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EXPLAINING INTERRATER RELIABILITY

by

Ronni Ellen Meritt-Haston

A DISSERTATION

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ABSTRACT

EXPLAINING INTERRATER RELIABILITY

By

Ronni Ellen Meritt-Haston

The purpose of this study was to empirically evaluate three hypotheses about the causes for low interrater reliability in performance ratings from supervisors, peers, and incumbents. Low reliability has been attributed to different observations by supervisors and peers, different behaviors exhibited by incumbents in the presence of supervisors and peers, and different perspectives of the incumbent's job. Theories and research findings from cognitive-social psychology and role theory were reviewed to explain the rationale for the hypotheses. Ratings of observational frequency of incumbents' job behaviors were obtained from supervisors and peers to assess the first explanation. The frequency with which ratees enacted behaviors in the presence of supervisors and peers were obtained from incumbents to measure the second proposition. Supervisors', peers', and incumbents' job performance standards and judgments about the importance of job dimensions were obtained to examine the third assertion. Ratings of incumbents' job performance were obtained from supervisors, peers, and incumbents in order to relate each of the hypothesized explanations to performance

Ronni Ellen Meritt-Haston

rating interrater reliability and performance rating variance.

Head nurses (supervisors) and staff nurses (peers and incumbents) employed by 16 hospitals throughout Michigan participated in the research. Results indicated differences in behavioral frequency of incumbents when in the presence of their supervisors and peers. There were no differences between supervisors' and peers' observational frequency or among the three rater groups' performance standards or importance ratings. Further, there was no relationship between any of the explanations and performance rating interrater reliability or performance rating variance. Results are discussed in terms of distortions attributed to cognitive schemas and the limitations of the sample. Possible future research utilizing videotapes to establish greater control over the situation is described.

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INTRODUCTION

In order for organizations to deal effectively with declining productivity, increases in the mandatory retirement age, and equal employment opportunity challenges, they must appraise the performance of their employees. The decisions employers make are predicated on the ability to discriminate good from poor performers. For example, performance appraisals are intricately related to personnel functions such as training, compensation, and promotion. They are also used to evaluate the effectiveness of selection programs and to motivate employees to develop and use their talents.

Appraisals used for any personnel decision must meet the same equal employment opportunity standards as employment tests. Because of the growing number of court cases involving performance appraisals (e.g., Kleiman & Durham, 1981), and their importance in organizational decision making, many organizations recognize the desirability of obtaining performance evaluations from multiple sources (e.g., peers, subordinates).

There are several advantages to using multiple raters in the performance appraisal process. A psychometric advantage is that multiple raters permit the assessment of convergent validity of multiple rating criteria through the

multitrait-multirater matrix (Lawler, 1967). Another psychometric advantage is increased reliability resulting from pooling several individuals' ratings. Content validity may also be enhanced through increased observations of ratee performance, resulting in an evaluation of a larger behavioral domain (Borman, 1974). There may also be operational advantages because the use of multiple raters increases the participation of relevant persons in the process fostering interest and commitment (Schneier & Beatty, 1978).

A great deal of research has been conducted to establish the relative rating accuracy among various rater groups. In the course of these research endeavors, a consistent finding emerged--when different groups of raters evaluated the same focal persons, there was low interrater reliability.

Several explanations have been posited for low interrater reliability and these assertions were the hypotheses for the study reported here. Specifically, this study will explore the cognitive processes involved in performance evaluation in an attempt to understand why ratings given to the same individual by different rater groups are discrepant. The importance of studying cognitive processes has been advocated by several individuals (Cooper, 1981; Feldman, 1981; Landy & Farr, 1980; Nathan & Lord, 1983).

In this research study, three hypotheses will be tested. The first hypothesis is that different groups of raters observe different ratee behaviors and these differ-

ences are associated with low interrater reliability (referred to as Different Observations hypothesis). The second hypothesis is that individuals in the various rater groups have different perspectives of the focal job (i.e., have different cognitive schemas) which lead to different standards of judgment and/or different weightings of behaviors and the differences are related to low interrater reliability (referred to as Different Perspectives hypothesis). The third hypothesis is that the focal person actually behaves differently when interacting with members of the various rater groups and the differences lead to low interrater reliability (referred to as Different Behaviors hypothesis). These hypothesized relationships are depicted in Figure 1. As indicated in the figure, observations, perspectives (or cognitive schemas), and ratee behaviors are postulated to mediate the relationship between rater groups and performance ratings. The likely relationships among these hypothesized explanations, depicted by the dashed lines, will be explored later.

Interrater Reliability

In this section, studies examining interrater reliability among performance ratings from different rater groups will be reviewed.

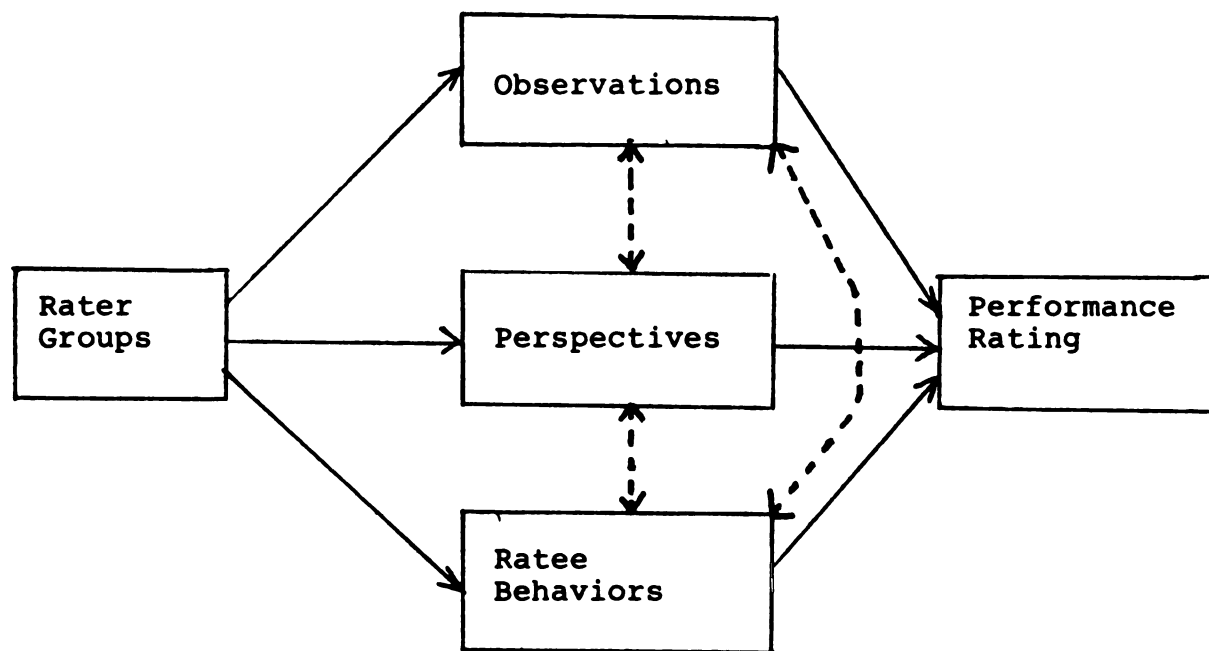


Figure 1. Model of hypothesized explanations for low interrater reliability

Supervisors-Peers

The most frequent rater group comparison has involved supervisor and peer ratings. These studies have generally demonstrated differences between the two types of raters.

Several studies were conducted in military settings where "buddy ratings" were quite common. For example, Gordon and Medland (1965) found that peer ratings of overall leadership potential for Army recruits correlated only moderately with squad sergeant's ratings. In contrast, Booker and Miller (1966) found that peer and supervisor nominations concerning promotion of Reserve Officers' Training Corps students had high interrater reliability.

Hollander (1954, 1956, 1957, 1965) and Wherry and Fryer (1949) demonstrated that peer ratings of leadership potential had higher within-group reliability and were more valid than other measures or estimates (such as instructor's ratings) obtained during training. Furthermore, peers and supervisors based their nominations on different factors when making their ratings. Conversely, Klieger and Mosel (1953) found higher within-group reliability with supervisory ratings than peer ratings when noncommissioned Army officers were rated.

A number of studies were concerned with the relationship between supervisor and peer ratings of managers. Most of these studies demonstrated low interrater reliability between the rater groups (Forehand, 1963; Schneier & Beatty, 1978; Springer, 1953). In addition, it appeared that super-

visor's ratings were less lenient than peers'. Of course, this is not the same as reliability but may attenuate interrater reliability estimates if there is a ceiling on the scale for one rater group. The results of Siegal's (1982) study conflicted with the rest; his data indicated strong interrater reliability between the ratings from the two rater groups.

Low reliability between supervisor and peer ratings has been found for other focal positions as well. Tucker, Cline and Schmitt (1967) obtained ratings of pharmaceutical scientists in order to validate a biographical inventory. The interrater correlations for the four performance dimensions were low. Dickenson and Tice (1973) and Borman (1974) found low interrater reliability for ratings of firefighters and secretaries, respectively. In fact, Borman (1974) as well as Landy, Farr, Saal, and Freytag (1976) found different relevant dimensions of job performance when developing behavior-anchored scales for use by peers and supervisors. Zedeck, Imperato, Krausz, and Oleno (1974) obtained similar dimensions of performance from supervisors and peers but different specific examples of job behaviors to anchor the dimensions.

Supervisors-Self

Supervisory ratings have also been compared with the focal person's self-ratings. It is clear that there is substantial disagreement between the evaluations obtained from

these two rater groups--even more so than the disparities in supervisor and peer performance appraisals. Disparities between supervisor- and self-ratings have been found in studies involving engineers (Williams & Seiler, 1973), managers (Heneman, 1974; Thornton, 1968), nurses (Rothaus, Morton, & Hanson, 1965), clerical workers (Parker, Taylor, Barrett, & Martens, 1959), housekeeping and food service workers (Brief, Aldag, & Van Sell, 1977), and technical employees (Kirchner, 1965; Prien & Liske, 1962). In most instances, self-ratings were more lenient than supervisory ratings. When halo was investigated, supervisory ratings contained consistently more halo than self-ratings (e.g., Baird, 1977; Heneman, 1974; Kirchner, 1965; Parker et al., 1959).

Prien and Liske (1962) investigated this issue by factor analyzing the ratings from supervisors and focal persons. They found four factors aside from the general factor. The first two were interpretable as a "supervisor" and "self" factor, respectively. The last two were task-relevant factors. These results confirmed the above-mentioned findings and indicated that there were substantial differences between evaluations given by supervisors and focal persons.

Supervisors-Peers-Self

Several studies examined self-, supervisor, and peer ratings of the performance of nurses (Klimoski & London, 1974; Zammuto, London, & Rowland, 1982) and managers and

professionals (Holzbach, 1978; Lawler, 1967). Holzbach (1978) and Klimoski and London (1974) factor analyzed the ratings from the three groups of raters. Their findings concurred with those of Prien and Liske (1962); three factors emerged which were defined by self-, supervisor, and peer ratings. Two additional task-relevant factors emerged from the ratings in Klimoski and London's study while Holzbach had to partial out halo in order to obtain task-relevant factors.

Low interrater reliability has also been found when multitrait-multimethod matrices (Campbell & Fiske, 1959) were used to examine ratings from several rater groups (defining rater groups as methods). This technique was used by Lawler (1967), Holzbach (1978), and Klimoski and London (1974). Low validity diagonals were found in each study indicating little interrater reliability, although the authors concluded that there was convergent validity according to the criteria outlined by Campbell and Fiske (1959). There was higher reliability between the supervisor and peer ratings than the supervisor- and self-ratings or the peer- and self-ratings.

Zammuto et al. (1982) also found differences in the ratings from peers, supervisors, and incumbents. The results of multivariate and univariate analyses indicated that self-ratings were significantly higher and peer ratings had significantly more halo. These findings were in accord with the results of previously reviewed studies.

Other Comparisons

A few studies have compared ratings from supervisors and subordinates of focal persons (Kavanagh, Mackinney, & Wolins, 1971) and self-ratings and peer ratings (Bartlett, 1959). Both of these studies indicated low interrater reliability between the two rater groups. In addition, Zammuto et al. (1982) found that subordinate ratings were significantly higher than self-, peer, or supervisory ratings. Moreover, subordinate and self-ratings exhibited significantly more halo than peer or supervisory ratings.

Summary

The preceding discussion demonstrated that disparities in ratings from various rater groups are consistently found in studies involving a wide variety of job types, utilizing a number of rating traits or behaviors, and employing various analytical techniques. Researchers who found low interrater reliability explained it by citing at least one of the three hypotheses explored in this study. However, no study to date has offered theoretical rationale for these hypotheses, investigated all of them empirically, or looked at the relationships between the explanations and interrater reliability. The present research aimed to fill this void.

Why Low Interrater Reliability?

Several studies have been conducted to explore the reasons for low interrater reliability. One line of research investigated potential moderators of the relationship between different rater groups' ratings. In one study, Lawler (1967) found that age, seniority, and job tenure had significant moderating influences on the ratings given by superiors, peers, and incumbents. Managers with less seniority were rated higher by their superiors than their peers and by their peers and superiors than by themselves. Older managers with high seniority were rated lower by their superiors than by their peers and by the peers and superiors than by themselves. In contrast, Brief et al. (1977) found no moderating effects on supervisory and self-ratings as a result of role conflict and ambiguity, core task dimension, satisfaction, and demographic variables (sex, age, race, education, tenure, pay level).

A second line of research involves examining the rating process. The hypotheses tested in the present study are indicative of this process research. The justifications for these hypotheses are discussed in the remainder of this chapter.

Different Observations

The Different Observations hypothesis is based on the notion that the position (i.e., organizational role) of raters relative to ratees determines the extent and nature

of their observations (e.g., Barrett, 1966). This assertion has been maintained by numerous researchers in order to explain low interrater reliability (e.g., Bittner, 1948; Ghiselli & Brown, 1948; Springer, 1953).

Barrett (1966) listed the rater groups according to decreasing potential observational frequency of ratees' job performance in the following order: (1) self, (2) peers, (3) supervisors, and (4) subordinates. The amount of observation by peers, supervisors, and subordinates depends on the nature of the raters' and ratees' jobs and resulting contacts with focal persons. Span of control, physical distance, and work load may determine raters' observational frequency. For example, salespeople who are constantly out of the office making sales calls will be observed less frequently than assembly line workers.

Campbell, Dunnette, Lawler, and Weick (1970) concurred with Barrett (1966) in suggesting that peers would be able to observe more dimensions of a focal person's job than supervisors or subordinates. For example, peers could see how focal managers utilized financial, material, and human resources, but supervisors may not observe how ratees interacted with their subordinates. Further, some subordinates may work closely enough to their supervisors to get an idea of their performance but they traditionally observe only a portion of their daily work.

Lawler (1967) also asserted that each of the various rater groups has an adequate view of a portion of the incum-

bents' performance. Supervisors typically have the best overview of the situation and know how incumbents' job behaviors contribute to the overall goals of the organization. Peers are best situated to evaluate how incumbents work with others at the same organizational level to accomplish organizational goals. Subordinates are able to determine the superior's impact on the human resources of the organization.

Empirical support. The Different Observations argument has received some support. Campbell, Dunnette, Arvey, and Hellervik (1973), Whitla and Tirrell (1953), and Zedeck and Baker (1972) investigated interrater reliability when different levels of supervisors evaluated subordinates' performance. The findings consistently indicated low reliability between rater groups. The researchers asserted that the discrepancies were due to the fact that higher level supervisory groups had less direct contact with ratees. Because immediate supervisors presumably have more direct contact with ratees, one could also assert that within-group interrater reliability would be higher for immediate supervisors than distal supervisors. This hypothesis has not yet been tested.

Whitla and Tirrell (1953) examined the Different Observations hypothesis by correlating a job knowledge test with ratings from different supervisory levels. The ratings of the supervisors who were in closest proximity to the focal

persons correlated highest with the job knowledge test. This might indicate differing observations by the different supervisory levels. Specifically, immediate supervisors probably observe focal persons more than higher-level supervisors and can better evaluate focal persons' job knowledge. This would result in higher correlations between the job knowledge test and the immediate supervisors' ratings.

Nealy and Owen (1970) investigated the issue of different observations by having supervisors, incumbents, and outside observers rate the amount of time ratees' spent on various job duties. The three sources of behavior descriptions disagreed substantially over how the incumbents (nurses) spent their time.

Borman (1974) also hypothesized that raters in different organizational levels observe dissimilar behavior and are therefore competent to judge differing dimensions of the ratees' job performance. His results supported his hypothesis (i.e., performance rating reliability was higher on raters' own dimensions than on other rater group's scales).

Recently, Heneman and Wexley (1983) demonstrated the relationship between observations and performance ratings. They found that under typical rating conditions, there was a positive relationship between accuracy of ratings (as compared to true scores) and the amount of information observed. We could also posit a positive relationship between the amount of similarity between raters' observations of the

same behaviors and the interrater reliability of performance ratings from those rater groups.

In contrast to the above findings, Klieger and Mosel (1953) uncovered no real differences in ratings of supervisors who reported "much opportunity" to observe and those who reported "some (or little) opportunity." Similarly, Nealy and Owen (1970) found substantial agreement between two supervisory levels in their ratings of nurses' performance.

Summary. Various researchers have postulated that low interrater reliability is due to differing observations among different rater groups. A number of research studies which are relevant to this explanation have been reviewed. The evidence is equivocal as to whether this is the underlying reason for differences in ratings.

In several of the studies, the previously mentioned alternative hypotheses were not ruled out. It is unclear whether the results were a function of different observations by the rater groups, different perspectives of the ratees' jobs (leading to different performance standards or differential weighting of behaviors), or different behaviors by the ratees when in the presence of the different rater groups. Unfortunately, most of the researchers simply inferred that different observations resulted in different performance evaluations or that low interrater reliability was caused by different observations. In the present study, differences in observations by different rater groups will

be related to performance ratings and interrater reliability.

Different Perspectives

A number of researchers suggested that low interrater reliabilities result from various groups of raters having different perspectives or frames of reference concerning the focal job and ratees' performance (e.g., Landy & Farr, 1980; Rothaus et al., 1965). As a result of different frames of reference, raters may establish different standards (or expectations) for performance or consider dissimilar portions of the job important. When performance evaluations are required, rater groups may weight behaviors differently or assign different evaluations to the same behaviors because of their dissimilar frames of reference (Borman, 1974; Forehand & Guetzkow, 1961; Holzbach, 1978; Parker et al., 1959).

For example, Prien and Liske (1962) suggested that supervisors high in the status hierarchy may perceive a behavior favorably because they examine the organizational consequences. In contrast, subordinates may perceive the same behavior less favorably because they are more concerned with individual effects (e.g., reductions in pay would be evaluated differently). Obviously, individuals enacting the behavior would receive a high rating from supervisors and a low rating from subordinates.

Theoretical support for the Different Perspectives hypothesis is based on cognitive-social psychological research. The aim of this research involves the investigation of the cognitive activities in which individuals engage when forming an impression or making an evaluative rating of other individuals. The cognitive activities involved in the rating process can result in different rater groups having different perspectives resulting in discrepant performance evaluations. The rating process will be reviewed in this section.

Rating process. Four process stages have been distinguished to describe how individuals perceive and represent the world and evaluate other individuals (e.g., Hamilton, Katz, & Leirer, 1980). The rating process entails encoding, organizing, recalling, and evaluating a great deal of information about ratees. These four process stages will be discussed below to explain how different rater groups may develop different perspectives of the ratee's job and dissimilar evaluations of the ratee's job performance during each process stage.

Encoding. Individuals have a limited span of attention and storage capacity in immediate memory which forces selective perception (Broadbent, 1958; Miller, 1956). Selectivity compels individuals to focus their attention on information that is salient, or important, to them. In turn, the data which are perceived (or encoded) are primarily determined by where attention is focused in the environment (Taylor &

Fiske, 1978). Thus, if different behaviors are salient, or important, to different rater groups, attention may actually be focused on different behaviors. This may lead to the discrepancies in performance ratings typically found.

Differential salience is a function of subjective personally-relevant factors (i.e., needs, interests, cognitive schemas). Individuals direct their attention to seek out information for a given purpose or goal. For example, a temporary need state such as hunger will lead an individual to scan the environment for restaurants; whereas a driver running out of gas looks for gas stations. It has also been shown that people who are anticipating future interaction with someone spend more time looking at that person than they do to people with whom they anticipate no future interaction (Berscheid, Graziano, Monson, & Dermer, 1976).

In the organizational environment, supervisors depend on subordinates to fulfill certain job duties for them and may pay more attention to their eventual accomplishment than other behaviors. Thus, these job behaviors are salient to them. In contrast, peers depend on co-workers for other reasons (e.g., shared resources). The outcomes of those behaviors will be more important to peers than supervisors.

Individuals' cognitive schemas also affect the encoding of information. A schema is a cognitive structural concept, referring to a set of expectations about how individuals behave or should behave (Cantor & Mischel, 1979). Schemas reduce and simplify the information which individuals need

to perceive and store about themselves and others. Individuals can have schemas concerning personality traits (i.e., implicit personality theories), occupational characteristics, foreign citizens, and any other environmental information.

Expectations arising from schemas may result in individuals focusing attention on particular aspects of the environment (i.e., making those aspects of the stimulus field more salient). According to Bruner (1957), individuals are better able to encode expected than unexpected events. This bias favoring selective attention to information which fits into a schema of expected behaviors is intended to ease the information processing demands arising from interactions between people.

To the extent that cognitive schemas predict that focal persons will behave in certain ways--thereby making certain behaviors more salient--individuals will be more likely to perceive actions corresponding to the expected behaviors (Zadny & Gerard, 1974). For example, a supervisor who expects a subordinate to be careless in his/her work will be more sensitive to an error in calculations than otherwise might be the case if the expectations had not been there. In addition, a supervisor who expects a subordinate to finish a project which is given to him/her, will be sensitive to the completion or incompletion of that project.

Support for the influence of schemas on encoding has also been reported by Markus (1977). His data indicated that

people perceived and processed information about themselves faster if it fit schemas they held about themselves than if it did not. Other studies have demonstrated the same result when individuals process information about external stimuli (Brozek, Guetzkow, & Baldwin, 1951; McClelland & Atkinson, 1948).

The potentially important role of schemas in the encoding process is also suggested in an experiment by Duncan (1976). In this study, the influence on encoding of a stereotype--which has the properties of a schema--was investigated. The results indicated that stereotypic expectations influenced the manner in which the same behavior was encoded and interpreted by the observers of the behavior.

The previous discussion regarding the encoding stage gives some indication concerning reasons for low interrater reliability. Interests, needs, and cognitive schemas influence the observation and encoding of ratees' behaviors. These factors make certain behaviors or events more salient than others. It is easy to understand that supervisors, peers, and subordinates differ in their interests and needs concerning ratees. As a result, behaviors which focal persons enact may be differentially salient to the various rater groups. Salient information about other persons is more likely to be retained (Hamilton, Katz, & Leirer, 1980).

It will be seen that the different rater groups probably have different cognitive schemas resulting in different expectations for performance. If different expectations lead

raters to pay attention to dissimilar behaviors when observing ratees or to evaluate the same behaviors differently, interrater reliability will be low.

Organization. The perception or encoding of an object or an event in the environment involves an act of categorization; individuals "place" things in categories (Bruner, 1958). These categories influence the way observed and encoded behaviors are interpreted because behaviors are valued differently as a result of different performance expectations.

Categories of events with which people become accustomed to dealing are organized into systems or structures, bound together in various ways. A long line of research in implicit personality theory and person perception affirms the existence of shared meaning systems for structuring the world of people into categories based on attributes that are likely to co-occur (Hastorf, Schneider, & Polefka, 1970; Schneider, 1973). It is clear that people can go from behavioral signs to agreed-upon dispositional attributes which in turn are used to group stimuli according to different kinds of categories.

People differ in terms of the number and nature of the schemas and schema categories they possess (Ashmore & DelBoca, 1979; Feldman, 1981). Evidence has accumulated which indicates that the processes by which individuals intuitively develop schemas are subject to considerable bias (e.g., Chapman & Chapman, 1967, 1969; Jenkins & Ward, 1965;

Ward & Jenkins, 1965). Forming a schema requires an accumulation of instances of co-occurrences between variables, storage of this information over time, and judgment as to the resulting degree of association. As indicated before, certain kinds of data are noticed and encoded, while individuals appear to be insensitive to other kinds of information. This has ramifications for the types of categories that will be developed.

Rosch (1975) has suggested that schema categories are organized around prototypical or focal stimuli (i.e., the best examples of a concept). In the organizational context, for example, a loyal individual is closer to the prototype of subordinate than one who questions work assignments (that is, from the superior's point of view). There may also be schemas representing the prototype of an occupation (e.g., what the typical nurse's job is).

Stimuli may be categorized in several ways by the same and different individuals. Studies of how people freely describe and "type" one another suggest the extensive use of categories involving personality attributes, physical appearance, gender, race, social occupation, role constructs, and behavioral scripts (Abelson, 1976; Bem, 1978; Fiske & Cox, 1977; McGuire, McGuire, Child & Fujioka, 1978; Veness, 1969). In a similar vein, there may be categories for good and bad behaviors; there may also be categories for good and bad employees.

There is evidence that characteristics of perceivers are a central factor in the categorization process. In his text on the theory of personality, Kelly (1963) explained how schemas can be affected by the race, religion, and domicile of individuals. Triandis (1964) and Feldman and Hilterman (1975) also suggested that different categories will be salient for different people as a result of cultural factors, prejudice, and cognitive complexity. Moreover, Cohen and Ebbeson (1979) demonstrated that individuals will select schemas, and categorize behavior, consistent with their observational goals. Several studies have demonstrated that the mere categorization of persons into an "ingroup" and an "outgroup" is sufficient to create a cognitive structure of the social situation and affect the information sought and ratings made by individuals of the two groups (Doise, Csepeli, Dann, Gouge, Larsen, & Ostell, 1972; Wilder & Allen, 1978).

This discussion regarding the organization stage indicates how different rater groups may have different cognitive schemas to represent the focal person's job, and differentially effective employees, and differentially effective behaviors. Many factors affect the development of categories and category systems and the placement of stimuli into categories. In addition to the above mentioned variables, the role of the rater in relation to the ratee may influence the type of categories and categorization system developed. Thus, supervisors, peers, and subordinates may

develop different cognitive schemas. This may result from the different rater groups observing dissimilar behaviors or depending on ratees for different things. Also, different previous experiences may lead to dissimilar schemas. Supervisors, incumbents, peers, and subordinates may have had different educational or occupational experiences resulting in dissimilar ideas of the ratees' occupation as well as effective and ineffective performance.

If different rater groups have different cognitive schemas, they will have different expectations for performance. If rater groups hold different expectations, the same behaviors may be interpreted (or valued) differently by different people resulting in low interrater reliability. Different cognitive schemas could also lead to observed behaviors being categorized differently and to differentially salient job behaviors because of the dissimilar categories or prototypes comprising the schemas.

Recall. Categorization systems may distort the recall of behaviors that have been observed: Individuals tend to "see" things about focal persons that are not there and not to see other things that are there (Hamilton, 1979). In the process of recalling, the prototype of the relevant category is elicited and features of the prototype are remembered as being true of the person whether or not relevant behavioral information was ever presented (Cantor & Mischel, 1977; Wyer & Scrull, 1980). This distortion can lead to raters "recalling" effective or ineffective behaviors displayed by a ratee

which are consistent with the raters' overall impression of the ratee even if the behaviors were never observed (i.e., halo).

Another distorting effect of the categorization process is that information consistent with a prototype is most likely to be remembered, while information inconsistent with these prior expectations is least likely to be retained (Hamilton, 1979). Studies by Zadny and Gerard (1974), Rothbart, Evans, and Fulero (1979) and Cantor and Mischel (1977) demonstrated that individuals tended to overestimate their exposure to information that confirmed prior expectations. The exact locus of this effect remains unclear. Thus, it appears that prototypic conception influences encoding as well as the reconstruction or recall of information.

The process of appraising performance primarily relies on the recall of observed information. If different rater groups have different cognitive schemas, the behaviors they recall will be consistent with these discrepant prototypes. Furthermore, the behaviors that are recalled will lead to disparate evaluations of the same person because of dissimilar expectations and differential weighting of behaviors. Thus, not only will different rater groups observe different behaviors but they will also recall different behaviors.

Evaluation. To the extent that information about focal persons is stored and recalled in terms of category prototypes, the actual category system used by an evaluator will

play a large role in determining subsequent evaluations. As alluded to above, when focal persons are assigned to categories, further memory-based judgments of that employee are colored by the category prototype. This process, functionally identical to stereotyping (Ashmore & DelBoca, 1979), can produce either underevaluations or overevaluations by associating the general evaluation of the category with the person, by producing false memories of the person, or both.

Implicit personality research conducted by Norman and his colleagues (Norman, 1963; Norman & Goldberg, 1966; Passini & Norman, 1966) investigated the issue of whether evaluations resulted from actual attributes of focal persons or conceptual factors in the raters' minds. The evidence indicated that factor patterns were derived almost exclusively from the shared conceptions of trait structure among the set of raters rather than actual ratee characteristics. This has been supported by Schweder (1975) as well. These results underscore the importance of cognitive schemas in the evaluation of other individuals.

The issue of salience of information becomes important in this stage as well. The salience or prominence of certain kinds of information influences individuals' impressions of themselves and others. Salancik and Conway (1975) showed that relatively simple manipulations can alter the salience of certain information in the recall process and, as a result, change the overall attitude response.

In light of this, Tversky and Kahneman (1974) have asserted that instead of reviewing all the evidence when making a judgment, people frequently use the information which is most salient or available to them. Other researchers have documented that perceptually salient information is overrepresented in subsequent evaluations (e.g., Taylor & Fiske, 1975; Taylor, Fiske, Close, Anderson, & Ruderman, 1977; Langer, Taylor, Fiske, & Chanowitz, 1976; McArthur & Post, 1977; Berscheid et al., 1976).

At the evaluation stage, different cognitive schemas held by different rater groups will have a direct impact on interrater reliability. Raters' performance expectations will influence the evaluations they give to behaviors which have been observed, categorized, and recalled. If raters in different rater groups have different standards for performance, the same behavior will be evaluated differently resulting in low interrater reliability. Further, if raters in different rater groups believe that the same behaviors should be differentially weighted, there will be low interrater reliability among the evaluations.

Empirical support of Different Perspectives Hypothesis.

A number of studies examined the perspectives issue in performance appraisals. These will be discussed in the remainder of this section. First, evidence will be presented that prototypes of various occupational categories exist. Second, the documentation which indicates that various rater groups differ in their perspectives and therefore assign different

performance ratings to the same focal person will be discussed.

Several studies focused on the existence of an "occupational set." Veness (1969) asked individuals to make a number of separate assessments, on adjective rating scales, of the same "paper person" who was described as belonging to one of four occupations: lecturer, veterinary surgeon, road-sweeper, and gardener. She found that individuals associated different degrees of traits to the four occupations thus suggesting different cognitive schemas were associated with various jobs.

Information reviewed by Schmitt (1976) concerning interviewer stereotypes also indicated that individuals possess prototypes for various jobs. Sydiaha (1959, 1961) and Bolster and Springbett (1961) demonstrated that interviewers possessed stereotypes of idealized successful applicants against which real applicants were judged. In another study, Hakel, Hollmann, and Dunnette (1970) found that different groups of individuals held different prototypes of Certified Public Accountants.

Several other studies focused on the influence that occupational prototypes have on the retention and recall of information. Cohen (1977) had individuals view a videotape of a woman, whom they were told was either a waitress or librarian, having dinner with her husband. Several characteristics stereotypic of both occupations were incorporated into the stimulus tape (e.g., librarians are expected to

wear glasses, waitresses are more likely to drink beer). The results indicated that perceivers' memories were more accurate in recalling information consistent with the prototype they were using to observe the videotape (i.e., the occupation they had been told). Other studies demonstrated that recall for information which is consistent with occupational prototypes is superior to that which is inconsistent (Hamilton & Rose, 1978; Snyder & Cantor, 1979).

As Barrett (1966) stated, and as the above discussion implied, raters must fit what they observe into their own value systems, which provide them with the standards against which to judge what they see. Their own personality, experience, and personal values influence the rating. A number of studies indicated the importance of the rater's point of view. Zedeck et al. (1974) presented evidence that supervisors and incumbents valued the same behaviors differently. Their data showed that supervisors evaluated the same expected behaviors lower than incumbents did. This would lower interrater reliability because the same enacted behavior would receive a lower rating from supervisors than from incumbents. Schneier and Beatty (1978) also found this in their study involving entry-level manufacturing workers.

Other studies demonstrated that different groups of raters emphasized different behaviors in their ratings. In one instance, the ratings of salesmen by people at higher organizational levels agreed closely; except for the ratings of two persons who agreed with each other--but with no one

else (Munger, cited in Barrett, 1966). These two were credit managers; the rest were sales managers. Obviously, the credit managers and sales managers valued different elements of the performance of salesmen.

Further evidence is reported in studies by Levy (1960), Kirchner and Reisberg (1962), Schneider and Bayroff (1953), and Mandell (1956). They found that superiors who were divided into more effective and less effective groups sharply differed in their definitions and expectations concerning valued job behavior on the part of their subordinates. Further evidence that raters' characteristics influence their ratings is given by Forehand (1963). He found that raters' attitudes toward innovation made innovative behavior of the focal persons salient and influenced their overall ratings of performance.

Two studies statistically investigated whether different groups of raters differentially weighted job dimensions. Zammuto et al. (1982) used regression analyses to examine the relationships between performance ratings of various job dimensions and an overall rating for different rater groups. Their results supported the contention that rater groups were differentially weighting job dimensions. In their study with nurses, for example, it appeared that technical competence and skill in planning nursing care were weighted more heavily in self-ratings. However, peers apparently weighted the relational aspects of the job most heavily.

Nealy and Owen (1970) examined the same issue via a different method. They obtained ratings from two supervisory levels of time spent and performance on various job dimensions. Examination of the intercorrelations indicated that supervisors weighted some dimensions more heavily than others. For example, those nurses who spent more time at supervision were given higher performance ratings by second level supervisors than first level supervisors while those who concentrated their time on administration were given lower ratings.

Summary. Theory and research in cognitive-social psychology can provide a framework with which to understand low interrater reliability. Specifically, literature on selective attention and cognitive schemas is relevant to understanding discrepant standards of judgment and differential weighting schemes. If different rater groups differ in the prototypes they use to organize behavior (i.e., have different cognitive schemas), they will interpret the same behaviors differently and observe and recall differentially salient behaviors. These processes would then lead to disparate evaluations of ratees' job performance.

Research has also been reviewed which demonstrates that occupational prototypes exist and that these prototypes affect the recall of observed behaviors. Further, several studies have been reviewed which indicate that different groups of raters evaluate the same behaviors differently and emphasize different job dimensions when making performance

ratings. Unfortunately, the researchers either analyzed performance ratings, found differences among rater groups, and concluded that they must have different perspectives or asked rater groups about their expectations, found differences, and concluded that differences resulted in low interrater reliability. In the present study, the differences between rater groups' standards for performance will be related to performance rating interrater reliability. Further, the differences among rater groups in the importance they attach to ratee job dimensions will be related to interrater reliability.

Different Behaviors

The third explanation for low interrater reliability is that focal persons act differently when in the presence of or when interacting with members of different rater groups. Bittner (1948) asserted, for example, that individuals present their best side to their supervisors. Similarly, Booker and Miller (1966) contended that "it is a matter of common experience that personality traits that are often concealed from superiors are an open book to an individual's co-workers" (p. 42). Campbell et al. (1970) also asserted that individuals' behavior in the presence of their peers constitute a more valid portrayal of their "real self."

There are two lines of research which provide the theoretical support for this explanation. The first concerns the issues of roles, role-set expectations, and subsequent

effects on behavior. The second line of research, conducted by cognitive-social psychologists, indicates that people holding firm expectations based on cognitive schemas are likely to elicit confirming behaviors from other people. Information relevant to these two schools of thought will be presented in turn.

Role theory implications. Any social system, and especially a formal organization, may be viewed structurally as a partially interlocking complex of positions (Hunt, 1971). These positions represent the functional divisions of labor deemed useful to achievement of the system's goals. Organizationally, these positions follow a general principle of complementarity. Each position is differentiated with reference to one or more other positions and acts in complementary fashion to them. The expectations which arise from these complementary positions are called roles. Roles are sets of prescriptive rules, of guides to behavior, for persons of given positions.

In most instances, a given focal position or role will stand in organizational relation to more than a single complementary position. The role-set is the totality of complementary positions from which the expectations or prescriptions for focal positions arise.

In view of this, Jacobson, Charters, and Lieberman (1951) believed that in hierarchical organizations at least three such complementary positions should receive consideration. One is composed of persons who occupy like positions

(e.g., peers). Another is composed of persons who have a high degree of functional interdependence with the focal position (e.g., supervisors, subordinates). A third is composed of persons who do not have direct functionally interdependent relationships with the position, but who nevertheless are related to it through a concern with the formulation and implementation of the broader purposes of the organization (top-level management).

Research has consistently found disagreement regarding the expectations for focal persons among various positions in the role-set (e.e., Baird, 1969; Getzels & Guba, 1954; Miles, 1976). These results indicate that focal persons receive different expectations as a result of their interdependence with these complementary positions.

In the course of their interactions with the role-set, focal persons develop constructions of what these others expect of them. To the extent that focal persons properly meet the expectations of the role-set, they meet with approval; to the extent that they fail to meet these expectations, they are likely to experience sanctions. Therefore, it seems obvious that focal persons will vary their behavior depending on the particular complementary position with which they are interacting in order to gain approval. Research conducted on impression formation confirmed this assertion (e.g., Jones, Jones, & Gergen, 1963). The evidence indicated that individuals will act in certain ways to conform to expectations and gain approval.

In the same vein, a study by Jacobson et al. (1951) demonstrated what happens when focal persons do not meet expectations from the role-set. The researchers obtained ratings of expectations which workers, foremen, and union stewards had for the stewards. The data indicated that workers' and stewards' expectations agreed but differed from foremen's. Furthermore, the results showed that workers rejected union values when the stewards did not meet their expectations. The implication was that if stewards wanted to maintain or increase union membership, they would have to change their behaviors to conform to workers' expectations.

Cognitive-social psychology implications. Research by social psychologists has also documented that individuals will change their behavior depending on with whom they are interacting. Studies demonstrated that individuals who hold expectations of others constrain others' behavior in order to have their beliefs confirmed (Cantor & Mischel, 1979; Snyder & Swann, 1978). For example, when individuals interacted with others who they believed were physically attractive, they influenced these latter individuals (irrespective of the actual attractiveness) to act in ways that confirmed the expectations (the focal persons actually did behave like physically attractive people are expected to) (Snyder, Tanke, & Berscheid, 1977). This phenomenon has also been found in experiments using simulated interviews investigating racial stereotypes (Ward, Zanna, & Cooper, 1974).

A somewhat different self-fulfilling mechanism was demonstrated in a study by Zanna and Pack (1975). In this experiment, females were led to believe that males were desirable as potential dates and that they held either traditional or nontraditional schemas of the "ideal women." These females subsequently portrayed themselves as confirming what they believed were the males' expectations. Further, research conducted by Costrich, Feinstein, Kidder, Maracek, and Pascale (1975) demonstrated that when individuals did not behave in accordance with expectations of others, they received harsh judgment (i.e., judged less popular, less stable and liked less).

Summary. Low interrater reliability may be attributed to differences in the behaviors of focal persons when in the presence of different rater groups. Theoretical and empirical support for this proposition from role theory and cognitive-social psychology has been reviewed. These studies indicated that individuals will be influenced to behave in accordance with expectations held by other individuals. In the present study, differences in behaviors exhibited by focal persons in the presence of different rater groups will be related to performance ratings and interrater reliability.

Interdependence Among Observational, Perspectives, and Behavioral Explanations

As depicted in Figure 1, and as indicated by the discussion of each hypothesis, the three explanations would

seem to influence each other. For example, it was asserted that cognitive schemas direct attention to salient, or important, environmental cues. This implies that cognitive schemas can influence observational frequency.

In addition, behaviors which are observed affect the cognitive schemas which raters develop. Specifically, focal persons' behaviors may influence raters' opinions of how important or effective various behaviors are. For example, if supervisors observe focal persons enacting behaviors very frequently, they would probably judge those behaviors to be important for effective job performance.

Individuals' behaviors in the presence of others in the role-set may be influenced by their own cognitive schemas. They would probably enact behaviors which they believe are effective or important when in the presence of important complementary others. And, of course, raters' observations of focal persons should be influenced by focal persons' behaviors in the presence of raters.

Objectives of the Present Study

This study will empirically evaluate the hypotheses which have been proposed concerning the causes for low interrater reliability. Low reliability has been attributed to different observations, different perspectives, and different behaviors. In this section, the rationale for each hypothesis will be summarized and predictions about the

relationship between each explanation and performance ratings will be presented.

The Different Observations hypothesis is based on the notion that individuals' observations of focal persons are dependent on the extent and nature of their interactions with focal persons. Different rater groups may observe focal persons perform dissimilar portions of focal jobs and/or observe the same behaviors with differing frequencies. Studies were reviewed which demonstrated low interrater reliability of performance ratings from different supervisory levels and a relationship between amount of information observed and performance ratings to support the Different Observations hypothesis.

In the present study, amount of observation by the different rater groups will be related to performance ratings and interrater reliability. It seems that observational frequency could influence interrater reliability in several ways. First, the difference in supervisors' and peers' observational frequency of the same behaviors would be inversely related to the degree of interrater reliability. This is based on the notion that the greater the difference between raters' observations of ratees, the less they will agree on evaluations of ratees' performance.

Observational frequency can also influence performance rating variances and thus affect interrater reliability. This is consistent with the notion that confident raters are more likely than unconfident raters to use the extreme ends

of a scale (e.g., Schmitt, Coyle & Mellon, 1978; Schmitt & Lippin, 1980; Wexley & Pulakos, 1982). If raters have feelings of uncertainty--as a result of infrequent observations of ratees--they will tend to restrict the spread in their ratings by consistently using the central portion of the rating scale (Latham & Wexley, 1981). It is predicted that raters with more observations will be more confident about their evaluations of ratees' performance and will be more likely to use the extreme ends of the rating scale. If one rater group has less observational frequency than another, the variance in the ratings of the former will be restricted, and the correlation between the two groups' ratings will be attenuated.

The Different Perspectives argument has been conceptualized in terms of raters' frames of reference for viewing the focal person's job and the job performance of focal persons. Theory and research from cognitive-social psychology was reviewed in order to explain the phenomenon of different frames of reference. Specifically, frames of reference were viewed as cognitive schemas which individuals use to represent and organize information. A schema is a cognitive structural concept which refers to a set of expectations about how individuals behave.

Schemas are developed, categories are activated, and then they are used as prototypes to organize further material. The role of raters in relation to ratees influences schema development and categorization of information. Dif-

ferent rater groups can also have different schemas because of differences in previous experiences.

Schemas are prominent in all four cognitive stages of the rating process. They affect information encoding by directing attention to salient or important behaviors. They lead raters to interpret behaviors in line with the raters' expectations. They also influence retrieval and evaluation of information which is stored in memory.

In this study, the concept of schemas was used in two ways. One way in which schemas were operationalized was as a summary of raters' expectations of focal persons' job performance. If different rater groups have different expectations, they will value the same behavior differently. This is based on the findings that the types of structures (or schemas) that people develop or have developed about performance affects the encoding and interpretation of that performance. Differences in supervisors', peers', and incumbents' standards for performance (i.e., expectations) will be inversely related to the interrater reliability of performance ratings from those three rater groups.

The second way the concept of schemas was operationalized was as a representation of the prototype of the focal job. Different portions of the focal job may be important to different rater groups because they have different schemas to organize the information related to the focal job. If different portions of the job are important, raters may pay attention to different behaviors when observing focal per-

sons' job performance. Different schemas may also lead to differential retrieval of important behaviors or to differential weighting of the same behaviors when a performance evaluation is assigned. Differences in supervisors', peers', and incumbents' judgments concerning the importance of job behaviors should be inversely related to interrater reliability of performance ratings from those three rater groups.

The rationale for the Different Behaviors hypothesis is based on role theory research and social psychological literature. According to role theory, individuals in organizations are interdependent with one another. The expectations which arise from these interdependent positions are called roles. Roles are sets of prescribed behaviors or expectations for persons in a given position. Research has documented that conflict exists among expectations from different role senders (e.g., supervisors and peers). Focal persons receiving different expectations from different role senders try to enact behaviors conforming to different role senders' expectations when in their presence.

Social psychologists have also found that when people have expectations of others, they will constrain the other individuals' behavior to conform to those expectations. When individuals do not behave in accordance with expectations of others, they receive harsh judgments.

In the present study the behavior of focal persons in the presence of supervisors and peers will be related to

performance ratings and interrater reliability. It is expected that focal persons will enact behaviors with differing frequencies in the presence of peers and supervisors in order to conform to the expectations of the two rater groups. The difference in the frequency of focal persons' behaviors in the presence of supervisors and peers will be inversely related to the degree of interrater reliability of performance ratings from those two rater groups. This is based on the notion that the greater the difference between focal persons' behavior in the presence of different raters, the less the raters will agree on evaluations of ratees' performance. In addition, differences between focal persons' reports of behavior when in the presence of supervisors or peers and supervisors' or peers' reports of observations of the focal person, will lead to low interrater reliability in performance evaluations from incumbents and supervisors or peers.

Focal persons' behaviors should also be related to the variance in performance ratings from different rater groups. Specifically, the more frequently focal persons engage in various behaviors in the presence of raters, the more variance there will be in raters' performance ratings. This is founded on the notion that greater behavioral frequency increases raters' confidence (because of greater observational frequency) which leads to increased performance rating variance.

METHODS

Sample

The participants were employed as staff nurses (subordinates) or head nurses (supervisors) in 16 hospitals throughout the state of Michigan. The hospitals and their locations are listed in Appendix A. Hospitals of various sizes that were located throughout the state of Michigan and had previously contracted with the Michigan Hospital Association for personnel consulting were selected. Of the 25 hospitals initially contacted, 16 agreed to participate.

All participating nurses were selected by the Director of Nursing employed by each hospital. The Nursing Directors were instructed to use stratified random selection. Specifically, they were told to select nurses from different shifts and hospital units who differed in sex, race, age, education, and job performance.

Different numbers of hospitals and individuals participated in each of the four phases of the study (see Table 1 for numbers of participants in each step). An attempt was made to include the same number of participants from each hospital for each step of the study. Unfortunately, hospital size and availability of personnel placed restrictions on the number of nurses from each hospital. The number of par-

Table 1. Sample Size in Each Study Phase

<u>Step</u>	<u>Hospitals</u>	<u>HN^a</u>	<u>SN</u>	<u>Total N</u>
(1) Job Analysis/Critical Incident Interviews	5	13	12	25
(2) Retranslation Meetings	5	11	11	22
(3) Questionnaire Administration to Assess Observational Frequency, Standards of Judgment, Dimensional Importance, and Behavioral Observation	16	56	146	202
(4) Performance Appraisal Administration	16	56	151	207

^aHN=Head Nurses, SN=Staff Nurses

ticipants from each hospital and the size of each hospital is reported in Appendix A.

Job Analysis/Critical Incident Meetings

Initially, three staff nurses and three head nurses from each of five hospitals were requested for the first step, job analysis/critical incident interviews (total of 15 staff nurses and 15 head nurses). Some hospitals found it difficult to take a number of nurses away from work at the same time or convince nurses to work overtime. Thus, 12 staff nurses and 13 head nurses participated in step 1.

Retranslation Meetings

Three staff nurses and three head nurses were requested from five other hospitals for the second step, retranslation meetings (total of 15 staff nurses and 15 head nurses). Again, hospital size limited the number of participants. This resulted in 11 staff and 11 head nurses for step 2.

Questionnaire Administration

The third step involved administration of a questionnaire. The three hypotheses for low interrater reliability were investigated via this questionnaire. As described later, nurses were asked to respond to four rating tasks on the questionnaire. One, frequency of observation of staff nurse behavior, assessed the Different Observations hypothesis. The second, favorability ratings of effective and inef-

fective behaviors, and the third, dimensional importance ratings, were used to evaluate the Different Perspectives hypothesis. Last, focal persons rated behavioral frequency in the presence of head nurses and peers to investigate the Different Behaviors hypothesis.

All 16 hospitals were asked to select 15 staff nurses and five head nurses to respond to the questionnaire (total of 240 staff nurses and 80 head nurses). Certain restrictions were placed on the selection process. Specifically, the group of staff nurses was divided into peers and focal persons. This was accomplished by instructing the Directors of Nursing in the hospitals to select three staff nurses who reported to each of five head nurses. It was stressed that the three staff nurses should be well acquainted with each other's job performance (i.e., work in the same unit on the same shift). Further, the Directors of Nursing selected one of the three staff nurses to be the focal person, leaving the other two in the role of peers.

In other words, an attempt was made to have "teams" of 4 who conformed to the following pattern: (1) 1 head nurse, (2) 1 staff nurse focal person, and (3) 2 staff nurse peers. Thus, five of these teams were requested from each hospital (for a total of 80 head nurses, 80 staff nurse focal persons, 160 staff nurse peers, and 80 teams). In some hospitals three staff nurses from the same unit who worked at the same time and were well acquainted with each others' job performance were unavailable. Thus, the number of 4-person

teams was less than five in some hospitals. In some cases, 3-person teams (consisting of 1 head nurse, 1 staff nurse focal person, and 1 staff nurse peer) were substituted. This resulted in 61 teams as potential participants. Some staff nurses and head nurses were involved even if they did not belong to a team. Thus, 66 head nurses, 67 staff nurse focal persons, and 128 staff nurse peers (total of 195 staff nurses) were asked to respond to the questionnaire.

The response rate to the questionnaire was 80% (208 of 261). Since the focal persons' questionnaire contained more items, response rates for each respondent group were calculated. They were 89%, 75%, and 79% for head nurses, peers, and focal persons, respectively. It was determined that many nonrespondents had terminated employment (high turnover among nurses is a common problem). Other nonrespondents were peers who refused to participate when they discovered they were to evaluate a co-worker.

Out of the 208 returned questionnaires, 202 were usable. The six unusable questionnaires were either filled out incorrectly or arrived too late to be used in analyses. A total of 56 questionnaires from head nurses and 146 from staff nurses (52 focal persons and 94 peers) were usable.

Test-Retest Questionnaire

Twenty-two focal persons received the behavioral frequency rating task portion of the questionnaire a month after the questionnaires were returned. These 22 individuals

had previously agreed to respond to this rating task a second time in order to assess test-retest reliability. Responses were received from 77% of the 22 nurses (N=17).

Researcher Verification

Four focal persons were followed by the principal investigator for an entire shift each in order to assess the reliability of the behavioral frequency rating task. Ratings were made by the investigator regarding how often behaviors were enacted in the presence of head nurses and peers. As described below, these ratings were compared to the followed focal person's ratings.

Performance Ratings

The final step of the research was a performance rating of all focal persons by their head nurses, their 1 or 2 peers, and themselves. The same individuals made the job performance ratings as responded to the aforementioned questionnaire in step 3. Some nurses had terminated employment between the time of the questionnaire administration and performance rating. Thus, 190 staff nurses (65 focal persons and 125 peers) and 65 head nurses were available for step 4 participation.

The response rate to the performance ratings was 81% (207 out of 255). The return rate for head nurses was 86% (N=56); for peers, 80% (N=98); and for focal persons, 82% (N=53). A total of 171 participants responded to both the

questionnaire and the performance ratings (49 head nurses, 77 peers, and 45 focal persons).

Demographic Composition

The demographic composition of the sample for each step of the study is presented in Tables 2, 3 and 4. The sample was composed mainly of white females who worked the day shift. The participants represented all possible educational backgrounds and hospital units. They were in all stages of tenure and varied in age. All head nurses and 75% of the staff nurses worked full time.

Procedures

The presidents of 25 hospitals were contacted for permission to conduct the research with their nurses (see Appendix B for copies of all correspondence with hospitals). After permission was obtained from 16 of these presidents, a letter was sent to the Directors of Nursing of each hospital explaining the study and outlining the personnel and time commitments. The Directors of Nursing were asked to show the letter to all participating nurses.

Job Analysis/Critical Incident Meetings

The methods used to collect data were essentially the same as those followed in the construction of a Behaviorally Anchored Rating Scale (BARS). Nine job analysis/critical incident interviews were held with 12 staff nurses and 13

Table 2. Demographics of Job Analysis Participants

		<u>Staff</u> (N=12)	<u>Head</u> (N=13)	<u>Total</u>
Years as staff nurse	Mean	7.50y ^b	10.75y	9.19
	Range	2-19y	2-26y	2-26y
Years as head nurse	Mean	--	4.58y	4.58y
	Range	--	6m-14y	6m-14y
Years in current unit	Mean	3.34y	3.50y	3.42y
	Range	2m-10y	6m-8y	2m-10y
Unit	M/S ^a	25%	31%	28%
	IC	34%	23%	28%
	OR/RR	8%	8%	8%
	ER	17%	--	8%
	P/N	--	--	--
	PICU	--	8%	4%
	O/C	8%	8%	8%
	L/D	--	8%	4%
	O/R	8%	15%	12%
Shift	D	67%	86%	76%
	A	25%	7%	16%
	N	8%	7%	8%
Age	Mean	31y	38y	35y
	Range	21-45y	26-55y	21-55y
Race	White	92%	85%	92%
	Other	8%	15%	8%
Sex	Female	92%	92%	92%
	Male	8%	8%	8%
Education	A.D.	33%	38%	36%
	Diploma	50%	54%	52%
	B.S.N.	17%	8%	12%

^aM/S=Medical/Surgical, IC=Intensive Care, OR/RR=Operating Room/Recovery Room, ER=Emergency Room, P/N=Pediatrics/Nursery, PICU=Pediatrics Intensive Care Unit, O/C=Oncology/Cardiology, L/D=Labor/Delivery, O/R=Orthopedics/Rehabilitation, D=Days, A=Afternoons, N=Nights

^by=years, m=months

Table 3. Demographics of Retranslation Participants

		<u>Staff</u> (N=11)	<u>Head</u> (N=11)	<u>Total</u>
Years as staff nurse	Mean	9.68y ^b	7.82y	8.75y
	Range	2-19y	2-22y	2-22y
Years as head nurse	Mean	--	7.18y	7.18y
	Range	--	1-22y	1-22y
Years in current unit	Mean	7.03y	3.57y	5.30y
	Range	2-31y	1m-12y	1m-31y
Unit	M/S ^a	36%	18%	27%
	IC	9%	18%	14%
	OR/RR	9%	9%	9%
	ER	9%	--	5%
	P/N	18%	9%	14%
	PICU	--	--	--
	O/C	9%	9%	9%
	L/D	--	27%	14%
	O/R	--	9%	5%
	Float	9%	--	5%
Shift	D	73%	100%	86%
	A	18%	--	9%
	N	9%	--	5%
Age	Mean	42y	38y	40y
	Range	21-60y	21-50y	21-60y
Race	White	100%	91%	95%
	Other	--	9%	5%
Sex	Female	91%	100%	95%
	Male	9%	--	5%
Education	A.D.	27%	18%	23%
	Diploma	73%	45%	59%
	B.S.N.	--	36%	18%
Organization	Team	55%	45%	50%
	Primary	36%	55%	45%
	Functional	9%	--	5%

^aM/S=Medical/Surgical, IC=Intensive Care, OR/RR=Operating Room/Recovery Room, ER=Emergency Room, P/N=Pediatrics/Nursery, PICU=Pediatrics Intensive Care Unit, O/C=Oncology/Cardiology, L/D=Labor/Delivery, O/R=Orthopedics/Rehabilitation, D=Days, A=Afternoons, N=Nights

^by=years, m=months

Table 4. Demographics of Questionnaire and Performance Appraisal Respondents

		<u>Staff</u> (N=122)	<u>Head</u> (N=49)	<u>Total</u>
Years as staff nurse	Mean	4.63y ^b	5.63y	4.91y
	Range	6m-9y	2-9y	6m-9y
Years as head nurse	Mean	--	3.29y	3.29y
	Range	--	6m-7y	6m-7y
Years in current unit	Mean	3.93y	4.25y	3.63y
	Range	6m-8y	6m-8y	6m-8y
Unit	M/S ^a	45%	47%	46%
	IC	13%	9%	12%
	OR/RR	7%	7%	7%
	ER	7%	5%	7%
	P/N	4%	6%	5%
	PICU	1%	2%	2%
	O/C	4%	4%	4%
	L/D	10%	11%	10%
	O/R	7%	7%	7%
	Float	2%	2%	2%
Shift	D	62%	88%	69%
	A	24%	7%	19%
	N	14%	5%	11%
Age	Mean	35y	39y	36y
	Range	21-63y	26-63y	21-63y
Race	White	94%	89%	94%
	Other	6%	11%	6%
Sex	Female	93%	95%	94%
	Male	7%	5%	6%
Education	AD	37%	23%	33%
	Diploma	48%	52%	49%
	B.S.N.	15%	18%	16%
	Master's	1%	7%	3%
Organization of unit	Team	46%	44%	45%
	Primary	23%	27%	24%
	Functional	6%	9%	7%
	Modular	25%	20%	24%
Working hours	Part	25%	0	18%
	Full	75%	100%	82%

Table 4 (cont'd.)

^aM/S=Medical/Surgical, IC=Intensive Care, OR/RR=Operating Room/Recovery Room, ER=Emergency Room, P/N=Pediatrics/Nursery, PICU=Pediatrics Intensive Care Unit, O/C=Oncology/Cardiology, L/D=Labor/Delivery, O/R=Orthopedics/Rehabilitation, D=Days, A=Afternoons, N=Nights

^by=years, m=months

head nurses from five hospitals (see Appendix C for all data collection materials). Interviews were held with two or three staff nurses or head nurses at a time. In these interviews, the ultimate goal of a staff nurse was discussed and the major job dimensions designated and defined. Next, the nurses edited a job analysis task inventory previously compiled by the researcher and provided examples of effective and ineffective behavioral incidents for each job dimension. Finally, each nurse supplied demographic data.

The interviews resulted in a list of ten job dimensions with a definition of each, a task inventory of the staff nurse job, and 370 critical incidents. Since the job dimensions delineated by the two organizational levels were essentially the same, only one set was used for the rest of the study.

Retranslation Meetings

The critical incidents were edited and reduced to 232 unique behavioral statements by the principal investigator. These were presented along with the list of dimensions and their definitions to eleven staff nurses and eleven head nurses from five other hospitals for retranslation. Meetings were held with two to five staff nurses or head nurses at a time. The nurses were told to sort the critical incidents according to the dimension of which they were most representative.

The retranslation procedure was used to select items for the questionnaire in the third phase of the study. The percent allocation agreement was calculated for each critical incident. Incidents were selected if 55% of the 22 nurses had placed them in the same behavioral dimension.¹ This procedure reduced the number of critical incidents to 189.

Questionnaire Administration

The questionnaire, described in the following section, was sent to the Directors of Nursing at all 16 hospitals to be distributed to the 66 head nurses and 195 staff nurses (total N=261). This questionnaire was used to investigate the three hypotheses concerning low interrater reliability.

Performance Ratings

Some of the information from the questionnaire was also used to develop BARS for the staff nurse position. On the questionnaire, each of the remaining 189 critical incidents was rated according to how effective or ineffective it was for job performance. The mean and standard deviation of these favorability ratings for each statement were calculated. The BARS were developed from those statements whose mean effectiveness ratings fell along a continuum from 0 to 6 and whose standard deviations were 1.00 or less. Ten separate BARS were developed corresponding to each of the ten dimensions of the staff nurse job (see Appendix C).

The BARS were sent to the Directors of Nursing in all 16 hospitals to be distributed to 255 head nurses and staff nurses. The head nurses (N=65) and staff nurse peers (N=125) evaluated the staff nurse focal persons previously selected by the Directors of Nursing. Each focal person filled out a self-evaluation (N=65).

Measures

Questionnaire

The questionnaire to which all individuals responded contained four sections. Three sections were identical for all nurses; the fourth differed for the staff nurse focal persons.

One section of the questionnaire assessed situational and demographic information. Specifically, participants were asked about their tenure, shift, hospital unit, unit organization (team vs. primary care), and part vs. full-time status. Personal characteristics such as sex, race, age, and educational background were assessed. Finally, they responded to questions directly related to performance ratings (e.g., experience with ratings, acquaintance with ratee). All items were included to examine their function as covariates or as alternate predictors of performance ratings.

The three hypotheses for low interrater reliability were examined via the remaining three sections. One section, responded to by head nurses and staff nurse peers only, assessed the Different Observations hypothesis. In lieu of

this section, staff nurse focal persons received a rating task to evaluate the Different Behaviors hypothesis. Two of the sections, to which all nurses responded, were used to investigate the Different Perspectives hypothesis. The rating task for each hypothesis will be discussed separately in the remainder of this section.

Different observations. Head nurses and staff nurse peers only were asked to respond to the following rating task:

In this section a list of behavioral activities which staff nurses may perform is presented. They are grouped into 10 categories which are labelled and defined according to the behavioral activities in each category. Please read each of the activities and rate how frequently you have actually seen (focal person) perform each activity in a typical month. We are asking about _____ and not about staff nurses in general. This is not going to be used as an evaluation of _____'s performance, but we are interested in assessing how frequently a staff nurse does each activity. Please use the scale below:

0. never
1. once a month
2. twice a month
3. once a week
4. once every other shift

5. once a shift
6. twice a shift
7. every 2 hours or more frequently (i.e.,
Q 1 hour)

This rating task assessed how often the supervisors and peers observed the focal persons enacting 89 of the behaviors included in the task inventory. Thus, these behaviors were not critical incidents (i.e., very effective or very ineffective) but were neutral statements describing job duties. The statements were grouped according to the job dimension of the staff nurse job which they described.

Different perspectives. Two rating tasks were used to assess the existence of different frames of reference for the head nurse, peer, and focal person rater groups. The participants responded to the following rating task:

In this section, a list of job behaviors which have been seen by staff and head nurses is presented. Please read each of the examples of job behaviors below and then rate whether it describes good, bad, or average job performance for staff nurses (RNs). Please use the scale below:

0. Very poor--the example indicates very substandard job performance
1. Poor--the example indicates less than acceptable performance
2. Below average--the example indicates slightly less than average performance

3. Average--the example indicates job performance of the typical staff nurse
4. Above average--the example indicates slightly more than average performance
5. Good--the example indicates more than usually acceptable performance
6. Very good--the example indicates exceptional clearly superior job performance

This rating task measured whether supervisors, peers, and incumbents used different standards of judgment and therefore assigned different values to the same behaviors. These favorability ratings were indicative of the respondents' expectations for performance. Individuals with high expectations would give low favorability ratings indicating that nothing was considered exceptional or clearly superior performance. High favorability ratings would be given by people with low expectations inferring that nurses would be considered to have good performance with the minimum of effort. The behaviors which were rated included critical incidents and neutral statements for all ten dimensions. Thus, these behaviors covered the range of job performance. They were presented in random order.

Raters also responded to the following rating task:

In this section, the categories of behavioral activities and their definitions are listed. Please read each of them, referring to the previously listed behavioral activities when necessary,

and rate how important you believe each category is, relative to the other categories, for a staff nurse (RN) to perform at a fully competent, effective level. Please use the scale below:

0. Never done--this category is not the staff nurse's responsibility in your hospital unit and is therefore unimportant to the staff nurse's job
1. Minor importance--this category has the lowest priority of importance relative to all other categories
2. Fairly important--this category does not have the priority of importance you attach to most other categories
3. Moderately important--this category has about average priority of importance among all categories
4. Very important--this category has a higher degree of priority than most other categories
5. Most important--this category is one of the few most essential categories performed

This rating task was used to assess the subjective importance which supervisors, peers, and incumbents attached to the individual behavioral dimensions. It indicated whether the different rater groups would weight behaviors

differently when doing performance evaluations (i.e., different behaviors may be more salient during the encoding, organization, recall, and evaluation processes). Individuals were presented with the ten staff nurse job dimensions and their definitions for this rating task.

Different Behaviors. Staff nurse focal persons responded to the following rating task:

In this section a list of behavioral activities which staff nurses may perform is presented. They are grouped into 10 categories which are labelled and defined according to the behavioral activities in each category. We are asking you to make two sets of ratings for each behavioral activity. First, we would like you to indicate how often you perform each activity in the presence of (immediate supervisor) in a typical month. After you have made these ratings, we would like you to indicate how often you perform each activity in the presence of other staff nurses in your unit in a typical month. This is not an evaluation of your job performance. We are interested in seeing how often staff nurses do certain activities in the presence of their supervisors and in the presence of other staff nurses. Please use the scale below:

- 0. never
- 1. once a month
- 2. twice a month

3. once a week
4. once every other shift
5. once a shift
6. twice a shift
7. every 2 hours or more frequently (i.e.,
Q 1 hour)

This item assessed whether incumbents think they act differently when they are in the presence of their supervisors and peers. The immediate supervisors' names were specified on each questionnaire because there was no generic label commonly used in all hospitals (e.g., head nurse). Further, we wanted to ensure that the individuals to whom the focal persons referred were the same individuals who were responding to the Different Observations rating task. In contrast, the names of the two peers were not delineated for the focal persons because the two peers were selected randomly and should be representative of the entire peer group.

Thus, focal persons rated the same 89 behavioral statements in reference to their immediate supervisor and then their peers. The behaviors were the same as those to which the head nurses and peers referred in the Different Observations ratings. The response options for this item were also the same as those for the Different Observations ratings. In this way, incumbents', peers', and supervisors' ratings could be compared.

Performance Ratings

BARS were developed and administered to head nurses, peers, and focal persons in order to examine interrater reliability as well as the relationships between the three explanations and interrater reliability. Ten scales were developed to obtain ratings on the following staff nurse job dimensions: (a) Planning and Evaluating Patient Care, (b) Professional Nursing, (c) Basic Nursing Care, (d) Supportive Care of Patients and Families, (e) Patient-Family Teaching, (f) Interactions with Other Professionals, (g) Professional Development, (h) Unit Safety and Maintenance, (i) Administrative Functions, and (j) Documentation. There was also a scale to rate overall job performance.

DATA ANALYSIS

In this section, the methods used to examine interrater reliability will be detailed. Then, the analysis procedures designed to evaluate the three hypotheses explaining low interrater reliability will be described.

Interrater Reliability of Performance Ratings

It was important to document the extent of interrater reliability among performance ratings from the three rater groups before exploring the reasons for low interrater reliability. It was essential that interrater reliability coefficients vary across all ten dimensions in order to establish a relationship between differences in rater groups' judgments of observations, favorability, dimensional importance, and behaviors, and interrater reliability. Further, an adequate test of the hypotheses that observations and behaviors are related to performance rating variance necessitates that performance rating variances across dimensions fluctuate. Potential covariates of performance ratings were examined in order to determine whether they were related to the ratings and could potentially mask the relationships between the hypotheses and the performance ratings.

Examination of Covariates

The relationships among demographic and situational data and performance ratings were examined. Pearson product-moment correlations were used for continuous variables (e.g., years in unit). Breakdown and analysis of variance tests were used for nominal variables (e.g., race).

Within-Group Interrater Reliability

Within-group interrater reliability was assessed by correlating two peers' performance ratings of each focal person. There were 33 focal persons on whom performance ratings were obtained from two peers. Similar analyses were not possible for supervisory ratings because ratings were not obtained from several head nurses about the same focal person's performance. Performance ratings from two peers of the same focal person were averaged for all remaining analyses.

Between-Group Comparisons

One way to examine differences among peer, supervisor, and self-ratings was to compare mean ratings from the three rater groups on each dimension. Although this analysis did not relate to any of the hypotheses concerning low interrater reliability, it documented the consensus (or lack thereof), among the three rater groups regarding focal persons' job performance. Previous research indicated that self-ratings would be higher (i.e., more lenient) than supervisory or peer ratings. A 3 x 11 repeated measures

analysis of variance (ANOVA) was computed. Rater group was a between-subject factor (supervisor, peer, and focal person) and job dimension was a within-subject factor (ten separate dimensions and one overall rating). The standard deviations of the performance ratings for each rater group and each dimension were examined to determine the degree of fluctuation in the variance across dimensions. Restricted range in variance across dimensions would attenuate the correlations between observations or behaviors and performance rating variance.

Investigation of between-groups interrater reliability was accomplished via a multitrait-multirater matrix. Campbell and Fiske's (1959) criteria were utilized to examine convergent and discriminant validity. Evidence for convergent validity exists when the correlations between raters on the same traits (the validity diagonal entries) are significantly different from zero. Lack of convergent validity would indicate low interrater reliability. These coefficients were examined to determine the degree of variation across dimensions.

Three procedures are used to document discriminant validity. First, correlations in the validity diagonal should be higher than those in the same column and row in which neither trait nor rater are in common (heterotrait-heterorater triangle). Second, values in the validity diagonal should be higher than correlations between that trait and other traits with a common rater (heterotrait-monorater

triangle). Third, the pattern of trait interrelationships should be the same within and between raters (heterotrait-monorater and heterotrait-heterorater triangles).

The performance ratings were factor analyzed as another means of examining interrater reliability. Principal-components with Varimax rotation was the method. If separate factors emerge representing each rater groups' performance ratings, we can conclude that there is low interrater reliability.

Explanations for Low Interrater Reliability

Before discussing the analyses used to examine the three hypotheses explaining low interrater reliability, the types of procedures used to examine the psychometric adequacy of the questionnaire ratings and the relationships among the different rater groups' questionnaire ratings will be delineated. Six combinations of data were correlated for separate assessments concerning the four rating tasks. The first two combinations to be described were used to assess the within-group interrater reliability of all four ratings. The second two combinations were used to assess the similarity between different rater groups' ratings of observational frequency, behavior favorability, and dimensional importance. The fifth and sixth combinations of data were ratings obtained from the same individuals to assess the similarity between ratings obtained at different times (for test-retest

reliability) or the similarity between ratings of behavioral frequency in the presence of two different rater groups.

The first combination of data involved ratings from a single rater group and used judgments of individual items within each dimension (within-group within-dimension analyses). The second used ratings from a single rater group and used the average score for each dimension so that correlations were computed across all ten dimensions (within-group across-dimension analyses). The third involved ratings from two different rater groups (e.g., supervisors and focal persons) and used judgments of individual statements within each dimension (across-group within-dimension analyses). The fourth used ratings from two different rater groups and used the average score for each dimension so that correlations were computed across all ten dimensions (across-group across-dimension analyses). The fifth and sixth combinations of data on which correlations were based were ratings from the same individuals on individual items within each dimension (within-subject within-dimension analyses) and average scores for each dimension (within-subject across-dimension analyses).

Different Observations

Internal consistency reliability and inter-scale correlations. Peers and head nurses responded to an observational frequency rating task of 89 staff nurse job behaviors to examine this hypothesis. The 89 staff nurse job behaviors

were divided into the ten job dimensions which they described. Cronbach's coefficient alpha was computed on the observational frequency ratings of the behaviors associated with each dimension. Internal consistency reliability was calculated on peers' and supervisors' ratings separately. Correlations among dimensions were also computed. At a minimum, these correlation coefficients should be lower than the alpha coefficient for each dimension.

Within-group interrater reliability. Psychometric adequacy of observational frequency judgments was estimated by using observational frequency ratings from peers who had both observed the same focal person (similar analyses could not be accomplished with supervisors' ratings since only one head nurse was available for rating observational frequency of each focal person). Within-group within-dimension analyses were used to estimate within-group interrater reliability by constructing a data matrix for each dimension for which individuals were columns and observational frequency ratings of job behaviors in each dimension were rows (see Figure 2a).

Correlations were computed using observational frequency ratings of the individual behaviors within each dimension from 31 peer dyads. For example, from one dyad, one peer's observational frequency ratings of individual behaviors describing Administrative Functions (items 190 through 198 on the questionnaire) were correlated with the second peer's observational frequency judgments of behaviors in that

Dimension: Administrative Functions

	INDIVIDUALS					
	DYAD 1		DYAD 2		DYAD 31	
	P1	P2	P1	P2	P1	P2
190	X	X	X	X	X	X
191	X	X	X	X	X	X
192	X	X	X	X	X	X
193	X	X	X	X	X	X
194	X	X	X	X	X	X
195	X	X	X	X	X	X
196	X	X	X	X	X	X
197	X	X	X	X	X	X
198	X	X	X	X	X	X
	r_1		r_2		r_{31}	

(a) Two sets of data [e.g., Peer dyads (P1,P2)]

Dimension: Planning and Evaluating

	INDIVIDUALS					
	DYAD 1		DYAD 2		DYAD 46	
	HN	P	HN	P	HN	P
222	X	X	X	X	X	X
223	X	X	X	X	X	X
224	X	X	X	X	X	X
225	X	X	X	X	X	X
226	X	X	X	X	X	X
227	X	X	X	X	X	X
228	X	X	X	X	X	X
229	X	X	X	X	X	X
230	X	X	X	X	X	X
	r_1		r_2		r_{46}	

(c) Two rater groups' ratings [e.g., head nurse-peer dyads (HN,P)]

Dimension: Patient-Family Teaching

	INDIVIDUALS					
	DYAD 1		DYAD 2		DYAD 55	
	215	216	217	218	219	220
I	X	X	X	X	X	X
T	X	X	X	X	X	X
E	X	X	X	X	X	X
M	X	X	X	X	X	X
S	X	X	X	X	X	X
221	X	X	X	X	X	X
	r_1		r_2		r_{1540}	

(b) One set of data (e.g., all head nurses)

Dimension: Unit Safety and Maintenance

	INDIVIDUALS					
	DYAD 1		DYAD 2		DYAD 49	
	FP(H)	FP(P)	FP(H)	FP(P)	FP(H)	FP(P)
40	X	X	X	X	X	X
41	X	X	X	X	X	X
42	X	X	X	X	X	X
43	X	X	X	X	X	X
44	X	X	X	X	X	X
45	X	X	X	X	X	X
46	X	X	X	X	X	X
47	X	X	X	X	X	X
48	X	X	X	X	X	X
	r_1		r_2		r_{49}	

(d) Focal persons' ratings of behavioral frequency in the presence of head nurses [FP(H)] and peers [FP(P)]

Figure 2. Examples of Within-Group, Across-Group, and Within-Subject Analyses

dimension. Thus, 31 correlations (representing the 31 peer dyads) were calculated for each dimension; N for each correlation was determined by the number of behaviors in each dimension (N=9 for Administrative Functions).

The 31 correlations for each dimension demonstrated the extent to which the two peers observed behaviors within each dimension with the same relative frequency. Since they were computed on each peer dyad separately, actual differences in job duties between focal persons and actual differences between focal persons would not affect the coefficients. An average correlation across all 31 correlations was calculated for each dimension. A high correlation would result from the two peers in each dyad observing focal persons engaging in behaviors with the same relative frequency. A low correlation would imply that the two peers in each dyad do not observe the behaviors with the same relative frequency.

In addition, within-group across-dimension analyses were accomplished with all ten dimensions simultaneously. First, ten dimension scores for each rater were computed by summing across observational frequency responses associated with behaviors in each dimension and dividing by the number of behaviors summed for each dimension. Correlations were computed for each peer dyad using these ten dimension scores of observational frequency (N=10 for these 31 correlations). An average correlation across all 31 coefficients was com-

puted; this average represents the similarity between the peers' relative observational frequency of each dimension.

As stated above, similar analyses could not be performed with supervisors' ratings since only one head nurse rated observations of each focal person. Within-group interrater reliability of supervisors' observational frequency ratings was assessed via within-group within-dimension analyses by correlating each head nurse's ratings with every other head nurse's ratings. As depicted in Figure 2b, a data matrix was constructed for each dimension for which individuals were columns and observational frequency ratings of job behaviors in each dimension were rows.

For each dimension, correlations were computed between every head nurse's ratings of observational frequency of individual behaviors within a dimension and every other head nurse's ratings (N for each coefficient was equal to the number of behaviors in the dimension). For example, each supervisor's ratings of behaviors associated with Patient-Family Teaching (items 215-221 on the questionnaire) were correlated with every other supervisors' ratings of the individual behaviors in that dimension ($N=7$ for each coefficient). An average correlation for each dimension was calculated.

Additionally, correlations were calculated for all ten dimensions simultaneously (within-group across-dimension analyses). Ten dimension scores for each supervisor were computed by averaging observational frequency ratings of

the behaviors within each dimension. Correlations were calculated between each head nurse's ten dimension scores and every other head nurse's ten dimension scores ($N=10$ for 10 dimensions). An average was obtained from the coefficients based on dimension scores.

The average correlation for each dimension and for all ten dimensions using supervisors' ratings of different focal persons was affected by differences among focal persons (e.g., focal persons who are differentially effective may enact job behaviors with differing frequency). Average correlations could also be affected by differences in focal persons' jobs (e.g., staff nurses in some units may perform some behaviors more frequently than staff nurses in other units). They were also influenced by differences in job situations (e.g., staff nurses in some units may work more closely with head nurses and be more easily observed). The nature of the job (i.e., dependency on patient load and acuity) means that patient assignment for each staff nurse also affected frequency of behaviors and would in turn affect ratings of observational frequency of different staff nurses. Despite the potential differences in job situations, average correlations were computed to examine the congruence among head nurses' observations of staff nurses because all supervisors were classified as one rater group.

In a similar vein, it was important to examine the congruence among all peers' observations of staff nurses as all peers were combined into one rater group. Therefore, within-

group within-dimension and within-group across-dimension analyses of all peers' ratings were accomplished. The procedure was identical to that described above concerning head nurses' observational frequency ratings. Thus, correlations were computed for each dimension between each peer's ratings and every other peers' ratings. Further, correlations were computed for all ten dimensions simultaneously by using mean observational frequency scores for each dimension. An average interrater correlation was calculated from the coefficients of each dimension as well as the coefficients using mean dimension scores.

Examination of covariates. As alluded to above, there were potential covariates of observational frequency ratings. The relationships among demographic and situational data and mean observational frequency dimension scores were examined. Pearson product-moment correlations were used for continuous variables (e.g., years as a staff nurse). Break-down and analysis of variance tests were used for nominal variables (e.g., unit). After nominal variables were dummy coded, variables that were significantly related to observational frequency ratings were used in the ANOVA described below (see Appendix D for coding scheme).

Between-group comparisons. A 2 x 10 repeated measures ANOVA was computed to examine differences in head nurses' and peers' observational frequency ratings. First, observational frequency ratings from two peers of the same focal person were averaged (these averages were used for this and

all remaining analyses). The mean observational frequency dimension scores were used as the dependent variable for the ANOVA. Rater group was the first, between-subject factor, and dimension was a within-subject factor.

Another method of examining this hypothesis was to compute correlations for each dimension between head nurses' and peers' observational frequency ratings. Across-group within-dimension analyses were accomplished for these correlations. As depicted in Figure 2c, the data matrix was constructed for each dimension where individuals were columns and ratings of job behaviors within each dimension were rows. There were 46 focal persons for whom a supervisor and at least one peer gave observational frequency ratings. Thus, 46 correlations were calculated for each dimension (N for each correlation was determined by the number of behaviors in each dimension). For example, from one dyad, the head nurse's observational frequency ratings of individual behaviors describing Planning and Evaluating Patient Care (items 222 through 230 on the questionnaire) were correlated with the corresponding peer's observational frequency judgments of behaviors belonging to that dimension (N=9 for these correlations).

The 46 correlations for each dimension documented the extent to which the supervisor and peer of each focal person observed behaviors within each dimension with the same relative frequency. As each correlation was based on individual head nurse-peer dyads, actual differences among focal per-

sons' job duties would not affect the coefficients. An average correlation was obtained for each dimension based on the 46 coefficients associated with each dimension.

Correlations were also computed for all ten dimensions simultaneously based on the mean observational frequency score for each dimension. Across-group across-dimension analyses were accomplished for each head nurse-peer dyad. The ten observational frequency dimension scores associated with each supervisor were correlated with the mean ratings of the ten dimensions affiliated with the corresponding peer; 46 correlations were computed based on dimension scores from 46 head nurse-peer dyads (N=10 for each coefficient). An average of these 46 coefficients was calculated to describe the similarity between head nurses' and peers' relative observational frequency of all ten dimensions.

Relationship to performance ratings. In order to relate observational frequency to performance appraisal interrater reliability, difference scores were computed on observational frequency ratings and correlations were computed on performance ratings. These calculations were accomplished using ratings from a subsample of head nurses and peers who had made both judgments (N=70). Specifically, absolute difference scores were computed for each dimension between each head nurse's and each peer's mean observational frequency dimension score. A mean absolute difference score for each dimension was obtained. Interrater reliability was measured via Pearson product-moment correlations using supervisors'

and peers' performance ratings for each dimension (N=35). A correlation was calculated between the average difference score for each dimension and the interrater reliability coefficient for each dimension (N=10 for 10 dimensions). We would predict a negative correlation between observational frequency discrepancies and interrater reliability. An adequate test of this hypothesis depends on variance across dimensions in difference scores and reliability coefficients.

The relationship between observational frequency and performance rating variance was investigated. As explained earlier, greater observational frequency should increase raters' confidence when assigning performance ratings and increase the use of extreme ends of the performance rating scales. The mean observational frequency score for each dimension was calculated for each rater group (N=43 and 49 for head nurses and peers, respectively). The variance of the performance ratings for each dimension for each rater group was calculated. A correlation was computed using supervisors' mean observational frequency scores and their performance rating variances for all ten dimensions (N=10 for 10 dimensions). A second correlation was computed based on peers' mean observational frequency scores and their performance rating variances for all ten dimensions (N=10). A positive correlation would be predicted between observational frequency and performance rating variance. It is essential that average observational frequency and performance

appraisal variance fluctuate across dimensions in order for these hypotheses to be supported.

Different Perspectives

Internal consistency reliability and inter-scale correlations. As indicated previously, this hypothesis was assessed via two rating tasks. In the standards of judgment rating task, 189 critical incidents were presented randomly. These statements were divided into the ten staff nurse job dimensions for which they reflected effective and ineffective behavior. Cronbach's coefficient alpha was computed on the favorability ratings of the behaviors associated with each dimension. Internal consistency reliability was determined separately for supervisors', peers', and focal persons' favorability ratings. Correlations among dimensions were also computed. For the second rating task, correlations among dimensional importance ratings were computed for each rater group separately.

Within-group interrater reliability. Within-group interrater reliability of favorability ratings was assessed for each rater group separately via within-group within-dimension analyses. For each dimension, for each rater group, a data matrix was constructed for which individuals were columns and ratings on individual critical incidents within dimensions were rows (e.g., Figure 2b). For each rater group and each dimension, correlations were computed between every rater's favorability ratings of individual

behaviors and favorability judgments from every other rater in the same rater group (the N for each coefficient was equal to the number of behaviors in the dimension).

For example, each focal person's favorability ratings of behaviors associated with Professional Nursing (items 1 through 9 on the questionnaire) were correlated with every other focal person's ratings of the individual behaviors in that dimension (N=9 for these coefficients). An average correlation was calculated for each rater group for each dimension. High correlations would indicate that raters within a rater group rank-ordered the favorability of behaviors in a dimension similarly.

Within-group across-dimension analyses were also accomplished using all ten dimensions simultaneously. First, ten dimension scores for each rater were computed by summing across favorability judgments associated with behaviors in each dimension. These sums were then divided by the number of behaviors summed for each dimension. The index for each dimension described the rater's standard of performance for each dimension. As described earlier, a high standard of performance would be indicated by a low average and a high average would imply a low standard of performance. For each rater group, correlations were calculated between each rater's ten dimension scores and every other individual's ten dimension scores (N=10 for 10 dimensions). An average was obtained from the coefficients based on dimension scores. A high correlation would indicate that members of a

rater group had relatively similar standards of performance across the ten dimensions.

Within-group across-dimension analyses were accomplished with dimensional importance ratings from each rater group in order to determine the degree of within-group interrater reliability. Since importance judgments were not obtained on individual behaviors within each dimension, all ten dimensions were used simultaneously (similar to the analyses described above concerning dimension scores of favorability). For each rater group, correlations were computed between each rater's ten importance ratings and every other individual's ten importance judgments ($N=10$ for 10 dimensions). An average was calculated for each rater group. A high correlation would indicate that raters within each rater group agreed about the rank-order of dimensional importance.

Examination of covariates. Potential covariates of favorability ratings and importance judgments were investigated via Pearson product-moment correlations and breakdown tests. Demographic and situational data were correlated with mean favorability dimension scores when they were measured on a continuous scale (e.g., education). Correlations were also used to examine continuous variable covariates of importance ratings. Breakdown and analysis of variance tests were utilized for potential covariates which were nominal variables (e.g., shift). After nominal variables were dummy-coded,

significant covariates were included in the ANOVAs described below.

Between-group comparisons. Favorability ratings from two peers of the same focal person were averaged for the remaining analyses. Likewise, dimensional importance judgments from two peers of the same focal person were averaged for the remaining analyses.

A 3 x 10 ANOVA was computed with supervisors', peers', and focal persons' mean favorability dimension scores. The first, between-subject factor, was rater group, and the second, within-subject factor was job dimension. A similar analysis was accomplished for dimensional importance ratings.

Another procedure, involving across-group within-dimension analyses, was used to investigate the Different Perspectives hypothesis. Data matrices were constructed for which individuals were columns and favorability ratings of individual behaviors in each dimension were rows (e.g., Figure 2c). Correlations were computed for each dimension using favorability ratings from all three rater group combinations (head nurses-peers, head nurses-focal persons, peers-focal persons). There were 49 head nurse-peer dyads from whom favorability judgments were obtained. Thus, 49 correlations were calculated for each dimension based on peers' and supervisors' favorability judgments (N for each coefficient was equal to the number of behaviors describing

effective, average, and ineffective performance in each dimension).

For example, from one dyad, the head nurse's favorability ratings of individual behaviors describing Basic Nursing Care (items 10 through 21 on the questionnaire) were correlated with the corresponding peer's favorability judgments of behaviors belonging to that dimension (N=12 for this correlation). The resulting 49 correlations (representing 49 dyads) documented the extent to which each supervisor and corresponding peer in a dyad rank-ordered the favorability of behaviors similarly. An average correlation was obtained for each dimension based on the 49 coefficients associated with each dimension.

Favorability ratings were obtained from 47 peer-focal person dyads and 47 head nurse-focal person dyads. Thus, 47 coefficients were computed for each dimension between peers' and focal persons' ratings. Similarly, 47 coefficients were calculated for each dimension between supervisors' and focal persons' ratings. Average correlations were obtained for each dimension to summarize the degree of similarity between peers' and focal persons' judgments and, separately, head nurses' and focal persons' ratings.

Correlations were also computed for all ten dimensions simultaneously based on the mean favorability dimension score for each dimension (across-group across-dimension analyses). Therefore, 49 coefficients were computed to estimate the degree of similarity between head nurses' and

peers' standards of performance for all ten dimensions (N=10). An average of these 49 coefficients was obtained. Additionally, 47 coefficients were calculated using focal persons' and peers' mean favorability dimension scores (N=10) and 47 coefficients were computed based on focal persons' and supervisors' favorability dimension scores. Averages of the 47 coefficients for each set of dyads (i.e., focal persons and peers, focal persons and head nurses) were then calculated.

Across-group across-dimension analyses were also performed using dimensional importance ratings from the three rater groups. There were 47 head nurse-peer dyads from which dimensional importance ratings on all ten dimensions were obtained. Thus, 47 coefficients were calculated (N=10 for 10 dimensions) to represent the extent of agreement in the rank-order of dimensional importance between each head nurse and corresponding peer. An average of these 47 coefficients was calculated. Dimensional importance ratings for all ten dimensions were obtained from 42 head nurse-focal person dyads and 45 peer-focal person dyads. Thus, 42 coefficients (N=10) were computed for the former dyads and 45 coefficients were calculated for the latter dyads. Average coefficients were calculated from the 42 and 45 coefficients, respectively.

Relationship to performance ratings. Raters' perspectives were related to performance appraisal interrater reliability using both favorability and importance ratings.

Absolute difference scores were calculated between the three rater groups' mean favorability ratings for each dimension. A mean absolute difference score for each rater group combination for each dimension was obtained. The performance ratings assigned by each rater were correlated with those assigned by the raters in the other two rater groups (N=35, 32, and 34 for head nurses-peers, head nurses-focal persons, and peers-focal persons, respectively). A correlation was calculated between the mean absolute difference score for each dimension and the performance appraisal interrater reliability coefficient for each dimension for each of the three rater group combinations (N=10 for 10 dimensions). The same procedure was followed using dimensional importance ratings and performance ratings. Variance across dimensions in difference scores and reliability coefficients is needed for these hypotheses to be supported.

The existence of different perspectives was also investigated by regressing, for each rater group, the overall performance rating on the performance ratings of the ten dimensions. The beta weights for each dimension were compared across rater groups to determine if they differentially weighted the job dimensions when making their overall evaluations.

Different Behaviors

Internal consistency reliability and inter-scale correlations. Recall that to examine this hypothesis, two sets of

behavioral frequency ratings were obtained; focal persons recorded how frequently they engaged in staff nurse job behaviors in the presence of their supervisors and their peers. The 89 staff nurse job behaviors were sorted into the ten job dimensions. Cronbach's coefficient alpha was computed twice for each dimension, using both sets of ratings. Correlations among dimensions were also computed with both sets of ratings.

Test-retest reliability. As previously mentioned, 17 staff nurse focal persons responded to both sets of ratings twice. The consistency of focal persons' ratings from Time 1 to Time 2 was assessed by within-subject within-dimension analyses. The data matrix for each dimension was constructed for which individuals were columns and behavioral frequency ratings on individual behaviors within each dimension were rows (e.g., Figure 2a). The two ratings (Time 1 and Time 2) from each focal person of individual behaviors within each dimension were correlated with each other. Specifically, 17 coefficients were computed for each dimension which represented the consistency across time of reports of behavior in the presence of head nurses. Another 17 coefficients were calculated for each dimension which estimated the consistency of reports of behavior in the presence of peers from Time 1 to Time 2.

For example, one focal person's Time 1 ratings of behavioral frequency in the presence of her head nurse for behaviors describing Professional Development (items 199

through 205 on the questionnaire) were correlated with her Time 2 ratings of behaviors belonging to that dimension. This was accomplished for all 17 focal persons' ratings. This procedure was also completed for all 17 focal persons' ratings of behavioral frequency in the presence of their peers. The N for each correlation coefficient was determined by the number of behaviors in each dimension (N=7 for Professional Development).

Average correlations were calculated for each dimension which described the extent to which the reported variability in job behaviors in the presence of supervisors and in the presence of peers was consistent across time. Examining test-retest reliability using withinsubject analyses such as these controlled for possible differences in jobs across individuals (e.g., the same behaviors may be performed with different frequency because of the specific unit in which a focal person works) and possible differences in individuals.

Similar within-subject analyses were done with all ten dimensions simultaneously (within-subject across-dimension analyses). First, twenty indices of behavioral frequency in the presence of supervisors and peers were calculated for each individual by averaging the ratings of behaviors comprising each dimension. This was accomplished for Time 1 and Time 2 ratings. Correlations were computed between each focal person's Time 1 and Time 2 ratings using these mean behavioral frequency dimension scores (N=10 for these 17 coefficients). An average correlation across these 17 coef-

ficients was obtained; this average represents the similarity between Time 1 and Time 2 regarding the relative reported behavioral frequency of each dimension.

Researcher verification. Four of the focal persons were followed for an entire shift by the principal investigator in order to verify their responses. It was hoped that reliability between the respondents and researcher would support the reliability of the ratings in general. The data were analyzed via across-group within-dimension analyses similar to those used to examine the test-retest information. This time, the correlations were computed between each focal person's ratings and the researcher's ratings. Thus, four correlations were computed for each dimension to represent the degree to which the researcher's ratings corresponded to each focal person's ratings describing the focal person's behavior in the presence of her peers (N of each coefficient was equal to the number of behaviors in the dimension).

Only three coefficients were calculated for each dimension using ratings of behavioral frequency in the presence of head nurses. This was due to the absence of the head nurse on the day that a focal person was being followed by the researcher. Average correlations were calculated for each dimension which described the extent to which focal persons and the researcher concurred about the focal persons' behavior in the presence of their supervisors and peers.

Across-group across-dimension analyses were also completed for all ten dimensions simultaneously using mean behavioral frequency dimension scores. For each focal person, the ten behavioral frequency dimension scores describing behavior in the presence of head nurses as reported by the focal person were correlated with the mean dimension scores for each focal person assigned by the researcher. Four of these correlations were computed and an average calculated to describe the similarity between the researcher's and the focal persons' reports of behavioral frequency in the presence of peers for all ten dimensions. The same procedure was done using the dimension scores of behavioral frequency in the presence of head nurses (however only three correlations were computed and averaged).

Within-group interrater reliability. Within-group interrater reliability of focal persons' behavioral frequency judgments was assessed separately for the two sets of ratings (i.e., behavioral frequency in the presence of head nurses, behavioral frequency in the presence of peers). Within-group within-dimension analyses were used. For each set of ratings, for each dimension, a data matrix was constructed where individuals were columns and ratings on individual behaviors within dimensions were rows (e.g., Figure 2b). For each dimension, correlations were computed between every focal person's ratings of behavioral frequency of individual behaviors within a dimension and every other

focal person's ratings (N for each coefficient was determined by the number of behaviors in the dimension).

For example, each focal person's ratings of behavioral frequency in the presence of peers on behaviors describing Interactions with Other Professionals (items 206 through 214 on the questionnaire), were correlated with every other focal person's ratings of behavioral frequency in the presence of peers for behaviors in that dimension (N=9 for these coefficients). An average correlation for each dimension was calculated for each set of ratings. These averages described the consistency of reported behavior across all focal persons when in the presence of their supervisors and peers.

Similarly, correlations were calculated for all ten dimensions simultaneously by using mean behavioral frequency scores for each dimension (within-group across-dimension analyses). Correlations were computed between each focal person's ten dimension scores describing behavioral frequency in the presence of his/her head nurse and every other focal person's ten dimension scores (N=10 for these coefficients). An average was obtained from these coefficients. Correlations were also computed among all focal persons using their ten dimension scores of behavioral frequency in the presence of their peers. An average was obtained from these coefficients.

The average correlations for each dimension and for all ten dimensions were influenced by differences among focal persons' jobs and job situations and focal persons them-

selves. This is similar to the problem encountered when within-group interrater reliability of head nurses' observational frequency ratings was assessed.

Examination of covariates. Potential covariates of behavioral frequency ratings were examined via Pearson product-moment correlations and breakdown tests. Continuous variables (e.g., age) assessing demographic and situational data were correlated with the twenty indices of average behavioral frequency in the presence of head nurses and peers. Breakdown and analysis of variance tests were utilized for potential covariates which were assessed on a nominal scale (e.g., organization of unit). After nominal variables were dummy coded, significant covariates were included in the ANOVA described below.

Between-group comparisons. A 2 x 10 ANOVA was computed using focal persons' mean ratings of behavioral frequency in the presence of supervisors and peers. Both factors, rater group (head nurses, peers) and job dimension, were within-subject measures.

Another method used to examine this hypothesis was to compute correlations between each focal person's reports of behavioral frequency in the presence of his/her head nurse and his/her judgments of behavioral frequency in the presence of peers. Both sets of ratings were obtained from 48 focal persons. Within-subject within-dimension analyses were used. A data matrix was constructed for each dimension in which individuals were columns and behavioral frequency rat-

ings of individual behaviors within dimensions were rows (see Figure 2d). For each dimension, 48 coefficients were calculated based on each focal person's two sets of ratings (N for each coefficient was equal to the number of behaviors in each dimension).

For example, a focal person's judgments of behavioral frequency in the presence of her supervisor for behaviors in the Unit Safety and Maintenance dimension (items 40 through 48 on the questionnaire) were correlated with her reports of behavioral frequency in the presence of peers for behaviors in that dimension (N=9 for this coefficient). As each correlation was based on each individual focal person, differences in the focal persons' job duties would not influence the coefficients. An average correlation was obtained for each dimension from the 48 coefficients which estimated the consistency in relative frequency of behavior in the presence of the two rater groups.

Within-subject analyses were also accomplished using mean behavioral frequency dimension scores (within-subject across-dimension analyses). For each focal person, the ten indices describing behavioral frequency in the presence of his/her head nurse were correlated with the ten indices portraying behavioral frequency in the presence of peers (N=10 for each coefficient). An average of the 48 coefficients was calculated which described the similarity between focal persons' behavior in the presence of supervisors and peers across all ten dimensions.

Relationship to performance ratings. The relationship between ratee behaviors and performance appraisal interrater reliability was investigated by computing difference scores and correlating them with interrater reliability coefficients for performance ratings. Three different combinations of data were used for this investigation. First, absolute difference scores were calculated between each focal person's dimension scores describing behavioral frequency in the presence of his/her head nurse and his/her head nurse's observational frequency dimension scores. A mean absolute difference score for each dimension was obtained. Interrater reliability was measured by Pearson product-moment correlations between incumbents' and supervisors' performance ratings for each dimension. There were 32 head nurse-focal person dyads on whose ratings difference scores and reliability coefficients could be calculated. A correlation was calculated between the mean absolute difference score for each dimension and the performance appraisal interrater reliability coefficient for each dimension (N=10 for 10 dimensions).

The above procedure was repeated with focal person's ratings of behavioral frequency in the presence of their peers, peers' reports of observational frequency, focal persons' performance appraisals, and performance ratings assigned by peers. There were 34 peer-focal person dyads on which to compute absolute difference scores using behavioral frequency ratings and observational frequency judgments and

interrater reliability coefficients using performance appraisals. As described above, a correlation was calculated between the mean absolute difference score for each dimension and the performance appraisal interrater reliability coefficient for each dimension (N=10 for 10 dimensions). The rationale for the above two procedures is that differences between focal persons' reports of their behavior and raters' reports of their observations is related to low interrater reliability between self- and other's ratings.

Absolute difference scores and performance appraisal interrater reliability coefficients were calculated on a third combination of data. This time, each focal person's mean dimension score portraying behavioral frequency in the presence of peers was subtracted from his/her dimension score representing behavioral frequency in the presence of his/her head nurse. A mean absolute difference score for each dimension was calculated. Next, performance appraisal interrater reliability coefficients were computed using performance ratings from each focal person's supervisor and peer. There were 35 teams of focal persons, peers, and supervisors from whom the data necessary for these analyses were obtained. The mean absolute difference score for each dimension was correlated with the performance appraisal interrater reliability coefficient for each dimension (N=10 for 10 dimensions). This correlation was based on the premise that when ratees behave differently in the presence of supervisors and peers, interrater reliability of the raters'

performance ratings will be low. For the above-mentioned relationships to be established there must be variance across dimensions in reliability coefficients and difference scores.

The relationship between focal persons' behaviors and performance rating variance was investigated. The mean behavioral frequency score for each dimension for both sets of ratings (i.e., in the presence of head nurses, in the presence of peers) was calculated. For each dimension, the variance of the performance ratings assigned by supervisors was calculated. Similarly, the variance of the performance ratings assigned by peers was calculated for each dimension (after ratings from two peers of the same focal person had been averaged). A correlation was computed between the dimension scores of behavioral frequency in the presence of head nurses and head nurses' performance rating variances for all ten dimensions ($N=10$ for 10 dimensions).

A second correlation was computed between the dimension scores of behavioral frequency in the presence of peers and peers' performance rating variances for all ten dimensions ($N=10$). If ratees' behaviors increase raters' confidence because of increased exposure to performance, a positive correlation would be expected between behavioral frequency and performance rating variance. There must be differences across dimensions in mean behavioral frequency and performance rating variance for the relationships between performance rating variance and ratees' behaviors to be supported.

Interdependence Among Explanations

In order to examine the relationships among the three explanations, Pearson product-moment correlations were computed. Coefficients were calculated between supervisors' observational frequency, favorability, and importance ratings. They were also computed for peers' ratings of observational frequency, favorability, and importance. In a similar vein, focal persons' ratings of favorability, importance, and behavioral frequency in the presence of the two rater groups were correlated.

As a further means of examining the relations among the explanations, peers observational frequency ratings were correlated with focal persons' ratings of behavioral frequency in the presence of peers. The same correlations were computed for head nurses' observational frequency ratings and focal persons' ratings of behavioral frequency in the presence of head nurses. Across-group within-dimension analyses were accomplished for these correlations so that differences among focal persons' jobs and job situations would not influence the coefficients. Data matrices were constructed for which individuals were columns and observational and behavioral frequency ratings of individual behaviors in each dimension were rows (e.g., Figure 2c).

Correlations were computed for each dimension using observational frequency and behavioral frequency ratings. There were 44 head nurse-focal person dyads from whom obser-

vational and behavioral frequency judgments were obtained. Thus, 44 correlations were calculated for each dimension (N for each coefficient was determined by the number of behaviors in each dimension). Correlations were also calculated on behavioral frequency and observational frequency ratings for 44 focal person-peer dyads. Averages of the 44 coefficients for each dimension for each rater group combination were obtained in order to estimate the degree of similarity between focal persons' reports of behavior and raters' reports of focal persons' behavior.

Across-group across-dimension analyses were also accomplished. Correlations were also calculated for all ten dimensions simultaneously using mean observational frequency dimension scores and average behavioral frequency dimension scores for both rater group combinations separately (N=10 for 10 dimensions). An average was obtained for each rater group combination to summarize the relative similarity across dimensions between focal persons' reported behaviors and the other two rater group members' reported observations.

RESULTS

This study was undertaken to examine why there is low interrater reliability among performance ratings from different rater groups. Three hypotheses were asserted to explain this phenomenon: Different Observations, Different Perspectives, and Different Ratee Behaviors. A questionnaire involving four rating tasks and supervisor, peer, and self performance evaluations was administered to assess these hypotheses.

In this section, the support for the three hypotheses will be reported. Prior to presenting these results, the extent of performance rating interrater reliability will be detailed.

Interrater Reliability of Performance Ratings

As mentioned earlier, it was important to confirm low interrater reliability among performance ratings from the three rater groups in this study before investigating reasons for this phenomenon. It was essential to have variance across dimensions in reliability coefficients and performance rating variance in order to adequately test all hypotheses. Results presented in this first section describe the performance ratings and interrater reliability.

Before reporting results involving performance ratings, it should be noted that raters were given the opportunity to omit a rating of a dimension if they lacked information or if the dimension was not part of the ratees' job. This resulted in missing ratings for all dimensions. The smallest--most conservative--sample size has been reported for all analysis procedures.

Examination of Covariates

The relationships among demographic and situational data and performance ratings were examined via Pearson product-moment correlations for continuous variables and breakdown tests for discrete variables. These analyses indicated several alternate predictors of performance ratings (see Appendix E). Raters' tenure, educational background, age, and part vs. full time status were significantly related to performance ratings. Performance evaluations also varied significantly according to the hospital and unit in which raters worked, the size of the hospital, the organization of the unit, and whether the raters' performance had been previously evaluated. There was no relationship between raters' race or sex and performance ratings.

Within-Group Interrater Reliability

The coefficients describing within-group interrater reliability for peers' performance ratings are reported in Table 5. The coefficients were moderate; four were signifi-

Table 5. Within-Group Interrater Reliability of Peers' Performance Ratings (N=33)

Dimension	r	Peer 1		Peer 2	
		Mean	SD	Mean	SD
Administrative Functions	.11	3.94	.80	4.12	.83
Professional Development	.22	3.77	.93	4.00	1.13
Interactions with Professionals	.29	4.10	.84	4.35	1.10
Patient-Family Teaching	.25	3.71	.68	3.88	.85
Planning and Evaluating Patient Care	.32*	3.98	.92	4.30	.99
Professional Nursing	.11	4.65	1.00	4.98	.92
Basic Nursing Care	.62*	4.43	1.06	4.67	1.02
Supportive Care	.23	4.18	.94	4.43	1.11
Documentation	.30*	4.32	.87	4.50	.96
Unit Safety and Maintenance	.31*	4.00	.89	4.04	1.03
Overall	.10	4.29	.61	4.45	.80

* $p \leq .05$

cant. They varied considerably depending on which dimension was being evaluated. The lowest coefficients were for Administrative Functions, Professional Nursing, and the overall. This might be a result of the variety of behaviors comprising these dimensions. The best reliability was obtained for Basic Nursing Care.

It was expected that highest reliability would be obtained for those dimensions most likely to be observed by peers. This was partially supported (e.g., Documentation, Interactions with Other Professionals, Planning and Evaluating Patient Care, Unit Safety and Maintenance are more easily observed by peers). However, Basic Nursing Care, Patient-Family Teaching, and Supportive Care are usually accomplished alone with patients. Peers may obtain an indication of focal persons' performance on these dimensions through focal persons' documentation and in conversations with focal persons, other staff nurses, Licensed Practical Nurses, doctors, and patients.

Between-Group Comparisons

The results of the 3 x 11 ANOVA using performance ratings as the dependent variable, rater group as a between-subject factor and dimension as a within-subject factor are presented in Table 6. There was a significant effect for rater group and dimension. For all ten dimensions, self-ratings were higher than supervisor ratings. Newman-Keuls

Table 6. ANOVA Results of Performance Ratings

<u>Source</u>	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Rater group	50.34	2	25.17	6.26	.003
Error	558.70	139	4.02		
Dimension	98.21	10	9.82	24.70	.001
Rater group x dimension	13.25	20	.66	1.67	.03
Error	552.70	1390	.40		

Performance Rating Cell Means and Standard Deviations^a

<u>Dimension</u>	<u>HN (N=48)</u>		<u>Rater Group Peers (N=52)</u>		<u>FP (N=42)</u>	
	<u>Mean</u>	<u>SD</u>	<u>Mean</u>	<u>SD</u>	<u>Mean</u>	<u>SD</u>
Administrative Functions	4.02	.86	4.23	.78	4.50	.86
Professional Development	3.90	.83	4.08	.84	4.29	.94
Interactions with Other Professionals	4.10	.93	4.44	.94	4.79	.87
Patient-Family Teaching	3.94	.91	3.94	.73	4.33	1.03
Planning and Evaluating Patient Care	4.02	1.02	4.35	.88	4.52	.92
Professional Nursing	4.77	.90	5.02	.83	5.07	.71
Basic Nursing Care	4.33	.97	4.67	.96	4.88	.80
Supportive Care	4.39	.94	4.44	.85	4.98	.95
Documentation	4.19	.73	4.69	.81	4.83	.76
Unit Safety and Maintenance	4.10	.83	4.13	.82	4.48	.86
Overall	4.35	.70	4.56	.54	4.43	.63

^aHN=Head Nurses, FP=Focal Persons

post-hoc tests (see Appendix F) indicated that these differences were significant.

Self ratings were significantly higher than peer ratings for Administrative Functions, Interactions with Other Professionals, Patient-Family Teaching, Supportive Care, and Unit Safety and Maintenance. Peer ratings were significantly higher than supervisor ratings for Interactions with Other Professionals, Planning and Evaluating Patient Care, Professional Nursing, Basic Nursing Care, and Documentation. Lenient self-ratings were expected as this has been found in previous studies. Further, peers may be more lenient than head nurses for dimensions which are most crucial for staff nurse performance.

As mentioned previously, it is necessary for the variance of performance ratings from each rater group to fluctuate across dimensions. Examination of the standard deviations in Table 6 indicated very little variance across dimensions. The restricted range would attenuate correlations using performance rating variance across dimensions. The restricted range may be caused by the use of a low percent allocation agreement when items were chosen for BARS. If performance ratings were made on job dimensions that were not independent the variance computed across all dimensions will be low (similar ratings would be given to all dimensions).

Interrater reliability among the three rater groups is depicted via the multitrait-multirater matrix in Table 7.²

Table 7. Multitrait-Multirater Matrix of Performance Ratings^a

	HM ^b										Peers										PP													
	Ad ^c	PD	Int	Tch	Pln	PM	Bas	Sup	Doc	Saf	Ov	Ad	PD	Int	Tch	Pln	PM	Bas	Sup	Doc	Saf	Ov	Ad	PD	Int	Tch	Pln	PM	Bas	Sup	Doc	Saf	Ov	
HM	Ad	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	PD	22	57	41	37	52	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Tch	46	52	41	37	52	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Pln	43	27	41	37	52	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	PM	40	22	43	33	52	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Bas	39	09	32	55	51	32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Sup	50	24	40	60	63	38	47	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Peers	Doc	41	44	66	35	45	56	29	32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Saf	44	05	48	16	31	37	36	37	59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Ov	41	32	57	45	64	63	53	42	70	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Ad	(31)	-02	11	-13	22	23	02	05	05	-21	06	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	PD	02	(41)	30	11	13	02	05	05	-21	06	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Int	14	-01	(21)	-10	18	24	04	10	03	-03	12	63	46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Tch	21	38	31	(20)	14	24	08	09	02	-12	15	42	45	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Peers	Pln	31	29	50	18	(32)	19	16	32	18	12	33	41	27	45	55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	PM	23	08	26	-05	35	(30)	17	30	12	19	17	55	45	70	52	49	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Bas	05	-07	25	19	34	04	(28)	40	-12	14	16	29	24	48	44	53	53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Sup	20	12	42	12	21	15	05	(28)	00	-01	09	39	39	62	58	52	54	59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Doc	18	06	32	-20	23	25	12	21	(14)	16	20	69	31	68	47	64	67	49	60	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Saf	04	-11	-06	-23	06	10	-01	02	-11	(05)	07	56	37	59	50	38	61	58	43	64	-	-	-	-	-	-	-	-	-	-	-	-	
	Ov	18	02	25	-09	28	21	17	13	19	(40)	59	41	71	45	46	69	48	52	68	57	-	-	-	-	-	-	-	-	-	-	-	-	
PP	Ad	(09)	02	-26	-14	13	05	-04	01	-07	-19	-07	(09)	-22	-08	05	-17	-09	-21	-15	-14	19	-37	-	-	-	-	-	-	-	-	-	-	
	PD	01	(13)	-03	20	14	17	10	22	-17	-04	-06	-02	(06)	-10	03	-01	12	-06	-17	-05	05	-16	42	-	-	-	-	-	-	-	-	-	
	Int	14	-11	(-05)	15	07	15	12	02	-18	-01	-00	-12	06	(02)	-14	-03	02	-03	-03	-12	07	-13	56	51	-	-	-	-	-	-	-	-	
	Tch	18	20	18	(08)	07	15	08	17	-18	-02	-00	-12	06	(02)	-14	-03	02	-03	-03	-24	09	-36	60	55	69	-	-	-	-	-	-	-	
	Pln	18	20	18	(08)	07	15	08	17	-18	-02	-00	-12	06	(02)	-14	-03	02	-03	-03	-24	09	-36	60	55	69	-	-	-	-	-	-	-	
	PM	24	-02	14	11	22	(14)	20	22	-20	14	-02	20	09	28	14	05	(28)	11	-16	-03	03	-23	30	27	33	64	-	-	-	-	-	-	
	Bas	15	05	-03	29	22	28	(42)	30	-18	10	06	05	14	15	29	-06	27	(24)	08	02	20	06	32	50	56	52	31	45	-	-	-	-	
PP	Sup	13	-05	-03	14	18	08	02	(42)	-06	09	04	-13	-07	-23	-17	27	-07	-08	(-15)	-38	-04	-20	47	33	57	61	46	41	45	-	-	-	
	Doc	-10	-05	-08	-08	04	01	-06	09	(-12)	-10	-08	-14	09	-12	-07	-12	-07	-11	(-28)	04	-20	63	58	70	68	37	45	37	62	-	-	-	
	Saf	06	03	-15	-10	04	14	-22	05	-07	(-07)	-26	04	-02	-15	-08	-20	-06	-20	-11	-16	(10)	-31	66	53	48	66	64	42	32	45	61	-	
	Ov	13	03	01	-04	06	14	-15	07	-09	07	(-02)	-03	-01	-09	-01	-09	-03	-14	-09	-07	04	(-14)	43	59	57	53	52	28	50	58	48	-	

^aAll decimals have been omitted

^bAd-Administrative Functions, PD-Professional Development, Int-Interactions with Other Professionals, Tch-Patient-Family Teaching, Pln-Planning and Evaluating Patient Care, PM-Professional Nursing, Bas-Basic Nursing Care, Sup-Supportive Care, Doc-Documentation, Saf-Unit Safety and Maintenance, Ov-Overall

Numbers in parentheses are validity diagonal; correlations greater than .30 are significant at $p \leq .05$ with N=38

According to Campbell and Fiske's (1959) criteria there was little convergent validity. Of the 33 coefficients in the validity diagonals, 21% were significantly greater than zero. This would indicate low interrater reliability among the performance ratings from the three rater groups. There was no discriminant validity according to the three criteria. The validity diagonals were greater than 30% of the coefficients in the heterotrait-heterorater triangles. They were greater than 10% of the coefficients in the heterotrait-monorater triangles. Finally, the pattern of coefficients among traits and raters did not appear consistent.

The coefficients along the validity diagonals illuminate the degree of variation across dimensions in interrater reliability coefficients. The coefficients based on supervisors' and peers' performance ratings did not vary much (most were between .20 and .41). Those from supervisors' and focal persons' ratings also did not vary much (most were between -.12 and .13). The variation across reliability coefficients of peers' and focal persons' ratings also varied little (most were between -.15 and .11). This restriction in range would most likely attenuate correlations between difference scores and interrater reliability coefficients.

Factor analysis confirmed low interrater reliability. As indicated by the factor loadings in Table 8, the first three factors were primarily defined by the three rater groups' ratings. This supported the notion that ratings

Table 8. Principal-Components Factor Analysis (Varimax Rotation) of Supervisor, Peer, and Incumbent Performance Ratings (N=165)

	1	2	3	4	5	6	h^2
<u>Supervisor^a</u>							
Ad	<u>.72</u>	.11	.12	.28	.29	-.01	.73
PD	<u>.35</u>	.06	.01	-.06	<u>.73</u>	.29	.77
Int	<u>.77</u>	-.10	.19	-.00	<u>.45</u>	.16	.86
Tch	<u>.48</u>	-.14	.05	-.28	<u>.59</u>	-.03	.82
Pln	<u>.76</u>	.20	.36	.05	<u>.01</u>	-.04	.75
PN	<u>.69</u>	.25	-.01	<u>.46</u>	.08	.14	.83
Bas	<u>.58</u>	-.15	.16	-.08	.12	-.03	.70
Sup	<u>.82</u>	.08	.14	-.24	.33	-.10	.87
Doc	<u>.84</u>	-.01	-.20	.01	.03	.08	.79
Saf	<u>.71</u>	-.07	.02	.09	-.14	-.08	.56
Ov	<u>.86</u>	.07	.17	-.06	-.01	.01	.80
<u>Peer</u>							
Ad	.09	-.10	<u>.37</u>	<u>.73</u>	-.12	-.00	.73
PD	-.11	-.06	<u>.26</u>	-.02	.25	<u>.77</u>	.75
Int	-.06	-.12	<u>.48</u>	<u>.56</u>	-.04	<u>.51</u>	.89
Tch	-.12	.08	<u>.65</u>	<u>.25</u>	.27	<u>.24</u>	.66
Pln	.27	-.08	<u>.72</u>	.12	.14	.05	.64
PN	.16	-.09	<u>.59</u>	.28	-.05	<u>.60</u>	.84
Bas	.25	-.19	<u>.89</u>	-.12	-.06	<u>.01</u>	.92
Sup	.11	-.08	<u>.68</u>	.11	<u>.38</u>	.14	.72
Doc	.17	-.29	<u>.57</u>	<u>.60</u>	-.14	.10	.85
Saf	-.07	.04	<u>.80</u>	<u>.27</u>	<u>-.38</u>	.15	.88
Ov	.30	-.32	<u>.51</u>	<u>.36</u>	<u>-.12</u>	.34	.74
<u>Self</u>							
Ad	-.05	<u>.85</u>	-.00	.08	-.17	-.22	.81
PD	.09	<u>.43</u>	-.05	-.06	.13	.00	.96
Int	.10	<u>.70</u>	-.05	-.08	-.09	.11	.66
Tch	-.09	<u>.89</u>	-.01	-.14	.20	-.07	.88
Pln	.02	<u>.64</u>	-.12	.04	.24	-.21	.53
PN	.16	<u>.49</u>	.10	.18	.12	.21	.39
Bas	.14	<u>.42</u>	-.02	-.10	-.04	-.01	.75
Sup	.24	<u>.68</u>	-.25	<u>-.42</u>	-.06	-.06	.78
Doc	.10	<u>.78</u>	-.09	<u>-.38</u>	-.20	.18	.86
Saf	-.10	<u>.80</u>	-.14	<u>.04</u>	-.02	-.13	.76
Ov	.03	<u>.66</u>	-.07	-.03	-.08	.09	.59
Eigen value	8.05	6.85	3.93	1.94	1.42	1.15	
% of total variance	32.2	27.3	15.7	7.7	5.7	4.6	

Table 8, cont'd.

^aAd=Administrative Functions, PD=Professional Development, Int=Interactions with Other Professionals, Tch=Patient-Family Teaching, Pln=Planning and Evaluating Patient Care, PN=Professional Nursing, Bas=Basic Nursing Care, Sup=Supportive Care, Doc=Documentation, Saf=Unit Safety and Maintenance, Ov=Overall

^bFactor loadings $\geq .35$ are underscored

assigned by individuals within each rater group were more similar to each other than to ratings assigned by members of other rater groups. Although six factors with eigen values greater than 1.00 were isolated, the rater-specific factors accounted for most of the variance. The remaining three factors were also primarily defined by ratings from separate rater groups.

Explanations for Low Interrater Reliability

Different Observations

Internal consistency reliability and inter-scale correlations. To investigate the Different Observations hypothesis, peers and head nurses reported observational frequency of 89 behaviors which described ten dimensions of the staff nurse job. The internal consistency reliabilities of supervisors' and peers' observational frequency ratings of behaviors in the ten staff nurse dimensions are reported in Tables 9 and 10, respectively. Correlations among dimension scores are also presented. Acceptable reliability existed for both groups' ratings. All coefficients except one (Interactions with Other Professionals) were above .80. The correlations between dimensions were lower than the coefficient alpha for each dimension. However, there was considerable overlap between dimensions as evidenced by the inter-scale correlations (range from .39 to .77).

Within-group interrater reliability. As described earlier, within-group interrater reliability of observation-

Table 9. Internal Consistency and Inter-Scale Correlations of Head Nurses' Observational Frequency Ratings (N=55)^a

	Ad	PD	Int	Tch	Pln	PN	Bas	Sup	Doc	Saf	Mean	SD
Ad ^b	(.83)										3.8	1.2
PD	.50 ^c	(.84)									2.3	1.3
Int	.61	.55	(.80)								3.4	1.2
Tch	.70	.56	.72	(.90)							3.4	1.5
Pln	.68	.55	.70	.77	(.88)						3.7	1.5
PN	.60	.43	.56	.55	.60	(.89)					4.8	1.3
Bas	.58	.34	.56	.45	.50	.64	(.93)				4.2	1.7
Sup	.69	.62	.68	.78	.71	.67	.69	(.92)			3.8	1.5
Doc	.68	.47	.60	.59	.62	.73	.70	.75	(.85)		3.9	1.3
Saf	.62	.56	.58	.57	.64	.72	.66	.76	.73	(.87)	4.0	1.5

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^aNumbers in parentheses are coefficient alpha

^bAd=Administrative Functions, PD=Professional Development, Int=Interaction with Other Professionals, Tch=Patient-Family Teaching, Pln=Planning and Evaluating Patient Care, PN=Professional Nursing, Bas=Basic Nursing Care, Sup=Supportive Care, Doc=Documentation, Saf=Unit Safety and Maintenance

^cAll correlation coefficients significant at $p \leq .01$

Table 10. Internal Consistency and Inter-Scale Correlations of Peers' Observational Frequency Ratings (N=88)^a

	Ad	PD	Int	Tch	Pln	PN	Bas	Sup	Doc	Saf	Mean	SD
Ad ^b	(.82)										4.1	1.1
PD	.57 ^c	(.80)									2.3	1.1
Int	.54	.53	(.78)								3.3	1.1
Tch	.59	.57	.66	(.90)							3.6	1.5
Pln	.59	.56	.64	.74	(.83)						3.6	1.2
PN	.61	.51	.65	.61	.60	(.87)					4.9	1.2
Bas	.59	.43	.63	.55	.55	.59	(.92)				4.1	1.6
Sup	.55	.60	.60	.70	.66	.66	.70	(.91)			3.9	1.5
Doc	.58	.56	.65	.54	.63	.64	.59	.74	(.82)		3.8	1.3
Saf	.56	.48	.69	.59	.55	.66	.75	.78	.74	(.82)	4.2	1.3

^aNumbers in parentheses are coefficient alpha

^bAd=Administrative Functions, PD=Professional Development, Int=Interaction with Other Professionals, Tch=Patient-Family Teaching, Pln=Planning and Evaluating Patient Care, PN=Professional Nursing, Bas=Basic Nursing Care, Sup=Supportive Care, Doc=Documentation, Saf=Unit Safety and Maintenance

^cAll correlation coefficients significant at $p \leq .01$

al frequency judgments was assessed via within-group within-dimension and across-dimension analyses. Correlations were computed for each dimension for each of 31 peer dyads using ratings on individual behaviors within a dimension. The 31 coefficients for each dimension were averaged and the average correlations for the ten dimensions are reported in Table 11. In addition, 31 correlations for 31 peer dyads were computed using mean observational frequency scores for the ten dimensions (N=10 for 10 dimensions). These coefficients were averaged and this average is presented in Table 11 (labelled "Total"). The coefficients were moderately high, indicating that, in general, both peers reported similar observational frequency of behaviors. There was substantial disagreement between some peers as depicted by the negative correlations. However, the magnitudes of the average coefficients indicated that there were few negative correlations. The highest reliability was obtained for the dimension describing Interactions with Other Professionals. This is reasonable because other staff nurses (i.e., peers) were included as "other professionals" so this dimension may be most salient to peers. They may be able to recall these behaviors more reliably because they have the most direct observations of these behaviors.

Within-group within-dimension and across-dimension analyses were also accomplished for head nurses' ratings of observational frequency. Rather than computing correlations for each dimension based on ratings from dyads, each super-

Table 11. Within-Group Interrater Reliability of Peers' Observational Frequency Ratings for Dyads^a

Dimension	$\bar{r}$	Range
Administrative Functions (9) ^b	.59	-.64 to .97
Professional Development (7)	.41	-.54 to .96
Interactions with Professionals (9)	.68*	-.06 to .95
Patient-Family Teaching (7)	.42	-.53 to .94
Planning and Evaluating Patient Care (9)	.36	-.19 to .92
Professional Nursing (9)	.51	-.87 to .99
Basic Nursing Care (12)	.47	-.35 to .93
Supportive Care (9)	.52	-.55 to .97
Documentation (9)	.49	-.37 to .97
Unit Safety and Maintenance (9)	.24	-.28 to .81
Total (10) ^c	.47	-.08 to .83

* $p \leq .05$

^aCoefficients based on 31 peer dyads

^bNumber of behaviors in each dimension (N for each correlation coefficient)

^cBased on mean observational frequency dimension scores

visor's ratings of individual behaviors within a dimension were correlated with every other supervisor's ratings of individual behaviors. These coefficients were averaged for each dimension and they are reported in Table 12. Correlations were also calculated for all ten dimensions simultaneously by using mean observational frequency dimension scores ($N=10$ for 10 dimensions). These coefficients were averaged and the value is presented in Table 12 (labelled "Total").

The coefficient magnitudes suggested moderate consensus among head nurses' observations of focal persons. The highest reliability coefficient was obtained for Administrative Functions. This dimension describes the behaviors which staff nurses perform to help supervise the unit. Since these behaviors would either help or hinder the head nurse, they are probably very salient to head nurses. The worst reliabilities concerned Professional Development and Unit Safety and Maintenance. Since Professional Development activities and Unit Safety and Maintenance functions are required differentially among hospitals and units these low coefficients were expected.

The ratings from all peers were also analyzed with a within-group within-dimension and across-dimension correlation strategy. The procedure was identical to that described above concerning head nurses' ratings. Correlations were computed for each dimension between each peer's ratings of individual behaviors and every other peers' ratings. These

Table 12. Within-Group Interrater Reliability of Head Nurses' and Peers' Observational Frequency Ratings

Dimension ^a	Head Nurses ^c		Peers ^d	
	r	Range	r	Range
Ad (9) ^b	.50	-.71 to .99	.43	-.73 to .99
PD (7)	.16	-.95 to .99	.37	-.91 to .98
Int (9)	.41	-.52 to .99	.48	-.78 to .99
Tch (7)	.39	-.99 to .99	.32	-.91 to .99
Pln (9)	.20	-.97 to .99	.28	-.97 to .99
PN (9)	.36	-.99 to .99	.36	-.99 to .99
Bas (12)	.22	-.99 to .99	.20	-.82 to .96
Sup (9)	.36	-.99 to .99	.47	-.99 to .99
Doc (9)	.28	-.82 to .98	.34	-.74 to .99
Saf (9)	.16	-.97 to .99	.17	-.99 to .99
Total (10) ^e	.31	-.87 to .94	.36	-.73 to .96

^aAd=Administrative Functions, PD=Professional Development, Int=Interactions with other Professionals, Tch=Patient-Family Teaching, Pln=Planning and Evaluating Patient Care, PN=Professional Nursing, Bas=Basic Nursing Care, Sup=Supportive Care, Doc=Documentation, Saf=Unit Safety and Maintenance.

^bNumber of behaviors in each dimension (N for each correlation coefficient)

^cCoefficients based on correlations among 55 head nurses

^dCoefficients based on correlations among 88 peers

^eBased on mean observational frequency dimension scores

coefficients were averaged and are presented in Table 12. Correlations were also computed for all ten dimensions simultaneously by using mean observational frequency scores for each dimension. The coefficient labelled "Total" in Table 12 represents the average of the correlations based on observational frequency dimension scores ($N=10$ for 10 dimensions).

These coefficients indicated moderate consensus among the entire set of peers regarding the relative frequency with which they observed the job behaviors in each dimension. The highest reliability coefficient was obtained for Interactions with Other Professionals which seems reasonable. The lowest reliability coefficient for peers' as well as supervisors' ratings was for Unit Safety and Maintenance. The values in Table 12 for peers' ratings were lower than those in Table 11 for peer dyad ratings. This was expected because values in Table 12 are based on peers' ratings of different focal persons whereas those in Table 11 are based on peers' ratings of the same focal persons.

As noted before, differences among focal persons' jobs and focal persons themselves would attenuate all correlations reported in Table 12 because all head nurses and the majority of peers rated observations of different focal persons. Further, coefficients may be attenuated due to range restriction in observational frequency ratings within each dimension. Dimensions were defined by behaviors representing the same behavioral domain; observations of the behaviors of a particular focal person within any dimension would prob-

ably occur with similar frequency. Of course, this would not be true of the "Total" coefficient which represents all ten dimensions.

Examination of covariates. Pearson product-moment correlations and breakdown tests indicated several demographic and situational variables were related to observational frequency judgments (see Appendix E). Raters' education, tenure, length of acquaintance with focal person, and previous experience with performance evaluations were significantly related to mean observational frequency dimension scores. Judgments also varied with the unit and hospital in which raters worked, and the size of the hospital. These results supported prior suggestions that the situations in which raters work affect their observations of focal persons, thus attenuating correlations among all head nurses' ratings and all peers' ratings.

Between-group comparisons. The ANOVA results for peers' and supervisors' observational frequency ratings are presented in Table 13. The above mentioned demographic and situational variables made no significant contribution to the results so the findings without covariates are reported. The F-test indicated no significant differences between the two rater groups' ratings. There was a significant effect for dimension which confirmed the fact that nurses must perform some job duties (e.g., Professional Nursing) much more frequently than others (e.g., Professional Development). It also suggests that the mean observational frequency scores

Table 13. ANOVA Results of Observational Frequency Ratings

<u>Source</u>	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Rater group	.12	1	.12	.01	.93
Error	1576.17	113	13.95		
Dimension	411.82	9	45.76	67.16	.001
Rater group x dimension	4.61	9	.51	.75	.66
Error	692.90	1017	.68		

Observational Frequency Cell Means and Standard Deviations

<u>Dimension</u>	<u>Rater Group</u>			
	<u>Head Nurses (N=55)</u>		<u>Peers (N=57)</u>	
	<u>Mean</u>	<u>SD</u>	<u>Mean</u>	<u>SD</u>
Administrative Functions	3.80	1.17	3.97	1.13
Professional Development	2.28	1.29	2.28	1.11
Interactions with Other Professionals	3.33	1.27	3.19	1.14
Patient-Family Teaching	3.36	1.52	3.50	1.49
Planning and Evaluating Patient Care	3.62	1.53	3.49	1.28
Professional Nursing	4.74	1.42	4.72	1.42
Basic Nursing Care	4.09	1.79	3.91	1.75
Supportive Care	3.74	1.62	3.76	1.52
Documentation	3.86	1.43	3.66	1.30
Unit Safety and Maintenance	3.94	1.58	4.05	1.34

across dimensions would not have a restricted range. This is important for the correlation between mean observational frequency and performance rating variance.

There were differences in the mean observational frequency ratings from peers and supervisors for most dimensions; however, the large within-subject standard deviations may have precluded a significant effect. The previous findings concerning low within-group interrater reliability for observational frequency ratings (see Table 12) also indicated that within-group variance might be too large for a significant rater group effect to emerge.

Another method of investigating this hypothesis was to compute correlations for each supervisor-peer dyad for each dimension using observational frequency ratings of individual behaviors in each dimension (across-group within-dimension analyses). The coefficients for all 46 dyads were averaged for each dimension and they are reported in Table 14. Most were not significant but their magnitudes confirmed that peers and head nurses observed behaviors in each dimension with similar relative frequency. A correlation was also computed for each of the 46 dyads using mean observational frequency dimension scores (across-group across-dimension analyses). The average of these coefficients, labelled "Total" in Table 14, indicated that peers and head nurses reported observing all ten dimensions with similar relative frequency.

Table 14. Correlations Between Peers' and Head Nurses' Observational Frequency Ratings^a

Dimension	$\bar{r}$	Range
Administrative Functions (9) ^b	.59	.04 to .98
Professional Development (7)	.42	-.40 to .92
Interactions with Other Professionals (9)	.61*	.07 to .95
Patient-Family Teaching (7)	.48	-.28 to .97
Planning and Evaluating Patient Care (9)	.39	-.45 to .91
Professional Nursing (9)	.56	-.59 to .96
Basic Nursing Care (12)	.43	-.53 to .91
Supportive Care (9)	.54	-.48 to .93
Documentation (9)	.49	-.14 to .91
Unit Safety and Maintenance (9)	.36	-.17 to .88
Total (10) ^c	.52	-.77 to .90

* $p \leq .05$

^aCoefficients based on 46 peer-head nurse dyads

^bNumber of behaviors in each dimension (N for each correlation coefficient)

^cBased on mean observational frequency dimension scores

Relationship to performance ratings. The relationship between observational frequency ratings and performance appraisal interrater reliability was investigated by means of difference scores and performance appraisal interrater reliability coefficients. For 35 supervisor-peer dyads, difference scores were calculated between head nurses' and peers' mean observational frequency dimension scores. A correlation was computed between the average observational frequency difference scores on all ten dimensions and the interrater reliability coefficients for all ten dimensions based on supervisors' and peers' performance ratings (N=10 for 10 dimensions). This correlation was $-.01$ (N=10 for 10 dimensions). This low value indicated that there was no relationship between differences in observational frequency and interrater reliability. The correlation was probably attenuated, however, due to restriction in range across dimensions in both the difference scores (Mean=1.09, SD=.16) and interrater reliability coefficients (Mean=.21, SD=.15).

Another way in which different observations could influence interrater reliability is through performance rating variance. The prediction was that there would be a positive relationship between observational frequency and performance rating variance. The mean observational frequency score for each dimension for all head nurses was correlated with the variance in all head nurses' performance ratings for each dimension (N=10 for 10 dimensions). This correlation was $-.29$ (n.s.).

A second correlation was calculated between the mean of all peers' observational frequency scores on each dimension and the variance in all peers' performance ratings for each dimension (N=10 for 10 dimensions). This coefficient was .19 (n.s.). These two coefficients indicated that observational frequency ratings were not strongly related to performance rating variance. It is surprising that the correlations were in opposite directions and there were no differences in observational frequency between the two rater groups.

One reason for the low magnitudes of the correlations may be that raters who felt they did not have enough information about an individual's behavior on a particular dimension were advised not to make a rating. This would have deleted the lower end of the observational frequency rating continuum and corresponding performance ratings. Another possibility is the restricted range across dimensions in performance rating variance.

Different Perspectives

Internal consistency reliability and inter-scale correlations. All head nurses and staff nurses responded to two rating tasks to investigate this hypothesis. The internal consistency reliability data for head nurses', peers', and focal persons' favorability ratings are depicted in Tables 15, 16 and 17, respectively. Cronbach alpha coefficients were acceptable as all were at or above .80. In most cases, the correlations between dimensions were lower than the

Table 15. Internal Consistency and Inter-Scale Correlations of Head Nurses' Favorability Ratings (N=56)^a

	Ad	PD	Int	Tch	Pln	PN	Bas	Sup	Doc	Saf	Mean	SD
Ad ^b	(.87)										4.0	.6
PD	.70 ^c	(.82)									4.4	.5
Int	.85	.73	(.86)								4.0	.6
Tch	.63	.86	.70	(.86)							4.4	.5
Pln	.73	.77	.84	.83	(.89)						4.5	.6
PN	.75	.53	.85	.58	.74	(.91)					3.5	.7
Bas	.73	.49	.80	.54	.71	.87	(.93)				3.9	.7
Sup	.83	.72	.85	.74	.81	.83	.74	(.87)			4.2	.6
Doc	.88	.71	.89	.67	.82	.87	.84	.84	(.89)		3.6	.7
Saf	.85	.71	.91	.70	.82	.87	.82	.88	.91	(.85)	4.0	.6

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^aNumbers in parentheses are coefficient alpha

^bAd=Administrative Functions, PD=Professional Development, Int=Interactions with Other Professionals, Tch=Patient-Family Teaching, Pln=Planning and Evaluating Patient Care, PN=Professional Nursing, Bas=Basic Nursing Care, Sup=Supportive Care, Doc=Documentation, Saf=Unit Safety and Maintenance

^cAll correlation coefficients are significant at $p < .01$

Table 16. Internal Consistency and Inter-Scale Correlations of Peers' Favorability Ratings (N=93)^a

	Ad	PD	Int	Tch	Pln	PN	Bas	Sup	Doc	Saf	Mean	SD
Ad ^b	(.88)										3.9	.6
PD	.73 ^c	(.85)									4.3	.6
Int	.91	.67	(.87)								3.9	.6
Tch	.74	.85	.73	(.86)							4.1	.5
Pln	.73	.81	.73	.85	(.88)						4.2	.5
PN	.84	.53	.88	.60	.62	(.94)					3.4	.7
Bas	.79	.50	.86	.59	.62	.93	(.95)				3.7	.7
Sup	.85	.67	.88	.77	.72	.85	.83	(.87)			4.0	.6
Doc	.80	.53	.67	.55	.54	.92	.87	.82	(.91)		3.4	.7
Saf	.84	.62	.91	.67	.73	.90	.90	.85	.85	(.88)	3.9	.6

^aNumbers in parentheses are coefficient alpha

^bAd=Administrative Functions, PD=Professional Development, Int=Interactions with Other Professionals, Tch=Patient-Family Teaching, Pln=Planning and Evaluating Patient Care, PN=Professional Nursing, Bas=Basic Nursing Care, Sup=Supportive Care, Doc=Documentation, Saf=Unit Safety and Maintenance

^cAll correlation coefficients are significant at $p \leq .01$

Table 17. Internal Consistency and Inter-Scale Correlations of Focal Persons' Favorability Ratings (N=52)^a

	Ad	PD	Int	Tch	Pln	PN	Bas	Sup	Doc	Saf	Mean	SD
Ad ^b	.92	.78									4.1	.7
PD	.78 ^c	.84									4.4	.5
Int	.92	.78	.88								4.2	.6
Tch	.80	.90	.85	.89							4.4	.6
Pln	.71	.84	.80	.91	.94						4.5	.6
PN	.86	.61	.89	.67	.60	.94					3.7	.9
Bas	.86	.57	.87	.65	.59	.92	.88				4.0	.8
Sup	.92	.74	.90	.82	.76	.82	.81	.86			4.3	.6
Doc	.83	.61	.87	.72	.62	.92	.86	.83	.84		3.6	.7
Saf	.86	.60	.84	.66	.63	.86	.88	.82	.81	.87	4.1	.6

^aNumbers in parentheses are coefficient alpha

^bAd=Administrative Functions, PD=Professional Development, Int=Interactions with Other Professionals, Tch=Patient-Family Teaching, Pln=Planning and Evaluating Patient Care, PN=Professional Nursing, Bas=Basic Nursing Care, Sup=Supportive Care, Doc=Documentation, Saf=Unit Safety and Maintenance

^cAll correlation coefficients are significant at $p \leq .01$

internal consistency coefficients for each dimension. The correlations between dimensions were high, however, suggesting little independence among favorability ratings of dimensions. This is possibly a result of presenting the critical incidents randomly (i.e., not organized into dimensions). It might also result from the low allocation agreement criterion employed during the retranslation procedure.

The judgments of importance were obtained for staff nurse dimensions and not individual behaviors within dimensions. The correlations between dimensions are depicted in Tables 18, 19 and 20 for supervisors', peers', and focal persons' ratings. Most of the correlations were below .30 but they were statistically significant. The low magnitudes might indicate that individuals were distinguishing among the different dimensions when making these ratings. In contrast, the low coefficients might simply indicate a restricted range in the ratings resulting from agreement among raters concerning the importance of each dimension. The means and low standard deviations for each dimension suggest that the latter explanation may be correct.

Within-group interrater reliability. As explained previously, within-group interrater reliability was measured for each rater groups' favorability ratings via within-group within-dimension and across-dimension analyses. Correlations were computed for each dimension between each head nurses' favorability ratings of behaviors within a dimension and every other head nurses' favorability judgments for behav-

Table 18. Inter-Scale Correlations of Head Nurses' Dimensional Importance Ratings (N=54)^a

	Ad	PD	Int	Tch	Pln	PN	Bas	Sup	Doc	Saf	Mean	SD
Ad ^b	-										3.2	1.4
PD	.45 ^c	-									3.6	1.0
Int	.42	.52	-								3.4	1.0
Tch	.16	.55	.16	-							3.9	.9
Pln	-.02	.31	-.06	.46	-						4.1	.8
PN	.00	.04	-.15	.25	.50	-					4.4	.6
Bas	.11	.01	.00	.34	.28	.51	-				4.1	1.1
Sup	.12	.26	.04	.44	.42	.39	.43	-			4.3	.8
Doc	.17	.12	.13	.23	.46	.29	.29	.48	-		4.1	.7
Saf	.14	.26	.32	.21	.22	.23	.19	.28	.52	-	3.5	1.2

^aNo coefficient alpha computed on one item scale

^bAd=Administrative Functions, PD=Professional Development, Int=Interactions with Other Professionals, Tch=Patient-Family Teaching, Pln=Planning and Evaluating Patient Care, PN=Professional Nursing, Bas=Basic Nursing Care, Sup=Supportive Care, Doc=Documentation, Saf=Unit Safety and Maintenance

^cCorrelation coefficients $\geq .26$, $p \leq .05$, $\geq .34$, $p \leq .01$

Table 19. Inter-Scale Correlations of Peers' Dimensional Importance Ratings (N=93)^a

	Ad	PD	Int	Tch	Pln	PN	Bas	Sup	Doc	Saf	Mean	SD
Ad ^b	-										3.2	1.3
PD	.34 ^c	-									3.2	1.1
Int	.30	.46	-								3.4	1.0
Tch	.28	.38	.34	-							3.9	.7
Pln	.19	.35	.15	.31	-						4.1	.8
PN	-.02	-.17	.02	.20	.28	-					4.5	.7
Bas	.12	.04	.16	.14	.29	.39	-				4.2	.9
Sup	.05	.09	.20	.45	.16	.35	.54	-			4.1	.8
Doc	.17	.30	.29	.29	.23	.23	.17	.30	-		4.1	.8
Saf	.04	.01	.05	.18	.29	.20	.36	.30	.24	-	3.7	.9

^aNo coefficient alpha computed on one item scale

^bAd=Administrative Functions, PD=Professional Development, Int=Interactions with Other Professionals, Tch=Patient-Family Teaching, Pln=Planning and Evaluating Patient Care, PN=Professional Nursing, Bas=Basic Nursing Care, Sup=Supportive Care, Doc=Documentation, Saf=Unit Safety and Maintenance

^cCorrelation coefficients $\geq .20$, $p \leq .05$, $\geq .26$, $p \leq .01$

Table 20. Inter-Scale Correlations of Focal Persons' Dimensional Importance Ratings (N=50)^a

	Ad	PD	Int	Tch	Pln	PN	Bas	Sup	Doc	Saf	Mean	SD
Ad ^b	-										3.2	1.0
PD	.58 ^c	-									3.2	1.0
Int	.24	.54	-								3.5	.9
Tch	.44	.55	.41	-							3.9	.9
Pln	.44	.58	.28	.68	-						3.9	1.0
PN	-.07	-.03	.24	.23	.34	-					4.4	.7
Bas	-.09	.10	.31	.09	.19	.51	-				4.2	.9
Sup	-.07	.12	.30	.12	.11	.41	.69	-			4.1	.8
Doc	.01	.12	.35	.24	.11	.42	.27	.27	-		4.1	.8
Saf	.14	.30	.57	.05	.08	.15	.41	.26	.39	-	3.5	1.2

^aNo coefficient alpha computed on one item scale

^bAd=Administrative Functions, PD=Professional Development, Int=Interactions with Other Professionals, Tch=Patient-Family Teaching, Pln=Planning and Evaluating Patient Care, PN=Professional Nursing, Bas=Basic Nursing Care, Sup=Supportive Care, Doc=Documentation, Saf=Unit Safety and Maintenance

^cCorrelation coefficients $\geq .27$, $p \leq .05$, $\geq .35$, $p \leq .01$

iors in that dimension (N for each coefficient was determined by the number of behaviors in a dimension). The same procedure was accomplished for all peers' ratings and all focal persons' ratings. The average coefficient for each dimension for each rater group is reported in Table 21.

The results for all three rater groups' ratings were significant and indicated that there was substantial within-group interrater reliability regarding the relative favorability of behaviors within each dimension. The average correlation for each rater group based on mean favorability dimension scores for all ten dimensions (N=10 for 10 dimensions) is moderate for all three rater groups (labelled "Total"). This implied that there was moderate consensus regarding the relative standards for performance across dimensions within each rater group. These values are probably attenuated due to restriction of range. The dimension scores were obtained by averaging favorability ratings of effective and ineffective behaviors; the average of each dimension would all converge around the midpoint of the scale.

Within-group across-dimension analyses were accomplished for the dimensional importance ratings from each rater group. The average correlation for all supervisors' importance ratings across the ten dimensions was .18 (N=10 for 10 dimensions). The correlation for all peers' ratings was .25 (N=10) and for all focal persons' ratings was .20 (N=10). These low values indicated considerable disagreement

Table 21. Within-Group Interrater Reliability of Head Nurses', Peers', and Focal Persons' Favorability Ratings

Dimension ^a	Head Nurses ^c		Peers ^d		Focal Persons ^e	
	r	Range	r	Range	r	Range
Ad (19) ^b	.65**	-.34 to .97	.59**	-.52 to .99	.51*	-.62 to .96
PD (18)	.70**	-.21 to .99	.60**	-.90 to .98	.59**	-.52 to .96
Int (18)	.69**	-.43 to .97	.61**	-.74 to .97	.54*	-.71 to .98
Tch (19)	.73**	-.03 to .97	.63**	-.90 to .97	.58**	-.58 to .96
Pln (18)	.65**	-.45 to .98	.57**	-.89 to .99	.49*	-.61 to .96
PN (22)	.73**	-.30 to .98	.69**	-.35 to .99	.62**	-.52 to .97
Bas (21)	.72**	-.32 to .99	.70**	-.53 to .99	.54**	-.62 to .98
Sup (18)	.69**	-.36 to .96	.64**	-.67 to .98	.60**	-.65 to .97
Doc (18)	.11	-.26 to .97	.64**	-.65 to .99	.56**	-.61 to .96
Saf (18)	.65**	-.40 to .97	.61**	-.74 to .98	.48*	-.61 to .96
Total (10) ^f	.40	-.99 to .99	.41	-.99 to .99	.28	-.99 to .99

*p ≤.05

**p ≤.01

Table 21, cont'd.

^aAd=Administrative Functions, PD=Professional Development, Int=Interactions with Other Professionals, Tch=Patient-Family Teaching, Pln=Planning and Evaluating Patient Care, PN=Professional Nursing, Bas=Basic Nursing Care, Sup=Supportive Care, Doc=Documentation, Saf=Unit Safety and Maintenance

^bNumber of critical incidents in each dimension (N for each correlation coefficient)

^cCoefficients based on correlations among 56 head nurses

^dCoefficients based on correlations among 93 peers

^eCoefficients based on correlations among 52 focal persons

^fBased on mean favorability dimension scores

within the rater groups regarding the relative importance of each dimension. These correlations are most likely attenuated due to restriction of range within each individual's ratings of importance. If all dimensions were rated high or all dimensions assigned average importance by a rater, the variance across dimensions would be restricted (standard deviations were less than 1.00 for most individuals).

Examination of covariates. Pearson product-moment correlations and breakdown tests using potential covariates and favorability ratings indicated that favorability ratings were influenced by raters' education, age, tenure, part or full time status, and unit (see Appendix E). It is probable that these demographic variables and the particular unit influence the expectations for performance which nurses hold. For example, older nurses may believe that expressing doubt about a doctor's order is an example of poor behavior; younger nurses who received a more professional indoctrination may believe this same behavior is an example of above average performance.

Pearson product-moment correlations and breakdown tests indicated that ratings of dimensional importance were significantly related to raters' age, sex, race, tenure, part or full time status, previous performance rating experience, the hospital and unit in which they worked, and the organization of the unit (see Appendix E). These covariates were included in the ANOVAs described below. Since they did not

contribute significantly to the results, findings without the covariates are reported.

Between-group comparisons. The ANOVA results for supervisors', peers', and focal persons' favorability ratings are reported in Table 22. There was a nonsignificant effect for rater group and a significant effect for dimension. The significant effect for dimension indicated that raters have higher standards of judgment on some dimensions (e.g., Professional Nursing) than others (e.g., Professional Development). Apparently, there are no meaningful differences between rater groups concerning their standards of performance on the ten dimensions.

A 3 x 10 ANOVA was also computed for dimensional importance ratings (see Table 23). The effect for rater group was not significant. There was a significant effect for dimension which indicated that raters believe some dimensions (e.g., Professional Nursing) are more important than others (e.g., Unit Safety and Maintenance).

The relationships among the three rater groups' favorability ratings were also assessed by means of across-group within-dimension analyses. Correlations were computed for each dimension using favorability ratings of individual behaviors associated with that dimension for each head nurse-peer dyad (the N for each coefficient was equal to the number of behaviors in each dimension). The correlations for the 49 dyads were averaged and the averages are reported in Table 24. The same procedure was accomplished for 47 peer-

Table 22. ANOVA Results of Favorability Ratings

<u>Source</u>	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Rater group	11.34	2	5.67	1.87	.16
Error	497.39	164	3.03		
Dimension	138.41	9	15.38	179.55	.001
Rater group x dimension	1.43	18	.08	.93	.54
Error	126.42	1476	.09		

Favorability Ratings Cell Means and Standard Deviations^a

<u>Dimension</u>	<u>HN (N=56)</u>		<u>Rater Group Peers (N=59)</u>		<u>FP (N=52)</u>	
	<u>Mean</u>	<u>SD</u>	<u>Mean</u>	<u>SD</u>	<u>Mean</u>	<u>SD</u>
Administrative Functions	3.99	.60	3.88	.53	4.08	.66
Professional Development	4.44	.51	4.29	.52	4.40	.55
Interactions with Other Professionals	4.03	.60	3.93	.53	4.15	.64
Patient-Family Teaching	4.35	.54	4.18	.50	4.35	.62
Planning and Evaluating Patient Care	4.49	.60	4.22	.49	4.47	.62
Professional Nursing	3.53	.75	3.45	.69	3.66	.89
Basic Nursing Care	3.86	.68	3.78	.60	3.98	.75
Supportive Care	4.17	.58	4.06	.54	4.26	.61
Documentation	3.57	.66	3.43	.62	3.64	.73
Unit Safety and Maintenance	4.03	.60	3.91	.51	4.11	.65

^aHN=Head Nurses, FP=Focal Persons

Table 23. ANOVA Results of Dimensional Importance Ratings

<u>Source</u>	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Rater Group	10.82	2	5.41	2.25	.11
Error	381.50	159	2.40		
Dimension	252.07	9	28.01	46.09	.001
Rater group x dimension	8.11	18	.45	.74	.77
Error	869.52	1431	.61		

Dimensional Importance Cell Means and Standard Deviations^a

<u>Dimension</u>	<u>HN (N=56)</u>		<u>Rater Group Peers (N=58)</u>		<u>FP (N=50)</u>	
	<u>Mean</u>	<u>SD</u>	<u>Mean</u>	<u>SD</u>	<u>Mean</u>	<u>SD</u>
Administrative Functions	3.20	1.38	3.47	1.06	3.16	1.06
Professional Development	3.56	.96	3.38	.88	3.18	.98
Interactions with Other Professionals	3.44	1.00	3.52	.80	3.52	.86
Patient-Family Teaching	3.91	.92	4.03	.56	3.90	.91
Planning and Evaluating Patient Care	4.15	.83	4.17	.60	3.94	.98
Professional Nursing	4.42	.63	4.66	.61	4.36	.75
Basic Nursing Care	4.09	1.10	4.33	.80	4.18	.94
Supportive Care	4.26	.83	4.28	.62	4.12	.85
Documentation	4.17	.75	4.29	.59	4.06	.77
Unit Safety and Maintenance	3.48	1.16	3.79	.74	3.52	1.18

^aHN=Head Nurses, FP=Focal Persons

Table 24. Correlations Between Peers', Head Nurses', and Focal Persons' Favorability Ratings

Dimension ^a	Peers-Head Nurses ^c $\bar{r}$ Range	Peers-Focal Persons ^d $\bar{r}$ Range	Focal Persons-Head Nurses ^e $\bar{r}$ Range
Ad (19) ^b	.66* -.29 to .89	.59** -.46 to .93	.59** -.49 to .90
PD (18)	.76** -.63 to .94	.70** -.65 to .95	.62** -.42 to .95
Int (18)	.70** -.45 to .95	.65** -.54 to .94	.61** -.25 to .95
Tch (19)	.73** -.70 to .94	.69** -.56 to .93	.64** -.39 to .96
Pln (18)	.66** -.30 to .95	.60** -.34 to .92	.54* -.42 to .90
PN (22)	.74** -.01 to .96	.73** -.26 to .96	.68** -.43 to .97
Bas (21)	.73** -.33 to .98	.69** -.32 to .93	.61** -.32 to .93
Sup (18)	.71** -.13 to .91	.68** -.37 to .95	.65** -.24 to .95
Doc (18)	.71** .95 to .93	.66** -.36 to .95	.61** -.38 to .94
Saf (18)	.68** -.72 to .92	.61** -.51 to .94	.55* -.44 to .94
Total (10) ^f	.44 -.53 to .99	.37 -.61 to .90	.38 -.68 to .99

* $p < .05$

** $p < .01$

^aAd=Administrative Functions, PD=Professional Development, Int=Interactions with Other Professionals, Tch=Patient-Family Teaching, Pln=Planning and Evaluating Patient Care, PN=Professional Nursing, Bas=Basic Nursing Care, Sup=Supportive Care, Doc=Documentation, Saf=Unit Safety and Maintenance

Table 24, Cont'd.

^bNumber of critical incidents in each dimension (N for each correlation coefficient)

^cCoefficients based on 49 peer-head nurse dyads

^dCoefficients based on 47 peer-focal person dyads

^eCoefficients based on 47 focal person-head nurse dyads

^fBased on mean favorability dimension scores

focal person dyads and 47 head nurse-focal person dyads. The averages for each dimension for these rater group combinations are also presented in Table 24. The coefficients for all rater groups for all ten dimensions are significant and high. These findings confirmed the ANOVA results for mean favorability ratings which indicated that the three rater groups shared similar perceptions of effective, average, and ineffective job performance.

The coefficients for each rater group in Table 24 labelled "Total" are based on mean favorability ratings for all ten dimensions (across-group across-dimension analyses). These coefficients were moderate for all three rater groups which also suggests that supervisors, peers, and focal persons concur on standards of performance for all ten dimensions. These coefficients are probably attenuated due to restriction in range of the average favorability scores for each dimension (i.e., ratings of effective and ineffective behaviors have been averaged together).

Across-group across-dimension analyses for dimensional importance ratings were also accomplished. Correlations were computed between the ten importance ratings for 47 head nurse-peer dyads, 42 head nurse-focal person dyads and 45 focal person-peer dyads ($N=10$ for all coefficients). The average correlations for the three rater-group combinations were .28 (n.s.), .19 (n.s.), and .30 (n.s.), respectively. These low magnitudes indicated weak consensus among the three rater groups regarding the rank-order of dimensional

importance. However, the coefficients are probably attenuated due to restriction in range in each individual's importance judgments.

Relationship to performance ratings. The relationship between raters' perspectives and performance appraisal interrater reliability was examined using favorability and importance ratings. A performance appraisal interrater reliability coefficient for each dimension was obtained by correlating the performance ratings assigned by each rater with those assigned by the raters in the other two rater groups (N=35, 32, and 34 for head nurses-peers, head nurses-focal persons, and peers-focal persons, respectively). A mean absolute difference score for each rater group combination for each dimension was also calculated.

Correlations between performance appraisal interrater reliability coefficients among the three rater groups' performance ratings and mean absolute difference scores among the three rater groups' favorability ratings are presented in Table 25 (N=10 for 10 dimensions). There was no relationship between discrepant favorability ratings and interrater reliability. The restricted ranges in interrater reliability coefficients and difference scores may have obscured any true relationships. The coefficient for head nurses' and peers' ratings was in the predicted direction.

The same procedure was accomplished for dimensional importance ratings and the results are also reported in Table 25. Again, the coefficients were not significant. The

Table 25. Correlations Between Interrater Reliability and Different Perspectives (N=10)

	<u>Favorability</u>			<u>Importance</u>			<u>Interrater Reliability</u>		
	r	Mean	SD	r	Mean	SD	Mean	SD	
Head Nurses-Focal Persons	.03	.75	.12	-.28	.90	.25	.07	.19	
Head Nurses-Peers	-.22	.72	.07	.29	.86	.23	.21	.15	
Focal Persons-Peers	.00	.65	.05	.09	.88	.19	.08	.16	

direction of the correlation for head nurses and focal persons was consistent with the prediction. The direction of the relationship for head nurses and peers was contrary to expectations.

The existence of different perspectives was also investigated by regressing, for each rater group, the overall performance rating on the performance ratings of the ten dimensions. The standardized Beta weights and R^2 coefficients are presented in Table 26. The Beta weights revealed that different dimensions were salient to the three rater groups when an overall evaluation was assigned. Professional Nursing was the only dimension heavily weighted by all three rater groups. The dimensions with highest Beta weights for supervisors were Professional Nursing, Basic Nursing Care, and Documentation; for peers they were Professional Nursing, Interactions with Other Professionals, and Administrative Functions; for focal persons the highest Beta weights were for Professional Nursing, Professional Development, Supportive Care, and Documentation.

Different Behaviors

Internal consistency reliability and inter-scale correlations. To investigate this hypothesis, focal persons completed two sets of ratings describing the frequency with which they enact 89 staff nurse job behaviors in the presence of their head nurses and their peers. The internal consistency coefficients for both sets of behavioral frequency

Table 26. Regression of Overall Performance Rating on Dimension Performance Ratings for Three Rater Groups

Dimension ^a	Beta Weights	
	Head Nurses (N=48)	Peers (N=52)
Ad	.01	.19
PD	.08	.06
Int	.12	.31
Tch	-.02	-.13
Pln	.12	.03
PN	.21	.28
Bas	.18	.13
Sup	.06	.00
Doc	.29	.00
Saf	.07	.10
R ²	.67**	.63**
		.48**

**p ≤ .01

^aAd=Administrative Functions, PD=Professional Development, Int=Interactions with Other Professionals, Tch=Patient-Family Teaching, Pln=Planning and Evaluating Patient Care, PN=Professional Nursing, Bas=Basic Nursing Care, Sup=Supportive Care, Doc=Documentation, Saf=Unit Safety and Maintenance

ratings are presented in Tables 27 and 28. Correlations between dimensions are also reported. The internal consistency coefficients are adequate. All are above .80 except Interactions with Other Professionals in the presence of peers. The correlations among scales are high indicating nonindependent dimensions.

Test-retest reliability. Test-retest reliability was assessed by within-subject within-dimension and across-dimension analyses using ratings from seventeen focal persons who responded twice to both sets of ratings. The two ratings (Time 1 and Time 2) from each focal person of individual behaviors within each dimension were correlated with each other (N for each coefficient was equal to the number of behaviors belonging to each dimension). The 17 coefficients for each dimension describing consistency of reported behavior in the presence of supervisors across time were averaged. These averages are reported in Table 29. The average for each dimension summarizing consistency of reported behavior in the presence of peers are also presented in Table 29. The coefficients in Table 29 labelled "Total" are based on mean behavioral frequency dimension scores for all ten dimensions (N=10 for 10 dimensions).

The magnitudes of the coefficients in Table 29 suggested that focal persons' reports of behavior were consistent across time. Patient-Family Teaching, Planning and Evaluating Patient Care, and Professional Development had the lowest reliabilities. The first two dimensions are totally

Table 27. Internal Consistency and Inter-Scale Correlations of Ratings of Behavioral Frequency in Presence of Head Nurses (N=50)^a

	Ad	PD	Int	Tch	Pln	PN	Bas	Sup	Doc	Saf	Mean	SD
Ad ^b	(.92)										3.2	1.7
PD	.80 ^c	(.85)									2.0	1.2
Int	.78	.72	(.87)								2.7	1.4
Tch	.73	.74	.74	(.94)							2.7	1.8
Pln	.82	.67	.83	.83	(.93)						2.7	1.6
PN	.75	.74	.74	.78	.77	(.92)					3.7	1.8
Bas	.77	.74	.73	.69	.69	.84	(.97)				3.2	2.1
Sup	.74	.75	.75	.84	.80	.87	.83	(.95)			3.2	1.9
Doc	.74	.73	.74	.77	.78	.83	.77	.89	(.92)		3.2	1.6
Saf	.75	.74	.74	.78	.77	.89	.82	.91	.90	(.92)	3.4	1.8

^aNumbers in parentheses are coefficient alpha

^bAd=Administrative Functions, PD=Professional Development, Int=Interactions with Other Professionals, Tch=Patient-Family Teaching, Pln=Planning and Evaluating Patient Care, PN=Professional Nursing, Bas=Basic Nursing Care, Sup=Supportive Care, Doc=Documentation, Saf=Unit Safety and Maintenance

^cAll correlation coefficients are significant at $p \leq .01$

Table 28. Internal Consistency and Inter-Scale Correlations of Ratings of Behavioral Frequency in Presence of Peers (N=50)^a

	Ad	PD	Int	Tch	Pln	PN	Bas	Sup	Doc	Saf	Mean	SD
Ad ^b	(.83)										4.1	1.1
PD	.61 ^c	(.84)									2.5	1.1
Int	.64	.60	(.70)								3.3	.9
Tch	.56	.63	.60	(.91)							3.5	1.6
Pln	.68	.61	.65	.77	(.86)						3.4	1.3
PN	.52	.46	.47	.63	.62	(.87)					4.8	1.2
Bas	.60	.57	.69	.61	.76	.67	(.92)				4.3	1.5
Sup	.65	.56	.58	.74	.75	.86	.76	(.90)			4.0	1.4
Doc	.67	.64	.56	.59	.75	.76	.75	.70	(.83)		3.9	1.3
Saf	.69	.55	.55	.68	.81	.81	.79	.77	.87	(.86)	4.3	1.3

^aNumbers in parentheses are coefficient alpha

^bAd=Administrative Functions, PD=Professional Development, Int=Interactions with Other Professionals, Tch=Patient-Family Teaching, Pln=Planning and Evaluating Patient Care, PN=Professional Nursing, Bas=Basic Nursing Care, Sup=Supportive Care, Doc=Documentation, Saf=Unit Safety and Maintenance

^cAll correlation coefficients are significant at $p \leq .01$

Table 29. Test-Retest Reliability of Behavioral Frequency in Presence of Head Nurses and Peers^a

Dimension ^b	Referent Group			
	Head Nurses		Peers	
	$\bar{r}$	Range	$\bar{r}$	Range
Ad (9) ^c	.68*	.36 to .99	.69*	-.17 to .97
PD (7)	.50	-.16 to .99	.40	-.35 to .90
Int (9)	.76**	.39 to .97	.82**	.56 to .99
Tch (7)	.27	-.56 to .94	.46	-.61 to .99
Pln (9)	.45	-.51 to .85	.50	-.11 to .93
PN (9)	.61*	-.19 to .99	.66*	.14 to .99
Bas (12)	.67*	-.18 to .93	.67*	-.13 to .96
Sup (9)	.71*	.36 to .95	.66*	-.18 to .96
Doc (9)	.56	-.13 to .93	.65*	-.17 to .95
Saf (9)	.53	-.08 to .99	.65*	.19 to .99
Total (10) ^d	.53	-.27 to .87	.64*	-.09 to .90

* $p < .05$ ** $p < .01$ ^aCoefficients based on 17 focal persons' Time 1-Time 2 ratings^bAd=Administrative Functions, PD=Professional Development, Int=Interactions with Other Professionals, Tch=Patient-Family Teaching, Pln=Planning and Evaluating Patient Care, PN=Professional Nursing, Bas=Basic Nursing Care, Sup=Supportive Care, Doc=Documentation, Saf=Unit Safety and Maintenance^cNumber of behaviors in each dimension (N for each correlation coefficient)^dBased on mean behavioral frequency dimension scores

dependent on the patient load of each nurse. Inconsistency from one rating to the other could be a function of flexibility in patient load. In addition, Professional Development activities may be required once a month or every two months--leading to discrepant frequency ratings.

Researcher verification. The reliability of behavioral frequency ratings was also estimated by correlating ratings from four focal persons with ratings assigned by the researcher who followed the four focal persons. Across-group within-dimension analyses were accomplished by correlating, for each dimension, each focal person's behavioral frequency ratings of individual behaviors within a dimension and the researcher's ratings of that focal person's behavioral frequency (N for each coefficient was determined by the number of behaviors in the dimension). Averages for each dimension of the four coefficients for behavioral frequency in the presence of peers were calculated and are reported in Table 30. Although four focal persons were followed, one head nurse was absent and the average correlations for behavioral frequency in the presence of supervisors reported in Table 30 were based on three focal persons' ratings. Averages labelled "Total" were calculated on mean behavioral frequency dimension scores (across-group across-dimension analyses).

The coefficients with head nurses as referent group varied with dimension. The worst reliabilities were for Administrative Functions and Interactions with Other Profes-

Table 30. Researcher Verification of Ratings of Behavioral Frequency in Presence of Head Nurses and Peers

Dimension ^a	Referent Group			
	Head Nurses		Peers	
	$\bar{r}$	Range	$\bar{r}$	Range
Ad (9) ^b	.07	-.33 to .27	.71*	.67 to .79
PD (7)	.72*	.65 to .79	.49	.10 to .76
Int (9)	.07	-.16 to .36	.15	-.03 to .46
Tch (7)	.18	.10 to .26	.34	.02 to .79
Pln (9)	.42	.24 to .59	.30	.10 to .46
PN (9)	.31	-.01 to .51	.37	.02 to .72
Bas (12)	.39	.38 to .39	.55	.31 to .74
Sup (9)	.20	.00 to .36	.49	.29 to .63
Doc (9)	.35	.17 to .63	.56	.39 to .80
Saf (9)	.13	-.10 to .36	.21	-.25 to .58
Total (10) ^e	.35	-.34 to .90	.21	-.30 to .51

* $p \leq .05$

^aAd=Administrative Functions, PD=Professional Development, Int=Interactions with Other Professionals, Tch=Patient-Family Teaching, Pln=Planning and Evaluating Patient Care, PN=Professional Nursing, Bas=Basic Nursing Care, Sup=Supportive Care, Doc=Documentation, Saf=Unit Safety and Maintenance

^bNumber of items in each dimension (N for each correlation coefficient)

^cCoefficients based on 3 researcher-respondent dyads

^dCoefficients based on 4 researcher-respondent dyads

^eBased on mean behavioral frequency dimension scores

sionals; the highest coefficient was for Professional Development activities. The coefficients with peers as referent group were moderate. Lowest consensus was obtained for Interactions with Other Professionals; highest was for Administrative Functions. Unfortunately, focal persons were observed for only one shift each so behaviors which were not enacted every shift were not observed. This would attenuate the relationship between the researcher's and focal persons' behavioral frequency reports.

Within-group interrater reliability. Interrater reliability among focal persons' reports of behavioral frequency was assessed for both sets of ratings (in presence of head nurses and peers) by within-group within-dimension and across-dimension analyses. Correlations were computed for each dimension for each set of ratings between each focal person's behavioral frequency ratings of behaviors within a dimension and every other focal persons' behavioral frequency judgments for behaviors in that dimension (N for each coefficient was equal to the number of behaviors in a dimension). The average correlations for each dimension for each set of ratings is reported in Table 31. Averages of coefficients based on mean behavioral frequency scores of all ten dimensions (N=10) are also presented in Table 31 (labelled "Total").

The coefficients in reference to head nurses were lower than those in reference to peers. In general, the coefficients indicated that focal persons as a group acted fairly consistently in the presence of each rater group.

Table 31. Within-Group Interrater Reliability^a of Behavioral Frequency in Presence of Head Nurses and Peers^a

Dimension ^b	Referent Group			
	Head Nurses		Peers	
	$\bar{r}$	Range	$\bar{r}$	Range
Ad (9) ^c	.36	-.76 to .95	.45	-.88 to .98
PD (7)	.19	-.99 to .99	.31	-.97 to .99
Int (9)	.35	-.74 to .99	.45	-.61 to .96
Tch (7)	.11	-.94 to .99	.23	-.94 to .99
Pln (9)	.26	-.76 to .95	.30	-.90 to .99
PN (9)	.24	-.96 to .96	.31	-.99 to .99
Bas (12)	.26	-.75 to .99	.31	-.78 to .91
Sup (9)	.51	-.73 to .98	.49	-.94 to .99
Doc (9)	.23	-.83 to .99	.26	-.92 to .99
Saf (9)	.20	-.84 to .95	.25	-.87 to .99
Total (10) ^d	.24	-.76 to .92	.40	-.66 to .95

^aCoefficients based on correlations among 50 focal persons

^bAd=Administrative Functions, PD=Professional Development, Int=Interactions with Other Professionals, Tch=Patient-Family Teaching, Pln=Planning and Evaluating Patient Care, PN=Professional Nursing, Bas=Basic Nursing Care, Sup=Supportive Care, Doc=Documentation, Saf=Unit Safety and Maintenance

^cNumber of behaviors in each dimension (N for each correlation coefficient)

^dBased on mean behavioral frequency dimension scores

Examination of covariates. Pearson product-moment correlations and breakdown tests involving mean behavioral frequency dimension scores and potential covariates indicated that focal persons' ratings of behavioral frequency were related to their education, age, tenure, sex, race, experience with previous performance evaluations, hospital, and shift (see Appendix E). These findings seem reasonable because many of the variables directly affect the duties performed and whether those duties were performed in the presence of the two rater groups. For example, staff nurses who work during the night shift are less likely to perform most behaviors in the presence of head nurses who typically work during the day. These covariates were included in the ANOVA described below and made no significant contribution. Results are reported without covariates.

Between-group comparisons. The ANOVA results with focal persons' dimension scores of behavioral frequency are reported in Table 32. These results indicated that focal persons thought they acted differently when in the presence of their peers and head nurses. There was also a significant effect for dimension and a significant interaction.

The cell means indicated that focal persons reported more behavioral frequency in the presence of peers than head nurses for all dimensions. Newman-Keuls post hoc tests indicated all differences were significant. The interaction confirmed that differences between focal persons' ratings of behavioral frequency in the presence of peers and supervis-

Table 32. ANOVA Results of Behavioral Frequency Ratings

<u>Source</u>	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Referent Rater Group	126.48	1	126.48	14.4	.01
Error	430.32	49	8.78		
Dimension	262.81	9	29.20	32.16	.01
Error	400.39	441	.91		
Rater group x dimension	6.76	9	.75	2.25	.02
Error	147.48	441	.33		

Behavioral Frequency Cell Means and Standard Deviations

<u>Dimension</u>	<u>Referent Group</u>			
	<u>Head Nurses (N=50)</u>		<u>Peers (N=50)</u>	
	<u>Mean</u>	<u>SD</u>	<u>Mean</u>	<u>SD</u>
Administrative Functions	3.22	1.71	4.02	1.24
Professional Development	2.04	1.17	2.48	1.19
Interactions with Other Professionals	2.74	1.41	3.28	1.04
Patient-Family Teaching	2.72	1.79	3.40	1.62
Planning and Evaluating Patient Care	2.69	1.60	3.39	1.38
Professional Nursing	3.71	1.80	4.63	1.36
Basic Nursing Care	3.21	2.10	4.22	1.57
Supportive Care	3.24	1.86	3.86	1.52
Documentation	3.20	1.68	3.81	1.39
Unit Safety and Maintenance	3.42	1.80	4.20	1.41

ors were much greater for the Professional Nursing and Basic Nursing Care dimensions than the Professional Development and Interactions with Other Professionals dimensions. This is reasonable since actual nursing practice is much more likely to be accomplished with peers or in the presence of peers whereas head nurses are more likely to be present at Professional Development activities and in the nursing station where nurses interact with other health care professionals. The dimension effect confirmed the fact that nurses must perform some job duties (e.g., Professional Nursing) much more frequently than others (e.g., Professional Development). It also indicates that there should not be a restriction in range problem for mean behavioral frequency scores when they are correlated with variance of supervisors' and peers' performance ratings.

Another method used to examine the similarity of reported behavior in the presence of supervisors and peers was within-subject within-dimension analyses. Correlations were computed for each dimension between each focal person's ratings of individual behaviors in the presence of his/her head nurse and judgments of behavioral frequency in the presence of peers (N for each coefficient is equal to the number of behaviors in a dimension).

There were 49 focal persons from whom both sets of ratings were obtained. An average for each dimension was calculated and is reported in Table 33. Correlations were also computed for all ten dimensions simultaneously using mean

Table 33. Correlations Between Ratings of Behavioral Frequency in the Presence of Head Nurses and Peers^a

Dimension	$\bar{r}$	Range
Administrative Functions (9) ^b	.61*	-.25 to .99
Professional Development (7)	.50	-.81 to .99
Interactions with Other Professionals (9)	.73*	-.07 to .99
Patient-Family Teaching (7)	.43	-.61 to .99
Planning and Evaluating Patient Care (9)	.56	-.76 to .99
Professional Nursing (9)	.56	-.49 to .99
Basic Nursing Care (12)	.65*	-.32 to .99
Supportive Care (9)	.69*	-.22 to .99
Documentation (9)	.66*	-.18 to .99
Unit Safety and Maintenance (9)	.56	-.66 to .99
Total (10) ^c	.61*	-.39 to .97

* $p \leq .05$

^aCoefficients based on ratings from 48 focal persons

^bNumber of behaviors in each dimension (N for each correlation coefficient)

^cBased on mean behavioral frequency dimension scores

behavioral frequency dimension scores (N=10 for these 49 coefficients). An average of these 49 coefficients, labelled "Total," is also presented in Table 33. These coefficients were moderate to high which indicated some consistency in reported behavior in the presence of head nurses and peers. They may be inflated because of method variance (the same individuals made both ratings).

Relationship to performance ratings. The relationships between ratee behaviors, rater observations, and interrater reliability are outlined in Table 34. The coefficients involving focal persons and other rater groups were derived using behavioral frequency and observational frequency ratings. The coefficient involving head nurses' and peers' performance ratings involved focal persons' ratings of behavioral frequency in the presence of the two rater groups. None of the coefficients were significant and the direction of all three was opposite to that predicted. Restricted ranges in reliability coefficients and difference scores may have attenuated the correlations.

The relationship between focal persons' behaviors and performance rating variance was also investigated. The mean dimension score of behavioral frequency in the presence of supervisors for all focal persons was correlated with the variance in all head nurse's performance ratings for each dimension (N=10 for 10 dimensions). This correlation was $-.43$ (n.s.). A second correlation was calculated between the variance of all peers' performance ratings for each dimen-

Table 34. Correlations Between Interrater Reliability and Ratee Behaviors (N=10)

	r	Interrater Reliability	
		Mean	SD
Head Nurses-Focal Persons	.23 ^a	1.76	.28
Head Nurses-Peers	.49 ^b	1.12	.16
Focal Persons-Peers	.16 ^c	1.65	.25

^aDifference scores computed on head nurses' ratings of observational frequency and focal persons' ratings of behavioral frequency in presence of head nurse

^bDifference scores computed on focal persons' ratings of behavioral frequency in presence of head nurses and in presence of peers

^cDifference scores computed on peers' ratings of observational frequency and focal persons' ratings of behavioral frequency in presence of peers

sion and the mean dimension score for behavioral frequency in the presence of peers (N=10). This coefficient was $-.42$ (n.s.). These two coefficients indicated that focal persons' behavioral frequency in the presence of each rater group was not significantly related to the variance in performance ratings assigned by members of each rater group. Both correlations were moderate but in the direction opposite to that which was predicted.

Interdependence Among Explanations

Correlations were computed among the ratings obtained from each rater group to examine the relationships among the three hypotheses. These coefficients are presented in Table 35. There was no relationship between observational frequency or behavioral frequency and favorability ratings. Some of the coefficients based on observational frequency and importance were significant; however, most were low. Many of the correlations between behavioral frequency and importance were significant but also low. There also seemed to be no relationship between favorability ratings and dimensional importance ratings.

These findings suggest that cognitive schemas influence observations--attention is directed to behaviors which belong to important dimensions. On the other hand, dimensions may become important because behaviors comprising them are observed frequently. Cognitive schemas also seem to influence ratees' behaviors. Dimensions which focal persons

Table 35. Interdependence Among Observational, Perspectives, and Behavioral Explanations

Dimension ^a	OBS-FAV ^b			OBS-IMP			BEH-FAV			BEH-IMP			FAV-IMP		
	HN ^c	P	HN	P	HN	P	FP(H)	FP(P)	FP(P)	FP(H)	FP(P)	FP(P)	HN	P	FP
Ad	.22	.16	-.01	.26*	.15	.09	.24	.37**	.21	.09	.13				
PD	.03	.09	.00	.23*	.05	.10	.32*	.46**	.12	-.01	.03				
Int	.14	.11	-.09	.32**	.03	.00	.42**	.48**	.29*	.02	.29*				
Tch	.08	.15	.26*	.22*	-.10	-.07	.30*	.32*	.21	-.03	-.02				
Pln	.22	-.01	.22	.14	-.11	-.06	.14	.15	.16	-.09	.12				
PN	.17	.15	.08	.04	.14	.07	.14	-.03	.02	-.04	.01				
Bas	.08	.15	.20	.01	.12	-.02	.24	.29*	.01	-.08	.09				
Sup	.31*	.20	.16	-.13	.15	.04	.32*	.28*	-.05	-.06	.18				
Doc	.04	.09	.15	.25*	.19	.12	.06	.23	.23	.00	-.11				
Saf	.16	.17	.17	.01	.09	-.02	.08	.30*	.26*	.01	.27*				

*p ≤ .05

**p ≤ .01

^aAd=Administrative Functions, PD=Professional Development, Int=Interactions with Other Professionals, Tch=Patient-Family Teaching, Pln=Planning and Evaluating Patient Care, PN=Professional Nursing, Bas=Basic Nursing Care, Sup=Supportive Care, Doc=Documentation, Saf=Unit Safety and Maintenance

Table 35, Cont'd.

^bOBS=Observational Frequency, FAV=Favorability, IMP=Importance, BEH=Behavioral Frequency

^cHN=Head Nurses (N=55), P=Peers (N=87), FP(H)=Behavior in presence of Head Nurses (N=48), FP(P)=Behavior in presence of Peers (N=49), FP=Focal Persons (N=50)

believe are more important are engaged in more frequently. Again, frequency may affect cognitive schema development--frequently performed behaviors may be more salient and dimensions in which they belong be rated more important.

As a further means of examining the relationship between the Different Observations and Different Behaviors hypotheses, correlations were computed between peers' and head nurses' observational frequency and focal persons' ratings of behavioral frequency in the presence of the two rater groups. Across-group within-dimension and across-dimension analyses were completed for these correlations. Correlations were computed for each dimension using observational frequency ratings and behavioral frequency ratings of individual behaviors associated with that dimension from 44 head nurse-focal person dyads (N for each correlation was equal to the number of behaviors in each dimension). The same procedure was accomplished with ratings from 44 peer-focal person dyads. Average correlations were obtained for each dimension for both rater group combinations and are reported in Table 36. Coefficients were also calculated using mean observational frequency dimension scores and mean behavioral frequency dimension scores for the head nurse-focal person and peer-focal person dyads. The averages of these coefficients are also presented in Table 36 (labelled "Total"). The coefficients are not significant and are low to moderate. A stronger relationship was expected between focal persons' reports of their behaviors in the presence of

Table 36. Correlations Between Observational Frequency Ratings and Behavioral Frequency Ratings^a

Dimension	$\bar{r}$	FP-HN ^b Range	$\bar{r}$	FP-Peers Range
Administrative Functions (9) ^c	.55	-.08 to .90	.45	-.64 to .93
Professional Development (7)	.23	-.72 to .98	.41	-.66 to .96
Interactions with Other Professionals (9)	.49	-.27 to .98	.60*	-.37 to .95
Patient-Family Teaching (7)	.27	-.71 to .99	.32	-.72 to .94
Planning and Evaluating Patient Care (9)	.28	-.87 to .83	.41	-.78 to .93
Professional Nursing (9)	.46	-.33 to .94	.49	-.21 to .96
Basic Nursing Care (12)	.37	-.24 to .79	.33	-.59 to .96
Supportive Care (9)	.58	-.29 to .99	.47	-.64 to .92
Documentation (9)	.33	-.40 to .78	.47	-.38 to .90
Unit Safety and Maintenance (9)	.28	-.53 to .84	.32	-.58 to .85
Total (10) ^d	.32	-.69 to .84	.46	-.62 to .94

* $p \leq .05$

^aCorrelations based on 44 focal person-head nurse dyads and 44 focal person-peer dyads

^bFP=Focal Persons, HN=Head Nurses

^cNumber of behaviors in each dimension (N for each correlation coefficient)

^dBased on mean behavioral frequency dimension scores

the two rater groups and peers' and supervisors' reports of observations of focal persons.

The hypotheses, analysis procedures, and results are summarized in Table 37. As was evident in this chapter, support was not found for any of the hypotheses to explain interrater reliability.

Table 37. Summary of Analyses and Results

Hypotheses and Measures	Analysis Procedures	Results
Low Interrater Reliability of performance ratings from peers, supervisors, and incumbents	a) Within-Group Interrater r_{xx}	
-Behaviorally Anchored Rating Scales	-Pearson corr of peers' ratings	-Moderate
	b) Between-Group Comparisons	-Significant
	-ANOVA	-No convergent or discriminant validity
	-Multitrait-Multirater Matrix	-Separate factors for each rater group
	-Factor Analysis	
Different Observations of incumbents by supervisors and peers will lead to low interrater reliability in performance ratings from supervisors and peers; Different amounts of observation of incumbents by supervisors and peers will lead to differences in performance rating variance	a) Internal Consistency r_{xx} and Inter-Scale Correlations	-Adequate
	-Supervisors	-Adequate
	-Peers	
	b) Within-Group Interrater r_{xx} using within-group correlations	-Moderately high
	-Peer dyads	-Moderate
	-All supervisors	-Moderate
	-All peers	
	c) Between-Group Comparisons	-Not significant
	-ANOVA	
-Ratings of observational frequency of job behaviors by supervisors and peers	-Across-group correlations of ratings from peer-supervisor dyads	-Moderately high
-Performance ratings using BARS		

d) Relationship to Performance Ratings	-Observational frequency differences correlated with interrater reliability coefficients of performance ratings	-Very low (n.s.)
	-Mean observational frequency correlated with performance rating variance	
	-Supervisors	-Moderately low (n.s.)
	-Peers	-Low (n.s.)
Different Perspectives concerning expectations for incumbents' performance will lead to low interrater reliability in performance ratings from all rater groups	a) Internal Consistency r_{xx} and Inter-Scale Correlations	
	-Supervisors	-Adequate
	-Peers	-Adequate
	-Incumbents	-Adequate
	b) Within-Group Interrater r_{xx} using within-group correlations	
	-All supervisors	-High
	-All peers	-High
	-All incumbents	-High
	c) Between-Group Comparisons	
	-ANOVA	-Not significant
	-Across-group correlations of ratings from:	
	Peer-Supervisor dyads	-High
	Peer-Incumbent dyads	-High
	Incumbent-Supervisor dyads	-High

- d) Relationship to Performance Ratings
- Favorability rating differences correlated with interrater reliability coefficients of performance ratings from:
 - Peers-Supervisors -Low (n.s.)
 - Peers-Incumbents -Low (n.s.)
 - Incumbents-Supervisors -Low (n.s.)
- Different Perspectives of incumbents' jobs will lead to low interrater reliability in performance ratings from all rater groups
- Ratings of dimensional importance from supervisors, peers, and incumbents
 - Performance ratings of each dimension and an overall evaluation using BARS
- a) Inter-dimension Correlations
- Supervisors -Moderately low (sig.)
 - Peers -Moderately low (sig.)
 - Incumbents -Moderately low (sig.)
- b) Within-Group Interrater r_{xx} using within-group correlations
- All supervisors -Low (n.s.)
 - All peers -Low (n.s.)
 - All incumbents -Low (n.s.)
- c) Between-Group Comparisons
- ANOVA -Not significant
 - Across-group correlations of ratings from:
 - Peer-Supervisor dyads -Moderately low (n.s.)
 - Peer-Incumbent dyads -Low (n.s.)
 - Incumbent-Supervisor dyads -Moderately low (n.s.)

- d) Relationship to Performance Ratings
- Importance rating differences correlated with interrater reliability coefficients of performance ratings from:
 - Peers-Supervisors
 - Peers-Incumbents
 - Incumbents-Supervisors
- e) Regression of overall performance evaluation on dimensional performance ratings for each rater group

-Moderately low (n.s.)
 -Moderately low (n.s.)
 -Low (n.s.)
 -Different dimensions had highest Beta weights for each rater group

Different Behaviors enacted by incumbents in the presence of peers and supervisors will lead to low interrater reliability in performance ratings from peers and supervisors;

Differences between incumbents' reports of behaviors and supervisors' or peers' reports of observations will lead to low interrater reliability in performance ratings from incumbents and supervisors or peers; Different amounts of behaviors enacted in the presence of supervisors and peers will lead to differences in variance of performance ratings from supervisors and peers

- a) Internal Consistency r_{xx} and Inter-Scale Correlations
- Presence of supervisors
 - Presence of peers
- b) Test-Retest r_{xx} using within-subject analyses
- Presence of supervisors
 - Presence of peers
- c) Researcher Verification using across-group correlations
- Presence of supervisors
 - Presence of peers
- d) Within-Group Interrater r_{xx} using within-group correlations
- Presence of supervisors
 - Presence of peers

-Adequate
 -Adequate
 -High
 -High
 -Moderately low
 -Moderate
 -Moderate
 -Moderate

-Ratings of behavioral frequency in presence of supervisors and peers by incumbents -Observational frequency ratings by supervisors and peers -Performance ratings using BARS	e) Between-Group Comparisons -ANOVA -Across-group correlations of ratings in reference to supervisors and peers f) Relationship to Performance and Ratings -Behavioral frequency differences correlated with interrater reliability coefficients of performance ratings from peers and supervisors -Differences between Observational frequency ratings from supervisors and ratings of Behavioral frequency in presence of supervisors correlated with interrater reliability coefficients of performance ratings from supervisors and incumbents -Differences between Observational frequency ratings from peers and ratings of Behavioral frequency in presence of peers correlated with interrater reliability coefficients of performance ratings from peers and incumbents	-Significant -High
		-Low (n.s.)
		-Moderately high (n.s.)
		-Low (n.s.)

-Mean behavioral frequency in presence of supervisors correlated with variance of performance ratings from supervisors
-Mean behavioral frequency in presence of peers correlated with variance of performance ratings from peers

-Moderately high (n.s.)

-Moderately high (n.s.)

DISCUSSION

The purpose of this study was to investigate three hypothesized explanations for low interrater reliability. These explanations concerned differences in raters' observations and perspectives, and differences in ratees' behaviors. In this section, the research findings will be reviewed, limitations of the study will be addressed, and future research directions will be proposed.

Research Results

Interrater Reliability of Performance Ratings

Examination of performance ratings from supervisors, peers, and incumbents confirmed previous findings of low interrater reliability. Furthermore, self-ratings were consistently more lenient than supervisors' and peers' ratings. Factor analysis results of the ratings were consistent with those of Holzbach (1978), Klimoski and London (1974) and Prien and Liske (1962). Separate factors defined by the three rater groups' ratings were isolated.

Different Observations Explained

The findings concerning all three hypotheses for low interrater reliability indicated little support for these explanations. The analysis of variance results of super-

visors' and peers' observational frequency ratings indicated no significant differences in observations. As previously mentioned, the high within-rater-group variance due to differences in focal persons' and their jobs could have masked a significant rater group effect.

Another possible explanation for this nonsignificant result is based on verbal learning and person perception research. The observational frequency rating task was dependent on recalling observed behaviors. Research on verbal learning and person perception indicates that prototypes or general impressions may have affected these ratings in two ways. Research on verbal learning demonstrated that the meaning of sentences can be recalled after delay but that verbatim memory fades quickly (e.g., Jarvella, 1971; Zangwill, 1972). Memory of specific details is structured around stereotypical or routine sequences of events called "scripts" (Shank & Abelson, 1977). Moreover, Bower, Black, and Turner (1979) found that people recalled events and incidents that were consistent with a "script," even when these events did not occur.

Research on person perception also demonstrated that when people make memory-based judgments, they often rely on a general impression or a category prototype to help them access or reconstruct stored information. Schemas not only help organize memory but also affect inferences about whether specific behaviors have occurred (Sulin & Dooling, 1974). Cantor and Mischel (1977) and Hamilton, Katz, &

Leirer (1980) showed that information consistent with a prototype is more likely to be remembered while information inconsistent with prior expectations is less likely to be retained. Individuals tended to "see" things about focal persons that were not there and not to see things that did occur (Feldman, 1981; Nathan & Lord, 1983; Hamilton, 1979). Schweder and D'Andrade's (1980) systematic distortion hypothesis suggests that when demands are placed on recall, people infer specifics on the basis of their general schemas or prototypes.

Since both supervisors and peers were nurses, it is probable that their prototypes of a typical nurse's job are very similar to each other. When asked to recall observed behaviors, they would be inclined to recall behaviors consistent with the same prototype. This would result in similar ratings of "observed" behavior.

A second way prototypes could influence the ratings of observed behaviors is through the raters' conceptions of focal persons' performance. The raters' overall impression of an individual's performance would represent that individual's prototypical performance (either effective or ineffective). This prototype would elicit recollections of behavior consistent with it.

If raters have positive overall impressions of focal persons, they might recall focal persons engaging in behaviors more frequently (assuming that they need to enact job duties frequently in order to perform well). In contrast, if

raters have a low overall impression of focal persons, they may not recall behaviors as occurring frequently. In fact, this assertion was confirmed by the data in this study. The correlation between each rater's overall performance rating and mean observational frequency rating was significant ($r=.31$; $p<.01$). Of course, a correlation does not imply the direction of causation. Raters may base their judgments of frequency on their overall impression or decide on an overall performance rating on the basis of their observations.

Since peers and head nurses in this study did not assign significantly different overall performance ratings, it is probable that their recollections of behaviors were consistent with the same general impressions of focal persons' performance. This would lead to similar ratings of observational frequency.

When observational frequency difference scores were correlated with interrater reliability, there was no relationship. As indicated, this might result from restricted ranges in both the difference scores and the interrater reliability coefficients across all ten dimensions. Both difference scores and interrater reliability coefficients were consistently low across dimensions yielding little variance.

Observational frequency scores were not related to performance rating variance. As mentioned previously, performance ratings were not obtained for dimensions about which raters felt they had insufficient information to make a rat-

ing. Thus, those individuals who would report less observational frequency would presumably not have made a performance rating. This would attenuate a correlation based on observational frequency and performance ratings because the lower end of the distribution was eliminated.

It would be difficult to determine the true relationship between observational frequency and performance rating variance for another reason. Since true scores were not available, it would be difficult to determine whether raters used the central point on the scales because of less observations or because ratees truly deserved average ratings. Thus, raters who rated "average" ratees would not use the extreme ends of a rating scale regardless of the amount of observational frequency. This could mask the relationship between observational frequency and performance rating variance.

Different Perspectives Explanation

The Different Perspectives hypothesis was also not supported. There were no significant differences between the standards of judgment held by members of the three rater groups or the ratings of dimensional importance from the three rater groups. This was contrary to expectations.

The previous discussion concerning prototypes of a nurse's job could explain these nonsignificant findings. Specifically, since the individuals in all three rater groups were nurses they would hold the same prototype for a

nurse's job. This could lead to similar standards of judgment and ratings of importance from the three rater groups. It is also possible that subordinates were aware of their supervisors' standards of judgment and perceptions of dimensional importance and were influenced by supervisors' opinions. This would lead to nonsignificant differences between supervisors' and subordinates' ratings.

The relationship between favorability rating difference scores and interrater reliability was not significant. The same result was found for importance rating difference scores. The restricted ranges in difference scores and interrater reliability coefficients may have attenuated the coefficients.

When the overall performance rating was regressed on the performance ratings of individual dimensions, the findings indicated that different dimensions were salient to the three rater groups. Professional Nursing was considered important by all three groups. Peers also relied on focal persons' abilities to interact with other professionals (including other staff nurses) and administrative capabilities in assigning an overall evaluation. These would seem to be important to peers because of the effect they would have on the ease or difficulty of peers' jobs. Head nurses also relied on Basic Nursing Care and Documentation. Focal persons' effectiveness in these areas would be a reflection on head nurses' own effectiveness. Finally, focal persons' overall rating was best predicted by Professional Nursing,

Professional Development, Supportive Care, and Documentation. These reflect factors more personally-relevant (i.e., Professional Development) and patient-oriented (i.e., Supportive Care). Additionally, if focal persons know that Documentation is important to their head nurses, focal persons would also believe it is important.

Different Behaviors Explanation

The Different Behaviors hypothesis was not supported. The analysis of variance results indicated that focal persons reported engaging in behaviors more frequently in the presence of their peers than head nurses. The researcher's own observations confirmed these results. In many hospitals head nurses are more involved in administrative activities than patient-care activities with staff nurses. Other staff nurses would be involved more frequently with focal persons in patient-care activities and have more contact with focal persons. Thus focal persons would engage more frequently in job duties in the presence of peers than focal persons. This is especially true for staff nurses who work during the afternoon or night shifts when head nurses are off duty.

The relationship between behavioral frequency difference scores and interrater reliability coefficients was not significant. Furthermore, difference scores between focal persons' behavioral frequency ratings and raters' observational frequency ratings were not related to interrater reliability. Behavioral frequency scores were also not

related to performance rating variance. One explanation for this result concerns the performance ratings which focal persons "deserved." Since true performance scores were not available, it would be difficult to determine the true relationship between behavioral frequency and raters' performance variance. Similar to the explanation concerning observational frequency, performance rating variance would be low regardless of behavioral frequency if raters believed that ratees performed in an "average" manner.

Interdependence Among Explanations

It did not appear as if the three explanations were related to each other. The correlations between observational frequency and dimensional importance and behavioral frequency and dimensional importance were significant but low. These findings suggested that cognitive schemas (as measured by dimensional importance ratings) and observations influence each other but the direction is unclear. Further, behaviors and cognitive schemas also influence each other in an undetermined direction.

When the relationship between observational frequency and behavioral frequency was examined, a surprising result emerged. There was a weak relationship between the two sets of ratings. One would expect that focal persons' reports of behavior in the presence of raters would be more strongly related to raters' reports of observations. The low relationship can be explained two ways. First, when focal per-

sons' enact behaviors in the presence of raters, the raters may not be attending to the focal persons' behaviors because of selective perception (e.g., Bruner, 1958). As mentioned previously, raters might only attend to behaviors which are considered important by them. Barring distortion, raters must attend to behaviors in order to recall them. If behaviors were not encoded, raters' reports of observational frequency will be discrepant with ratees' reports of behavioral frequency.

The second way this result could be understood is based on the previously cited cognitive-social psychology research. If raters' recollections of behaviors are distorted because of the cognitive schemas which they hold, their reports of observations will not be related to ratees' reports of behavior.

Limitations of the Study

The primary limitation of this study concerns the sample. Although results of the study will most likely generalize to nurses in hospital settings, it may be difficult to generalize results to other types of organizations. In the hospital setting, nurses work fairly autonomously within prescribed procedures dictated by nursing practice, doctors' orders, and patients' conditions. This situation is quite different from other organizations, especially manufacturing firms, where lower level workers (e.g., assembly line) are not as autonomous and higher level employees (e.g., manag-

ers) do not follow prescribed procedures as stringently. The sample may be similar to sales or marketing agents and seems to be more representative of service organizations such as restaurants or retail stores. In these organizations, waitresses/waiters and retail salespeople are semi-autonomous but must follow prescribed methods.

In some instances the sample was too heterogeneous and in other cases it was too homogeneous. A more homogeneous sample would have been more appropriate to investigate the Different Observations hypothesis. As indicated previously, the differences among focal persons' jobs may have led to large within-group variance for peers' and head nurses' observational frequency ratings. This might have led to a Type II error. Had nurses all worked in one organization rather than sixteen different organizations, results might have been different.

Results might have been different had the study been conducted in another setting with different focal jobs. The structure of the hospital units and the staffing procedures utilized make it difficult for supervisors or peers to observe focal persons performing their jobs. Observational frequency ratings and performance ratings were probably more unreliable because of this situation.

A more heterogeneous sample would have been more appropriate to investigate the Different Perspectives hypothesis. Since all participants in the study were nurses, they would most likely have similar conceptions of the nurse's job

regardless of rater group. If doctors or patients had participated in the study as raters, there would be more disparity among rater groups' perspectives. Different dimensions would be important to doctors, nurses, and patients. For example, doctors might be more concerned with the fulfillment of their orders (i.e., Professional Nursing) whereas patients might be more concerned with Supportive Care or Teaching.

Implications and Future Research

The findings of this study have implications for performance appraisal procedures and research. The results of the observational frequency analyses have negative implications for performance appraisals which require recollections of specific behaviors (e.g. Behavioral Observation Scales). It was suggested that individuals' ratings of frequency were distorted by the overall impression of ratee's performance. Raters were more likely to record higher frequencies of behavior when they had an overall positive impression. When using Behavioral Observation Scales (BOS) raters may be inclined to do the same thing when recording observational frequency of critical incidents.

This assertion has been partially supported in a study conducted by Murphy, Martin, and Garcia (1982). They looked at the relationship between trait ratings and behavioral recall. The longer the recall delay, the higher the correlation between BOS ratings and trait ratings. Unfortunately,

the direction for causation was not determined. Raters may have recalled behaviors based on general impressions or developed general impressions from behavioral frequency. Thus, the issue has not been completely resolved.

The differences found between units in importance, favorability, and performance ratings have implications for the development and use of performance appraisals. In most organizations, a performance appraisal instrument is developed for all individuals in a particular position throughout an organization. It is sometimes acknowledged that dimensions may vary in importance among departments or units and should be differentially weighted. The results concerning dimensional importance ratings confirm that this procedure is warranted.

During the development of BARS, favorability ratings are obtained, but differences among units are typically not examined. The results concerning unit differences in favorability ratings in this research suggest that one standard of reference for all departments may not be appropriate. Even if critical incidents with low standard deviations are selected for inclusion on the scale, statements defining each performance level may not accurately describe performance standards in each individual unit.

Unit differences in performance ratings may indicate that BARS do not impose the same frame of reference on raters in different units, although they are intended to standardize reference behaviors. Again, different units may

have different standards for performance which are not standardized by BARS. Of course, unit differences in performance ratings may indicate actual differences in focal persons' performance. This cannot be eliminated as an alternative explanation because true scores were not available.

A final implication which these findings suggest for performance appraisal procedures is that raters need to be trained to observe relevant behaviors or be persuaded to keep logs of ratees' behaviors. This was suggested by Smith and Kendall (1963) and seems to be a worthwhile goal. The results of this study indicated low consensus between ratees' behaviors and raters' observations. This would lead to disagreement between self-ratings and other-ratings and could be a source of contention in performance feedback sessions.

In future research, raters' perspectives should be examined without imposing cognitive schemas on them. For example, if raters from different rater groups were asked an open-ended question about what they consider to be important dimensions of the job when evaluating ratees' performance they may cite different dimensions from one another. The results might be different from those obtained in this study in which ratings of dimensional importance were requested. This proposition was partially supported by the data obtained in this study. Specifically, the dimensions which appeared to be most salient to each rater group when the overall performance rating was regressed on the individual

dimension performance ratings were not the same dimensions as those which were judged most important by each rater group (in the dimensional importance rating task).

Borman (1983) has proposed that a procedure like the Kelly Role Construct Reportory Test could be used to elicit individuals' constructs. He also described how individual differences in the content of constructs can be studied.

A more appropriate procedure for investigating the relationship between observational or behavioral frequency and performance rating variance is to obtain ratings of multiple ratees from each rater. Performance rating variance for each rater's ratings could then be examined across ratees and the issue of "true" performance would be somewhat alleviated. It may also be more beneficial to examine the differences in the effectiveness of behaviors in the presence of peers and supervisors to investigate the Different Behaviors hypothesis rather than to obtain ratings of the frequency of job behaviors (as was done in this study).

Future research directions should also attempt to examine the three hypotheses in this study under more controlled conditions. This would enable independent investigation of the three hypotheses but would be very difficult in a field setting. A lab study could be conducted utilizing videotapes. The videotapes would establish true scores for behavioral frequency, favorability of behaviors, and performance. Behavioral frequency and performance could be varied on the

videotapes and rating tasks similar to those used in the present study could be used.

The difficulty would lie in establishing different rater groups among viewers of the videotapes. However, this could be accomplished by involving employees from different levels of a "real world" organization. The employees would be told that the videotapes portrayed a job applicant involved in a work simulation. The videotape viewers would be potential peers, supervisors, or subordinates of the job applicant. Involvement of "real world" organizational members and videotapes portraying realistic situations would enhance generalizability. The control resulting from videotapes would help in further understanding the causes for low interrater reliability. The present study was an initial attempt to examine the hypothesized reasons for low interrater reliability. Since the data are more suggestive than conclusive, future research is needed to determine the sources of low interrater reliability.

FOOTNOTES

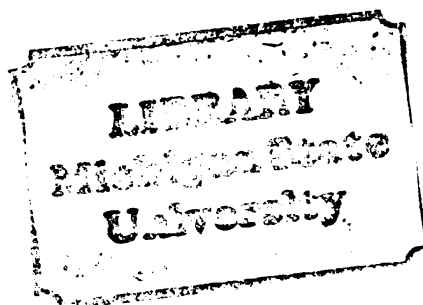
¹ The minimum allocation agreement was liberal because the number of nurses involved in the retranslation procedure was low. Each individual contributed 5 percentage points (1 out of 22). Thus, an incident would not meet the 55% agreement minimum if 10 nurses did not agree on the appropriate behavioral dimension.

² The correlations in the monorater and heterorater triangles are based on varying numbers of individuals. Sample sizes in the head nurse monorater triangle ranged from 49 to 55, in the peer triangle from 54 to 59, and among focal person correlations from 45 to 53. When head nurses' and peers' ratings were correlated, sample sizes ranged from 43 to 50; sample sizes in the head nurse-focal person heterorater block ranged from 38 to 46; sample sizes for correlations between peers' and focal persons' ratings ranged from 40 to 47.

THESIS



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APPENDICES

APPENDIX A
HOSPITAL SAMPLE DESCRIPTION

Appendix A

Table A1. Hospital Sample Description

<u>Hospital</u>	<u>Size</u> ^a	JA ^b	R	<u>Participants</u>		PAR	PAS
				QR	QS		
Lake View Comm. Paw Paw	S	3 HN ^c	--	4 HN ^d	4 HN	3 HN	4 HN
				2 FP	5 FP	2 FP	4 FP
				3 P	6 P	2 P	6 P
				1 T	3 T	0 T	3 T
St. Luke's Saginaw	S	--	--	4 HN	5 HN	4 HN	5 HN
				5 FP	5 FP	5 FP	5 FP
				7 P	8 P	5 P	8 P
				3 T	4 T	3 T	4 T
Clinton Memorial St. Johns	S	--	3 HN	4 HN	5 HN	4 HN	5 HN
				5 FP	5 FP	4 FP	5 FP
				8 P	10 P	9 P	10 P
				4 T	5 T	3 T	5 T
Genesee Memorial Flint	M	--	5 SN	4 HN	5 HN	5 HN	5 HN
				2 FP	5 FP	4 FP	5 FP
				2 P	10 P	7 P	10 P
				1 T	5 T	3 T	5 T
Pennock Hastings	S	--	4 SN	3 HN	3 HN	3 HN	3 HN
				2 FP	3 FP	3 FP	3 FP
				6 P	6 P	6 P	6 P
				1 T	3 T	3 T	3 T
Detroit Osteo. Highland Park	M	3 SN	--	4 HN	5 HN	3 HN	5 HN
		2 HN		3 FP	5 FP	1 FP	5 FP
				4 P	10 P	6 P	10 P
				1 T	4 T	1 T	4 T
Saginaw General Saginaw	L	3 SN	--	5 HN	5 HN	5 HN	5 HN
		3 HN		4 FP	5 FP	5 FP	5 FP
				9 P	10 P	10 P	10 P
				4 T	5 T	5 T	5 T
Munising Memorial Munising	S	--	--	1 HN	1 HN	1 HN	1 HN
				1 FP	1 FP	1 FP	1 FP
				2 P	2 P	0 P	1 P
				1 T	1 T	0 T	1 T
Munson Medical Traverse City	M	3 SN	--	4 HN	5 HN	5 HN	5 HN
		3 HN		5 FP	5 FP	5 FP	5 FP
				9 P	10 P	10 P	10 P
				4 T	5 T	5 T	5 T

Table A1, cont'd.

<u>Hospital</u>	<u>Size^a</u>	<u>JA^b</u>	<u>R</u>	<u>Participants</u>		<u>PAR</u>	<u>PAS</u>
				<u>QR</u>	<u>QS</u>		
United Memorial Greenville	S	3 SN 2 HN	--	2 HN	2 HN	2 HN	2 HN
				2 FP	2 FP	2 FP	2 FP
				4 P	4 P	4 P	4 P
				1 T	1 T	1 T	1 T
Charlevoix Area Charlevoix	S	--	--	4 HN	4 HN	4 HN	4 HN
				3 FP	4 FP	3 FP	4 FP
				7 P	8 P	8 P	8 P
				3 T	4 T	3 T	4 T
Hayes-Green-Beach Charlotte	S	--	--	2 HN	2 HN	1 HN	2 HN
				2 FP	2 FP	1 FP	2 FP
				2 P	4 P	1 P	4 P
				1 T	1 T	1 T	1 T
Gr. Rapids Osteo. Grand Rapids	M	--	--	3 HN	5 HN	3 HN	4 HN
				4 FP	5 FP	4 FP	4 FP
				8 P	10 P	6 P	8 P
				3 T	5 T	3 T	4 T
Memorial Hospital Owosso	M	--	--	4 HN	5 HN	5 HN	5 HN
				5 FP	5 FP	5 FP	5 FP
				7 P	10 P	10 P	10 P
				3 T	5 T	5 T	5 T
Ingham Medical Lansing	M	--	2 SN 3 HN	5 HN	5 HN	3 HN	5 HN
				5 FP	5 FP	4 FP	5 FP
				9 P	10 P	5 P	10 P
				5 T	5 T	2 T	5 T
Pontiac General Pontiac	L	--	5 HN	3 HN	5 HN	5 HN	5 HN
				2 FP	5 FP	4 FP	5 FP
				7 P	10 P	9 P	10 P
				2 T	5 T	4 T	5 T
Total		12 SN 13 HN	11 SN 11 HN	56 HN	66 HN	56 HN	65 HN
				52 FP	67 FP	53 FP	65 FP
				94 P	128 P	98 P	125 P
				38 T	61 T	42 T	60 T

^aS=small (less than 100 beds), M=medium (101 to 200),

L=large (more than 200)

^bJA=Job Analysis/Critical Incident Interviews, R=Retranslation Meetings, QR=Questionnaires Received, QS=Questionnaires Sent, PAR=Performance Appraisals Received, PAS=Performance Appraisals Sent

^cHN=Head Nurse, SN=Staff Nurse

^dHN=Head Nurse, FP=Focal Person, P=Peers, T=Teams of 3 or 4

APPENDIX B
CORRESPONDENCE WITH HOSPITALS



6215 West St. Joseph Highway
Lansing, Michigan 48917
(517) 323-3443
Patric E. Ludwig
President

March 30, 1983

Mr. A. Craig Haner
Administrator
Lake View Community Hospital
Box 209
Paw Paw, MI 49079

Dear Mr. Haner:

The purpose of this letter is to tell you about an exciting project involving the development of a performance appraisal instrument for the position of staff nurse.

Ronni Meritt, a graduate student at Michigan State University pursuing her Ph.D. in Industrial Psychology, will be performing a project for her dissertation which may be useful to the Michigan Hospital personnel professionals. MHASC has agreed to assist her because we believe it will advance the state of performance appraisal in the hospital industry.

The project is described in the attached enclosure. In that summary the benefits and requirements for your hospital are also outlined. You will see that there are no monetary costs involved.

The type of performance appraisal instrument to be developed evaluates actual observable behaviors of employees. It is commonly referred to as a Behaviorally Anchored Rating Scale (BARS). This type of system is considered by many to be better than one which rates personality traits such as dependability or adaptability. Some of the rationale is listed in the enclosure. It has been found to be a valuable tool for improving employees' performance.

Your hospital has been selected to be offered the opportunity to participate in this project. Once completed, those hospitals which participated in the project will receive a criteria based performance appraisal system for the staff nurse position, as required under current JCAH regulations. Hospitals which have not been involved will be able to purchase the instrument. It would be greatly appreciated if you would agree to be one of the hospitals which have input in its development.

March 30, 1983
Page Two

Ms. Meritt will call you the week of April 18-22 to answer any questions you may have. Thank you for your assistance.

Sincerely yours,

Alan S. Katz, Manager
Personnel and Labor Relations
Consulting Service

ASK:mc

Enclosure

cc: Jerry Labadie
Personnel Director

Version A

**Advantages of Behaviorally Anchored
Rating Scale (BARS) System**

For a performance appraisal to be effective in improving work performance, reducing turnover, and being useful for other personnel-related decisions, it ought to be carefully constructed and be based on accepted standards of performance. These standards should be specific, goal oriented, job related, and reflect those behaviors which are within an individual's control. A behaviorally-based instrument identifies effective behaviors known to produce consistently superior performance as well as those behaviors which individuals should avoid.

In contrast, instruments which are used to evaluate personality traits do not generate the information necessary to improve performance. They do not specify controllable behaviors to employees.

Individuals often need behavioral guidelines to improve performance. A behavioral instrument, therefore, is best for developmental purposes. Further, since employees are evaluated on observable behaviors, it is more defensible to them as well as in grievance or court proceedings.

What is Required of Your Hospital

Meetings with 3 staff nurses and their supervisors lasting 2 to 3 hours.

One hour for 5 staff nurses and their supervisors to respond to a questionnaire.

One hour for 5 staff nurses and their supervisors to evaluate the performance of those staff nurses.

What Your Hospital Will Receive

A tailor-made behavioral performance appraisal instrument for the staff nurse position.

An extensive updated job description of the staff nurse position.

What Are the Monetary Costs

\$0

Version B

**Advantages of Behaviorally Anchored
Rating Scale (BARS) System**

For a performance appraisal to be effective in improving work performance, reducing turnover, and being useful for other personnel-related decisions, it ought to be carefully constructed and be based on accepted standards of performance. These standards should be specific, goal oriented, job related, and reflect those behaviors which are within an individual's control. A behaviorally-based instrument identifies effective behaviors known to produce consistently superior performance as well as those behaviors which individuals should avoid.

In contrast, instruments which are used to evaluate personality traits do not generate the information necessary to improve performance. They do not specify controllable behaviors to employees.

Individuals often need behavioral guidelines to improve performance. A behavioral instrument, therefore, is best for developmental purposes. Further, since employees are evaluated on observable behaviors, it is more defensible to them as well as in grievance or court proceedings.

What is Required of Your Hospital

One hour for meetings with 5 staff nurses and their supervisors.

One hour for 5 staff nurses and their supervisors to respond to a questionnaire.

One hour for 5 staff nurses and their supervisors to evaluate the performance of those staff nurses.

What Your Hospital Will Receive

A tailor-made behavioral performance appraisal instrument for the staff nurse position.

An extensive updated job description of the staff nurse position.

What Are the Monetary Costs

\$0

Version C

**Advantages of Behaviorally Anchored
Rating Scale (BARS) System**

For a performance appraisal to be effective in improving work performance, reducing turnover, and being useful for other personnel-related decisions, it ought to be carefully constructed and be based on accepted standards of performance. These standards should be specific, goal oriented, job related, and reflect those behaviors which are within an individual's control. A behaviorally-based instrument identifies effective behaviors known to produce consistently superior performance as well as those behaviors which individuals should avoid.

In contrast, instruments which are used to evaluate personality traits do not generate the information necessary to improve performance. They do not specify controllable behaviors to employees.

Individuals often need behavioral guidelines to improve performance. A behavioral instrument, therefore, is best for developmental purposes. Further, since employees are evaluated on observable behaviors, it is more defensible to them as well as in grievance or court proceedings.

What is Required of Your Hospital

One hour for 5 staff nurses and their supervisors to respond to a questionnaire.

One hour for 5 staff nurses and their supervisors to evaluate the performance of those staff nurses.

What Your Hospital Will Receive

A tailor-made behavioral performance appraisal instrument for the staff nurse position.

An extensive updated job description of the staff nurse position.

What Are the Monetary Costs

\$0



6215 West St. Joseph Highway
Lansing, Michigan 48917
(517) 323-3443
Patric E. Ludwig
President

May 5, 1983

Dear (Director of Nursing):

I would like to thank you for agreeing to participate in the Michigan Hospital Association Service Corporation's project to develop a performance appraisal instrument for your staff nurses (RNs). I am writing this letter to answer some questions you might have about the project. Please show this letter to those staff nurses and head nurses who will participate in this study.

The proposed plan of action is outlined below. The time schedule is tentative because some delays may be encountered. Further, not all hospitals will be involved in the first two steps. This letter will clarify in which steps your hospital will participate.

1. Job Analysis--meetings with staff nurses and head nurses to establish the duties which staff nurses perform and get examples of effective and ineffective behaviors. Proposed completion is May 31, 1983.
2. Verification--meetings with staff nurses and head nurses to check the comprehensiveness of the job analysis and the representativeness of the examples of effective and ineffective behaviors. Proposed completion is June 30, 1983.
3. Questionnaire Administration--the questionnaire will be sent through the mail to you to be distributed to 5 head nurses and 15 staff nurses. This questionnaire will measure how frequently the job duties are performed, how important various groups of job duties are, and whether the examples of behavior which have been collected represent effective or ineffective behavior. Proposed administration is between July 15 and July 31, 1983.
4. Performance Appraisal--the appraisal instrument will be sent through the mail to you for distribution to the head nurses and staff nurses that are participating in the project. Proposed mailing is between August 15 and August 31, 1983.

Your hospital has been asked to participate in Steps

_____.

Version A

May 5, 1983

page 2

Individuals who are asked to participate in the group meetings should be a representative group of staff nurses and head nurses. It is preferable that they are from different shifts and work in different units of the hospital. In addition, where possible, the sample should contain a mix of sex, race, and age groups and educational backgrounds (A.D., Diploma, B.S.).

Individuals who are asked to respond to the questionnaire and performance appraisal should be selected randomly from the entire staff. However, it is also preferable if they are from different shifts and work in different units of the hospital. In addition, where possible, the sample should contain a mix of sex, race, and age groups and educational backgrounds.

Three staff nurses should be selected who report to each of 5 head nurses, for a total of 15 staff nurses. These three nurses who report to each of the 5 head nurses should be well acquainted with each other's job performance. A performance evaluation will be conducted for a staff nurse who is chosen from among each group of three, for a total of 5 staff nurse evaluations.

The staff nurses who are evaluated should be chosen randomly. It will not be beneficial if only the top or bottom performers are evaluated. The evaluation will be given by the head nurse and the other two staff nurses in each group.

If you have a problem with selecting individuals who conform to this pattern, please contact me and we can discuss possible solutions. Please send me a list of the names of the 15 staff nurses and 5 head nurses who have agreed to participate in the project as soon as possible. On the list, please indicate whether the individual is a staff nurse or head nurse. In addition, please indicate which 5 of the 15 staff nurses will be evaluated by their head nurse and their 2 peers. It would facilitate the project if you could list these names in 5 groups of 4 (head nurse, peers, staff nurse to be evaluated).

The individuals who are asked to participate should be informed that their employment will not be affected either positively or negatively by their participation in any step of this project. Voluntary participation is requested. Further, these individuals should be assured that their answers in the group meetings and on the written instruments will be confidential.

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May 5, 1983
page 3

The names of individuals who participate in any of the group meetings will not be recorded. A coding system will be used on the written materials. Questionnaires and performance appraisal instruments will have a number on them so that they can be matched to each other.

No one other than myself will have access to the numbers which correspond to participants' names. Therefore, no names will appear on the written materials. In addition, the questionnaires and appraisal instruments will be sent directly to me so that confidentiality will be preserved.

As you know, the result of this project has the potential to be a significant contribution to the job performance of staff nurses. I hope that the nurses will agree to participate in this project by meeting with me and returning the completed questionnaires and performance appraisal instruments.

Once again, I appreciate your participation in this study. I shall be writing again at the end of May to give you an update on the progress of the project. If you or the participants have any questions, I am available at (517) 355-2171. The project manager from the Michigan Hospital Association Service Corporation is Alan S. Katz, Manager of the Personnel and Labor Relations Consulting Service. He can be reached at (517) 323-3443.

Sincerely,

Ronni E. Meritt

Version B

May 5, 1983
page 2

Individuals who are asked to respond to the questionnaire and performance appraisal should be selected randomly from the entire staff. However, it is preferable if they are from different shifts and work in different units of the hospital. In addition, where possible, the sample should contain a mix of sex, race, and age groups and educational backgrounds (A.D., Diploma, B.S.).

Three staff nurses should be selected who report to each of 5 head nurses, for a total of 15 staff nurses. These three nurses who report to each of the 5 head nurses should be well acquainted with each other's job performance. A performance evaluation will be conducted for a staff nurse who is chosen from among each group of three, for a total of 5 staff nurse evaluations.

The staff nurses who are evaluated should be chosen randomly. It will not be beneficial if only the top or bottom performers are evaluated. The evaluation will be given by the head nurse and the other two staff nurses in each group.

If you have a problem with selecting individuals who conform to this pattern, please contact me and we can discuss possible solutions. Please send me a list of the names of the 15 staff nurses and 5 head nurses who have agreed to participate in the project as soon as possible. On the list, please indicate whether the individual is a staff nurse or head nurse. In addition, please indicate which 5 of the 15 staff nurses will be evaluated by their head nurses and their 2 peers. It would facilitate the project if you could list these names in 5 groups of 4 (head nurse, peers, staff nurse to be evaluated).

The individuals who are asked to participate should be informed that their employment will not be affected either positively or negatively by their participation in any step of this project. Voluntary participation is requested. Further, these individuals should be assured that their answers on the written instruments will be confidential.

A coding system will be used on the written materials. Questionnaires and performance appraisal instruments will have a number on them so that they can be matched to each other. No one other than myself will have access to the numbers which correspond to participants' names. Therefore, no names will appear on the written materials.

May 5, 1983
page 3

In addition, the questionnaires and appraisal instruments will be sent directly to me so that confidentiality will be preserved.

As you know, the result of this project has the potential to be a significant contribution to the job performance of staff nurses. I hope that the nurses will agree to participate in this project by returning the completed questionnaires and performance appraisal instruments.

Once again, I appreciate your participation in this project. I shall be writing again at the end of May to give you an update on the progress of the study. If you or the participants have any questions, I am available at (517) 355-2171. The project manager from the Michigan Hospital Association Service Corporation is Alan S. Katz, Manager of the Personnel and Labor Relations Consulting Service. He can be reached at (517) 323-3443.

Sincerely,

Ronni E. Meritt



6215 West St. Joseph Highway
Lansing, Michigan 48917
(517) 323-3443
Patric E. Ludwig
President

June 6, 1983

Dear (Director of Nursing):

This is an update on the progress of the Michigan Hospital Association Service Corporation's project to develop a performance appraisal instrument for staff nurses. As specified in the previous letter, the anticipated completion date for the first step, job analysis meetings, was May 31, 1983. These meetings have all been held, and I am pleased to say that the project is running on schedule.

All verification meetings will be held in June. We do not expect to encounter any delays for step 2 of the project.

Step 3, the questionnaire, will be distributed in mid-July. A date will be specified by which time we would like the completed questionnaires returned. With your help in ensuring that all questionnaires are returned, there should not be any delays in that step of the project. If necessary, a follow-up letter will be sent to encourage nurses who have not returned their completed questionnaires. We hope that we will be able to avoid the use of such letters.

The same procedure will be followed for step 4, the performance appraisal. This will be mailed out toward the end of August. Again, we hope that there will be no delays in the return of the completed performance appraisals. We will rely on your help in ensuring that all performance appraisals are returned.

As specified in the previous letter, we need a list of the names of the individuals who will be participating in the questionnaire and performance appraisal steps of the project. It would be helpful if the list was written according to the guidelines specified previously. Please send the list by June 20 to me at the address given below. As a note of clarification, the same individuals who participate(d) in the group meetings can participate in steps 3 and 4.

June 6, 1983
Page Two

Once again, thank you for participating in this project. Be assured that all information will be held in strict confidence. If you have any questions do not hesitate to call me at (517) 355-2171. Please address all future correspondence to me at the following address:

Michigan State University
Psychology Department
Psychology Research Building
East Lansing, MI 48824

Sincerely,

Ronni Meritt

RM/jiw



6215 West St. Joseph Highway
Lansing, Michigan 48917
(517) 323-3443

Patric E. Ludwig
President

July 20, 1983

Dear (Director of Nursing):

We are now ready for the third step of the Michigan Hospital Association Service Corporation staff nurse performance appraisal project. I have compiled the information which was collected in the first two steps of the project and developed a questionnaire. This questionnaire requests the nurses to rate the frequency and importance of behavioral activities which the staff nurses perform. It also asks for a rating concerning whether various examples of behavior which have been collected represent effective or ineffective behavior. I have enclosed an extra copy of the questionnaire, with your name on it, so that you can see what is being measured.

Please distribute the questionnaires to the individuals whose names are written on them. It is important that the questionnaire goes to the specific person whose name is on the questionnaire because each individual has been assigned a code number. I must match their questionnaire to the performance appraisal which will be completed in the next step of the project. The head nurse and two peers in each group are receiving the same questionnaire. The staff nurses who are serving as focal persons (to be rated) receive a different section concerning the frequency ratings than the other two groups.

It is very important that all participants return their completed answer sheets in order for us to be able to use the information for your hospital. I am requesting that they be returned by August 15, 1983. Anything that you can do to encourage the nurses to fill out the answer sheets and return them by this date will be greatly appreciated.

I will be sending a short questionnaire to the staff nurses who are serving as focal persons sometime in late August (before the fourth step of this project). The next questionnaire is actually a repeat of one section of this questionnaire (the frequency ratings). I need to do this in order to check the reliability of the frequency ratings. I will be asking these focal nurses to volunteer to do this second questionnaire and hopefully there will be enough volunteers so that we do not have to "bother" those who do not want to do the second questionnaire.

July 20, 1983
Page 2

Thank you for your cooperation. The questionnaire is somewhat long; however, its length is determined by the complexity of the staff nurse job and is necessary to gather the information needed to develop an objective criterion-based performance appraisal instrument. The nurses should be able to complete it in approximately one hour. I look forward to receiving the completed answer sheets shortly.

If there are any questions, I can be reached at (517) 355-2171 or 353-8690. Once again, thank you for all your help in the coordination of this project.

Sincerely,

Ronni Meritt
Project Coordinator

RM/cll

Enclosure

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August 15, 1983

Dear (Director of Nursing):

Last month questionnaires for the Michigan Hospital Association Service Corporation staff nurse performance appraisal project were sent to you. Completed answer sheets were received from some of the nurses at your hospital, and I wish to express my appreciation to those nurses. However, answer sheets from the following people have not been received:

Copies of the follow-up letter are enclosed. Please give a copy to each of the above mentioned individuals. In addition, I would be grateful if you could encourage these nurses to return their completed answer sheets by August 31, 1983.

As mentioned previously, it is very important that completed answer sheets be received from all nurses in order for us to use the information from your hospital. The quality and objectivity of the performance appraisal instrument depend on the return of completed answer sheets from all individuals who agreed to participate.

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August 15, 1983
Page 2

Extra questionnaires and computer answer sheets are available if any of the nurses have misplaced the ones they received last month. I can be reached at (517) 355-2171 or 353-8690.

Thank you for your cooperation in coordinating this project.

Sincerely,

Ronni E. Meritt
Project Coordinator

RM:mc

Enclosures

Follow-Up Letter to Participants

michigan hospital association



6215 West St. Joseph Highway
Lansing, Michigan 48917
(517) 323-3443

Patric E. Ludwig
President

Michigan Hospital Association Service Corporation
Staff Nurse Performance Appraisal Project

Last month you received a questionnaire for the Michigan Hospital Association Service Corporation staff nurse performance appraisal project. We are writing this letter to ask you to send your completed answer sheets back by August 31, 1983.

As we mentioned when we sent the questionnaire to you, it is very important that we receive completed answer sheets from all nurses in order for us to use the information from your hospital. The quality and objectivity of the performance appraisal instrument depend on the return of completed answer sheets from you and all other individuals who have agreed to participate.

We can send you another questionnaire or computer answer sheets if you have misplaced the ones you received last month. The project coordinator can be reached at (517) 355-2171 or 353-8690.

Thank you for your participation.

Sincerely,

Ronni Meritt
Project Coordinator



6215 West St. Joseph Highway
Lansing, Michigan 48917
(517) 323-3443
Patric E. Ludwig
President

September 23, 1983

Dear (Director of Nursing):

Thank you for your cooperation thus far in the Michigan Hospital Association Service Corporation staff nurse performance appraisal project. The final phase of the project is now ready to be completed. This phase involves actually using the performance appraisal form to determine how well the form works.

Please distribute the appraisal form to the individual whose name is written on it. Once again, it is important that the appraisal form goes to the specific person whose name is written on it because of the code number which has been assigned to each individual.

It is very important that all participants return their completed rating forms in order for us to be able to use the information from your hospital. I am requesting that they be returned by October 10, 1983. Again, anything that you can do to encourage the nurses to make the ratings and return them by this date will be greatly appreciated.

I am including a questionnaire for those focal persons who have agreed to fill out Section 2 (the frequency ratings) a second time. As I mentioned previously, this second questionnaire is needed in order to measure the reliability of the items on the questionnaire. I would appreciate it if you would give the questionnaire(s) to the individual(s) whose name(s) are written on them. Since only those nurses who agreed to respond a second time are getting this questionnaire, it is very important that they return their completed answer sheet. They are being asked to return the answer sheet in the same envelopes as the rating forms.

Thank you once again for your assistance in coordinating this project. It never would have been completed without all the time and effort that you and your nurses have devoted. If there are any questions, I can be reached at (517) 355-2171 or 353-8690.

Sincerely,

Ronni Meritt
Project Coordinator

RM:mc

Enclosures



6215 West St. Joseph Highway
Lansing, Michigan 48917
(517) 323-3443
Patric E. Ludwig
President

September 23, 1983

Dear (Director of Nursing):

Thank you for your cooperation thus far in the Michigan Hospital Association Service Corporation staff nurse performance appraisal project. The final phase of the project is now ready to be completed. This phase involves actually using the performance appraisal form to determine how well the form works.

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It is very important that all participants return their completed rating forms in order for us to be able to use the information from your hospital. I am requesting that they be returned by October 10, 1983. Again, anything that you can do to encourage the nurses to make the ratings and return them by this date will be greatly appreciated.

Thank you once again for your assistance in coordinating this project. It never would have been completed without all the time and effort that you and your nurses have devoted. If there are any questions, I can be reached at (517) 355-2171 or 353-8690.

Sincerely,

Ronni Meritt
Project Coordinator

RM:mc

Enclosures



6215 West St. Joseph Highway
Lansing, Michigan 48917
(517) 323-3443
Patric E. Ludwig
President

October 12, 1983

Dear (Director of Nursing):

Last month drafts of the performance appraisal form for the Michigan Hospital Association Staff Nurse Performance Appraisal project were sent to you. Completed appraisal forms were received from some of the nurses at your hospital, and I appreciate their promptness. However, appraisal forms from the following people have not been received:

Copies of a letter are enclosed. Please give a copy to the individuals whose names are on them. I would be grateful if you could encourage these nurses to return their completed appraisal forms by October 25, 1983. In addition, those individuals who received second questionnaires are requested to send their answer sheet back by the same date.

As mentioned before, completed appraisal forms are needed from all nurses in order for the information from your hospital to be used. The quality and objectivity of the final performance appraisal instrument depends on us receiving appraisal forms and answer sheets from all individuals who agreed to participate.

Extra appraisal forms and second questionnaires are available which can be sent if any nurses have misplaced them. I can be reached at (517) 355-2171 or 353-8690 if needed.

Thank you again for your assistance.

Sincerely,

Ronni Meritt
Project Coordinator

RM:mc

Enclosures



Follow-Up Letter to Participants (Version A)

6215 West St. Joseph Highway
Lansing, Michigan 48917
(517) 323-3443Patric E. Ludwig
President

Michigan Hospital Association Service Corporation
Staff Nurse Performance Appraisal Project

Last month you received a performance appraisal rating form for the Michigan Hospital Association Service Corporation staff nurse performance appraisal project. This letter is being sent to you to ask you to send your completed ratings back by October 25, 1983.

It is very important that we receive completed appraisal forms from all nurses in order for us to use the information from your hospital. The quality and objectivity of the performance appraisal form depends on the return of completed ratings from all individuals who agreed to participate.

Those individuals who expressed their willingness to reply to one section of the questionnaire a second time also received a second questionnaire. Since you are one of those people, please send the completed answer sheet back with your completed appraisal form. It is extremely important that we receive these second answer sheets from all individuals who said they would respond a second time in order to develop an objective performance appraisal form.

Extra appraisal forms and questionnaires are available from the project coordinator if you have misplaced the one you received last month. The project coordinator can be reached at (517) 355-2171 or 353-8690.

Thank you for your participation thus far in the project.

Sincerely,

Ronni Meritt
Project Coordinator

Follow-Up Letter to Participants (Version B)



6215 West St. Joseph Highway
Lansing, Michigan 48917
(517) 323-3443
Patric E. Ludwig
President

Michigan Hospital Association Service Corporation
Staff Nurse Performance Appraisal Project

Last month you received a performance appraisal rating form for the Michigan Hospital Association Service Corporation staff nurse performance appraisal project. This letter is being sent to you to ask you to send your completed ratings back by October 25, 1983.

It is very important that we receive completed appraisal forms from all nurses in order for us to use the information from your hospital. The quality and objectivity of the performance appraisal form depends on the return of completed ratings from all individuals who agreed to participate.

Extra appraisal forms are available from the project coordinator if you have misplaced the one you received last month. The project coordinator can be reached at (517) 355-2171 or 353-8690.

Thank you for your participation thus far in the project.

Sincerely,

Ronni Meritt
Project Coordinator

APPENDIX C
DATA COLLECTION MATERIALS

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OUTLINE AND INSTRUCTIONS FOR
JOB ANALYSIS/CRITICAL INCIDENT MEETINGS

1. Explanation of project
2. Purpose of meeting
 - Conduct job analysis to determine what staff nurses do and what makes the difference between an effective and ineffective staff nurse.
 - Stress that they are the experts
3. Ask what the ultimate goal of the staff nurse job is.
4. Use "pie method" to elicit job dimensions.
5. Look at task list and discuss changes
 - Tasks gathered from books, manuals, Michigan Nurses' Association, job descriptions
 - Handout: Task List
6. Elicit critical incidents for each dimension
 - Definition of effective performance: type of behavior that they wished all staff nurses would do the same thing under similar circumstances.
 - Definition of ineffective performance: if the behavior occurred repeatedly or even once under certain circumstances, would make them doubt the competency of the individual.
 - Handout: Critical Incidents.
7. Fill out Information Sheet

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TASK LIST

Definition of task: Describes work which produces an identifiable product which could be used by someone other than the performer.

Task statement: Consists of an action verb (what is done), the object of the action (to whom or what is done), how the work is done (what materials) and why it is done (output).

Keep these in mind:

The staff nurse's daily routine

Is the task performed?

Is the task statement covered by a previous task statement?

Does the task statement fit better in another job dimension?

Are there any other tasks that should be under the job dimension?

Is the task statement written clearly with the appropriate language--Will everyone understand what is meant?

STAFF NURSE JOB ANALYSIS

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PLANNING AND EVALUATING PATIENT CARE

Activities directed at obtaining information relative to patients' present and past health status; activities concerned with the assessment of the illnesses from which patients are suffering; activities concerned with evaluating treatments and revising care plans.

1. Talks with patients and families in order to identify problems and needs of patients and prioritize nursing care.
2. Talks with patients and families about nursing history in order to write this information on patients' records.
3. Writes an initial assessment and nursing judgment based on patients' immediate needs at time of admission to make necessary plans or take action.
4. Writes a detailed nursing care plan that includes nursing assessments, plans, treatments (such as medications), and patients' responses in order to keep others informed.
5. Indicates in nursing care plan which needs will be responsibility of other health professionals to insure proper health care of patients.
6. Establishes goals and objectives in nursing care plan in order to implement actions according to priority.

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7. Participates in patient care conferences to discuss and evaluate patient's conditions and treatments.
8. Speaks to patients and families about discharge needs in order to plan necessary care.
9. Examines/evaluates information which has been collected about patients via observations, interviews, records, and research to develop a nursing care plan.
10. Interprets selected laboratory and x-ray findings in order to plan or revise nursing care activities, in coordination with physicians' recommendations.
11. Watches/directs ambulatory patients to remedy problems that may occur.
12. Continuously evaluates patients' conditions in order to make necessary revisions in the plan of care.
13. Reviews patient care plan charts, upon request, in order to evaluate the effectiveness of hospital policies and quality of health care.
14. Evaluates specific areas of patient care informally and/or formally (such as delay between lab test and receipt of report) in order to maintain quality patient care.

PROFESSIONAL NURSING

Activities directed at treating patients for the illnesses they were admitted for and any complications; activities involving interpreting physicians' orders and doing recommended treatments.

1. Provides emergency treatment as appropriate (such as cardiac arrest, shock, respiration, hemorrhage) to save patients' lives.
2. Checks surgical sites, dressing, I.V.s, splints, etc, to remedy any problems which might occur.
3. Checks and records temperature, pulse, blood pressure, elimination, appetite, and other vital signs to detect deviations from normal, determine progress of patients, and make recommendations.
4. Prepares and administers medications to be given orally, intravenously, intramuscularly, subcutaneously, and locally in order to fulfill physicians' recommendations.
5. Prepares and starts I.V.s, regulates flow, monitors for infiltration and phlebitis, according to standard operating procedures, in order to fulfill physicians' recommendations.
6. Collects samples from patients (such as urine, vomitus, stools) as prescribed by physicians in order to prepare them for laboratory analysis and diagnosis.

7. Notifies physicians of patients' conditions and reactions to drugs, treatments, and significant incidents in order to arrange for medical attention.
8. Assists physicians with treatments, diagnostic tests, examinations, and dressings to coordinate effective patient care.
9. Prepares room, sterile instruments, equipment, and supplies for specific patients and procedures.
10. Inspects and/or affixes labels on medications, drainage bottles and tubes, I.V. bottles, etc. in order to ensure that patients receive correct treatments.
11. Counts narcotics in order to check supply.
12. Posts patient care information above patients' beds to keep others informed (such as 24 hour urines or lay flat for 6 hours).
13. Schedules and/or performs tests and treatments to fulfill physicians' recommendations.

BASIC NURSING CARE

Activities involving bedside care of patients and activities of daily living; activities necessary for the comfort and well-being of patients to maintain their health and prevent infection, regardless of the illness from which they are suffering.

1. Helps patients into bed upon admission (such as escorting, undressing, putting clothes away).
2. Tell patients and families about hospital policies and routine in order to begin the orientation process.
3. Checks that patients are in assigned rooms and beds and that correct arm bands are on patients.
4. Helps patients clean and groom body in order to promote personal hygiene and deter disease.
5. Administers baths, packs, or other applications in order to keep patients' body temperature in the normal range.
6. Cleans skin and shaves hair, gives pre-operative injections and/or enemas to prepare patients for operations.
7. Checks patients' access to call signal in order to assure that patients can contact nursing staff.

8. Answers patients' call signal lights in order to find out what patients want.
9. Tidies beds by turning down, adding or taking off blankets in order to make patients comfortable.
10. Strips and makes beds after obtaining linens to keep patients comfortable and sanitary.
11. Gives patients lotions to remedy problems with dry skin or irritation.
12. Turns patients in bed, gives back rubs, and exercises hands and feet, when necessary, to stimulate circulation and relieve pressure and muscle tension.
13. Distributes nourishments (such as milk shakes or sandwiches) in order to ensure that patients receive nutritional requirements.
14. Checks food trays to be sure that patients receive nutritional requirements.
15. Gives and takes away bedpans and urinals in order to let patients eliminate waste as needed.
16. Feeds patients who can not feed themselves.
17. Helps patients get up, walk, go to bathroom, get on stretcher, and/or into wheelchair to encourage ambulatory movement.

18. Receives, cares for, arranges, distributes, and removes flowers, cards, and other gifts.
19. Observes patients' belongings from time of admission to discharge in order to be sure of their safety.
20. Restrains confused patients to ensure theirs' and others' safety.

SUPPORTIVE CARE OF PATIENTS AND FAMILIES

Activities directed at showing care, kindness, and compassion for patients and their families; activities aimed at giving patients and their families emotional support.

- 1. Introduces self to patients and families in order to initiate communication.**
- 2. Talks to patients in a supportive way in order to establish a therapeutic relationship so patients can express their needs.**
- 3. Speaks with patients and families about their emotional, social, and economic needs in order to consider these issues when caring for patients.**
- 4. Speaks with and listens to patients' families in a supportive way to emphasize their importance in patient care and show concern for their situation.**
- 5. Listens to patients' verbal and nonverbal communications to identify potential or existing problems.**
- 6. Tells patients and/or families the status of the patients' recovery to alleviate worries and answer questions.**
- 7. Notifies families of serious conditions of patients to comfort them and answer questions.**

8. Looks for a room and shows it to patients' families in order to provide privacy when necessary.
9. Escorts patients to and from various rooms (such as I.C.U.) to answer questions, calm fears, and monitors patients.
10. Makes telephone calls for patients or takes them to telephone to make calls.
11. Contacts clergy member and arranges a visit in order to comply with patients' wishes.

PATIENT - FAMILY TEACHING

Activities involving teaching, advising, giving directions, and demonstrating to patients and families.

- 1. Speaks with patients and families in order to assess their educational needs about patients.**
- 2. Gives advice and counsel to patients and families in order to promote health and prevent illness during hospitalization and after discharge (such as diet, basic hygiene).**
- 3. Explains tests, procedures, medications, and the day's routine to patients and families, within the guidelines specified by physicians.**
- 4. Explains to patients and families about equipment, supplies, treatments, etc., in order for them to know when to call for assistance while hospitalized.**
- 5. Explains specific physiology and implications of illness in order for patients and families to understand the treatment, limitations, and precautions.**
- 6. Obtains available literature from the hospital for patients and families with various illnesses in order to inform them about implications and treatments.**

7. Speaks with patients and their families in order to explain discharge planning and necessary care.

DOCUMENTATION

Activities necessary for record keeping and documenting staff actions; activities involving written communication.

1. Record physicians' visits and/or orders on chart to document treatment.
2. Records treatments, procedures, medications, etc. on chart in order to document health care.
3. Fills out incident reports to document accidents, use of wrong medication or treatment, omission of medication or therapy, or other incidents of major importance.
4. Checks consent forms to make sure that the appropriate persons have signed them.
5. Writes down when narcotics and medications are take from supply and returned to supply in order to update inventory records and document accountability.
6. Writes requisitions for supplies and/or equipment (such as intravenous fluids) to ensure that they are available when needed.
7. Fills out charge slips for therapies or treatments in order for them to be added to patients' bills.

8. Fills out forms in order to record admissions and/or discharges.
9. Fills out requisition forms to request special diets or treatments (such as x-rays, blood tests).
10. Fills out forms to send to other units or facilities when patients are transferred.
11. Writes down information for medical and/or legal reports so that the appropriate authorities can take actions (such as rape, abuse, or coroner's cases).
12. Fills out forms concerning patients' conditions in order to predict how many staff members will be needed for next shift.
13. Updates unit census report in order to document the patients' condition, progress, and problems.
14. Initials lab log to verify that lab work has been reviewed, entered in lab log, and physicians have been notified.
15. Sorts x-ray and/or laboratory slips to file them in appropriate folders.

ADMINISTRATIVE FUNCTIONS

Activities involving supervision of others and coordination of patient care; activities necessary for the smooth, efficient functioning of the Hospital.

1. Assigns tasks/gives directions to each team member (including senior practice students, orientees, and/or volunteers) according to abilities and organizational needs to provide optimal patient care.
2. Talks with other health care members to see that assignments have been completed by the end of the shift.
3. Gives opinions to supervisor, upon request, concerning job performance of nursing staff to promote their personal and professional development.
4. Evaluates nursing care given by each team member (including volunteers, orientees, and/or senior practice students) in order to provide appropriate direction.
5. Checks inventory of supplies in order to determine if they are low.
6. Prepares change-of-shift reports to inform next shift of patients' conditions and necessary care.
7. Talks with other health care members to ensure that they get their break time.

8. Assists nursing staff and/or ward clerk who have heavy assignments or difficult patients in order to show support and coordinate health care.
9. Observes the actions of hospital staff, patients, and visitors in order to remedy problems which might occur.
10. Informs head nurse or supervisor of problems (such as house-keeping, maintenance, supplies, schedules, physicians' requests) so that action can be taken.

INTERACTIONS WITH OTHER PROFESSIONALS

Activities necessary for interacting with nursing and health care staff and social service professionals within and outside the hospital; activities involving the exchange of information with other health care providers and coordination of health care with other departments.

1. Attends change-of-shift reports in order to inform others and find out about patients' conditions and needed care.
2. Attends staff meetings in order to discuss problems which might be occurring with other staff members (such as communication problems).
3. Attends physicians' rounds to inform physicians of special conditions about patients.
4. Talks with other health care members to be sure that someone watches patients while on break.
5. Works with other hospital units, upon request, to assess patients and/or administer treatments.
6. Requests and receives information and assistance from x-ray, laboratory, pharmacist, and/or respiratory care to coordinate patient care.
7. Works with dietitian and/or food service in order to ensure that patients' nutritional needs are met.

8. Works with physical, occupational, and/or recreational therapists to discuss and plan care for patients.
9. Works with social workers, protective agencies, community groups, public health agencies, and/or police departments to discuss and plan care for patients.
10. Works with home care nursing department to arrange care for discharged patients.
11. Works with other hospitals when patients are in the process of transferring to coordinate patient care.

PROFESSIONAL DEVELOPMENT

Activities involving continuing education and self-maintenance; activities necessary for the advancement of the profession and nursing staff.

1. Informs immediate supervisor of personal growth needs in order to enhance professional development (such as needing instruction or practice in starting I.V.s).
2. Establishes appropriate personal care habits to maintain physical and mental health.
3. Attends orientations and in-service seminars to update knowledge and skills.
4. Participates in meetings, task forces, and/or committees to develop policies which improve the quality of care in the Hospital.
5. Shares with colleagues, formally and informally, new knowledge regarding clinical observations and interpretations learned in continuing education activities, in order to enhance professional development and practice communicating effectively on a personal level.
6. Gives information and ideas, based on personal experience and training, to new nurses (such as orientees and senior practice students) in order to recommend procedures for nursing care.

UNIT SAFETY AND MAINTENANCE

Activities necessary to maintain the safety and cleanliness of patients' environment and the hospital.

- 1. Oversees environment (nursing conference room, patient area, and nursing station) in order to provide for ongoing safety and cleanliness of unit.**
- 2. Makes patients' surroundings neat, clean, and uncluttered, upon request, in order to allow for patients' comfort.**
- 3. Changes environmental conditions (such as air conditioner, heat, windows) to keep patients' temperature within the normal range.**
- 4. Cleans and/or checks equipment in order to make sure it is sterile and ready for patients.**
- 5. Monitors equipment or machinery to which patients are hooked up to maintain patient and staff safety (such as cardiac monitors).**
- 6. Stores and guards narcotics in order to protect patients from unnecessary medication and thievery.**
- 7. Checks expiration dates on medications and sterile equipment to make sure they have not expired.**

8. Post necessary signs on door or bed (such as radioactive precautions) in order to maintain a safe environment.
9. Checks side rails to be sure they are up at night and during the day when necessary.
10. Encourages patients to put valuables in a safe place (such as locker or safe) upon admission in order to avoid problems.

CRITICAL INCIDENTS

Examples of effective and ineffective behavior

1. What were the circumstances leading up to the incident?
2. What exactly did the staff nurse do that was either effective or ineffective?
3. What happened as a result of the staff nurse's actions?

Michigan Hospital Association Service Corporation
Staff Nurse Performance Appraisal Project

Information Sheet

Date: _____

Years employed as a staff nurse: _____ (Overall total)

Years employed as a head nurse: _____

Hospital at which you are employed: _____

Shift which you presently work: _____

Current work assignment (unit): _____

How long have you been performing your current work assignment?

_____ (please circle: months or years)

What type of educational background do you have? (e.g., A.D.,
Diploma, B.S.)

What is your gender? _____

How do you describe yourself?

_____ Black

_____ Puerto Rican/Spanish American

_____ White

_____ American Indian

_____ Oriental

_____ Other (specify) _____

What is your present age?

_____ 21-25

_____ 36-40

_____ 51-55

_____ 26-30

_____ 41-45

_____ 56-60

_____ 31-35

_____ 46-50

_____ Over 60

What other work areas have you worked in and for how long?

_____ for _____ (please circle: months or years)

_____ for _____ (please circle: months or years)

_____ for _____ (please circle: months or years)

_____ for _____ (please circle: months or years)

_____ for _____ (please circle: months or years)

How would you describe the organization of the nursing staff in
your unit?

__ team nursing __ primary care nursing __ functional nursing

Outline and Instructions for Retranslation Meetings

1. Explanation of project
2. Purpose of meeting
 - Get data to statistically select behavioral statements for performance appraisal instrument.
 - Only those statements on which there is agreement among a majority of nurses concerning the dimension allocation will be selected.
 - Revisions to dimension labels and/or definitions.
3. Handout: Dimensions and Definitions
4. Sort statements according to dimension they are most representative of.
5. Fill out Information Sheet.

Dimensions and Definitions

Administration--Activities necessary for the smooth, efficient functioning of the hospital; activities involving supervision of others and coordination of patient care.

Professional Development--Activities necessary for the advancement of the profession and nursing staff; activities involving continuing education and self-maintenance.

Interactions with Other Professionals--Activities necessary for interacting with health care staff and social service professionals within and outside the hospital; activities performed in a liaison function in order to exchange information with other health care providers and coordinate health care with other departments.

Planning and Evaluating Patient Care--Activities directed at obtaining information relative to patients' present and past health status; activities concerned with the assessment of the illnesses from which patients are suffering; activities concerned with evaluating treatments and revising care plan.

Technical Nursing--Activities directed at treating patients for the illnesses for which they were admitted and any complications; activities involving interpreting physicians' orders and doing recommended treatments.

Basic Nursing Care--Activities necessary for the comfort and well-being of patients, to maintain their health and prevent infection, regardless of the illnesses from which

they are suffering; activities involving bedside care of patients and activities of daily living.

Supportive Care of Patients and Families--Activities directed at showing care, kindness, and compassion for patients and their families; activities aimed at giving patients and their families emotional support.

Patient-Family Teaching--Activities involving teaching, advising, giving directions, and demonstrating to patients and families.

Documentation--Activities necessary for record keeping and documenting staff actions; activities involving written communication.

Unit Safety and Maintenance--Activities necessary to maintain the safety and cleanliness of patients' environment and the hospital.



6215 West St. Joseph Highway
Lansing, Michigan 48917
(517) 323-3443

Patric E. Ludwig
President

Michigan Hospital Association Service Corporation
Staff Nurse Performance Appraisal Project

We would like to thank you for agreeing to participate in this project. As you probably know, the goal of this project is to develop a performance appraisal instrument for staff nurses.

The type of instrument we are developing has been found to be helpful for both those people who are being evaluated as well as those who are doing the evaluating. It specifies the types of behaviors which are considered to be good and bad performance of staff nurses. In addition, evaluations are based on actual observable behaviors of staff nurses. Therefore, we avoid reference to individuals' personality traits (such as dependability) when evaluating their job performance. This type of instrument is less ambiguous and more objective than rating scales which are typically used.

A large number of staff and head nurses throughout Michigan have been interviewed by the project coordinator who is associated with the Michigan Hospital Association and not your hospital. They have helped in compiling a list of behavioral activities which staff nurses engage in and examples of good and bad job behaviors. This information is presented in this questionnaire.

In this stage of the project we are asking you to help us with your knowledge of and experience in the position of staff nurse. We are asking you to provide information concerning how frequently the behavioral activities are performed, how important various categories of these activities are, and whether the examples of behavior which have been collected represent effective or ineffective behavior. This information is vital in the development of the performance appraisal instrument.

A total of 16 hospitals are participating in this project. It is extremely important that we receive completed answer sheets from all participants. We are aware that this lengthy questionnaire is an imposition on your extremely busy schedule. We apologize in this regard but the length is determined by the complexity of the staff nurse job and is necessary to gather the information needed to develop an objective criterion-based performance appraisal instrument. We estimate the total response time to be approximately one hour.

Page Two

We wish to stress that your employment will not be affected in any way by your participation in this project. Your name will not be recorded on the answer sheets. A code number which appears on the answer sheets has been assigned to you by the project coordinator. Only the project coordinator has access to this number. All your responses will be held in strictest confidence. In order to accomplish this and preserve scientific rigor, please do not discuss your responses with anyone else in your hospital.

We have supplied a business reply envelope (no postage necessary) for you to use when mailing your completed answer sheets directly back to the project coordinator; do not send the questionnaire. In addition, please refold the answer sheets the same way they were folded when you received them. Please return the answer sheets by August 15, 1983.

We appreciate your help and we feel that your serious attention to this task will result in a performance appraisal instrument that makes a significant contribution to the job performance and professional development of staff nurses.

If you have any questions, concerns, or comments involving this project, we would be happy to discuss them with you. The phone numbers where the project coordinator can be reached are (517) 355-2171 and 353-8690.

Sincerely,

Ronni Meritt

Project Coordinator

Michigan Hospital Association Service Corporation
Staff Nurse Performance Appraisal Project

General Directions

The purpose of this questionnaire is to find out about the work which staff nurses perform. There are three sections, each asking for a different rating concerning the staff nurse job. A fourth section containing demographic items is presented at the end. Please read each item carefully and mark your response in the appropriate space on the enclosed computer answer sheets. There are two answer sheets and you may use either one to make the first 230 responses. The remainder of your responses should then be placed on the second answer sheet. We have numbered item 231 as #1 and the response to this item will be placed on the second answer sheet next to #1. Use a #2 pencil only. The computer will not record the responses if you do not use a #2 pencil. In the event that you are unfamiliar with this type of answer sheet, an example follows.

Example: Please indicate your gender.

- 0. male
- 1. female

If you are female, you would answer by filling in the appropriate circle, i.e. 1 :

0 1 2 3 4 5 6 7 8 9

=====

Section I

In this section, a list of job behaviors which have been seen by staff and head nurses is presented. Please read each of the examples of job behaviors below and then rate whether it describes good, bad, or average job performance for staff nurses (RNs). Please use the scale below for items 1-189:

- 0. Very poor - the example indicates very substandard job performance
- 1. Poor - the example indicates less than acceptable performance
- 2. Below average - the example indicates slightly less than average performance
- 3. Average - the example indicates job performance of the typical staff nurse
- 4. Above average - the example indicates slightly more than average performance
- 5. Good - the example indicates more than usually acceptable performance
- 6. Very good - the example indicates exceptional clearly superior job performance

PLEASE MARK ALL ANSWERS ON ANSWER SHEET USING #2 PENCIL ONLY

1. Informs head nurse or supervisor of problems (such as housekeeping, maintenance, schedules, supplies, physicians' orders) so that action can be taken.
2. Observes the actions of hospital staff, patients, and visitors in order to remedy problems which might occur.
3. Works with other hospital units, upon request, to assess patients and/or administer treatments.
4. Makes patients' surroundings neat, clean, and uncluttered, upon request, in order to allow for patients' comfort.
5. Leaves patients sitting on bedpan for 15 to 20 minutes.
6. Posts necessary signs on door or bed (such as Radioactive Precautions) in order to maintain a safe environment.
7. Speaks with and listens to patients' families in a supportive way to emphasize their importance in patient care and show concern for their situation.
8. Does not turn patients in bed when it has not been done during the shift yet.
9. Checks siderails to be sure they are up at night and during the day when necessary.
10. Calls other departments (such as O.R.) to find out why they have not been there to pick up patients.
11. Helps patients clean and groom body in order to promote personal hygiene and deter disease.
12. Disappears during a code or other emergency situation.
13. Watches physical therapist to see what the treatment is in order to do it with patients on his/her own.
14. Checks up on equipment which was reported as broken to make sure it has been fixed.
15. Feed patients who cannot feed themselves.
16. Does not apply a dressing properly (such as putting antibiotic cream or sterile dressing on with bare hands).
17. Does not talk to other service professionals to discuss patients' conditions.
18. Cleans IVACs every day and makes sure they work.

19. Checks with other nursing staff at any free time to see if anyone needs help getting tasks done.
20. Discredits therapists or other nurses in front of patients (such as agreeing that patient should not have to do exercises which therapist has instructed patient to do).
21. Helps patients get up, walk, go to bathroom, get on stretcher and/or into wheelchair to encourage ambulatory movement.
22. Gives a medication without knowing what it is (such as giving a sleeping pill at 8 a.m.).
23. Helps patients into bed upon admission (such as escorting, undressing, putting clothes away).
24. Notifies families of serious conditions of patients to comfort them and answer questions.
25. Does not check drug cart or emergency equipment when it is an assigned task.
26. Introduces patients to other patients who have had the same illness or procedure.
27. Cleans and/or checks equipment in order to make sure it is sterile and ready for patients.
28. Notifies physicians of patients' conditions, and reactions to drugs, treatments, and significant incidents in order to arrange for medical attention.
29. Says something bad about comatose or semicomatose patients when in their rooms.
30. Does not put patients' valuables in a safe place (such as leaving earrings on top of bedside stand).
31. Monitors equipment or machines to which patients are hooked up to maintain patient and staff safety (such as cardiac monitors).
32. Avoids starting I.V.s and leaves it for other nurses.
33. Oversees environment (nursing conference room, patient area, nursing station) in order to provide for ongoing safety and cleanliness of unit.
34. Writes down on chart particular steps which physician has specified nurses should go through for a procedure

in order to have reference the next time procedure is done.

35. Reviews patient care plan charts, upon request, in order to evaluate effectiveness of hospital policies and quality of health care.
36. Evaluates specific areas of patient care informally and/or formally (such as delay between lab test and receipt of report) in order to maintain quality patient care.
37. Examines/evaluates information which has been collected about patients via observation, interviews, records and research to develop a nursing care plan.
38. Takes notes when making rounds with physicians concerning recommendations for patients.
39. Strips and makes beds after obtaining linens to keep patients comfortable and sanitary.
40. Stands patients up to take their blood pressure after getting a reading of 60 over 20 while they are sitting down.
41. Answers patients' call signal lights in order to find out what patients want.
42. Gives and takes away bedpans and urinals in order to let patients eliminate waste as needed.
43. Watches patients closely in order to detect changes in mood or physical symptoms and recognize deviation from normal.
44. Gives pericare to patients who are totally bedridden.
45. Sits with dying patients and their families for long periods of time to comfort them.
46. Calls and asks families to come to hospital if patients seem overly anxious or nervous.
47. Asks physicians what literature they want patients to have in order to teach them about illness, implications, etc.
48. Prepares rooms, sterile instruments, equipment, and supplies for specific patients and procedures.
49. Attends orientations and inservice seminars to update knowledge and skills.

50. Questions patients and families to find out when they do and do not understand what is being explained concerning the illness or treatment or implications.
51. Writes down incorrect information on consent form (such as wrong procedure).
52. Shares with colleagues, formally and informally, new knowledge regarding clinical observations and interpretations learned in continuing education activities in order to enhance professional development.
53. Checks and records temperature, pulse, blood pressure, elimination, appetite, and other vital signs to detect deviations from normal, determine progress of patients, and make recommendations.
54. Does not document completely (such as documenting symptoms but omitting treatment or documenting treatment and omitting response to treatment).
55. Explains specific physiology and implications of illness in order for patients and families to understand the treatment, limitations, and precautions.
56. Prepares and administers medications to be given orally, intravenously, intramuscularly, subcutaneously, and locally in order to fulfill physicians' recommendations.
57. Brings articles in that are found in nursing literature or newspapers to share with others.
58. Speaks with patients and families in order to assess their educational needs about patients.
59. Does not realize patients are in shock when they are pale, unresponsive, and have low blood pressure.
60. Assists physicians with treatments, diagnostic tests, and dressing to coordinate effective patient care.
61. Sets up discharge services for patients such as support groups or hooking them up with outside agencies (such as American Heart Association).
62. Gives information and ideas, based on personal experience and training, to new nurses (such as orientees and senior practice students) in order to recommend procedures for nursing care.
63. Explains to patients and families about equipment, supplies, treatments, etc., in order for them to know when to call for assistance while hospitalized.

64. Conducts research projects concerning nursing in order to upgrade the profession and own professional development.
65. Continually evaluates patients' conditions in order to make necessary revisions in the plan of care.
66. Explains tests, procedures, medications and the day's routine to patients and families, within the guidelines specified by physicians.
67. Joins/attends professional organizations and civic groups to advance the profession of nursing.
68. Does library searches to get information for teaching patients.
69. Sets up classes with family members who have said they will be helping with patients' care to teach them about the care.
70. Writes an initial assessment and nursing judgment based on patients' immediate needs at time of admission to make necessary plans or take action.
71. Takes equipment to be cleaned and/or serviced if it is soiled or broken.
72. Takes time and explains what everything means to patients and families (such as lab values, amount of oxygen).
73. Writes a detailed nursing care plan that includes nursing assessments, plans, treatments (such as medications) and patients' responses in order to keep others informed.
74. Asks physicians when patients will be discharged in order to start discharge planning in accordance with the date.
75. Updates care plans daily.
76. Sets up goals to develop professionally but does not meet goals (such as offering to read about new medications and then not doing it).
77. Assigns tasks to individuals who are not qualified to do the task.
78. Forgets to make sure that there are special supplies for the weekend (such as catheters).
79. Does not follow proper channels of communication (jumps over head nurse or supervisor and goes directly to director with problems).

80. Talks with patients and families about nursing history in order to write this information in patients' records.
81. Leaves out the assignment of specific tasks to employees which should be done (such as checking emergency equipment, stocking treatment room, noting orders).
82. Keeps written records of the status of narcotics, emergency cart, and emergency equipment in order to know when things are missing or not working and take appropriate action.
83. Talks with patients and families to identify problems and needs of patients and prioritize nursing care.
84. Fills out incident reports to document accidents, use of wrong medication or treatment, omission of medication or therapy, or other incidents of major importance.
85. Does not write care plans for patients.
86. Records physicians' visits and/or orders on chart to document treatment.
87. Records treatments, procedures, medication, etc., on chart in order to document treatment.
88. Does not check Kardex until halfway through shift in order to plan care for patients.
89. Checks consent form to make sure that the appropriate persons have signed them.
90. Delegates tasks to others and then sits and does not do anything.
91. Calls physicians to check ambiguous orders (such as "nembutol every 6 hours").
92. Writes a care plan and then does not accomplish the goals in it.
93. Bends visiting rules for families when patients are very ill (extends hours or allows young children to visit).
94. Delegates tasks fairly in order to avoid overloading any one individual with "undesirable" tasks.
95. Does not set priorities in caring for patients (such as helping to make a bed before checking Kardex).

96. Argues with family when they question why certain things are being done (such as certain tests).
97. Lets patients have dangerous objects (such as a razor) after attempted suicide.
98. Leaves siderails down at night when charts say that patients can ambulate independently.
99. Participates in birthday and/or holiday celebrations with patients (such as painting Easter eggs).
100. Assists nursing staff and/or ward clerk who have heavy assignments or difficult patients in order to show support and coordinate health care.
101. Gives patients medications to which they are allergic even when it is written in their charts that they are allergic.
102. Stores and guards narcotics in order to protect patients from unnecessary medication and thievery.
103. Gives patients lotions to remedy problems with dry skin or irritation.
104. Turns patients in bed and gives back rubs and exercises patients' hands and feet when necessary to stimulate circulation and relieve pressure and muscle tension.
105. Does not document a problem which develops which is not related to the illness for which patients are admitted (such as bed sores or back pain).
106. Encourages patients to put valuables in safe place (such as locker or safe) upon admission in order to avoid problems.
107. Restrains confused patients to ensure theirs and others' safety.
108. Looks for a Licensed Practical Nurse or Nurse Aide when patients request a bedpan instead of getting it for them.
109. Sees patients beginning to show signs of complications and pre-prepares in anticipation of physicians' orders (such as having supplies or medications set up).
110. Asks patients if they have any allergies or reactions to medications before giving an I.V. for the first time (even if recorded on chart).

111. Asks patients if they want something different to eat if they are not eating the food that is served at meals.
112. Does not call for help when having a problem repeatedly (such as having to poke patient three times to start an I.V.).
113. Participates in patient care conferences to discuss and evaluate patients' conditions and treatments.
114. Avoids filling out incident reports.
115. Looks up how to use a new medication in the P.D.R. before it is ordered by physicians for any patients.
116. Speaks with patients and their families in order to explain discharge planning and necessary care.
117. Obtains available literature from the hospital for patients and families with various illnesses in order to inform them about implications and treatment.
118. Does not chart physicians' visits and/or orders.
119. Asks unit manager to get videotapes or inservices that are relevant to present patients' needs.
120. Keeps documentation on what has been taught to patients and families in order to remember what needs to be taught.
121. Leaves charting for the last 5 minutes of shift.
122. Talks with other health care members to be sure that someone watches patients while on break.
123. Does not fill out all necessary information about past history of patients (such as allergies, previous medications).
124. Attends staff meetings in order to discuss problems which might be occurring with other staff members (such as communication problems).
125. Documents precise and pertinent information about patients' conditions (such as incision color and drainage; treatment for pain and response).
126. Does not inform supervisor and/or other shift members about problems with patients' conditions (such as on-coming infection, abnormally high or low temperature).

127. Requests and receives information and assistance from x-ray, lab, pharmacist, and/or respiratory care to coordinate patient care.
128. Refuses to change patients' sheets when a spot is on them.
129. Gives advice and counsel to patients and families in order to promote health and prevent illness during hospitalization and after discharge (such as diet, basic hygiene).
130. Talks with other health care members to see that assignments have been completed by the end of the shift.
131. Does not initiate discharge planning until the day patients are discharged.
132. Evaluates physicians' orders and questions them (such as physician ordering more potassium for patient whose lab results showed high potassium and calling physician to get order changed).
133. Does not refer patients to social services personnel and tries to solve patients' problems alone (such as trying to cure suicidal patients).
134. Interprets selected laboratory and x-ray findings in order to plan or revise nursing care activities, in coordination with physicians' recommendations.
135. Works with physical, occupational and recreational therapists, and other professionals (such as social workers, community groups) to discuss and plan care for patients.
136. Checks patients' temperature a second time within an hour if it reads low the first time (such as 94 degrees).
137. Gives back care two or three times a night to patients who are totally bedridden.
138. Leaves room abruptly when patients start to talk to nurse.
139. Removes call signal light from patients' reach so that patients will not signal for nurse.
140. Does not wash buttocks of patients who cannot do it themselves (such as when they have a bad back).

141. Tries to drum up cost-effective business by talking to physicians about treating patients on an out-patient basis rather than in-patient or in physicians' office (such as for chemotherapy).
142. Charts that care has been given and it has not (charts that patient has had mouth care and bath but soap is still in paper and toothpaste is still in box).
143. Gives challenging assignments to senior practice students in order to broaden their experience.
144. Does not take time to speak to family members who are visiting patients.
145. Checks inventory of supplies in order to determine if they are low.
146. Works with dietician and/or food service in order to ensure that patients' nutritional needs are met.
147. Orders tests for patients that physician has not recommended because patients show symptoms of complication (such as poor color or respiration).
148. Does not call families of seriously ill patients.
149. Leaves notes anywhere there might be any danger to staff or patients (such as a note on wheelchair with broken brake).
150. Works with home care nursing department to arrange care for discharged patients.
151. Parks equipment in front of emergency exits or in the flow of traffic.
152. Prepares change-of-shift reports to inform next shift of patients' conditions and necessary care.
153. Orders the wrong test and does not realize it even when the results come back (such as ordering an EKG instead of EEG).
154. Tells patients and/or families the status of the patients' recovery to alleviate worries and answer questions.
155. Checks expiration dates on medications and sterile equipment to make sure they have not expired.
156. Evaluates nursing care given by each team member (including orientees and senior practice students) in order to provide appropriate direction.

157. Introduces self to patients and families in order to initiate communication.
158. Calls other staff nurses to find replacements when unit is understaffed.
159. Speaks with patients and families about their emotional, social, and economic needs in order to consider these issues when caring for patients.
160. Assigns tasks/gives directions to each team member (including senior practice students and/or volunteers) according to abilities and organizational needs to provide optimal patient care.
161. Informs supervisor of a problem and then reminds supervisor that it needs to be resolved.
162. Contacts clergyman and arranges a visit in order to comply with patients' wishes.
163. Checks surgical sites, dressings, I.V.s, tubes, splints, etc., to remedy any problems which might occur.
164. Looks for a room and shows it to patients' families in order to provide privacy when necessary.
165. Gets an extra blanket for patients if their temperature is low (such as 94 degrees).
166. Avoids talking to physicians to discuss patients' conditions; will tell other nurses the information and have them discuss conditions with physicians.
167. Avoids teaching patients and/or families and gets another nurse or physician to do it.
168. Does not correct nursing students or other nurses after seeing them do something incorrectly (such as a dressing change).
169. Talks to patients in a supportive way in order to establish a therapeutic relationship so patients can express their needs.
170. Sends patients home without teaching them what they need to know after discharge (such as diabetic diet or giving themselves insulin injections).
171. Tells nursing students to stand in the corner of patients' rooms and not to help with any procedures.

172. Gives patients a brief surface explanation for the purpose of a medication rather than explaining in more detail (such as "for your heart").
173. Provides emergency treatment as appropriate (such as cardiac arrest, shock, respiration, hemorrhage) to save patients' lives.
174. Is not open to new ways of doing things (such as a new method of charting).
175. Sets up meetings with patients and/or families and then does not show up.
176. Writes a detailed account of a patient family problem on chart in order to assess the impact on patients' recovery.
177. Teaches patients self-care beyond their capabilities.
178. Calls in sick whenever tired.
179. Does not attend inservices which are not immediately relevant for present patients.
180. Puts I and Os on sheet when patients have taken fluids and voided and does not wait until the end of shift.
181. Gives informal feedback to other health care members on an ongoing basis.
182. Does not volunteer or readily accept assignments beyond the normal routine.
183. Speaks to people in lab with respect and calmness even when test results are 2 days late; asks them if there is a problem, explains the situation and how important the results are.
184. Does not tell others about new information that has been learned in continuing education classes.
185. Informs immediate supervisor of personal growth needs in order to enhance professional development (such as needing instruction or practice in starting I.V.s).
186. Establishes appropriate personal care habits to maintain physical and mental health.
187. Reviews progress notes, orders, and lab slips without being reminded.
188. Locates and reads professional resources to identify and plan optimal health care for patients.

189. Tells other nurses, Licensed Practical Nurses, Nurse Aides and/or senior practice students about specific educational activities and inservices.

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Section II

In this section a list of behavioral activities which staff nurses may perform is presented. They are grouped into 10 categories which are labelled and defined according to the behavioral activities in each category. Please read each of the activities and rate how frequently you have actually seen _____ perform each activity in a typical month. We are asking about _____ and not about staff nurses in general. This is not going to be used as an evaluation of _____'s performance, but we are interested in assessing how frequently a staff nurse does each activity. Please use the scale below for items 190-230 on answer sheet #1 and 1-48 on answer sheet #2.

- 0. never
- 1. once a month
- 2. twice a month
- 3. once a week
- 4. once every other shift
- 5. once a shift
- 6. twice a shift
- 7. every 2 hours or more frequently (i.e., Q 1 hour)

A. Administrative Functions - Activities involving supervision of others and coordination of patient care; activities necessary for the smooth, efficient functioning of the hospital.

- 190. Assigns tasks/gives directions to each team member (including senior practice students and/or volunteers) according to abilities and organizational needs to provide optimal patient care.
- 191. Talks with other health care members to see that assignments have been completed by the end of the shift.
- 192. Evaluates nursing care given by each team member (including orientees and senior practice students) in order to provide appropriate direction.
- 193. Assists nursing staff and/or ward clerk who have heavy assignments or difficult patients in order to show support and coordinate health care.
- 194. Calls other staff nurses to find replacements when unit is understaffed.

195. Checks inventory of supplies in order to determine if they are low.
196. Prepares change-of-shift reports to inform shift of patients' conditions and necessary care.
197. Informs head nurse or supervisor of problems (such as housekeeping, maintenance, supplies, schedules, physicians' requests) so that action can be taken.
198. Observes the actions of hospital staff, patients, and visitors in order to remedy problems which might occur.

B. Professional Development - Activities involving continuing education and self-maintenance; activities necessary for the advancement of the profession and nursing staff.

199. Informs immediate supervisor of personal growth needs in order to enhance professional development (such as needing instruction or practice in starting I.V.s).
200. Locates and reads professional resources to identify and plan optimal health care for patients.
201. Establishes appropriate personal care habits to maintain physical and mental health.
202. Attends orientations and inservice seminars to update knowledge and skills.
203. Shares with colleagues, formally and informally, new knowledge regarding clinical observations and interpretations learned in continuing education activities to enhance professional development.
204. Gives information and ideas, based on personal experience and training, to new nurses (such as orientees and senior practice students) in order to recommend procedures for nursing care.
205. Tells other nurses, Licensed Practical Nurses, Nurse Aides and/or senior practice students about specific educational activities and inservices.

C. Interactions with Other Professionals - Activities necessary for interacting with nursing and health care staff and social service professionals within and outside the hospital; activities involving the exchange of information with other health care providers and coordination of health care with other departments.

206. Talks with other health care members to be sure that someone watches patients while on break.
 207. Attends staff meetings in order to discuss problems which might be occurring with other staff members (such as communication problems).
 208. Attends change-of-shift reports in order to inform others and find out about patients' conditions and treatments.
 209. Attends physicians' rounds to inform physicians of special conditions about patients.
 210. Requests and receives information and assistance from x-ray, lab, pharmacist, and/or respiratory care to coordinate patient care.
 211. Works with dietician and/or food service in order to ensure that patients' nutritional needs are met.
 212. Works with physical, occupational and recreational therapists, and other professionals (such as social workers, community groups) to discuss and plan care for patients.
 213. Works with other hospital units, upon request, to assess patients and/or administer treatment.
 214. Works with home care nursing department to arrange care for discharged patients.
- D. Patient-Family Teaching - Activities involving teaching, advising, giving directions, and demonstrating to patients and families.
215. Speaks with patients and families in order to assess their educational needs about patients.
 216. Obtains available literature from the hospital for patients and families with various illnesses in order to inform them about implications and treatments.
 217. Gives advice and counsel to patients and families in order to promote health and prevent illness during hospitalization and after discharge (such as diet, basic hygiene).
 218. Explains specific physiology and implications of illness in order for patients and families to understand the treatment, limitations, and precautions.

219. Explains tests, procedures, medications and the day's routine to patients and families, within the guidelines specified by physicians.
220. Explains to patients and families about equipment, supplies, treatments, etc., in order for them to know when to call for assistance while hospitalized.
221. Speaks with patients and their families in order to explain discharge planning and necessary care.
- E. Planning and Evaluating Patient Care - Activities directed at obtaining information relative to patients' present and past health status; activities concerned with the assessment of the illnesses from which patients are suffering; activities concerned with evaluating treatments and revising care plans.
222. Writes an initial assessment and nursing judgment based on patients' immediate needs at time of admission to make necessary plans or take action.
223. Talks with patients and families in order to identify problems and needs of patients and prioritize nursing care.
224. Talks with patients and families about nursing history in order to write this information on patients' records.
225. Participates in patient care conferences to discuss and evaluate patients' conditions and treatments.
226. Writes a detailed nursing care plan that includes nursing assessments, plans, treatments (such as medications) and patients' responses in order to keep others informed.
227. Indicates in nursing care plan which needs will be responsibility of other health professionals to insure proper health care of patients.
228. Interprets selected laboratory and x-ray findings in order to plan or revise nursing care activities, in coordination with physicians' recommendations.
229. Examines/evaluates information which has been collected about patients via observations, interviews, records and research to develop a nursing care plan.
230. Continuously evaluates patients' conditions in order to make necessary revisions in the plan of care.

****BEGIN USING #1 ON SECOND ANSWER SHEET****

F. Professional Nursing - Activities directed at treating patients for the illnesses they were admitted for and any complications; activities involving interpreting physicians' orders and doing recommended treatments.

1. Provides emergency treatment as appropriate (such as cardiac arrest, shock, respiration, hemorrhage) to save patients' lives.
2. Prepares rooms, sterile instruments, equipment, and supplies for specific patients and procedures.
3. Checks surgical sites, dressings, I.V.s, tubes, splints, etc., to remedy any problems which might occur.
4. Inspects and/or affixes labels on medications, drainage bottles and tubes, I.V. bottles, etc., in order to ensure that patients receive correct treatments.
5. Checks and records temperature, pulse, blood pressure, elimination, appetite, and other vital signs to detect deviations from normal, determine progress of patients, and make recommendations.
6. Prepares and administers medications to be given orally, intravenously, intramuscularly, subcutaneously, and locally in order to fulfill physicians' recommendations.
7. Assists physicians with treatments, diagnostic tests, and dressings to coordinate effective patient care.
8. Notifies physicians of patients' conditions, and reactions to drugs, treatments and significant incidents in order to arrange for medical attention.
9. Counts narcotics in order to check supply.

G. Basic Nursing Care - Activities involving bedside care of patients and activities of daily living; activities necessary for the comfort and well-being of patients, to maintain their health and prevent infection, regardless of the illness from which they are suffering.

10. Helps patients into bed upon admission (such as escorting, undressing, putting clothes away).
11. Tells patients about hospital policies and routines in order to begin the orientation process.

12. Helps patients clean and groom body in order to promote personal hygiene and deter disease.
13. Answers patients' call signal lights in order to find out what patients want.
14. Helps patients get up, walk, go to bathroom, get on stretcher and/or into wheelchair to encourage ambulatory movement.
15. Feeds patients who cannot feed themselves.
16. Gives and takes away bedpans and urinals in order to let patients eliminate waste as needed.
17. Turns patients in bed, gives back rubs, and exercises hands and feet when necessary to stimulate circulation and relieve pressure and muscle tension.
18. Gives patients lotions to remedy problems with dry skin or irritation.
19. Administers baths, packs or other applications in order to keep patients' body temperature in the normal range.
20. Restrains confused patients to ensure theirs and others' safety.
21. Strips and makes beds after obtaining linens to keep patients comfortable and sanitary.

H. Supportive Care of Patients and Families - Activities directed at showing care, kindness, and compassion for patients and their families; activities aimed at giving patients and their families emotional support.

22. Introduces self to patients and families in order to initiate communication.
23. Talks to patients in a supportive way in order to establish a therapeutic relationship so patients can express their needs.
24. Listens to patients' verbal and nonverbal communications to identify potential or existing patient problems.
25. Speaks with and listens to patients' families in a supportive way to emphasize their importance in patient care and show concern for their situation.

26. Tells patients and/or families the status of the patients' recovery to alleviate worries and answer questions.
27. Notifies families of serious conditions of patients to comfort them and answer questions.
28. Looks for a room and shows it to patients' families in order to provide privacy when necessary.
29. Speaks with patients and families about their emotional, social, and economic needs in order to consider these issues when caring for patients.
30. Contacts clergy member and arranges a visit in order to comply with patients' wishes.
 - I. Documentation - Activities necessary for record keeping and documenting staff actions; activities involving written communication.
31. Records physicians' visits and/or orders on chart to document treatment.
32. Records treatments, procedures, medications, etc., on chart in order to document treatment.
33. Fills out incident reports to document accidents, use of wrong medication or treatment, omission of medication or therapy, or other incidents of major importance.
34. Checks consent forms to make sure that the appropriate persons have signed them.
35. Keeps written records of the status of narcotics, emergency cart, and emergency equipment in order to know when things are missing or not working and take appropriate action.
36. Fills out forms in order to record admissions and/or discharges.
37. Writes requisitions for supplies and/or equipment (such as intravenous fluids) to ensure that they are available when needed.
38. Fills out requisition forms to request special diets or treatments (such as x-rays, blood tests).
39. Sorts x-ray and/or laboratory slips to file them in appropriate folders.

- J. Unit Safety and Maintenance - Activities necessary to maintain the safety and cleanliness of patients' environment and the hospital.
40. Oversees environment (nursing conference room, patient area, nursing station) in order to provide for ongoing safety and cleanliness of unit.
 41. Makes patients' surroundings neat, clean, and uncluttered, upon request in order to allow for patients' comfort.
 42. Cleans and/or checks equipment in order to make sure it is sterile and ready for patients.
 43. Monitors equipment or machinery to which patients are hooked up to maintain patient and staff safety (such as cardiac monitors).
 44. Stores and guards narcotics in order to protect patients from unnecessary medication and thievery.
 45. Checks expiration dates on medications and sterile equipment to make sure they have not expired.
 46. Posts necessary signs on door or bed (such as Radio-active Precaution) in order to maintain a safe environment.
 47. Checks siderails to be sure they are up at night and during the day when necessary.
 48. Encourages patients to put valuables in safe place (such as locker or safe) upon admission in order to avoid problems.

Section III

In this section, the categories of behavioral activities and their definitions are listed. Please read each of them, referring to the previously listed behavioral activities when necessary, and rate how important you believe each category is, relative to the other categories, for a staff nurse (RN) to perform at a fully competent, effective level. Please use the scale below for items 49-58.

0. Never done - this category is not the staff nurse's responsibility in your hospital unit and is therefore unimportant to the staff nurse's job.
1. Minor importance - this category has the lowest priority of importance relative to all other categories.

2. Fairly important - this category does not have the priority of importance you attach to most other categories.
 3. Moderately important - this category has about average priority of importance among all categories.
 4. Very important - this category has a higher degree of priority than most other categories.
 5. Most important - this category is one of the few most essential categories performed.
49. Administrative Functions - Activities involving supervision of others and coordination of patient care; activities necessary for the smooth, efficient functioning of the hospital.
 50. Professional Development - Activities involving continuing education and self-maintenance; activities necessary for the advancement of the profession and nursing staff.
 51. Interactions with Other Professionals - Activities necessary for interacting with nursing and health care staff and social service professionals within and outside the hospital; activities involving the exchange of information with other health care providers and coordination of health care with other departments.
 52. Patient-Family Teaching - Activities involving teaching, advising, giving directions, and demonstrating to patients and families.
 53. Planning and Evaluating Patient Care - Activities directed at obtaining information relative to patients' present and past health status; activities concerned with the assessment of the illnesses from which patients are suffering; activities concerned with evaluating treatments and revising care plans.
 54. Professional Nursing - Activities directed at treating patients for the illnesses they were admitted for and any complications; activities involving interpreting physicians' orders and doing recommended treatments.
 55. Basic Nursing Care - Activities involving bedside care of patients and activities of daily living; activities necessary for the comfort and well-being of patients, to maintain their health and prevent infection, regardless of the illness from which they are suffering.
 56. Supportive Care of Patients and Families - Activities directed at showing care, kindness, and compassion for patients and their families; activities aimed at giving patients and their families emotional support.

57. Documentation - Activities necessary for record keeping and documenting staff actions; activities involving written communication.
58. Unit Safety and Maintenance - Activities necessary to maintain the safety and cleanliness of patients' environment and the hospital.
- =====

Section IV

Finally, we would like to know a little about you so we can see how different types of people respond to the three sections of this questionnaire. Please use the scales provided to answer items 59-72.

59. Please indicate how many years you have been a staff nurse at this or any other hospital.
0. less than 6 months
 1. 6 months to 1 year
 2. 1 to 3 years
 3. 3 to 5 years
 4. 5 to 7 years
 5. 7 to 10 years
 6. 10 to 15 years
 7. 15 to 20 years
 8. 20 to 30 years
 9. over 30 years
60. If you are a head nurse now, please indicate how many years you have been a head nurse at this or any other hospital. (If not a head nurse, mark in 0.)
0. 0
 1. 1 month to 1 year
 2. 1 to 3 years
 3. 3 to 5 years
 4. 5 to 7 years
 5. 7 to 10 years
 6. 10 to 15 years
 7. 15 to 20 years
 8. 20 to 30 years
 9. over 30 years
61. Please indicate in which unit you work most of the time (more than 50%).
0. medical and/or surgical
 1. critical or intensive care
 2. operating room or recovery room
 3. emergency room
 4. pediatrics or nursery
 5. pediatric ICU or neonatal ICU
 6. oncology or cardiology

7. labor and delivery/postpartum
 8. orthopedics or rehabilitation
 9. float (no specific unit)
62. Please indicate how many years you have been working in this unit.
0. less than 6 months
 1. 6 months to 1 year
 2. 1 to 3 years
 3. 3 to 5 years
 4. 5 to 7 years
 5. 7 to 10 years
 6. 10 to 15 years
 7. 15 to 20 years
 8. 20 to 30 years
 9. over 30 years
63. Please indicate on which shift you work most of the time (more than 50%).
0. days (typically 7 a.m. to 3 p.m., first shift)
 1. afternoons/evenings (typically 3 p.m. to 11 p.m., second shift)
 2. nights (typically 11 p.m. to 7 a.m., third shift)
 3. variable shifts (no one shift worked most of the time)
64. Please indicate which type of educational background you have (mark the highest level you have attained).
0. high school diploma or GED
 1. associate's degree
 2. associate's degree and some credits toward bachelors
 3. diploma
 4. diploma and some college
 5. bachelor's degree in nursing
 6. bachelor's degree in something other than nursing
 7. bachelor's degree and some graduate credits
 8. master's
 9. Ph.D.
65. Please indicate your gender.
0. female
 1. male
66. Please indicate your race.
0. White
 1. Black
 2. Hispanic
 3. Indian/Native American
 4. Asian/Pacific Islander
 5. other
67. Please indicate your age.
0. less than 21 years
 1. 21-25
 2. 26-30

3. 31-35
 4. 36-40
 5. 41-45
 6. 46-50
 7. 51-55
 8. 56-60
 9. over 60
68. Please indicate the way the nursing staff in your unit is primarily organized.
0. team nursing
 1. primary care nursing
 2. functional nursing
 3. modular nursing (combination of team and primary care)
69. Please indicate whether you work:
0. part-time
 1. full-time
70. Please indicate if you have ever had your performance formally rated by someone else.
0. no
 1. yes
71. Please indicate if you have ever formally rated someone else's performance.
0. no
 1. yes
72. Please indicate how long you have worked with the staff nurse who you have been asked to refer to in Section II.
0. less than 6 months
 1. 6 months to 1 year
 2. 1 to 3 years
 3. 3 to 5 years
 4. 5 to 7 years
 5. 7 to 10 years
 6. 10 to 15 years
 7. 15 to 20 years
 8. 20 to 30 years
 9. over 30 years



6215 West St. Joseph Highway
Lansing, Michigan 48917
(517) 323-3443

Patric E. Ludwig
President

Michigan Hospital Association Service Corporation
Staff Nurse Performance Appraisal Project

We would like to thank you for agreeing to participate in this project. As you probably know, the goal of this project is to develop a performance appraisal instrument for staff nurses.

The type of instrument we are developing has been found to be helpful for both those people who are being evaluated as well as those who are doing the evaluating. It specifies the types of behaviors which are considered to be good and bad performance of staff nurses. In addition, evaluations are based on actual observable behaviors of staff nurses. Therefore, we avoid reference to individuals' personality traits (such as dependability) when evaluating their job performance. This type of instrument is less ambiguous and more objective than rating scales which are typically used.

A large number of staff and head nurses throughout Michigan have been interviewed by the project coordinator who is associated with the Michigan Hospital Association and not your hospital. They have helped in compiling a list of behavioral activities which staff nurses engage in and examples of good and bad job behaviors. This information is presented in this questionnaire.

In this stage of the project we are asking you to help us with your knowledge of and experience in the position of staff nurse. We are asking you to provide information concerning how frequently the behavioral activities are performed, how important various categories of these activities are, and whether the examples of behavior which have been collected represent effective or ineffective behavior. This information is vital in the development of the performance appraisal instrument.

A total of 16 hospitals are participating in this project. It is extremely important that we receive completed answer sheets from all participants. We are aware that this lengthy questionnaire is an imposition on your extremely busy schedule. We apologize in this regard but the length is determined by the complexity of the staff nurse job and is necessary to gather the information needed to develop an objective criterion-based performance appraisal instrument. We estimate the total response time to be approximately one hour.

Page Two

We wish to stress that your employment will not be affected in any way by your participation in this project. Your name will not be recorded on the answer sheets. A code number which appears on the answer sheets has been assigned to you by the project coordinator. Only the project coordinator has access to this number. All your responses will be held in strictest confidence. In order to accomplish this and preserve scientific rigor, please do not discuss your responses with anyone else in your hospital.

We have supplied a business reply envelope (no postage necessary) for you to use when mailing your completed answer sheets directly back to the project coordinator; do not send the questionnaire. In addition, please refold the answer sheets the same way they were folded when you received them. Please return the answer sheets by August 15, 1983.

We appreciate your help and we feel that your serious attention to this task will result in a performance appraisal instrument that makes a significant contribution to the job performance and professional development of staff nurses.

If you have any questions, concerns, or comments involving this project, we would be happy to discuss them with you. The phone numbers where the project coordinator can be reached are (517) 355-2171 and 353-8690.

Sincerely,

Ronni Meritt

Project Coordinator

Michigan Hospital Association Service Corporation
Staff Nurse Performance Appraisal Project

General Directions

The purpose of this questionnaire is to find out about the work which staff nurses perform. There are three sections, each asking for a different rating concerning the staff nurse job. A fourth section containing demographic items is presented at the end. Please read each item carefully and mark your response in the appropriate space on the enclosed computer answer sheets. There are two answer sheets and you may use either one to make the first 230 responses. The remainder of your responses should then be placed on the second answer sheet. We have numbered item 231 as #1 and the response to this item will be placed on the second answer sheet next to #1. Use a #2 pencil only. The computer will not record the responses if you do not use a #2 pencil. In the event that you are unfamiliar with this type of answer sheet, an example follows.

Example: Please indicate your gender.

- 0. male
- 1. female

If you are female, you would answer by filling in the appropriate circle, i.e. 1 :

0 1 2 3 4 5 6 7 8 9
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Section I

In this section, a list of job behaviors which have been seen by staff and head nurses is presented. Please read each of the examples of job behaviors below and then rate whether it describes good, bad, or average job performance for staff nurses (RNs). Please use the scale below for items 1-189:

- 0. Very poor - the example indicates very substandard job performance
- 1. Poor - the example indicates less than acceptable performance
- 2. Below average - the example indicates slightly less than average performance
- 3. Average - the example indicates job performance of the typical staff nurse
- 4. Above average - the example indicates slightly more than average performance
- 5. Good - the example indicates more than usually acceptable performance
- 6. Very good - the example indicates exceptional clearly superior job performance

PLEASE MARK ALL ANSWERS ON ANSWER SHEET USING #2 PENCIL ONLY

1. Informs head nurse or supervisor of problems (such as housekeeping, maintenance, schedules, supplies, physicians' orders) so that action can be taken.
2. Observes the actions of hospital staff, patients, and visitors in order to remedy problems which might occur.
3. Works with other hospital units, upon request, to assess patients and/or administer treatments.
4. Makes patients' surroundings neat, clean, and uncluttered, upon request, in order to allow for patients' comfort.
5. Leaves patients sitting on bedpan for 15 to 20 minutes.
6. Posts necessary signs on door or bed (such as Radioactive Precautions) in order to maintain a safe environment.
7. Speaks with and listens to patients' families in a supportive way to emphasize their importance in patient care and show concern for their situation.
8. Does not turn patients in bed when it has not been done during the shift yet.
9. Checks siderails to be sure they are up at night and during the day when necessary.
10. Calls other departments (such as O.R.) to find out why they have not been there to pick up patients.
11. Helps patients clean and groom body in order to promote personal hygiene and deter disease.
12. Disappears during a code or other emergency situation.
13. Watches physical therapist to see what the treatment is in order to do it with patients on his/her own.
14. Checks up on equipment which was reported as broken to make sure it has been fixed.
15. Feed patients who cannot feed themselves.
16. Does not apply a dressing properly (such as putting antibiotic cream or sterile dressing on with bare hands).
17. Does not talk to other service professionals to discuss patients' conditions.
18. Cleans IVACs every day and makes sure they work.

19. Checks with other nursing staff at any free time to see if anyone needs help getting tasks done.
20. Discredits therapists or other nurses in front of patients (such as agreeing that patient should not have to do exercises which therapist has instructed patient to do).
21. Helps patients get up, walk, go to bathroom, get on stretcher and/or into wheelchair to encourage ambulatory movement.
22. Gives a medication without knowing what it is (such as giving a sleeping pill at 8 a.m.).
23. Helps patients into bed upon admission (such as escorting, undressing, putting clothes away).
24. Notifies families of serious conditions of patients to comfort them and answer questions.
25. Does not check drug cart or emergency equipment when it is an assigned task.
26. Introduces patients to other patients who have had the same illness or procedure.
27. Cleans and/or checks equipment in order to make sure it is sterile and ready for patients.
28. Notifies physicians of patients' conditions, and reactions to drugs, treatments, and significant incidents in order to arrange for medical attention.
29. Says something bad about comatose or semicomatose patients when in their rooms.
30. Does not put patients' valuables in a safe place (such as leaving earrings on top of bedside stand).
31. Monitors equipment or machines to which patients are hooked up to maintain patient and staff safety (such as cardiac monitors).
32. Avoids starting I.V.s and leaves it for other nurses.
33. Oversees environment (nursing conference room, patient area, nursing station) in order to provide for ongoing safety and cleanliness of unit.
34. Writes down on chart particular steps which physician has specified nurses should go through for a procedure

in order to have reference the next time procedure is done.

35. Reviews patient care plan charts, upon request, in order to evaluate effectiveness of hospital policies and quality of health care.
36. Evaluates specific areas of patient care informally and/or formally (such as delay between lab test and receipt of report) in order to maintain quality patient care.
37. Examines/evaluates information which has been collected about patients via observation, interviews, records and research to develop a nursing care plan.
38. Takes notes when making rounds with physicians concerning recommendations for patients.
39. Strips and makes beds after obtaining linens to keep patients comfortable and sanitary.
40. Stands patients up to take their blood pressure after getting a reading of 60 over 20 while they are sitting down.
41. Answers patients' call signal lights in order to find out what patients want.
42. Gives and takes away bedpans and urinals in order to let patients eliminate waste as needed.
43. Watches patients closely in order to detect changes in mood or physical symptoms and recognize deviation from normal.
44. Gives pericare to patients who are totally bedridden.
45. Sits with dying patients and their families for long periods of time to comfort them.
46. Calls and asks families to come to hospital if patients seem overly anxious or nervous.
47. Asks physicians what literature they want patients to have in order to teach them about illness, implications, etc.
48. Prepares rooms, sterile instruments, equipment, and supplies for specific patients and procedures.
49. Attends orientations and inservice seminars to update knowledge and skills.

50. Questions patients and families to find out when they do and do not understand what is being explained concerning the illness or treatment or implications.
51. Writes down incorrect information on consent form (such as wrong procedure).
52. Shares with colleagues, formally and informally, new knowledge regarding clinical observations and interpretations learned in continuing education activities in order to enhance professional development.
53. Checks and records temperature, pulse, blood pressure, elimination, appetite, and other vital signs to detect deviations from normal, determine progress of patients, and make recommendations.
54. Does not document completely (such as documenting symptoms but omitting treatment or documenting treatment and omitting response to treatment).
55. Explains specific physiology and implications of illness in order for patients and families to understand the treatment, limitations, and precautions.
56. Prepares and administers medications to be given orally, intravenously, intramuscularly, subcutaneously, and locally in order to fulfill physicians' recommendations.
57. Brings articles in that are found in nursing literature or newspapers to share with others.
58. Speaks with patients and families in order to assess their educational needs about patients.
59. Does not realize patients are in shock when they are pale, unresponsive, and have low blood pressure.
60. Assists physicians with treatments, diagnostic tests, and dressing to coordinate effective patient care.
61. Sets up discharge services for patients such as support groups or hooking them up with outside agencies (such as American Heart Association).
62. Gives information and ideas, based on personal experience and training, to new nurses (such as orientees and senior practice students) in order to recommend procedures for nursing care.
63. Explains to patients and families about equipment, supplies, treatments, etc., in order for them to know when to call for assistance while hospitalized.

64. Conducts research projects concerning nursing in order to upgrade the profession and own professional development.
65. Continually evaluates patients' conditions in order to make necessary revisions in the plan of care.
66. Explains tests, procedures, medications and the day's routine to patients and families, within the guidelines specified by physicians.
67. Joins/attends professional organizations and civic groups to advance the profession of nursing.
68. Does library searches to get information for teaching patients.
69. Sets up classes with family members who have said they will be helping with patients' care to teach them about the care.
70. Writes an initial assessment and nursing judgment based on patients' immediate needs at time of admission to make necessary plans or take action.
71. Takes equipment to be cleaned and/or serviced if it is soiled or broken.
72. Takes time and explains what everything means to patients and families (such as lab values, amount of oxygen).
73. Writes a detailed nursing care plan that includes nursing assessments, plans, treatments (such as medications) and patients' responses in order to keep others informed.
74. Asks physicians when patients will be discharged in order to start discharge planning in accordance with the date.
75. Updates care plans daily.
76. Sets up goals to develop professionally but does not meet goals (such as offering to read about new medications and then not doing it).
77. Assigns tasks to individuals who are not qualified to do the task.
78. Forgets to make sure that there are special supplies for the weekend (such as catheters).

79. Does not follow proper channels of communication (jumps over head nurse or supervisor and goes directly to director with problems).
80. Talks with patients and families about nursing history in order to write this information in patients' records.
81. Leaves out the assignment of specific tasks to employees which should be done (such as checking emergency equipment, stocking treatment room, noting orders).
82. Keeps written records of the status of narcotics, emergency cart, and emergency equipment in order to know when things are missing or not working and take appropriate action.
83. Talks with patients and families to identify problems and needs of patients and prioritize nursing care.
84. Fills out incident reports to document accidents, use of wrong medication or treatment, omission of medication or therapy, or other incidents of major importance.
85. Does not write care plans for patients.
86. Records physicians' visits and/or orders on chart to document treatment.
87. Records treatments, procedures, medication, etc., on chart in order to document treatment.
88. Does not check Kardex until halfway through shift in order to plan care for patients.
89. Checks consent form to make sure that the appropriate persons have signed them.
90. Delegates tasks to others and then sits and does not do anything.
91. Calls physicians to check ambiguous orders (such as "nembutol every 6 hours").
92. Writes a care plan and then does not accomplish the goals in it.
93. Bends visiting rules for families when patients are very ill (extends hours or allows young children to visit).

94. Delegates tasks fairly in order to avoid overloading any one individual with "undesirable" tasks.
95. Does not set priorities in caring for patients (such as helping to make a bed before checking Kardex).
96. Argues with family when they question why certain things are being done (such as certain tests).
97. Lets patients have dangerous objects (such as a razor) after attempted suicide.
98. Leaves siderails down at night when charts say that patients can ambulate independently.
99. Participates in birthday and/or holiday celebrations with patients (such as painting Easter eggs).
100. Assists nursing staff and/or ward clerk who have heavy assignments or difficult patients in order to show support and coordinate health care.
101. Gives patients medications to which they are allergic even when it is written in their charts that they are allergic.
102. Stores and guards narcotics in order to protect patients from unnecessary medication and thievery.
103. Gives patients lotions to remedy problems with dry skin or irritation.
104. Turns patients in bed and gives back rubs and exercises patients' hands and feet when necessary to stimulate circulation and relieve pressure and muscle tension.
105. Does not document a problem which develops which is not related to the illness for which patients are admitted (such as bed sores or back pain).
106. Encourages patients to put valuables in safe place (such as locker or safe) upon admission in order to avoid problems.
107. Restrains confused patients to ensure theirs and others' safety.
108. Looks for a Licensed Practical Nurse or Nurse Aide when patients request a bedpan instead of getting it for them.
109. Sees patients beginning to show signs of complications and pre-prepares in anticipation of physicians' orders (such as having supplies or medications set up).

110. Asks patients if they have any allergies or reactions to medications before giving an I.V. for the first time (even if recorded on chart).
111. Asks patients if they want something different to eat if they are not eating the food that is served at meals.
112. Does not call for help when having a problem repeatedly (such as having to poke patient three times to start an I.V.).
113. Participates in patient care conferences to discuss and evaluate patients' conditions and treatments.
114. Avoids filling out incident reports.
115. Looks up how to use a new medication in the P.D.R. before it is ordered by physicians for any patients.
116. Speaks with patients and their families in order to explain discharge planning and necessary care.
117. Obtains available literature from the hospital for patients and families with various illnesses in order to inform them about implications and treatment.
118. Does not chart physicians' visits and/or orders.
119. Asks unit manager to get videotapes or inservices that are relevant to present patients' needs.
120. Keeps documentation on what has been taught to patients and families in order to remember what needs to be taught.
121. Leaves charting for the last 5 minutes of shift.
122. Talks with other health care members to be sure that someone watches patients while on break.
123. Does not fill out all necessary information about past history of patients (such as allergies, previous medications).
124. Attends staff meetings in order to discuss problems which might be occurring with other staff members (such as communication problems).
125. Documents precise and pertinent information about patients' conditions (such as incision color and drainage; treatment for pain and response).

126. Does not inform supervisor and/or other shift members about problems with patients' conditions (such as on-coming infection, abnormally high or low temperature).
127. Requests and receives information and assistance from x-ray, lab, pharmacist, and/or respiratory care to coordinate patient care.
128. Refuses to change patients' sheets when a spot is on them.
129. Gives advice and counsel to patients and families in order to promote health and prevent illness during hospitalization and after discharge (such as diet, basic hygiene).
130. Talks with other health care members to see that assignments have been completed by the end of the shift.
131. Does not initiate discharge planning until the day patients are discharged.
132. Evaluates physicians' orders and questions them (such as physician ordering more potassium for patient whose lab results showed high potassium and calling physician to get order changed).
133. Does not refer patients to social services personnel and tries to solve patients' problems alone (such as trying to cure suicidal patients).
134. Interprets selected laboratory and x-ray findings in order to plan or revise nursing care activities, in coordination with physicians' recommendations.
135. Works with physical, occupational and recreational therapists, and other professionals (such as social workers, community groups) to discuss and plan care for patients.
136. Checks patients' temperature a second time within an hour if it reads low the first time (such as 94 degrees).
137. Gives back care two or three times a night to patients who are totally bedridden.
138. Leaves room abruptly when patients start to talk to nurse.
139. Removes call signal light from patients' reach so that patients will not signal for nurse.

140. Does not wash buttocks of patients who cannot do it themselves (such as when they have a bad back).
141. Tries to drum up cost-effective business by talking to physicians about treating patients on an out-patient basis rather than in-patient or in physicians' office (such as for chemotherapy).
142. Charts that care has been given and it has not (charts that patient has had mouth care and bath but soap is still in paper and toothpaste is still in box).
143. Gives challenging assignments to senior practice students in order to broaden their experience.
144. Does not take time to speak to family members who are visiting patients.
145. Checks inventory of supplies in order to determine if they are low.
146. Works with dietician and/or food service in order to ensure that patients' nutritional needs are met.
147. Orders tests for patients that physician has not recommended because patients show symptoms of complication (such as poor color or respiration).
148. Does not call families of seriously ill patients.
149. Leaves notes anywhere there might be any danger to staff or patients (such as a note on wheelchair with broken brake).
150. Works with home care nursing department to arrange care for discharged patients.
151. Parks equipment in front of emergency exits or in the flow of traffic.
152. Prepares change-of-shift reports to inform next shift of patients' conditions and necessary care.
153. Orders the wrong test and does not realize it even when the results come back (such as ordering an EKG instead of EEG).
154. Tells patients and/or families the status of the patients' recovery to alleviate worries and answer questions.
155. Checks expiration dates on medications and sterile equipment to make sure they have not expired.

156. Evaluates nursing care given by each team member (including orientees and senior practice students) in order to provide appropriate direction.
157. Introduces self to patients and families in order to initiate communication.
158. Calls other staff nurses to find replacements when unit is understaffed.
159. Speaks with patients and families about their emotional, social, and economic needs in order to consider these issues when caring for patients.
160. Assigns tasks/gives directions to each team member (including senior practice students and/or volunteers) according to abilities and organizational needs to provide optimal patient care.
161. Informs supervisor of a problem and then reminds supervisor that it needs to be resolved.
162. Contacts clergy member and arranges a visit in order to comply with patients' wishes.
163. Checks surgical sites, dressings, I.V.s, tubes, splints, etc., to remedy any problems which might occur.
164. Looks for a room and shows it to patients' families in order to provide privacy when necessary.
165. Gets an extra blanket for patients if their temperature is low (such as 94 degrees).
166. Avoids talking to physicians to discuss patients' conditions; will tell other nurses the information and have them discuss conditions with physicians.
167. Avoids teaching patients and/or families and gets another nurse or physician to do it.
168. Does not correct nursing students or other nurses after seeing them do something incorrectly (such as a dressing change).
169. Talks to patients in a supportive way in order to establish a therapeutic relationship so patients can express their needs.
170. Sends patients home without teaching them what they need to know after discharge (such as diabetic diet or giving themselves insulin injections).

171. Tells nursing students to stand in the corner of patients' rooms and not to help with any procedures.
172. Gives patients a brief surface explanation for the purpose of a medication rather than explaining in more detail (such as "for your heart").
173. Provides emergency treatment as appropriate (such as cardiac arrest, shock, respiration, hemorrhage) to save patients' lives.
174. Is not open to new ways of doing things (such as a new method of charting).
175. Sets up meetings with patients and/or families and then does not show up.
176. Writes a detailed account of a patient family problem on chart in order to assess the impact on patients' recovery.
177. Teaches patients self-care beyond their capabilities.
178. Calls in sick whenever tired.
179. Does not attend inservices which are not immediately relevant for present patients.
180. Puts I and Os on sheet when patients have taken fluids and voided and does not wait until the end of shift.
181. Gives informal feedback to other health care members on an ongoing basis.
182. Does not volunteer or readily accept assignments beyond the normal routine.
183. Speaks to people in lab with respect and calmness even when test results are 2 days late; asks them if there is a problem, explains the situation and how important the results are.
184. Does not tell others about new information that has been learned in continuing education classes.
185. Informs immediate supervisor of personal growth needs in order to enhance professional development (such as needing instruction or practice in starting I.V.s).
186. Establishes appropriate personal care habits to maintain physical and mental health.
187. Reviews progress notes, orders, and lab slips without being reminded.

188. Locates and reads professional resources to identify and plan optimal health care for patients.
189. Tells other nurses, Licensed Practical Nurses, Nurse Aides and/or senior practice students about specific educational activities and inservices.

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Section II

In this section a list of behavioral activities which staff nurses may perform is presented. They are grouped into 10 categories which are labelled and defined according to the behavioral activities in each category. We are asking you to make two sets of ratings for each behavioral activity. First, we would like you to indicate how often you perform each activity in the presence of _____ in a typical month. Use responses 190-230 on answer sheet #1 and 1-48 on answer sheet #2. After you have responded to items 190-230 and 1-48, we would like you to indicate how often you perform each activity in the presence of other staff nurses in your unit in a typical month. Use responses 49-137 on the answer sheet. This is not an evaluation of your job performance. We are interested in seeing how often staff nurses do certain activities in the presence of their supervisors and in the presence of other staff nurses. Please use the scale below for both sets of ratings (items 190-230 and 1-137).

0. never
1. once a month
2. twice a month
3. once a week
4. once every other shift
5. once a shift
6. twice a shift
7. every 2 hours or more frequently (i.e., Q 1 hour)

- A. Administrative Functions - Activities involving supervision of others and coordination of patient care; activities necessary for the smooth, efficient functioning of the hospital.

190. Assigns tasks/gives directions to each team member (including senior practice students and/or volunteers) according to abilities and organizational needs to provide optimal patient care.
191. Talks with other health care members to see that assignments have been completed by the end of the shift.
192. Evaluates nursing care given by each team member (including orientees and senior practice students) in order to provide appropriate direction.

193. Assists nursing staff and/or ward clerk who have heavy assignments or difficult patients in order to show support and coordinate health care.
194. Calls other staff nurses to find replacements when unit is understaffed.
195. Checks inventory of supplies in order to determine if they are low.
196. Prepares change-of-shift reports to inform shift of patients' conditions and necessary care.
197. Informs head nurse or supervisor of problems (such as housekeeping, maintenance, supplies, schedules, physicians' requests) so that action can be taken.
198. Observes the actions of hospital staff, patients, and visitors in order to remedy problems which might occur.
- B. Professional Development - Activities involving continuing education and self-maintenance; activities necessary for the advancement of the profession and nursing staff.
199. Informs immediate supervisor of personal growth needs in order to enhance professional development (such as needing instruction or practice in starting I.V.s).
200. Locates and reads professional resources to identify and plan optimal health care for patients.
201. Establishes appropriate personal care habits to maintain physical and mental health.
202. Attends orientations and inservice seminars to update knowledge and skills.
203. Shares with colleagues, formally and informally, new knowledge regarding clinical observations and interpretations learned in continuing education activities to enhance professional development.
204. Gives information and ideas, based on personal experience and training, to new nurses (such as orientees and senior practice students) in order to recommend procedures for nursing care.
205. Tells other nurses, Licensed Practical Nurses, Nurse Aides and/or senior practice students about specific educational activities and inservices.

C. Interactions with Other Professionals - Activities necessary for interacting with nursing and health care staff and social service professionals within and outside the hospital; activities involving the exchange of information with other health care providers and coordination of health care with other departments.

- 206. Talks with other health care members to be sure that someone watches patients while on break.
- 207. Attends staff meetings in order to discuss problems which might be occurring with other staff members (such as communication problems).
- 208. Attends change-of-shift reports in order to inform others and find out about patients' conditions and treatments.
- 209. Attends physicians' rounds to inform physicians of special conditions about patients.
- 210. Requests and receives information and assistance from x-ray, lab, pharmacist, and/or respiratory care to coordinate patient care.
- 211. Works with dietician and/or food service in order to ensure that patients' nutritional needs are met.
- 212. Works with physical, occupational and recreational therapists, and other professionals (such as social workers, community groups) to discuss and plan care for patients.
- 213. Works with other hospital units, upon request, to assess patients and/or administer treatment.
- 214. Works with home care nursing department to arrange care for discharged patients.

D. Patient-Family Teaching - Activities involving teaching, advising, giving directions, and demonstrating to patients and families.

- 215. Speaks with patients and families in order to assess their educational needs about patients.
- 216. Obtains available literature from the hospital for patients and families with various illnesses in order to inform them about implications and treatments.
- 217. Gives advice and counsel to patients and families in order to promote health and prevent illness during hos-

pitalization and after discharge (such as diet, basic hygiene).

- 218. Explains specific physiology and implications of illness in order for patients and families to understand the treatment, limitations, and precautions.
- 219. Explains tests, procedures, medications and the day's routine to patients and families, within the guidelines specified by physicians.
- 220. Explains to patients and families about equipment, supplies, treatments, etc., in order for them to know when to call for assistance while hospitalized.
- 221. Speaks with patients and their families in order to explain discharge planning and necessary care.

E. Planning and Evaluating Patient Care - Activities directed at obtaining information relative to patients' present and past health status; activities concerned with the assessment of the illnesses from which patients are suffering; activities concerned with evaluating treatments and revising care plans.

- 222. Writes an initial assessment and nursing judgment based on patients' immediate needs at time of admission to make necessary plans or take action.
- 223. Talks with patients and families in order to identify problems and needs of patients and prioritize nursing care.
- 224. Talks with patients and families about nursing history in order to write this information on patients' records.
- 225. Participates in patient care conferences to discuss and evaluate patients' conditions and treatments.
- 226. Writes a detailed nursing care plan that includes nursing assessments, plans, treatments (such as medications) and patients' responses in order to keep others informed.
- 227. Indicates in nursing care plan which needs will be responsibility of other health professionals to insure proper health care of patients.
- 228. Interprets selected laboratory and x-ray findings in order to plan or revise nursing care activities, in coordination with physicians' recommendations.

- 229. Examines/evaluates information which has been collected about patients via observations, interviews, records and research to develop a nursing care plan.
- 230. Continuously evaluates patients' conditions in order to make necessary revisions in the plan of care.

****BEGIN USING #1 ON SECOND ANSWER SHEET****

F. Professional Nursing - Activities directed at treating patients for the illnesses they were admitted for and any complications; activities involving interpreting physicians' orders and doing recommended treatments.

- 1. Provides emergency treatment as appropriate (such as cardiac arrest, shock, respiration, hemorrhage) to save patients' lives.
- 2. Prepares rooms, sterile instruments, equipment, and supplies for specific patients and procedures.
- 3. Checks surgical sites, dressings, I.V.s, tubes, splints, etc., to remedy any problems which might occur.
- 4. Inspects and/or affixes labels on medications, drainage bottles and tubes, I.V. bottles, etc., in order to ensure that patients receive correct treatments.
- 5. Checks and records temperature, pulse, blood pressure, elimination, appetite, and other vital signs to detect deviations from normal, determine progress of patients, and make recommendations.
- 6. Prepares and administers medications to be given orally, intravenously, intramuscularly, subcutaneously, and locally in order to fulfill physicians' recommendations.
- 7. Assists physicians with treatments, diagnostic tests, and dressings to coordinate effective patient care.
- 8. Notifies physicians of patients' conditions, and reactions to drugs, treatments and significant incidents in order to arrange for medical attention.
- 9. Counts narcotics in order to check supply.

G. Basic Nursing Care - Activities involving bedside care of patients and activities of daily living; activities necessary for the comfort and well-being of patients, to maintain their health and

prevent infection, regardless of the illness from which they are suffering.

10. Helps patients into bed upon admission (such as escorting, undressing, putting clothes away).
11. Tells patients about hospital policies and routines in order to begin the orientation process.
12. Helps patients clean and groom body in order to promote personal hygiene and deter disease.
13. Answers patients' call signal lights in order to find out what patients want.
14. Helps patients get up, walk, go to bathroom, get on stretcher and/or into wheelchair to encourage ambulatory movement.
15. Feeds patients who cannot feed themselves.
16. Gives and takes away bedpans and urinals in order to let patients eliminate waste as needed.
17. Turns patients in bed, gives back rubs, and exercises hands and feet when necessary to stimulate circulation and relieve pressure and muscle tension.
18. Gives patients lotions to remedy problems with dry skin or irritation.
19. Administers baths, packs or other applications in order to keep patients' body temperature in the normal range.
20. Restrains confused patients to ensure theirs and others' safety.
21. Strips and makes beds after obtaining linens to keep patients comfortable and sanitary.

H. Supportive Care of Patients and Families - Activities directed at showing care, kindness, and compassion for patients and their families; activities aimed at giving patients and their families emotional support.

22. Introduces self to patients and families in order to initiate communication.
23. Talks to patients in a supportive way in order to establish a therapeutic relationship so patients can express their needs.

24. Listens to patients' verbal and nonverbal communications to identify potential or existing patient problems.
25. Speaks with and listens to patients' families in a supportive way to emphasize their importance in patient care and show concern for their situation.
26. Tells patients and/or families the status of the patients' recovery to alleviate worries and answer questions.
27. Notifies families of serious conditions of patients to comfort them and answer questions.
28. Looks for a room and shows it to patients' families in order to provide privacy when necessary.
29. Speaks with patients and families about their emotional, social, and economic needs in order to consider these issues when caring for patients.
30. Contacts clergy member and arranges a visit in order to comply with patients' wishes.
 - I. Documentation - Activities necessary for record keeping and documenting staff actions; activities involving written communication.
31. Records physicians' visits and/or orders on chart to document treatment.
32. Records treatments, procedures, medications, etc., on chart in order to document treatment.
33. Fills out incident reports to document accidents, use of wrong medication or treatment, omission of medication or therapy, or other incidents of major importance.
34. Checks consent forms to make sure that the appropriate persons have signed them.
35. Keeps written records of the status of narcotics, emergency cart, and emergency equipment in order to know when things are missing or not working and take appropriate action.
36. Fills out forms in order to record admissions and/or discharges.
37. Writes requisitions for supplies and/or equipment (such as intravenous fluids) to ensure that they are available when needed.

- 38. Fills out requisition forms to request special diets or treatments (such as x-rays, blood tests).
- 39. Sorts x-ray and/or laboratory slips to file them in appropriate folders.

J. Unit Safety and Maintenance - Activities necessary to maintain the safety and cleanliness of patients' environment and the hospital.

- 40. Oversees environment (nursing conference room, patient area, nursing station) in order to provide for ongoing safety and cleanliness of unit.
- 41. Makes patients' surroundings neat, clean, and uncluttered, upon request in order to allow for patients' comfort.
- 42. Cleans and/or checks equipment in order to make sure it is sterile and ready for patients.
- 43. Monitors equipment or machinery to which patients are hooked up to maintain patient and staff safety (such as cardiac monitors).
- 44. Stores and guards narcotics in order to protect patients from unnecessary medication and thievery.
- 45. Checks expiration dates on medications and sterile equipment to make sure they have not expired.
- 46. Posts necessary signs on door or bed (such as Radio-active Precaution) in order to maintain a safe environment.
- 47. Checks siderails to be sure they are up at night and during the day when necessary.
- 48. Encourages patients to put valuables in safe place (such as locker or safe) upon admission in order to avoid problems.

Now please use the same scale to indicate how often you perform each activity in the presence of other staff nurses in your unit in a typical month. Use responses 49-137 on the answer sheet.

A. Administrative Functions - Activities involving supervision of others and coordination of patient care; activities necessary for the smooth, efficient functioning of the hospital.

- 49. Assigns tasks/gives directions to each team member (including senior practice students and/or volunteers)

according to abilities and organizational needs to provide optimal patient care.

50. Talks with other health care members to see that assignments have been completed by the end of the shift.
51. Evaluates nursing care given by each team member (including orientees and senior practice students) in order to provide appropriate direction.
52. Assists nursing staff and/or ward clerk who have heavy assignments or difficult patients in order to show support and coordinate health care.
53. Calls other staff nurses to find replacements when unit is understaffed.
54. Checks inventory of supplies in order to determine if they are low.
55. Prepares change-of-shift reports to inform shift of patients' conditions and necessary care.
56. Informs head nurse or supervisor of problems (such as housekeeping, maintenance, supplies, schedules, physicians' requests) so that action can be taken.
57. Observes the actions of hospital staff, patients, and visitors in order to remedy problems which might occur.

B. Professional Development - Activities involving continuing education and self-maintenance; activities necessary for the advancement of the profession and nursing staff.

58. Informs immediate supervisor of personal growth needs in order to enhance professional development (such as needing instruction or practice in starting I.V.s).
59. Locates and reads professional resources to identify and plan optimal health care for patients.
60. Establishes appropriate personal care habits to maintain physical and mental health.
61. Attends orientations and inservice seminars to update knowledge and skills.
62. Shares with colleagues, formally and informally, new knowledge regarding clinical observations and interpretations learned in continuing education activities to enhance professional development.

63. Gives information and ideas, based on personal experience and training, to new nurses (such as orientees and senior practice students) in order to recommend procedures for nursing care.
64. Tells other nurses, Licensed Practical Nurses, Nurse Aides and/or senior practice students about specific educational activities and inservices.
- C. Interactions with Other Professionals - Activities necessary for interacting with nursing and health care staff and social service professionals within and outside the hospital; activities involving the exchange of information with other health care providers and coordination of health care with other departments.
 65. Talks with other health care members to be sure that someone watches patients while on break.
 66. Attends staff meetings in order to discuss problems which might be occurring with other staff members (such as communication problems).
 67. Attends change-of-shift reports in order to inform others and find out about patients' conditions and treatments.
 68. Attends physicians' rounds to inform physicians of special conditions about patients.
 69. Requests and receives information and assistance from x-ray, lab, pharmacist, and/or respiratory care to coordinate patient care.
 70. Works with dietician and/or food service in order to ensure that patients' nutritional needs are met.
 71. Works with physical, occupational and recreational therapists, and other professionals (such as social workers, community groups) to discuss and plan care for patients.
 72. Works with other hospital units, upon request, to assess patients and/or administer treatment.
 73. Works with home care nursing department to arrange care for discharged patients.
- D. Patient-Family Teaching - Activities involving teaching, advising, giving directions, and demonstrating to patients and families.

74. Speaks with patients and families in order to assess their educational needs about patients.
75. Obtains available literature from the hospital for patients and families with various illnesses in order to inform them about implications and treatments.
76. Gives advice and counsel to patients and families in order to promote health and prevent illness during hospitalization and after discharge (such as diet, basic hygiene).
77. Explains specific physiology and implications of illness in order for patients and families to understand the treatment, limitations, and precautions.
78. Explains tests, procedures, medications and the day's routine to patients and families, within the guidelines specified by physicians.
79. Explains to patients and families about equipment, supplies, treatments, etc., in order for them to know when to call for assistance while hospitalized.
80. Speaks with patients and their families in order to explain discharge planning and necessary care.

E. Planning and Evaluating Patient Care - Activities directed at obtaining information relative to patients' present and past health status; activities concerned with the assessment of the illnesses from which patients are suffering; activities concerned with evaluating treatments and revising care plans.

81. Writes an initial assessment and nursing judgment based on patients' immediate needs at time of admission to make necessary plans or take action.
82. Talks with patients and families in order to identify problems and needs of patients and prioritize nursing care.
83. Talks with patients and families about nursing history in order to write this information on patients' records.
84. Participates in patient care conferences to discuss and evaluate patients' conditions and treatments.
85. Writes a detailed nursing care plan that includes nursing assessments, plans, treatments (such as medications) and patients' responses in order to keep others informed.

86. Indicates in nursing care plan which needs will be responsibility of other health professionals to insure proper health care of patients.
87. Interprets selected laboratory and x-ray findings in order to plan or revise nursing care activities, in coordination with physicians' recommendations.
88. Examines/evaluates information which has been collected about patients via observations, interviews, records and research to develop a nursing care plan.
89. Continuously evaluates patients' conditions in order to make necessary revisions in the plan of care.
- F. Professional Nursing - Activities directed at treating patients for the illnesses they were admitted for and any complications; activities involving interpreting physicians' orders and doing recommended treatments.
90. Provides emergency treatment as appropriate (such as cardiac arrest, shock, respiration, hemorrhage) to save patients' lives.
91. Prepares rooms, sterile instruments, equipment, and supplies for specific patients and procedures.
92. Checks surgical sites, dressings, I.V.s, tubes, splints, etc., to remedy any problems which might occur.
93. Inspects and/or affixes labels on medications, drainage bottles and tubes, I.V. bottles, etc., in order to ensure that patients receive correct treatments.
94. Checks and records temperature, pulse, blood pressure, elimination, appetite, and other vital signs to detect deviations from normal, determine progress of patients, and make recommendations.
95. Prepares and administers medications to be given orally, intravenously, intramuscularly, subcutaneously, and locally in order to fulfill physicians' recommendations.
96. Assists physicians with treatments, diagnostic tests, and dressings to coordinate effective patient care.
97. Notifies physicians of patients' conditions, and reactions to drugs, treatments and significant incidents in order to arrange for medical attention.
98. Counts narcotics in order to check supply.

G. Basic Nursing Care - Activities involving bedside care of patients and activities of daily living; activities necessary for the comfort and well-being of patients, to maintain their health and prevent infection, regardless of the illness from which they are suffering.

99. Helps patients into bed upon admission (such as escorting, undressing, putting clothes away).
100. Tells patients about hospital policies and routines in order to begin the orientation process.
101. Helps patients clean and groom body in order to promote personal hygiene and deter disease.
102. Answers patients' call signal lights in order to find out what patients want.
103. Helps patients get up, walk, go to bathroom, get on stretcher and/or into wheelchair to encourage ambulatory movement.
104. Feeds patients who cannot feed themselves.
105. Gives and takes away bedpans and urinals in order to let patients eliminate waste as needed.
106. Turns patients in bed, gives back rubs, and exercises hands and feet when necessary to stimulate circulation and relieve pressure and muscle tension.
107. Gives patients lotions to remedy problems with dry skin or irritation.
108. Administers baths, packs or other applications in order to keep patients' body temperature in the normal range.
109. Restrains confused patients to ensure theirs and others' safety.
110. Strips and makes beds after obtaining linens to keep patients comfortable and sanitary.

H. Supportive Care of Patients and Families - Activities directed at showing care, kindness, and compassion for patients and their families; activities aimed at giving patients and their families emotional support.

111. Introduces self to patients and families in order to initiate communication.

112. Talks to patients in a supportive way in order to establish a therapeutic relationship so patients can express their needs.
113. Listens to patients' verbal and nonverbal communications to identify potential or existing patient problems.
114. Speaks with and listens to patients' families in a supportive way to emphasize their importance in patient care and show concern for their situation.
115. Tells patients and/or families the status of the patients' recovery to alleviate worries and answer questions.
116. Notifies families of serious conditions of patients to comfort them and answer questions.
117. Looks for a room and shows it to patients' families in order to provide privacy when necessary.
118. Speaks with patients and families about their emotional, social, and economic needs in order to consider these issues when caring for patients.
119. Contacts clergyman and arranges a visit in order to comply with patients' wishes.
 - I. Documentation - Activities necessary for record keeping and documenting staff actions; activities involving written communication.
120. Records physicians' visits and/or orders on chart to document treatment.
121. Records treatments, procedures, medications, etc., on chart in order to document treatment.
122. Fills out incident reports to document accidents, use of wrong medication or treatment, omission of medication or therapy, or other incidents of major importance.
123. Checks consent forms to make sure that the appropriate persons have signed them.
124. Keeps written records of the status of narcotics, emergency cart, and emergency equipment in order to know when things are missing or not working and take appropriate action.
125. Fills out forms in order to record admissions and/or discharges.

- 126. Writes requisitions for supplies and/or equipment (such as intravenous fluids) to ensure that they are available when needed.
- 127. Fills out requisition forms to request special diets or treatments (such as x-rays, blood tests).
- 128. Sorts x-ray and/or laboratory slips to file them in appropriate folders.

J. Unit Safety and Maintenance - Activities necessary to maintain the safety and cleanliness of patients' environment and the hospital.

- 129. Oversees environment (nursing conference room, patient area, nursing station) in order to provide for ongoing safety and cleanliness of unit.
- 130. Makes patients' surroundings neat, clean, and uncluttered, upon request in order to allow for patients' comfort.
- 131. Cleans and/or checks equipment in order to make sure it is sterile and ready for patients.
- 132. Monitors equipment or machinery to which patients are hooked up to maintain patient and staff safety (such as cardiac monitors).
- 133. Stores and guards narcotics in order to protect patients from unnecessary medication and thievery.
- 134. Checks expiration dates on medications and sterile equipment to make sure they have not expired.
- 135. Posts necessary signs on door or bed (such as Radioactive Precaution) in order to maintain a safe environment.
- 136. Checks siderails to be sure they are up at night and during the day when necessary.
- 137. Encourages patients to put valuables in safe place (such as locker or safe) upon admission in order to avoid problems.

Section III

In this section, the categories of behavioral activities and their definitions are listed. Please read each of them, referring to the previously listed behavioral activities when necessary, and rate how important you believe each category is, relative to the other categories, for a staff

nurse (RN) to perform at a fully competent, effective level. Please use the scale below for items 138-147.

0. Never done - this category is not the staff nurse's responsibility in your hospital unit and is therefore unimportant to the staff nurse's job.
 1. Minor importance - this category has the lowest priority of importance relative to all other categories.
 2. Fairly important - this category does not have the priority of importance you attach to most other categories.
 3. Moderately important - this category has about average priority of importance among all categories.
 4. Very important - this category has a higher degree of priority than most other categories.
 5. Most important - this category is one of the few most essential categories performed.
-
138. Administrative Functions - Activities involving supervision of others and coordination of patient care; activities necessary for the smooth, efficient functioning of the hospital.
 139. Professional Development - Activities involving continuing education and self-maintenance; activities necessary for the advancement of the profession and nursing staff.
 140. Interactions with Other Professionals - Activities necessary for interacting with nursing and health care staff and social service professionals within and outside the hospital; activities involving the exchange of information with other health care providers and coordination of health care with other departments.
 141. Patient-Family Teaching - Activities involving teaching, advising, giving directions, and demonstrating to patients and families.
 142. Planning and Evaluating Patient Care - Activities directed at obtaining information relative to patients' present and past health status; activities concerned with the assessment of the illnesses from which patients are suffering; activities concerned with evaluating treatments and revising care plans.
 143. Professional Nursing - Activities directed at treating patients for the illnesses they were admitted for and any complications; activities involving interpreting physicians' orders and doing recommended treatments.

144. Basic Nursing Care - Activities involving bedside care of patients and activities of daily living; activities necessary for the comfort and well-being of patients, to maintain their health and prevent infection, regardless of the illness from which they are suffering.
145. Supportive Care of Patients and Families - Activities directed at showing care, kindness, and compassion for patients and their families; activities aimed at giving patients and their families emotional support.
146. Documentation - Activities necessary for record keeping and documenting staff actions; activities involving written communication.
147. Unit Safety and Maintenance - Activities necessary to maintain the safety and cleanliness of patients' environment and the hospital.

=====

Section IV

Finally, we would like to know a little about you so we can see how different types of people respond to the three sections of this questionnaire. Please use the scales provided to answer items 148-161.

148. Please indicate how many years you have been a staff nurse at this or any other hospital.
 0. less than 6 months
 1. 6 months to 1 year
 2. 1 to 3 years
 3. 3 to 5 years
 4. 5 to 7 years
 5. 7 to 10 years
 6. 10 to 15 years
 7. 15 to 20 years
 8. 20 to 30 years
 9. over 30 years
149. If you are a head nurse now, please indicate how many years you have been a head nurse at this or any other hospital. (If not a head nurse, mark in 0.)
 0. 0
 1. 1 month to 1 year
 2. 1 to 3 years
 3. 3 to 5 years
 4. 5 to 7 years
 5. 7 to 10 years
 6. 10 to 15 years
 7. 15 to 20 years
 8. 20 to 30 years
 9. over 30 years

150. Please indicate in which unit you work most of the time (more than 50%).
0. medical and/or surgical
 1. critical or intensive care
 2. operating room or recovery room
 3. emergency room
 4. pediatrics or nursery
 5. pediatric ICU or neonatal ICU
 6. oncology or cardiology
 7. labor and delivery/postpartum
 8. orthopedics or rehabilitation
 9. float (no specific unit)
151. Please indicate how many years you have been working in this unit.
0. less than 6 months
 1. 6 months to 1 year
 2. 1 to 3 years
 3. 3 to 5 years
 4. 5 to 7 years
 5. 7 to 10 years
 6. 10 to 15 years
 7. 15 to 20 years
 8. 20 to 30 years
 9. over 30 years
152. Please indicate on which shift you work most of the time (more than 50%).
0. days (typically 7 a.m. to 3 p.m., first shift)
 1. afternoons/evenings (typically 3 p.m. to 11 p.m., second shift)
 2. nights (typically 11 p.m. to 7 a.m., third shift)
 3. variable shifts (no one shift worked most of the time)
153. Please indicate which type of educational background you have (mark the highest level you have attained).
0. high school diploma or GED
 1. associate's degree
 2. associate's degree and some credits toward bachelors
 3. diploma
 4. diploma and some college
 5. bachelor's degree in nursing
 6. bachelor's degree in something other than nursing
 7. bachelor's degree and some graduate credits
 8. master's
 9. Ph.D.
154. Please indicate your gender.
0. female
 1. male
155. Please indicate your race.

- 0. White
 - 1. Black
 - 2. Hispanic
 - 3. Indian/Native American
 - 4. Asian/Pacific Islander
 - 5. other
156. Please indicate your age.
- 0. less than 21 years
 - 1. 21-25
 - 2. 26-30
 - 3. 31-35
 - 4. 36-40
 - 5. 41-45
 - 6. 46-50
 - 7. 51-55
 - 8. 56-60
 - 9. over 60
157. Please indicate the way the nursing staff in your unit is primarily organized.
- 0. team nursing
 - 1. primary care nursing
 - 2. functional nursing
 - 3. modular nursing (combination of team and primary care)
158. Please indicate whether you work:
- 0. part-time
 - 1. full-time
159. Please indicate if you have ever had your performance formally rated by someone else.
- 0. no
 - 1. yes
160. Please indicate if you have ever formally rated someone else's performance.
- 0. no
 - 1. yes
161. Please indicate whether you would be willing to fill out Section II (frequency ratings) of this questionnaire again a month from now.
- 0. no
 - 1. yes



6215 West St. Joseph Highway
Lansing, Michigan 48917
(517) 323-3443
Patric E. Ludwig
President

Michigan Hospital Association Service Corporation
Staff Nurse Performance Appraisal Project

We would like to thank you for your participation thus far in the Michigan Hospital Association Service Corporation staff nurse performance appraisal project. The final phase of the project is now ready to be completed. This phase involves actually using the performance appraisal form to determine how well the form works. The instructions for using the form are presented on the following page. Please read them carefully and completely before using the form.

As mentioned previously, this form is composed of actual observable behaviors of staff nurses. The behaviors were collected from staff and head nurses throughout Michigan. The ratings which you provided on the questionnaire last month were used to select the behaviors included on the form.

We wish to stress that your employment--and the employment of the evaluated individual (if you are not doing a self-evaluation)--will not be affected in any way by your participation in this project. Your name will not be recorded on the performance appraisal form. The code number which has been assigned to you by the project coordinator appears on the appraisal form. Only the project coordinator has access to this number. All your responses will be held in strictest confidence. In order to accomplish this and preserve scientific rigor, please do not discuss your responses with anyone else in your hospital.

Once again, a business reply envelope has been supplied for you to use when mailing your completed appraisal form directly back to the project coordinator. Please remove this letter which has your name written on it before mailing back the appraisal form. Please return the completed appraisal form by October 10, 1983. It is very important that we receive completed appraisal forms from all participants.

Your cooperation in this phase of the project is greatly appreciated. With your help, an improved performance appraisal form will be developed.

If you have any questions, comments, or concerns, the project coordinator can be reached at (517) 355-2171 or 353-8690.

Sincerely,

Ronni Meritt
Project Coordinator

Focal Persons' Rating Form

Michigan Hospital Association Service Corporation
Staff Nurse Performance Appraisal Project

Instructions

This performance appraisal form is designed to measure important aspects of a staff nurse's job. In order to evaluate how well the form works we are asking for your cooperation in rating your work performance.

It is extremely important that you give careful consideration to the ratings which you make. The information will be used to finalize the objective, criterion-based performance appraisal form for the staff nurse position. These ratings will not be used in any personnel action or decision involving you or any other nurse.

There are 10 rating scales, each describing an important part of the staff nurse's job. The scales are numbered from 1 to 6. Instead of simply using words like "satisfactory," "outstanding," or "needs attention" on the scales, examples are provided to illustrate various performance effectiveness levels. That is, on each scale, these examples describe the kind of behavior that can be expected from a staff nurse who is typically considered a High, Average, or Low performer.

These examples are included to give you clear anchor points to help you make an accurate rating of yourself. It is not necessary for you to have actually done the behavior described in the example. Rather, you should be able to judge whether or not you would be expected to display the type of behavior described in the example.

In making your ratings, use your performance during the last 6 months as a basis for your evaluations (less than 6 months if you have not worked in your unit for 6 months). Each of the ten rating scales should be considered separately, as some staff nurses may do well on some parts of the job but not as well on others. Do not let good or poor performance on one part of the job influence your rating on another part of the job.

Before making your rating, read each scale label and its definition. Then, read the behavioral examples which describe High, Average, and Low job performance on that scale. The rating scales may include some areas of the staff nurse job which you do not perform. If you feel you cannot make a rating on a particular scale because you do not perform that part of the job, place a check mark in the space at the top of the page indicating that it is not part of your job. If you feel you can make a rating, decide which of

the examples is most typical of (or could be most expected of) you and place a check mark in the box at that point of the rating scale.

Be sure to mark only one number on each rating scale and do not make ratings in between the boxes. Please remember that this will not be used for anything but refining the scale so we need your honest opinion of your job performance.

_____ Check here if this dimension of the staff nurse job is NOT PART OF YOUR JOB.

PLANNING AND EVALUATING PATIENT CARE: Activities directed at obtaining information relative to patients' present and past health status; activities concerned with the assessment of the illnesses from which patients are suffering; activities concerned with evaluating treatments and revising care plans.

To the right are examples of behavior of individuals who are typically rated "HIGH" on this dimension.

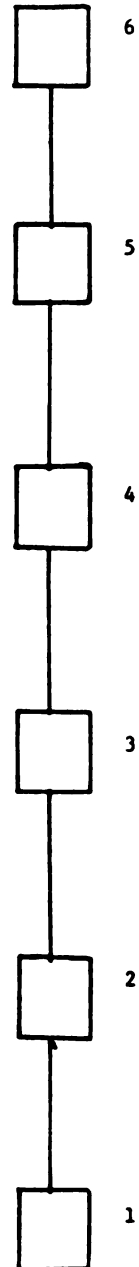
- Writes a detailed nursing care plan that includes nursing assessments, plans, treatments (such as medications) and patients' responses in order to keep others informed.
- Evaluates specific areas of patient care informally and/or formally (such as delay between lab test and receipt of report) in order to maintain quality patient care.
- Asks physicians when patients will be discharged in order to start discharge planning in accordance with the date.
- Updates care plans daily.

To the right are examples of behavior of individuals who are typically rated "AVERAGE" on this dimension.

- Reviews progress notes, orders, and lab slips without being reminded.
- Writes an initial assessment and nursing judgment based on patients' immediate needs at time of admission to make necessary plans or take action.
- Talks with patients and families about nursing history in order to write this information on patients' records.

To the right are examples of behavior of individuals who are typically rated "LOW" on this dimension.

- Writes a care plan and then does not accomplish the goals in it.
- Does not set priorities in caring for patients (such as helping to make a bed before checking Kardex).
- Does not write care plans for patients.



_____ Check here if this dimension of the staff nurse job is NOT PART OF YOUR JOB.

PROFESSIONAL NURSING: Activities directed at treating patients for the illnesses they were admitted for and any complications; activities involving interpreting physicians' orders and doing recommended procedures.

To the right are examples of behavior of individuals who are typically rated "HIGH" on this dimension.

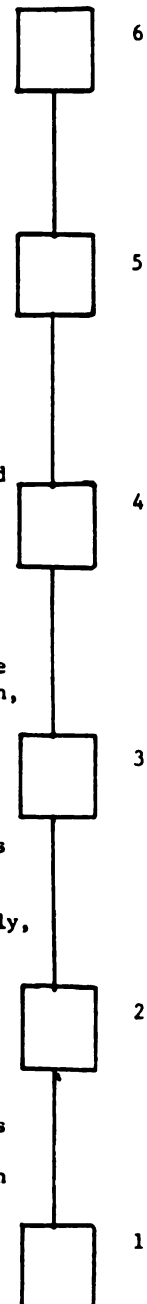
- Sees patients beginning to show signs of complications and pre-prepares in anticipation of physicians' orders (such as having supplies or medications set up).
- Asks patients if they have any allergies or reactions to medications before giving an IV for the first time (even if recorded on chart).
- Evaluates physicians' orders and questions them (such as physician ordering more potassium for patient whose lab results showed high potassium and calling physician to get order changed).

To the right are examples of behavior of individuals who are typically rated "AVERAGE" on this dimension.

- Provides emergency treatment as appropriate (such as cardiac arrest, shock, respiration, hemorrhage) to save patients' lives.
- Assists physicians with treatments, diagnostic tests, and dressings to coordinate patient care.
- Checks surgical sites, dressings, IVs, tubes, splints, etc. to remedy any problems which might occur.
- Prepares and administers medications to be given orally, intravenously, intramuscularly, subcutaneously, and locally in order to fulfill physicians' recommendations.

To the right are examples of behavior of individuals who are typically rated "LOW" on this dimension.

- Orders the wrong test and does not realize it even when the results come back (such as ordering an EKG instead of EEG).
- Does not realize patients are in shock when they are pale, unresponsive, and have low blood pressure.
- Gives patients medications to which they are allergic even when it is written in their charts that they are allergic.



_____ Check here if this dimension of the staff nurse job is NOT PART OF YOUR JOB.

BASIC NURSING CARE: Activities involving bedside care of patients and activities of daily living; activities necessary for the comfort and well-being of patients, to maintain their health and prevent infection regardless of the illness from which they are suffering.

To the right are examples of behavior of individuals who are typically rated "HIGH" on this dimension.

- Gives back care two or three times a night to patients who are totally bedridden.
- Asks patients if they want something different to eat if they are not eating the food that is served at meals.

To the right are examples of behavior of individuals who are typically rated "AVERAGE" on this dimension.

- Helps patients into bed upon admission (such as escorting, undressing, putting clothes away) in order to complete admission procedures.
- Feeds patients who can not feed themselves.
- Answers patients' call signal lights in order to find out what patients want.
- Gives and takes away bedpans and urinals in order to let patients eliminate waste as needed.

To the right are examples of behavior of individuals who are typically rated "LOW" on this dimension.

- Refuses to change patients' sheets when a spot is on them.
- Looks for Licensed Practical Nurse or Nurse Aide when patients request a bedpan instead of getting it for them.
- Does not wash buttocks of patients who can not do it themselves (such as when they have a bad back).
- Removes call signal lights from patients' reach so that patients can not signal for nurse.

6

5

4

3

2

1

_____ Check here if this dimension of the staff nurse job is NOT PART OF YOUR JOB.

SUPPORTIVE CARE OF PATIENTS AND FAMILIES: Activities directed at showing care, kindness, and compassion for patients and their families; activities aimed at giving patients and their families emotional support.

To the right are examples of behavior of individuals who are typically rated "HIGH" on this dimension.

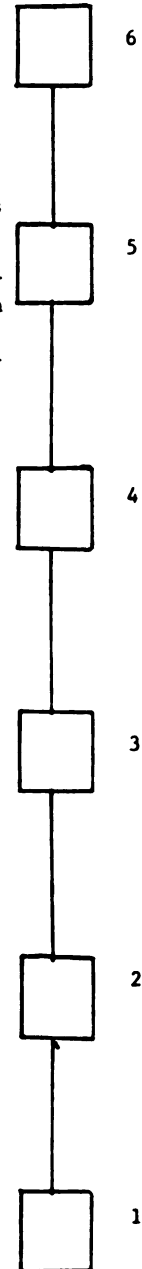
- Sits with dying patients and their families for long periods of time to comfort them.
- Speaks with and listens to patients' families in a supportive way to emphasize their importance in patient care and show concern for their situation.
- Calls and asks families to come to hospital if patients seem overly anxious or nervous.

To the right are examples of behavior of individuals who are typically rated "AVERAGE" on this dimension.

- Contacts clergyman and arranges a visit in order to comply with patients' wishes.
- Talks to patients in a supportive way in order to establish a therapeutic relationship so patients can express their needs.
- Tells patients and/or families the status of patients' recovery to alleviate worries and answer questions.
- Introduces self to patients and families in order to initiate communication.

To the right are examples of behavior of individuals who are typically rated "LOW" on this dimension.

- Does not take time to speak to family members who are visiting patients.
- Argues with family members when they ask why certain things are being done (such as certain tests).
- Leaves room abruptly when patients start to talk to nurse.



— Check here if this dimension of the staff nurse job is NOT PART OF YOUR JOB.

PATIENT-FAMILY TEACHING: Activities involving teaching, advising, giving directions, and demonstrating to patients and families.

To the right are examples of behavior of individuals who are typically rated "HIGH" on this dimension.

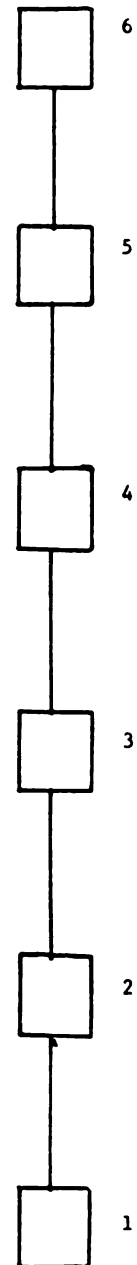
- Does library searches to get information for teaching patients.
- Sets up classes with family members who have said they will be helping with patients' care to teach them about the care.
- Explains specific physiology and implications of illnesses in order for patients and families to understand the treatments, limitations, and precautions.

To the right are examples of behavior of individuals who are typically rated "AVERAGE" on this dimension.

- Gives advice and counsel to patients and families in order to promote health and prevent illness during hospitalization and after discharge (such as diet, basic hygiene).
- Explains tests, procedures, medications, and the day's routine to patients and families, within the guidelines specified by physicians.
- Explains to patients and families about equipment, supplies, treatments, etc. in order for them to know when to call for assistance while hospitalized.

To the right are examples of behavior of individuals who are typically rated "LOW" on this dimension.

- Teaches patients self-care beyond their capabilities.
- Sets up meetings with patients and/or families and then does not show up.
- Sends patients home without teaching them what they need to know after discharge (such as diabetic diet or giving themselves insulin injections).



_____ Check here if this dimension of the staff nurse job is NOT PART OF YOUR JOB.

INTERACTIONS WITH OTHER PROFESSIONALS: Activities necessary for interacting with nursing and health care staff and social service professionals within and outside hospital; activities involving the exchange of information with other health care providers and coordination of health care with other departments.

To the right are examples of behavior of individuals who are typically rated "HIGH" on this dimension.

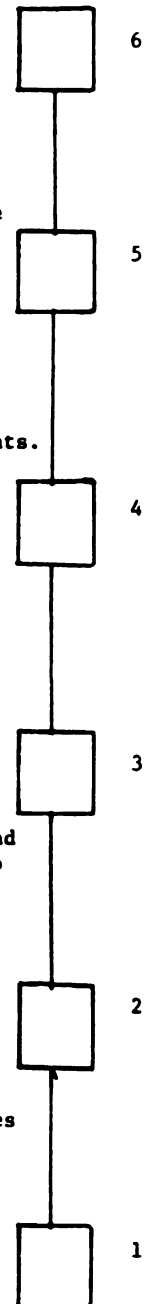
- Checks with other nursing staff at any free time to see if anyone needs help getting tasks done.
- Watches physical therapist to see what the treatment is in order to do it with patients on his/her own.
- Works with physical, occupational, and recreational therapists, and other professionals (such as social workers, community groups) to discuss and plan care for patients.

To the right are examples of behavior of individuals who are typically rated "AVERAGE" on this dimension.

- Attends staff meetings in order to discuss problems which might be occurring with other staff members (such as communication problems).
- Talks with other health care members to be sure that someone watches patients while on break.
- Calls other departments (such as OR) to find out why they have not been there to pick up patients.

To the right are examples of behavior of individuals who are typically rated "LOW" on this dimension.

- Avoids talking to physicians to discuss patients' conditions; will tell other nurses the information and have them discuss conditions with physicians.
- Does not refer patients to social services personnel and tries to solve patients' problems alone (such as trying to cure suicidal patients).



—— Check here if this dimension of the staff nurse job is NOT PART OF YOUR JOB.

PROFESSIONAL DEVELOPMENT: Activities involving continuing education and self-maintenance; activities necessary for the advancement of the profession and nursing staff.

To the right are examples of behavior of individuals who are typically rated "HIGH" on this dimension.

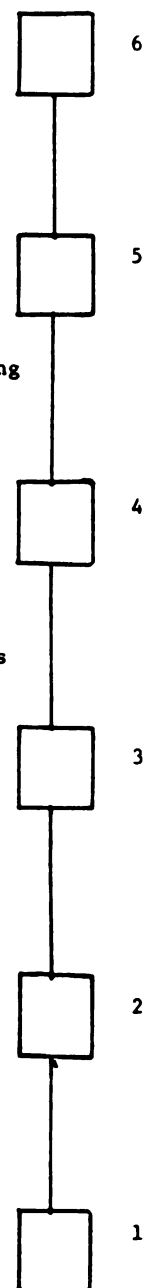
- Joins/attends professional organizations and civic groups to advance the profession of nursing.
- Locates and reads professional resources to identify and plan optimal health care for patients.
- Brings articles in that are found in nursing literature or newspapers to share with others.

To the right are examples of behavior of individuals who are typically rated "AVERAGE" on this dimension.

- Attends orientations and inservice seminars to update knowledge and skills.
- Informs immediate supervisor of personal growth needs in order to enhance professional development (such as needing instruction or practice in starting IVs).
- Establishes appropriate personal care habits to maintain physical and mental health.

To the right are examples of behavior of individuals who are typically rated "LOW" on this dimension.

- Sets up goals to develop professionally but does not meet goals (such as offering to read about new medications and then not doing it).
- Does not tell others about ne information that has been learned in continuing education classes.
- Does not attend inservices which are not immediately relevant for present patients.
- Is not open to new ways of doing things (such as new methods of charting).



_____ Check here if this dimension of the staff nurse job is NOT PART OF YOUR JOB.

UNIT SAFETY AND MAINTENANCE: Activities necessary to maintain the safety and cleanliness of patients' environment and the hospital.

To the right are examples of behavior of individuals who are typically rated "HIGH" on this dimension.

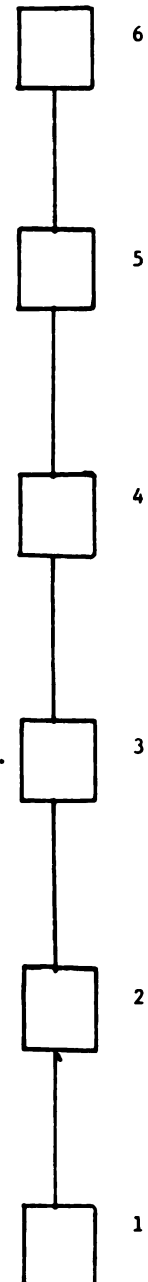
- Checks up on equipment which was reported as broken to make sure it has been fixed.
- Cleans IVACs every day and makes sure they work.

To the right are examples of behavior of individuals who are typically rated "AVERAGE" on this dimension.

- Posts necessary signs on door or bed (such as Radioactive Precautions) in order to maintain a safe environment.
- Checks siderails to be sure they are up at night and during the day when necessary.
- Takes equipment to be cleaned and/or serviced if it is soiled or broken.
- Makes patients' surroundings neat, clean, and uncluttered upon request in order to allow for patients' comfort.

To the right are examples of behavior of individuals who are typically rated "LOW" on this dimension.

- Parks equipment in front of emergency exits or in the flow of traffic.
- Does not check drug cart or emergency equipment when it is an assigned task.
- Lets patients have dangerous objects (such as a razor) after attempted suicide.



_____ Check here if this dimension of the staff nurse job is NOT PART OF YOUR JOB.

ADMINISTRATIVE FUNCTIONS: Activities involving supervision of others and coordination of patient care; activities necessary for the smooth, efficient functioning of the hospital.

To the right are examples of behavior of individuals who are typically rated "HIGH" on this dimension.

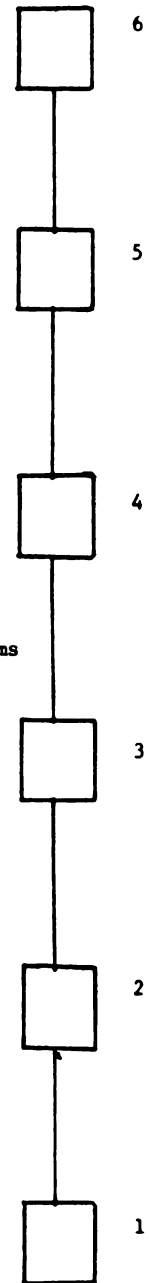
- Gives challenging assignments to senior practice students in order to broaden their experience.
- Evaluates nursing care given by each team member (including orientees and senior practice students) in order to provide appropriate direction.
- Calls other staff nurses to find replacements when unit is understaffed.

To the right are examples of behavior of individuals who are typically rated "AVERAGE" on this dimension.

- Informs head nurse or supervisor of problems (such as housekeeping, maintenance, supplies, schedules, physicians' requests) so that action can be taken.
- Talks with other health care members to see that assignments have been completed by the end of the shift.
- Prepares change-of-shift reports to inform next shift of patients' conditions and necessary care.

To the right are examples of behavior of individuals who are typically rated "LOW" on this dimension.

- Does not correct nursing students or other nurses after seeing them do something incorrectly (such as a dressing change).
- Assigns tasks to individuals who are not qualified to do the tasks.
- Delegates tasks to others and then sits and does not do anything.



Continued on next page.....

_____ Check here if this dimension of the staff nurse job is NOT PART OF YOUR JOB.

DOCUMENTATION: Activities necessary for record keeping and documenting staff actions; activities involving written communication.

To the right are examples of behavior of individuals who are typically rated "HIGH" on this dimension.

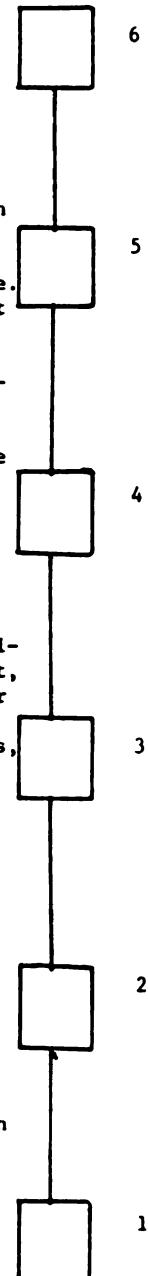
- Writes down on chart particular steps which physician has specified nurses should go through for a procedure in order to have a reference the next time procedure is done.
- Keeps documentation on what has been taught to patients and families in order to remember what needs to be taught.
- Keeps written records of the status of narcotics, emergency cart, and emergency equipment in order to know when things are missing or not working and take appropriate action.

To the right are examples of behavior of individuals who are typically rated "AVERAGE" on this dimension.

- Fills out incident reports to document accidents, use of wrong medication or treatment, omission of medication or therapy, or other incidents of major importance.
- Records treatments, procedures, medications, etc. on chart in order to document treatment.
- Records physicians' visits and/or orders on chart to document treatments.

To the right are examples of behavior of individuals who are typically rated "LOW" on this dimension.

- Avoids filling out incident reports.
- Does not fill out all necessary information about past history of patients (such as allergies, previous medications).
- Writes down incorrect information on consent form (such as wrong procedure).
- Charts that care has been given and it has not (charts that patient has had mouth care and bath but soap is still in paper and toothpaste is still in box).



OVERALL RATING

Now consider all aspects of your job performance as a staff nurse.
Please indicate below how you believe you are performing your job.

I have performed in a clearly superior manner
on all performance dimensions -- clearly out-
performing other staff nurses I have known.

☐ 6

I have performed better than most other staff
nurses on nearly all performance dimensions.

☐ 5

I have performed better than average on most
performance dimensions. Performance on all
dimensions is at least adequate.

☐ 4

I have performed in an average manner on most
performance dimensions, but need improvement
in one or more areas.

☐ 3

I have performed below average on several
performance dimensions and need to improve
in these areas if I am to be successful.

☐ 2

I am clearly deficient on most performance
dimensions.

☐ 1

Supervisors' and Peers' Rating Form

Michigan Hospital Association Service Corporation
Staff Nurse Performance Appraisal ProjectInstructions

This performance appraisal form is designed to measure important aspects of a staff nurse's job. In order to evaluate how well the form works, we are asking for your cooperation in rating the work performance of _____.

It is extremely important that you give careful consideration to the ratings which you make. The information will be used to finalize the objective, criterion-based performance appraisal form for the staff nurse position. These ratings will not be used in any personnel action or decision involving the person who is rated or any other nurse.

There are 10 rating scales, each describing an important part of the staff nurse's job. The scales are numbered from 1 to 6. Instead of simply using words like "satisfactory," "outstanding," or "needs attention" on the scales, examples are provided to illustrate various performance effectiveness levels. That is, on each scale, these examples describe the kind of behavior that can be expected from a staff nurse who is typically considered a High, Average, or Low performer.

These examples are included to give you clear anchor points to help you make an accurate rating of _____. It is not necessary for you to have seen the individual you are rating actually exhibit the behavior described in the examples. Rather, by knowing this staff nurse, you should be able to judge whether or not he or she would be expected to display the type of behavior described in the example.

In making your ratings, use _____'s performance during the last 6 months as a basis for your evaluations (less than 6 months if you have not worked together for 6 months). Do not be influenced by personal feelings about this individual that are not job-related. Each of the ten rating scales should be considered separately, as some staff nurses may do well on some parts of the job but not as well on others. Do not let good or poor performance on one part of the job influence your rating on another part of the job.

Before making your rating, read each scale label and its definition. Then, read the behavioral examples which describe High, Average, and Low job performance on that scale. The rating scales may include some areas of the staff nurse job which are not part of _____'s job, or

which you do not see _____ doing, or which you do not have enough information on which to base a decision. If you feel you cannot make a rating on a particular scale, place a check mark in the space at the top of the page indicating that you have insufficient information for rating. If you feel you can make a rating, decide which of the examples is most typical of (or could be most expected of) _____ and place a check mark in the box at that point on the rating scale.

Be sure to mark only one number on each rating scale and do not make ratings in between the boxes. Please remember that this will not be used for anything but refining the scale so we need your honest opinion of _____'s job performance.

— Check here if you have INSUFFICIENT INFORMATION with which to make a judgment about this individual's behavior for this dimension of the staff nurse's job.

PLANNING AND EVALUATING PATIENT CARE: Activities directed at obtaining information relative to patients' present and past health status; activities concerned with the assessment of the illnesses from which patients are suffering; activities concerned with evaluating treatments and revising care plans.

To the right are examples of behavior of individuals who are typically rated "HIGH" on this dimension.

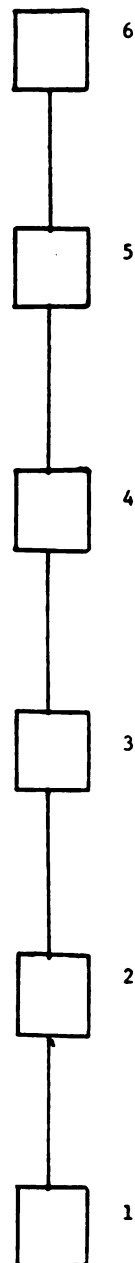
- Writes a detailed nursing care plan that includes nursing assessments, plans, treatments (such as medications) and patients' responses in order to keep others informed.
- Evaluates specific areas of patient care informally and/or formally (such as delay between lab test and receipt of report) in order to maintain quality patient care.
- Asks physicians when patients will be discharged in order to start discharge planning in accordance with the date.
- Updates care plans daily.

To the right are examples of behavior of individuals who are typically rated "AVERAGE" on this dimension.

- Reviews progress notes, orders, and lab slips without being reminded.
- Writes an initial assessment and nursing judgment based on patients' immediate needs at time of admission to make necessary plans or take action.
- Talks with patients and families about nursing history in order to write this information on patients' records.

To the right are examples of behavior of individuals who are typically rated "LOW" on this dimension.

- Writes a care plan and then does not accomplish the goals in it.
- Does not set priorities in caring for patients (such as helping to make a bed before checking Kardex).
- Does not write care plans for patients.



Check here if you have INSUFFICIENT INFORMATION with which to make a judgment about this individual's behavior for this dimension of the staff nurse's job.

PROFESSIONAL NURSING: Activities directed at treating patients for the illnesses they were admitted for and any complications; activities involving interpreting physicians' orders and doing recommended procedures.

To the right are examples of behavior of individuals who are typically rated "HIGH" on this dimension.

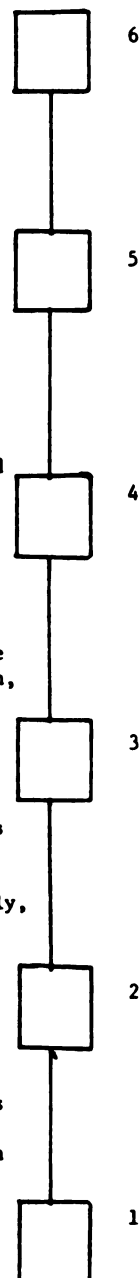
- Sees patients beginning to show signs of complications and pre-prepares in anticipation of physicians' orders (such as having supplies or medications set up).
- Asks patients if they have any allergies or reactions to medications before giving an IV for the first time (even if recorded on chart).
- Evaluates physicians' orders and questions them (such as physician ordering more potassium for patient whose lab results showed high potassium and calling physician to get order changed).

To the right are examples of behavior of individuals who are typically rated "AVERAGE" on this dimension.

- Provides emergency treatment as appropriate (such as cardiac arrest, shock, respiration, hemorrhage) to save patients' lives.
- Assists physicians with treatments, diagnostic tests, and dressings to coordinate patient care.
- Checks surgical sites, dressings, IVs, tubes, splints, etc. to remedy any problems which might occur.
- Prepares and administers medications to be given orally, intravenously, intramuscularly, subcutaneously, and locally in order to fulfill physicians' recommendations.

To the right are examples of behavior of individuals who are typically rated "LOW" on this dimension.

- Orders the wrong test and does not realize it even when the results come back (such as ordering an EKG instead of EEG).
- Does not realize patients are in shock when they are pale, unresponsive, and have low blood pressure.
- Gives patients medications to which they are allergic even when it is written in their charts that they are allergic.



Check here if you have INSUFFICIENT INFORMATION with which to make a judgment about this individual's behavior for this dimension of the staff nurse's job.

BASIC NURSING CARE: Activities involving bedside care of patients and activities of daily living; activities necessary for the comfort and well-being of patients, to maintain their health and prevent infection regardless of the illness from which they are suffering.

To the right are examples of behavior of individuals who are typically rated "HIGH" on this dimension.

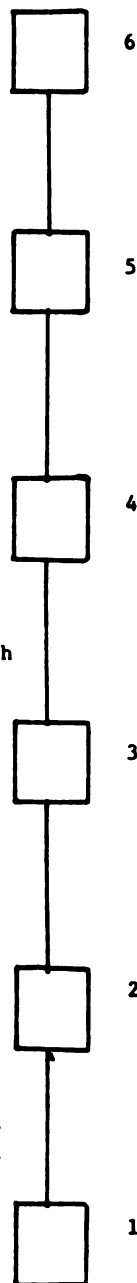
- Gives back care two or three times a night to patients who are totally bedridden.
- Asks patients if they want something different to eat if they are not eating the food that is served at meals.

To the right are examples of behavior of individuals who are typically rated "AVERAGE" on this dimension.

- Helps patients into bed upon admission (such as escorting, undressing, putting clothes away) in order to complete admission procedures.
- Feeds patients who can not feed themselves.
- Answers patients' call signal lights in order to find out what patients want.
- Gives and takes away bedpans and urinals in order to let patients eliminate waste as needed.

To the right are examples of behavior of individuals who are typically rated "LOW" on this dimension.

- Refuses to change patients' sheets when a spot is on them.
- Looks for Licensed Practical Nurse or Nurse Aide when patients request a bedpan instead of getting it for them.
- Does not wash buttocks of patients who can not do it themselves (such as when they have a bad back).
- Removes call signal lights from patients' reach so that patients can not signal for nurse.



Check here if you have INSUFFICIENT INFORMATION with which to make a judgment about this individual's behavior for this dimension of the staff nurse's job.

SUPPORTIVE CARE OF PATIENTS AND FAMILIES: Activities directed at showing care, kindness, and compassion for patients and their families; activities aimed at giving patients and their families emotional support.

To the right are examples of behavior of individuals who are typically rated "HIGH" on this dimension.

- Sits with dying patients and their families for long periods of time to comfort them.
- Speaks with and listens to patients' families in a supportive way to emphasize their importance in patient care and show concern for their situation.
- Calls and asks families to come to hospital if patients seem overly anxious or nervous.

To the right are examples of behavior of individuals who are typically rated "AVERAGE" on this dimension.

- Contacts clergyman and arranges a visit in order to comply with patients' wishes.
- Talks to patients in a supportive way in order to establish a therapeutic relationship so patients can express their needs.
- Tells patients and/or families the status of patients' recovery to alleviate worries and answer questions.
- Introduces self to patients and families in order to initiate communication.

To the right are examples of behavior of individuals who are typically rated "LOW" on this dimension.

- Does not take time to speak to family members who are visiting patients.
- Argues with family members when they ask why certain things are being done (such as certain tests).
- Leaves room abruptly when patients start to talk to nurse.

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Check here if you have INSUFFICIENT INFORMATION with which to make a judgment about this individual's behavior for this dimension of the staff nurse's job.

PATIENT-FAMILY TEACHING: Activities involving teaching, advising, giving directions, and demonstrating to patients and families.

To the right are examples of behavior of individuals who are typically rated "HIGH" on this dimension.

- Does library searches to get information for teaching patients.
- Sets up classes with family members who have said they will be helping with patients' care to teach them about the care.
- Explains specific physiology and implications of illnesses in order for patients and families to understand the treatments, limitations, and precautions.

To the right are examples of behavior of individuals who are typically rated "AVERAGE" on this dimension.

- Gives advice and counsel to patients and families in order to promote health and prevent illness during hospitalization and after discharge (such as diet, basic hygiene).
- Explains tests, procedures, medications, and the day's routine to patients and families, within the guidelines specified by physicians.
- Explains to patients and families about equipment, supplies, treatments, etc. in order for them to know when to call for assistance while hospitalized.

To the right are examples of behavior of individuals who are typically rated "LOW" on this dimension.

- Teaches patients self-care beyond their capabilities.
- Sets up meetings with patients and/or families and then does not show up.
- Sends patients home without teaching them what they need to know after discharge (such as diabetic diet or giving themselves insulin injections).

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Check here if you have INSUFFICIENT INFORMATION with which to make a judgment about this individual's behavior for this dimension of the staff nurse's job.

INTERACTIONS WITH OTHER PROFESSIONALS: Activities necessary for interacting with nursing and health care staff and social service professionals within and outside hospital; activities involving the exchange of information with other health care providers and coordination of health care with other departments.

To the right are examples of behavior of individuals who are typically rated "HIGH" on this dimension.

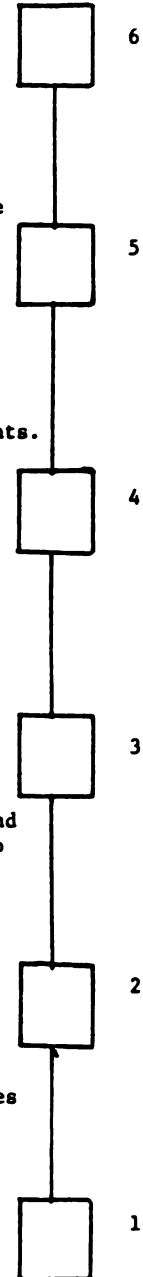
- Checks with other nursing staff at any free time to see if anyone needs help getting tasks done.
- Watches physical therapist to see what the treatment is in order to do it with patients on his/her own.
- Works with physical, occupational, and recreational therapists, and other professionals (such as social workers, community groups) to discuss and plan care for patients.

To the right are examples of behavior of individuals who are typically rated "AVERAGE" on this dimension.

- Attends staff meetings in order to discuss problems which might be occurring with other staff members (such as communication problems).
- Talks with other health care members to be sure that someone watches patients while on break.
- Calls other departments (such as OR) to find out why they have not been there to pick up patients.

To the right are examples of behavior of individuals who are typically rated "LOW" on this dimension.

- Avoids talking to physicians to discuss patients' conditions; will tell other nurses the information and have them discuss conditions with physicians.
- Does not refer patients to social services personnel and tries to solve patients' problems alone (such as trying to cure suicidal patients).



_____ Check here if you have INSUFFICIENT INFORMATION with which to make a judgment about this individual's behavior for this dimension of the staff nurse's job.

PROFESSIONAL DEVELOPMENT: Activities involving continuing education and self-maintenance; activities necessary for the advancement of the profession and nursing staff.

To the right are examples of behavior of individuals who are typically rated "HIGH" on this dimension.

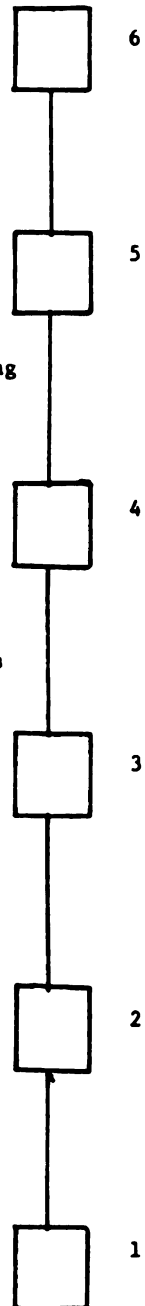
- Joins/attends professional organizations and civic groups to advance the profession of nursing.
- Locates and reads professional resources to identify and plan optimal health care for patients.
- Brings articles in that are found in nursing literature or newspapers to share with others.

To the right are examples of behavior of individuals who are typically rated "AVERAGE" on this dimension.

- Attends orientations and inservice seminars to update knowledge and skills.
- Informs immediate supervisor of personal growth needs in order to enhance professional development (such as needing instruction or practice in starting IVs).
- Establishes appropriate personal care habits to maintain physical and mental health.

To the right are examples of behavior of individuals who are typically rated "LOW" on this dimension.

- Sets up goals to develop professionally but does not meet goals (such as offering to read about new medications and then not doing it).
- Does not tell others about ne information that has been learned in continuing education classes.
- Does not attend inservices which are not immediately relevant for present patients.
- Is not open to new ways of doing things (such as new methods of charting).



_____ Check here if you have INSUFFICIENT INFORMATION with which to make a judgment about this individual's behavior for this dimension of the staff nurse's job.

UNIT SAFETY AND MAINTENANCE: Activities necessary to maintain the safety and cleanliness of patients' environment and the hospital.

To the right are examples of behavior of individuals who are typically rated "HIGH" on this dimension.

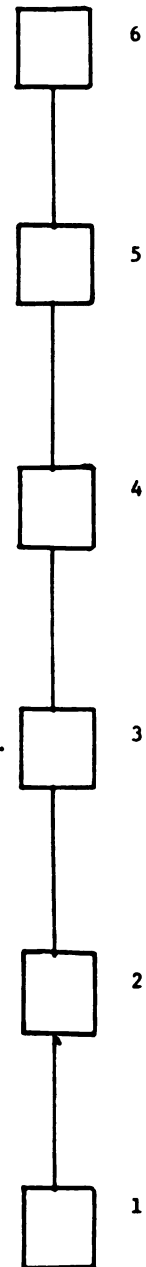
- Checks up on equipment which was reported as broken to make sure it has been fixed.
- Cleans IVACs every day and makes sure they work.

To the right are examples of behavior of individuals who are typically rated "AVERAGE" on this dimension.

- Posts necessary signs on door or bed (such as Radioactive Precautions) in order to maintain a safe environment.
- Checks siderails to be sure they are up at night and during the day when necessary.
- Takes equipment to be cleaned and/or serviced if it is soiled or broken.
- Makes patients' surroundings neat, clean, and uncluttered upon request in order to allow for patients' comfort.

To the right are examples of behavior of individuals who are typically rated "LOW" on this dimension.

- Parks equipment in front of emergency exits or in the flow of traffic.
- Does not check drug cart or emergency equipment when it is an assigned task.
- Lets patients have dangerous objects (such as a razor) after attempted suicide.



_____ Check here if you have INSUFFICIENT INFORMATION with which to make a judgment about this individual's behavior for this dimension of the staff nurse's job.

ADMINISTRATIVE FUNCTIONS: Activities involving supervision of others and coordination of patient care; activities necessary for the smooth, efficient functioning of the hospital.

To the right are examples of behavior of individuals who are typically rated "HIGH" on this dimension.

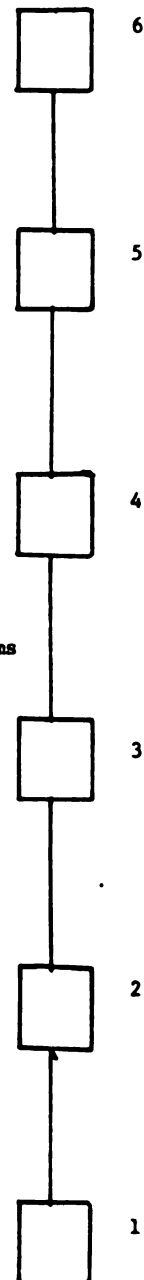
- Gives challenging assignments to senior practice students in order to broaden their experience.
- Evaluates nursing care given by each team member (including orientees and senior practice students) in order to provide appropriate direction.
- Calls other staff nurses to find replacements when unit is understaffed.

To the right are examples of behavior of individuals who are typically rated "AVERAGE" on this dimension.

- Informs head nurse or supervisor of problems (such as housekeeping, maintenance, supplies, schedules, physicians' requests) so that action can be taken.
- Talks with other health care members to see that assignments have been completed by the end of the shift.
- Prepares change-of-shift reports to inform next shift of patients' conditions and necessary care.

To the right are examples of behavior of individuals who are typically rated "LOW" on this dimension.

- Does not correct nursing students or other nurses after seeing them do something incorrectly (such as a dressing change).
- Assigns tasks to individuals who are not qualified to do the tasks.
- Delegates tasks to others and then sits and does not do anything.



Continued on next page.....

Check here if you have INSUFFICIENT INFORMATION with which to make a judgment about this individual's behavior for this dimension of the staff nurse's job.

DOCUMENTATION: Activities necessary for record keeping and documenting staff actions; activities involving written communication.

To the right are examples of behavior of individuals who are typically rated "HIGH" on this dimension.

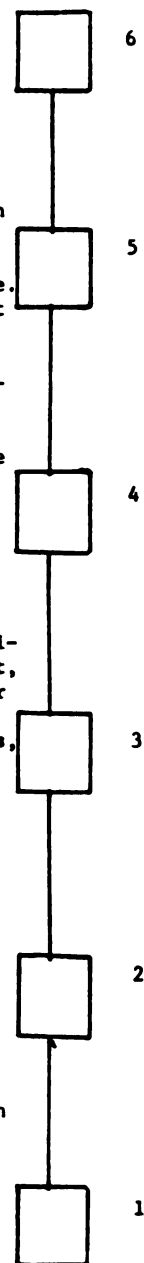
- Writes down on chart particular steps which physician has specified nurses should go through for a procedure in order to have a reference the next time procedure is done.
- Keeps documentation on what has been taught to patients and families in order to remember what needs to be taught.
- Keeps written records of the status of narcotics, emergency cart, and emergency equipment in order to know when things are missing or not working and take appropriate action.

To the right are examples of behavior of individuals who are typically rated "AVERAGE" on this dimension.

- Fills out incident reports to document accidents, use of wrong medication or treatment, omission of medication or therapy, or other incidents of major importance.
- Records treatments, procedures, medications, etc. on chart in order to document treatment.
- Records physicians' visits and/or orders on chart to document treatments.

To the right are examples of behavior of individuals who are typically rated "LOW" on this dimension.

- Avoids filling out incident reports.
- Does not fill out all necessary information about past history of patients (such as allergies, previous medications).
- Writes down incorrect information on consent form (such as wrong procedure).
- Charts that care has been given and it has not (charts that patient has had mouth care and bath but soap is still in paper and toothpaste is still in box).



OVERALL RATING

Now consider all aspects of the job performance of this staff nurse which you have been able to observe. Please indicate below how you believe this individual is performing his/her job.

This staff nurse performs in a clearly superior manner on all performance dimensions -- clearly outperforming other staff nurses you have known.

This staff nurse performs better than most other staff nurses on nearly all performance dimensions.

This staff nurse performs better than average on most performance dimensions. Performance on all dimensions is at least adequate.

This staff nurse performs in an average manner on most performance dimensions, but needs improvement in one or more areas.

This staff nurse performs below average on several performance dimensions and needs to improve in these areas if he/she is to be successful.

This staff nurse is clearly deficient on most performance dimensions.

☐	6
☐	5
☐	4
☐	3
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☐	1

Retest Questionnaire

Michigan Hospital Association Service Corporation
Staff Nurse Performance Appraisal Project

Thank you for answering the questionnaire which was sent to you in July. At that time you were asked if you would be willing to respond to one section of that questionnaire a second time. This second questionnaire is needed in order to measure the reliability of the questionnaire itself.

Attached is the second questionnaire. It contains items which ask you to provide information concerning how frequently you perform various behavioral activities in the presence of your head nurse and in the presence of other staff nurses. We would appreciate it if you would respond to this questionnaire on the attached computer answer sheet. Since we are only sending this questionnaire to those nurses who indicated that they would be willing to respond to it a second time, it is essential that you respond to the items and send the completed answer sheet back.

Please return the answer sheet in the same business reply envelope that you are using to return the performance ratings of yourself. Everything will be held in strictest confidence.

Your participation in this part of the project is greatly appreciated. We especially thank you for agreeing to give this extra time to the project.

If you have any questions, concerns, or comments involving this project, we would be happy to discuss them with you. The phone numbers where the project coordinator can be reached are (517) 355-2171 or 353-8690.

Cordially,

Ronni Meritt
Project Coordinator

Michigan Hospital Association Service Corporation
Staff Nurse Performance Appraisal Project

Directions

Please read each item carefully and mark your response in the corresponding space on the computer answer sheet. Use a #2 pencil only. The computer will not record the responses if you do not use a #2 pencil.

A list of behavioral activities which staff nurses may perform is presented in this questionnaire. They are grouped into 10 categories which are labelled and defined according to the behavioral activities in each category. We are asking you to make two sets of ratings for each behavioral activity.

First, we would like you to indicate how often you perform each activity in the presence of _____ in a typical month. Use responses 1-89 on the answer sheet for these ratings.

After you have responded to items 1-89, please indicate how often you perform each activity in the presence of other staff nurses in your unit in a typical month. Use responses 90-178 on the answer sheet.

This is not an evaluation of your job performance. We are interested in seeing how often staff nurses do certain activities in the presence of their supervisors and in the presence of other staff nurses.

Please use the scale below for both sets of ratings (items 1-178).

0. never
1. once a month
2. twice a month
3. once a week
4. once every other shift
5. once a shift
6. twice a shift
7. every 2 hours or more frequently (i.e., Q 1 hour)

A. Administrative Functions - Activities involving supervision of others and coordination of patient care; activities necessary for the smooth, efficient functioning of the hospital.

1. Assigns tasks/gives directions to each team member (including senior practice students and/or volunteers) according to abilities and organizational needs to provide optimal patient care.
2. Talks with other health care members to see that assignments have been completed by the end of the shift.
3. Evaluates nursing care given by each team member (including orientees and senior practice students) in order to provide appropriate direction.
4. Assists nursing staff and/or ward clerk who have heavy assignments or difficult patients in order to show support and coordinate health care.
5. Calls other staff nurses to find replacements when unit is understaffed.
6. Checks inventory of supplies in order to determine if they are low.
7. Prepares change-of-shift reports to inform shift of patients' conditions and necessary care.
8. Informs head nurse or supervisor of problems (such as housekeeping, maintenance, supplies, schedules, physicians' requests) so that action can be taken.
9. Observes the actions of hospital staff, patients, and visitors in order to remedy problems which might occur.

B. Professional Development - Activities involving continuing education and self-maintenance; activities necessary for the advancement of the profession and nursing staff.

10. Informs immediate supervisor of personal growth needs in order to enhance professional development (such as needing instruction or practice in starting I.V.s).

PLEASE MARK ALL ANSWERS ON ANSWER SHEET USING #2 PENCIL ONLY

11. Locates and reads professional resources to identify and plan optimal health care for patients.
12. Establishes appropriate personal care habits to maintain physical and mental health.
13. Attends orientations and inservice seminars to update knowledge and skills.
14. Shares with colleagues, formally and informally, new knowledge regarding clinical observations and interpretations learned in continuing education activities to enhance professional development.
15. Gives information and ideas, based on personal experience and training, to new nurses (such as orientees and senior practice students) in order to recommend procedures for nursing care.
16. Tells other nurses, Licensed Practical Nurses, Nurse Aides and/or senior practice students about specific educational activities and inservices.

C. Interactions with Other Professionals - Activities necessary for interacting with nursing and health care staff and social service professionals within and outside the hospital; activities involving the exchange of information with other health care providers and coordination of health care with other departments.

17. Talks with other health care members to be sure that someone watches patients while on break.
18. Attends staff meetings in order to discuss problems which might be occurring with other staff members (such as communication problems).
19. Attends change-of-shift reports in order to inform others and find out about patients' conditions and treatments.
20. Attends physicians' rounds to inform physicians of special conditions about patients.
21. Requests and receives information and assistance from x-ray, lab, pharmacist, and/or respiratory care to coordinate patient care.
22. Works with dietician and/or food service in order to ensure that patients' nutritional needs are met.

- 23. Works with physical, occupational and recreational therapists, and other professionals (such as social workers, community groups) to discuss and plan care for patients.
- 24. Works with other hospital units, upon request, to assess patients and/or administer treatment.
- 25. Works with home care nursing department to arrange care for discharged patients.

D. Patient-Family Teaching - Activities involving teaching, advising, giving directions, and demonstrating to patients and families.

- 26. Speaks with patients and families in order to assess their educational needs about patients.
- 27. Obtains available literature from the hospital for patients and families with various illnesses in order to inform them about implications and treatments.
- 28. Gives advice and counsel to patients and families in order to promote health and prevent illness during hospitalization and after discharge (such as diet, basic hygiene).
- 29. Explains specific physiology and implications of illness in order for patients and families to understand the treatment, limitations, and precautions.
- 30. Explains tests, procedures, medications and the day's routine to patients and families, within the guidelines specified by physicians.
- 31. Explains to patients and families about equipment, supplies, treatments, etc., in order for them to know when to call for assistance while hospitalized.
- 32. Speaks with patients and their families in order to explain discharge planning and necessary care.

E. Planning and Evaluating Patient Care - Activities directed at obtaining information relative to patients' present and past health status; activities concerned with the assessment of the illnesses from which patients are suffering; activities concerned with evaluating treatments and revising care plans.

- 33. Writes an initial assessment and nursing judgment based on patients' immediate needs at time of admission to make necessary plans or take action.

34. Talks with patients and families in order to identify problems and needs of patients and prioritize nursing care.
35. Talks with patients and families about nursing history in order to write this information on patients' records.
36. Participates in patient care conferences to discuss and evaluate patients' conditions and treatments.
37. Writes a detailed nursing care plan that includes nursing assessments, plans, treatments (such as medications) and patients' responses in order to keep others informed.
38. Indicates in nursing care plan which needs will be responsibility of other health professionals to insure proper health care of patients.
39. Interprets selected laboratory and x-ray findings in order to plan or revise nursing care activities, in coordination with physicians' recommendations.
40. Examines/evaluates information which has been collected about patients via observations, interviews, records and research to develop a nursing care plan.
41. Continuously evaluates patients' conditions in order to make necessary revisions in the plan of care.

F. Professional Nursing - Activities directed at treating patients for the illnesses they were admitted for and any complications; activities involving interpreting physicians' orders and doing recommended treatments.

42. Provides emergency treatment as appropriate (such as cardiac arrest, shock, respiration, hemorrhage) to save patients' lives.
43. Prepares rooms, sterile instruments, equipment, and supplies for specific patients and procedures.
44. Checks surgical sites, dressings, I.V.s, tubes, splints, etc., to remedy any problems which might occur.
45. Inspects and/or affixes labels on medications, drainage bottles and tubes, I.V. bottles, etc., in order to ensure that patients receive correct treatments.
46. Checks and records temperature, pulse, blood pressure, elimination, appetite, and other vital signs to detect

deviations from normal, determine progress of patients, and make recommendations.

47. Prepares and administers medications to be given orally, intravenously, intramuscularly, subcutaneously, and locally in order to fulfill physicians' recommendations.
48. Assists physicians with treatments, diagnostic tests, and dressings to coordinate effective patient care.
49. Notifies physicians of patients' conditions, and reactions to drugs, treatments and significant incidents in order to arrange for medical attention.
50. Counts narcotics in order to check supply.

G. Basic Nursing Care - Activities involving bedside care of patients and activities of daily living; activities necessary for the comfort and well-being of patients, to maintain their health and prevent infection, regardless of the illness from which they are suffering.

51. Helps patients into bed upon admission (such as escorting, undressing, putting clothes away).
52. Tells patients about hospital policies and routines in order to begin the orientation process.
53. Helps patients clean and groom body in order to promote personal hygiene and deter disease.
54. Answers patients' call signal lights in order to find out what patients want.
55. Helps patients get up, walk, go to bathroom, get on stretcher and/or into wheelchair to encourage ambulatory movement.
56. Feeds patients who cannot feed themselves.
57. Gives and takes away bedpans and urinals in order to let patients eliminate waste as needed.
58. Turns patients in bed, gives back rubs, and exercises hands and feet when necessary to stimulate circulation and relieve pressure and muscle tension.
59. Gives patients lotions to remedy problems with dry skin or irritation.
60. Administers baths, packs or other applications in order to keep patients' body temperature in the normal range.

61. Restrains confused patients to ensure theirs and others' safety.
62. Strips and makes beds after obtaining linens to keep patients comfortable and sanitary.
- H. Supportive Care of Patients and Families - Activities directed at showing care, kindness, and compassion for patients and their families; activities aimed at giving patients and their families emotional support.
63. Introduces self to patients and families in order to initiate communication.
64. Talks to patients in a supportive way in order to establish a therapeutic relationship so patients can express their needs.
65. Listens to patients' verbal and nonverbal communications to identify potential or existing patient problems.
66. Speaks with and listens to patients' families in a supportive way to emphasize their importance in patient care and show concern for their situation.
67. Tells patients and/or families the status of the patients' recovery to alleviate worries and answer questions.
68. Notifies families of serious conditions of patients to comfort them and answer questions.
69. Looks for a room and shows it to patients' families in order to provide privacy when necessary.
70. Speaks with patients and families about their emotional, social, and economic needs in order to consider these issues when caring for patients.
71. Contacts clergymember and arranges a visit in order to comply with patients' wishes.
- I. Documentation - Activities necessary for record keeping and documenting staff actions; activities involving written communication.
72. Records physicians' visits and/or orders on chart to document treatment.
73. Records treatments, procedures, medications, etc., on chart in order to document treatment.

74. Fills out incident reports to document accidents, use of wrong medication or treatment, omission of medication or therapy, or other incidents of major importance.
75. Checks consent forms to make sure that the appropriate persons have signed them.
76. Keeps written records of the status of narcotics, emergency cart, and emergency equipment in order to know when things are missing or not working and take appropriate action.
77. Fills out forms in order to record admissions and/or discharges.
78. Writes requisitions for supplies and/or equipment (such as intravenous fluids) to ensure that they are available when needed.
79. Fills out requisition forms to request special diets or treatments (such as x-rays, blood tests).
80. Sorts x-ray and/or laboratory slips to file them in appropriate folders.

J. Unit Safety and Maintenance - Activities necessary to maintain the safety and cleanliness of patients' environment and the hospital.

81. Oversees environment (nursing conference room, patient area, nursing station) in order to provide for ongoing safety and cleanliness of unit.
82. Makes patients' surroundings neat, clean, and uncluttered, upon request in order to allow for patients' comfort.
83. Cleans and/or checks equipment in order to make sure it is sterile and ready for patients.
84. Monitors equipment or machinery to which patients are hooked up to maintain patient and staff safety (such as cardiac monitors).
85. Stores and guards narcotics in order to protect patients from unnecessary medication and thievery.
86. Checks expiration dates on medications and sterile equipment to make sure they have not expired.

87. Posts necessary signs on door or bed (such as Radio-active Precaution) in order to maintain a safe environment.
88. Checks siderails to be sure they are up at night and during the day when necessary.
89. Encourages patients to put valuables in safe place (such as locker or safe) upon admission in order to avoid problems.

A. Administrative Functions - Activities involving supervision of others and coordination of patient care; activities necessary for the smooth, efficient functioning of the hospital.

90. Assigns tasks/gives directions to each team member (including senior practice students and/or volunteers) according to abilities and organizational needs to provide optimal patient care.
91. Talks with other health care members to see that assignments have been completed by the end of the shift.
92. Evaluates nursing care given by each team member (including orientees and senior practice students) in order to provide appropriate direction.
93. Assists nursing staff and/or ward clerk who have heavy assignments or difficult patients in order to show support and coordinate health care.
94. Calls other staff nurses to find replacements when unit is understaffed.
95. Checks inventory of supplies in order to determine if they are low.
96. Prepares change-of-shift reports to inform shift of patients' conditions and necessary care.
97. Informs head nurse or supervisor of problems (such as housekeeping, maintenance, supplies, schedules, physicians' requests) so that action can be taken.
98. Observes the actions of hospital staff, patients, and visitors in order to remedy problems which might occur.

B. Professional Development - Activities involving continuing education and self-maintenance; activities necessary for the advancement of the profession and nursing staff.

99. Informs immediate supervisor of personal growth needs in order to enhance professional development (such as needing instruction or practice in starting I.V.s).
100. Locates and reads professional resources to identify and plan optimal health care for patients.
101. Establishes appropriate personal care habits to maintain physical and mental health.
102. Attends orientations and inservice seminars to update knowledge and skills.
103. Shares with colleagues, formally and informally, new knowledge regarding clinical observations and interpretations learned in continuing education activities to enhance professional development.
104. Gives information and ideas, based on personal experience and training, to new nurses (such as orientees and senior practice students) in order to recommend procedures for nursing care.
105. Tells other nurses, Licensed Practical Nurses, Nurse Aides and/or senior practice students about specific educational activities and inservices.

C. Interactions with Other Professionals - Activities necessary for interacting with nursing and health care staff and social service professionals within and outside the hospital; activities involving the exchange of information with other health care providers and coordination of health care with other departments.

106. Talks with other health care members to be sure that someone watches patients while on break.
107. Attends staff meetings in order to discuss problems which might be occurring with other staff members (such as communication problems).
108. Attends change-of-shift reports in order to inform others and find out about patients' conditions and treatments.
109. Attends physicians' rounds to inform physicians of special conditions about patients.
110. Requests and receives information and assistance from x-ray, lab, pharmacist, and/or respiratory care to coordinate patient care.

- 111. Works with dietician and/or food service in order to ensure that patients' nutritional needs are met.
- 112. Works with physical, occupational and recreational therapists, and other professionals (such as social workers, community groups) to discuss and plan care for patients.
- 113. Works with other hospital units, upon request, to assess patients and/or administer treatment.
- 114. Works with home care nursing department to arrange care for discharged patients.

D. Patient-Family Teaching - Activities involving teaching, advising, giving directions, and demonstrating to patients and families.

- 115. Speaks with patients and families in order to assess their educational needs about patients.
- 116. Obtains available literature from the hospital for patients and families with various illnesses in order to inform them about implications and treatments.
- 117. Gives advice and counsel to patients and families in order to promote health and prevent illness during hospitalization and after discharge (such as diet, basic hygiene).
- 118. Explains specific physiology and implications of illness in order for patients and families to understand the treatment, limitations, and precautions.
- 119. Explains tests, procedures, medications and the day's routine to patients and families, within the guidelines specified by physicians.
- 120. Explains to patients and families about equipment, supplies, treatments, etc., in order for them to know when to call for assistance while hospitalized.
- 121. Speaks with patients and their families in order to explain discharge planning and necessary care.

E. Planning and Evaluating Patient Care - Activities directed at obtaining information relative to patients' present and past health status; activities concerned with the assessment of the illnesses from which patients are suffering; activities concerned with evaluating treatments and revising care plans.

122. Writes an initial assessment and nursing judgment based on patients' immediate needs at time of admission to make necessary plans or take action.
123. Talks with patients and families in order to identify problems and needs of patients and prioritize nursing care.
124. Talks with patients and families about nursing history in order to write this information on patients' records.
125. Participates in patient care conferences to discuss and evaluate patients' conditions and treatments.
126. Writes a detailed nursing care plan that includes nursing assessments, plans, treatments (such as medications) and patients' responses in order to keep others informed.
127. Indicates in nursing care plan which needs will be responsibility of other health professionals to insure proper health care of patients.
128. Interprets selected laboratory and x-ray findings in order to plan or revise nursing care activities, in coordination with physicians' recommendations.
129. Examines/evaluates information which has been collected about patients via observations, interviews, records and research to develop a nursing care plan.
130. Continuously evaluates patients' conditions in order to make necessary revisions in the plan of care.

F. Professional Nursing - Activities directed at treating patients for the illnesses they were admitted for and any complications; activities involving interpreting physicians' orders and doing recommended treatments.

131. Provides emergency treatment as appropriate (such as cardiac arrest, shock, respiration, hemorrhage) to save patients' lives.
132. Prepares rooms, sterile instruments, equipment, and supplies for specific patients and procedures.
133. Checks surgical sites, dressings, I.V.s, tubes, splints, etc., to remedy any problems which might occur.
134. Inspects and/or affixes labels on medications, drainage bottles and tubes, I.V. bottles, etc., in order to ensure that patients receive correct treatments.

- 135. Checks and records temperature, pulse, blood pressure, elimination, appetite, and other vital signs to detect deviations from normal, determine progress of patients, and make recommendations.
- 136. Prepares and administers medications to be given orally, intravenously, intramuscularly, subcutaneously, and locally in order to fulfill physicians' recommendations.
- 137. Assists physicians with treatments, diagnostic tests, and dressings to coordinate effective patient care.
- 138. Notifies physicians of patients' conditions, and reactions to drugs, treatments and significant incidents in order to arrange for medical attention.
- 139. Counts narcotics in order to check supply.

G. Basic Nursing Care - Activities involving bedside care of patients and activities of daily living; activities necessary for the comfort and well-being of patients, to maintain their health and prevent infection, regardless of the illness from which they are suffering.

- 140. Helps patients into bed upon admission (such as escorting, undressing, putting clothes away).
- 141. Tells patients about hospital policies and routines in order to begin the orientation process.
- 142. Helps patients clean and groom body in order to promote personal hygiene and deter disease.
- 143. Answers patients' call signal lights in order to find out what patients want.
- 144. Helps patients get up, walk, go to bathroom, get on stretcher and/or into wheelchair to encourage ambulatory movement.
- 145. Feeds patients who cannot feed themselves.
- 146. Gives and takes away bedpans and urinals in order to let patients eliminate waste as needed.
- 147. Turns patients in bed, gives back rubs, and exercises hands and feet when necessary to stimulate circulation and relieve pressure and muscle tension.
- 148. Gives patients lotions to remedy problems with dry skin or irritation.

- 149. Administers baths, packs or other applications in order to keep patients' body temperature in the normal range.
- 150. Restrains confused patients to ensure theirs and others' safety.
- 151. Strips and makes beds after obtaining linens to keep patients comfortable and sanitary.

H. Supportive Care of Patients and Families - Activities directed at showing care, kindness, and compassion for patients and their families; activities aimed at giving patients and their families emotional support.

- 152. Introduces self to patients and families in order to initiate communication.
- 153. Talks to patients in a supportive way in order to establish a therapeutic relationship so patients can express their needs.
- 154. Listens to patients' verbal and nonverbal communications to identify potential or existing patient problems.
- 155. Speaks with and listens to patients' families in a supportive way to emphasize their importance in patient care and show concern for their situation.
- 156. Tells patients and/or families the status of the patients' recovery to alleviate worries and answer questions.
- 157. Notifies families of serious conditions of patients to comfort them and answer questions.
- 158. Looks for a room and shows it to patients' families in order to provide privacy when necessary.
- 159. Speaks with patients and families about their emotional, social, and economic needs in order to consider these issues when caring for patients.
- 160. Contacts clergyman and arranges a visit in order to comply with patients' wishes.

I. Documentation - Activities necessary for record keeping and documenting staff actions; activities involving written communication.

- 161. Records physicians' visits and/or orders on chart to document treatment.

- 162. Records treatments, procedures, medications, etc., on chart in order to document treatment.
- 163. Fills out incident reports to document accidents, use of wrong medication or treatment, omission of medication or therapy, or other incidents of major importance.
- 164. Checks consent forms to make sure that the appropriate persons have signed them.
- 165. Keeps written records of the status of narcotics, emergency cart, and emergency equipment in order to know when things are missing or not working and take appropriate action.
- 166. Fills out forms in order to record admissions and/or discharges.
- 167. Writes requisitions for supplies and/or equipment (such as intravenous fluids) to ensure that they are available when needed.
- 168. Fills out requisition forms to request special diets or treatments (such as x-rays, blood tests).
- 169. Sorts x-ray and/or laboratory slips to file them in appropriate folders.

J. Unit Safety and Maintenance - Activities necessary to maintain the safety and cleanliness of patients' environment and the hospital.

- 170. Oversees environment (nursing conference room, patient area, nursing station) in order to provide for ongoing safety and cleanliness of unit.
- 171. Makes patients' surroundings neat, clean, and uncluttered, upon request in order to allow for patients' comfort.
- 172. Cleans and/or checks equipment in order to make sure it is sterile and ready for patients.
- 173. Monitors equipment or machinery to which patients are hooked up to maintain patient and staff safety (such as cardiac monitors).
- 174. Stores and guards narcotics in order to protect patients from unnecessary medication and thievery.
- 175. Checks expiration dates on medications and sterile equipment to make sure they have not expired.

176. Posts necessary signs on door or bed (such as Radio-active Precaution) in order to maintain a safe environment.
177. Checks siderails to be sure they are up at night and during the day when necessary.
178. Encourages patients to put valuables in safe place (such as locker or safe) upon admission in order to avoid problems.

APPENDIX D
CODING SCHEME FOR SITUATIONAL AND
DEMOGRAPHIC INFORMATION

Coding Scheme for Situational and
Demographic Information

Continuous Variables

- | | |
|-------------------------|---|
| 1. Years as staff nurse | 0. less than 6 months
1. 6 months to 1 year
2. 1 to 3 years
3. 3 to 5 years
4. 5 to 7 years
5. 7 to 10 years
6. 10 to 15 years
7. 15 to 20 years
8. 20 to 30 years
9. over 30 years |
| 2. Years as head nurse | 0. 0 (not a head nurse)
1. 1 month to 1 year
2. 1 to 3 years
3. 3 to 5 years
4. 5 to 7 years
5. 7 to 10 years
6. 10 to 15 years
7. 15 to 20 years
8. 20 to 30 years
9. over 30 years |

3. Years in current unit

- 0. less than 6 months
- 1. 6 months to 1 year
- 2. 1 to 3 years
- 3. 3 to 5 years
- 4. 5 to 7 years
- 5. 7 to 10 years
- 6. 10 to 15 years
- 7. 15 to 20 years
- 8. 20 to 30 years
- 9. over 30 years

4. Education

- 0. high school diploma or GED
- 1. associate's degree
- 2. associate's degree and some
credits toward bachelor's
- 3. diploma
- 4. diploma and some college
- 5. bachelor's degree in nursing
- 6. bachelor's degree in something
other than nursing
- 7. bachelor's degree and some
graduate credits
- 8. master's
- 9. Ph.D.

5. Sex

0. female

1. male

6. Age

0. less than 21 years

1. 21-25

2. 26-30

3. 31-35

4. 36-40

5. 41-45

6. 46-50

7. 51-55

8. 56-60

9. over 60

7. Experience as a ratee

0. no

1. yes

8. Experience as a rater

0. no

1. yes

9. Size of hospital

1. small

2. medium

3. large

- | | |
|--------------------------|-----------------------|
| 10. Acquaintance w/ratee | 0. less than 6 months |
| | 1. 6 months to 1 year |
| | 2. 1 to 3 years |
| | 3. 3 to 5 years |
| | 4. 5 to 7 years |
| | 5. 7 to 10 years |
| | 6. 10 to 15 years |
| | 7. 15 to 20 years |
| | 8. 20 to 30 years |
| | 9. over 30 years |

Nominal Variables

- | | |
|----------|--|
| 1. Unit | 0. Noncritical (Medical/Surgical,
Pediatrics/Nursery, Oncology/
Cardiology, Labor and Delivery/
Postpartum, Orthopedics/
Rehabilitation) |
| | 1. Critical (Intensive Care,
Operating/Recovery Room,
Emergency Room, Pediatrics
ICU) |
| 2. Shift | 0. days |
| | 1. afternoon or evening |

- | | |
|---------------------------------|----------------------------|
| 3. Organization of unit | 0. team or functional |
| | 1. primary care or modular |
| 4. Race | 0. white |
| | 1. nonwhite |
| 5. Hospital (See
Appendix A) | 0. small |
| | 1. medium or large |

APPENDIX E
COVARIATE ANALYSIS RESULTS

Table E1. Covariates with Supervisor, Peer, and Self-Performance Ratings (N=154)^a

Dimension ^b	EDUC ^c	AGE	YRSSTF	YRSHN	YRSUNIT	PARTFULL	RATEE	HOSP SIZE
Ad		-.19**		-.26**				
PD	-.16*							
Int		-.20**		-.19**	-.16*	.13*		
Tch				-.13*				
Pln								
PN				-.13*			-.14*	
Bas				-.20**			-.17*	-.16*
Sup		-.20**						-.21**
Doc		-.19**	-.17*	-.14*	-.20**			
Saf				-.19**	-.13*			
Ov								

*p < .05

**p < .01

^aOnly significant results for continuous variables shown^bAd=Administrative Functions, PD= Professional Development, Int=Interactions with Other Professionals, Tch=Patient-Family Teaching, Pln=Planning and Evaluating Patient Care, PN=Professional Nursing, Bas=Basic Nursing Care, Doc=Documentation, Saf=Unit Safety and Maintenance, Ov=Overall.^cEDUC=education, YRSSTF=years as staff nurse, YRSHN=years as head nurse, YRSUNIT=years in unit, PARTFULL=part or full time status, RATEE=previous job performance rated, HOSP SIZE=hospital size; all covariate information refers to raters' characteristics.

Table E2. Covariates with Supervisor, Peer, and Self-Performance Ratings (N=156)^a

<u>Dimension</u>	<u>Covariate</u>	<u>Category</u>	<u>N</u>	<u>Mean</u>	<u>SD</u>
Planning and Evaluating Patient Care X=4.12 SD=.94	Organization F=3.78**	Team	74	3.88	.89
		Primary	37	4.30	.97
		Functional	13	4.62	.87
		Modular	35	4.26	.88
	Hospital F=2.73**	Lake View	7	4.14	.90
		St. Luke's	11	4.82	1.08
		Clinton	15	4.00	.76
		Genesee	3	3.67	.58
		Pennock	11	4.54	1.21
		Detroit Osteo	5	2.80	1.10
		Saginaw	16	4.50	.63
		Munising	2	4.50	.71
		Munson	18	4.56	1.04
		United Mem.	7	3.86	.69
		Charlevoix	13	3.77	.93
		Hayes-Green-Beach	2	4.50	.71
		Grand Rapids Osteo	11	3.91	.54
		Memorial	16	3.94	.57
		Ingham	12	4.25	.87
		Pontiac Gen.	12	3.50	1.00
	Unit F=2.43**	Med/Surg	72	4.58	.93
		ICU	21	5.00	.77
		OR/Recovery	11	4.73	1.19
		Emerg. Room	13	5.62	.51
		Pediatrics	8	4.25	.89
		Peds ICU	3	5.33	.58
		Oncology/Cardiology Labor/Delivery	6 17	5.00 4.76	1.10 .75

Table E2, cont'd.

<u>Dimension</u>	<u>Covariate</u>	<u>Category</u>	<u>N</u>	<u>Mean</u>	<u>SD</u>
		Orthopedics	11	4.82	.87
		Float	3	5.33	1.15
Basic Nursing	Organization	Team	71	4.28	1.00
Care	F=5.09**	Primary	37	4.97	.87
X=4.58		Functional	14	4.93	1.00
SD=1.01		Modular	34	4.68	.94
Supportive	Hospital	Lake View	7	5.43	.79
Care	F=2.09**	St. Luke's	11	5.09	.94
X=4.44		Clinton	15	4.47	1.13
SD=1.01		Genesee	4	3.75	.96
		Pennock	10	4.20	1.03
		Detroit Osteo	6	3.33	.82
		Saginaw	18	4.28	.75
		Munising	2	4.50	.71
		Munson	18	4.72	1.13
		United Mem	6	4.67	1.03
		Charlevoix	13	4.54	.97
		Hayes-Green-Beach	2	4.50	2.12
		Grand Rapids Osteo	11	4.18	.75
		Memorial	16	4.56	.81
		Ingham	12	4.42	.90
		Pontiac Gen	11	3.82	1.08
Unit Safety	Unit	Med/Surg	68	3.93	.85
and Maintenance	F=1.91*	ICU	20	4.30	.80
X=4.11		OR/Recovery	11	4.73	1.01
SD=.89		Emerg. Room	12	4.67	.78
		Pediatrics	8	3.75	.71
		Peds ICU	3	4.33	.58
		Oncology/Cardiology	6	3.83	.98

Table E2, cont'd.

<u>Dimension</u>	<u>Covariate</u>	<u>Category</u>	<u>N</u>	<u>Mean</u>	<u>SD</u>
		Labor/Delivery	17	4.00	1.06
		Orthopedics	11	4.09	.83
		Float	3	4.33	.58
		Team	71	3.85	.79
	Organization	Primary	38	4.32	.87
	F=3.51*	Functional	14	4.36	.74
		Modular	38	4.24	1.05

* $p < .05$

** $p < .01$

^aOnly significant results for nominal variables shown.

Table E3. Covariates with Supervisor and Peer Observational Frequency Ratings (N=140)^a

Dimension ^b	EDUC ^c	YRSUNIT	AQUAINT	RATEE	HOSPSIZE
Ad		-.15*			
PD	-.18*				
Int			.21**		.14*
Tch			.25**		.14*
Pln			.15*	-.14*	
Bas					.20**
Sup	-.17*				
Doc				.17*	
Saf	-.18*		.16*		

*p < .05

**p < .01

^aOnly significant results for continuous variables shown

^bAd=Administrative Functions, PD=Professional Development, Int=Interactions with Other Professionals, Tch=Patient-Family Teaching, Pln=Planning and Evaluating Patient Care, PN=Professional Nursing, Bas=Basic Nursing Care, Sup=Supportive Care, Doc=Documentation, Saf=Unit Safety and Maintenance

^cEDUC=education, YRSUNIT=years in unit, AQUAINT=acquaintance with ratee, RATEE=previous job performance rated, HOSPSIZE=hospital size; all covariate information refers to raters' characteristics

Table E4. Covariates with Supervisor and Peer Observational Frequency Ratings
(N=140)

<u>Dimension</u>	<u>Covariate</u>	<u>Category</u>	<u>N</u>	<u>Mean</u>	<u>SD</u>
Patient-Family Teaching X=3.55 SD=1.49	Hospital F=1.72*	Lake View	7	3.45	1.50
		St. Luke's	8	2.80	2.06
		Clinton	12	3.36	1.31
		Genesee	6	3.83	.32
		Pennock	9	4.06	1.60
		Detroit Osteo	8	1.86	2.14
		Saginaw	14	4.38	.77
		Munising	2	4.43	1.41
		Munson	13	3.57	1.22
		United Mem.	4	2.25	1.83
		Charlevoix	11	3.45	1.51
		Hayes-Green-Beach	3	3.52	1.33
		Grand Rapids Osteo	11	3.45	1.82
		Memorial	11	4.14	1.04
		Ingham	14	3.73	1.23
		Pontiac Gen.	10	3.64	1.44
Planning and Evaluating Patient Care X=3.62 SD=1.33	Unit F=2.01*	Med/Surg.	66	3.56	1.30
		ICU	17	3.92	1.09
		OR/Recovery	10	2.58	2.02
		Emerg. Room	7	5.00	1.61
		Pediatrics	8	3.67	.99
		Peds ICU	2	2.83	1.02
		Oncology/Cardiology	6	4.13	.67
		Labor/Delivery	14	3.40	1.17
		Orthopedics	9	3.72	.92
		Float	1	4.33	0

Table E4, cont'd.

<u>Dimension</u>	<u>Covariate</u>	<u>Category</u>	<u>N</u>	<u>Mean</u>	<u>SD</u>
Professional Nursing X=4.86 SD=1.24	Unit F=2.46**	Med/Surg	66	4.59	1.29
		ICU	17	5.26	1.52
		OR/Recovery	10	4.83	.70
		Emerg. Room	7	6.43	.86
		Pediatrics	8	5.18	.84
		Peds ICU	2	5.33	.31
		Oncology/Cardiology	6	5.24	.91
		Labor/Delivery	14	4.37	.85
		Orthopedics	9	4.83	1.06
		Float	1	5.67	0
		Lake View	7	2.92	2.12
		St. Luke's	8	2.90	1.85
		Clinton	12	4.38	1.47
Basic Nursing Care X=4.10 SD=1.66	Hospital F=1.97*	Genesee	6	4.18	1.91
		Pennock	9	4.00	1.13
		Detroit Osteo	8	4.01	2.64
		Saginaw	14	4.72	1.35
		Munising	2	1.67	2.00
		Munson	13	4.54	.80
		United Mem.	4	3.69	2.02
		Charlevoix	11	5.05	.62
		Hayes-Green-Beach	3	4.97	1.42
		Grand Rapids Osteo	11	4.20	1.97
		Memorial	11	4.06	1.31
		Ingham	14	4.59	1.24
		Pontiac Gen.	10	2.89	1.90

*p < .05

**p < .01

^aOnly significant results for nominal variables shown

Table E5. Covariates with Supervisor, Peer, and Focal Person Favorability Ratings (N=198)^a

<u>Dimension</u> ^b	<u>EDUC</u> ^c	<u>AGE</u>	<u>YRSHN</u>	<u>YRSUNIT</u>	<u>PARTFULL</u>
Ad	.14*		.12*	.12*	
PD	.18**		.14*		
Int	.17**				
Tch	.13*				
Pln	.16**		.18**	.14*	
PN		.13*		.14*	
Bas	.12*	.12*		.13*	.13*
Sup	.16*				
Doc	.12*	.12*		.13*	
Saf	.15*				

*p < .05

**p < .01

^a Only significant results for continuous variables shown

^b Ad=Administrative Functions, PD=Professional Development, Int=Interactions with Other Professionals, Tch=Patient-Family Teaching, Pln=Planning and Evaluating Patient Care, PN=Professional Nursing, Bas=Basic Nursing Care, Sup=Supportive Care, Doc=Documentation, Saf=Unit Safety and Maintenance

^c EDUC=education, YRSHN=years as head nurse, PARTFULL=part vs. full time status

Table E6. Covariates with Supervisor, Peer, and Focal Person Favorability Ratings (N=197)^a

<u>Dimension</u>	<u>Covariate</u>	<u>Category</u>	<u>N</u>	<u>Mean</u>	<u>SD</u>
Basic Nursing Care X=3.82 SD=.69	Unit F=2.17*	Med/Surg	90	4.02	.82
		ICU	24	3.72	.64
		OR/Recovery	14	3.79	.49
		Emerg. Room	12	3.41	.26
		Pediatrics	9	3.75	.77
		Peds ICU	3	3.52	.34
		Oncology/Cardiology	7	3.82	.48
		Labor/Delivery	20	3.51	.35
		Orthopedics	14	3.76	.33
		Float	4	3.49	.24

*p < .05

^aOnly significant results for nominal variables shown

Table E7. Covariates with Supervisor, Peer, and Focal Person Dimensional Importance Ratings (N=197)

<u>Dimension</u>	<u>Covariate</u>	<u>Category</u>	<u>N</u>	<u>Mean</u>	<u>SD</u>
Professional Development X=3.26 SD=1.03	Unit F=2.15*	Med/Surg	90	3.14	1.11
		ICU	24	3.13	.99
		OR/Recovery	14	3.86	.95
		Emerg. Room	13	3.62	1.04
		Pediatrics	9	2.89	1.17
		Peds ICU	3	3.00	0
		Oncology/Cardiology	7	4.00	.58
		Labor/Delivery	20	3.45	.69
		Orthopedics	14	2.79	.80
		Float	4	4.00	1.15
Interactions with Other Professionals X=3.44 SD=.93	Race F=2.50*	White	186	3.47	.86
		Black	5	2.20	1.79
		Native American	1	3.00	.00
		Asian	4	3.50	1.73
		Other	1	4.00	.00
	Unit F=2.02*	Med/Surg	90	3.34	1.04
		ICU	24	3.17	.92
		OR/Recovery	14	4.00	.68
		Emerg. Room	13	3.69	.95
		Pediatrics	9	3.22	.44
		Peds ICU	3	3.33	1.53
		Oncology/Cardiology	7	4.14	.38
		Labor/Delivery	20	3.25	.72
		Orthopedics	13	3.23	.83
		Float	4	4.25	.96

Table E7, cont'd.

<u>Dimension</u>	<u>Covariate</u>	<u>Category</u>	<u>N</u>	<u>Mean</u>	<u>SD</u>
Patient-Family Teaching X=3.89 SD=.82	Unit F=2.33*	Med/Surg	90	3.83	.81
		ICU	24	3.42	.93
		OR/Recovery	14	4.21	.70
		Emerg. Room	13	4.31	.63
		Pediatrics	9	4.11	.33
		Peds ICU	3	4.00	1.00
		Oncology/Cardiology	7	3.86	1.22
		Labor/Delivery	20	4.25	.64
		Orthopedics	13	3.77	.73
		Float	4	3.50	1.00
Unit Safety and Maintenance X=3.60 SD=1.04	Organization F=3.71**	Team	88	3.81	.93
		Primary	48	3.60	1.07
		Functional	14	3.64	.93
		Modular	47	3.19	1.15
Hospital F=1.95*		Lake View	9	3.67	.87
		St. Luke's	16	3.38	1.36
		Clinton	17	3.41	1.23
		Genesee	8	4.25	1.04
		Pennock	10	3.90	.99
		Detroit Osteo	10	4.20	.79
		Saginaw	18	3.67	1.03
		Munising	4	4.00	1.41
		Munson	18	3.61	1.04
		United Mem.	8	4.13	.99
		Charlevoix	14	3.79	.98
		Hayes-Green-Beach	6	3.00	.63
		Grand Rapids Osteo	15	3.53	.74

Table E7, cont'd.

<u>Dimension</u>	<u>Covariate</u>	<u>Category</u>	<u>N</u>	<u>Mean</u>	<u>SD</u>
		Memorial	16	3.38	.96
		Ingham	19	2.79	.92
		Pontiac Gen.	12	3.92	.67

* $p < .05$
** $p < .01$

^aOnly significant results for nominal variables shown

Table E8. Covariates with Focal Person Behavioral Frequency in Presence of Head Nurses (N=49)^a

<u>Dimension</u> ^b	<u>EDUC</u> ^c	<u>AGE</u>
Ad		
PD		
Int		.26*
Tch		
Pln		
PN	.25*	
Bas		
Sup		
Doc	.25*	
Saf		

* $p \leq .05$

^aOnly significant results for continuous variables shown

^bAd=Administrative Functions, PD=Professional Development, Int=Interactions with Other Professionals, Tch=Patient-Family Teaching, Pln=Planning and Evaluating Patient Care, PN=Professional Nursing, Bas=Basic Nursing Care, Sup=Supportive Care, Doc=Documentation, Saf=Unit Safety and Maintenance

^cEDUC=education

Table E9. Covariates with Focal Person Behavioral Frequency in Presence of Head Nurses (N=49)^a

<u>Dimension</u>	<u>Covariate</u>	<u>Category</u>	<u>N</u>	<u>Mean</u>	<u>SD</u>
Administrative Functions X=3.22 SD=1.71	Hospital F=2.25*	Lake View	2	.22	0
		St. Luke's	4	3.50	1.68
		Clinton	5	3.54	1.80
		Genesee	2	1.33	.16
		Pennock	2	3.56	2.20
		Detroit Osteo	3	5.30	.42
		Saginaw	4	2.22	2.04
		Munising	1	5.33	0
		Munson	5	4.00	1.00
		United Mem.	1	.56	0
		Charlevoix	3	3.59	.55
		Hayes-Green-Beach	2	1.33	1.89
		Grand Rapids Osteo	4	3.81	1.24
		Memorial	5	3.24	1.81
		Ingham	5	2.84	1.18
		Pontiac Gen.	2	4.61	1.18
Professional Development X=2.04 SD=1.18	Shift F=4.00*	Days	34	3.60	1.56
		Afternoons	10	2.36	1.62
		Nights	5	1.93	1.92
		Variable	-		
	Race F=3.34*	White	45	1.91	1.11
		Black	2	3.71	.20
		Native American	1	2.14	0
		Other	1	4.43	0

Table E9, cont'd.

<u>Dimension</u>	<u>Covariate</u>	<u>Category</u>	<u>N</u>	<u>Mean</u>	<u>SD</u>
Interactions with Other Professionals X=2.74 SD=1.41	Hospital F=1.98*	Lake View	2	.44	.47
		St. Luke's	4	2.81	.40
		Clinton	5	3.13	1.68
		Genesee	2	1.50	.24
		Pennock	2	1.50	.55
		Detroit Osteo	3	4.00	.29
		Saginaw	4	2.08	1.82
		Munising	1	4.78	0
		Munson	5	3.58	1.06
		United Mem.	1	.89	0
		Charlevoix	3	3.26	1.19
		Hayes-Green-Beach	2	1.33	1.89
		Grand Rapids Osteo	4	2.69	1.55
		Memorial	5	2.58	1.14
		Ingham	5	2.84	1.20
		Pontiac Gen.	2	4.39	.71
		Days	34	3.21	1.21
		Afternoons	10	2.09	1.44
		Nights	5	1.00	.79
		Variable	-		
	Shift F=8.79**				

Table E9, cont'd.

<u>Dimension</u>	<u>Covariate</u>	<u>Category</u>	<u>N</u>	<u>Mean</u>	<u>SD</u>
Patient-Family Teaching X=2.71 SD=1.81	Shift F=4.95**	Days Afternoons Nights Variable	34 10 5 -	3.18 1.99 .97	1.78 1.49 1.17
Planning and Evaluating Patient Care X=2.64 SD=1.58	Shift F=5.76**	Days Afternoons Nights Variable	34 10 5 -	3.08 1.97 1.02	1.45 1.63 .81

*p <.05

**p <.01

^aOnly significant results for nominal variables shown

Table E10. Covariates with Focal Person Behavioral Frequency in Presence of Peers (N=50)^a

<u>Dimension</u> ^b	<u>EDUC</u> ^c	<u>AGE</u>	<u>YRSUNIT</u>	<u>SEX</u>	<u>RATEE</u>
Ad					
PD		.25*			
Int		.30*	.24*	.29*	
Tch	.23*				
Pln					
PN					
Bas					.28*
Sup	.25*				
Doc				.27*	.31**
Saf					.29*

*p < .05

**p < .01

^aOnly significant results for continuous variables shown

^bAd=Administrative Functions, PD=Professional Development, Int=Interactions with Other Professionals, Tch=Patient-Family Teaching, Pln=Planning and Evaluating Patient Care, PN=Professional Nursing, Bas=Basic Nursing Care, Sup=Supportive Care, Doc=Documentation, Saf=Unit Safety and Maintenance

^cEDUC=education, YRSUNIT=years in unit, RATEE=previous job performance rated

Table E11. Covariates with Focal Person Behavioral Frequency
in Presence of Peers (N=50)

<u>Dimension</u>	<u>Covariate</u>	<u>Category</u>	<u>N</u>	<u>Mean</u>	<u>SD</u>
Basic Nursing Care X=4.28 SD=1.46	Hospital F=2.58**	Lake View	2	2.88	.18
		St. Luke's	4	4.23	2.52
		Clinton	5	4.80	.92
		Genesee	2	.88	.41
		Pennock	1	5.33	0
		Detroit Osteo	3	5.77	.23
		Saginaw	4	5.31	1.15
		Munising	1	5.83	0
		Munson	5	4.22	1.80
		United Mem.	2	3.38	.28
		Charlevoix	3	5.22	.61
		Hayes-Green-Beach	2	3.67	1.30
		Grand Rapids Osteo	4	3.21	.42
		Memorial	5	3.85	1.02
		Ingham	5	4.53	.68
		Pontiac Gen.	2	5.25	.47
Supportive Care X=3.96 SD=1.42	Hospital F=2.01*	Lake View	2	2.56	.63
		St. Luke's	4	3.81	2.31
		Clinton	5	4.67	.81
		Genesee	2	3.50	.55
		Pennock	1	4.11	0
		Detroit Osteo	3	5.19	.61
		Saginaw	4	4.47	1.79
		Munising	1	5.56	0
		Munson	5	3.16	1.89
		United Mem.	2	3.78	1.73
		Charlevoix	3	5.26	.63
		Hayes-Green-Beach	2	2.39	.08

Table E11, cont'd.

<u>Dimension</u>	<u>Covariate</u>	<u>Category</u>	<u>N</u>	<u>Mean</u>	<u>SD</u>
		Grand Rapids Osteo	4	2.19	.53
		Memorial	5	4.07	.62
		Ingham	5	4.00	.74
		Pontiac Gen.	2	5.61	.08

* $p \leq .05$

** $p \leq .01$

^aOnly significant results for nominal variables shown

APPENDIX F
NEWMAN-KEULS RESULTS

Table F1. Newman-Keuls Results for Performance Ratings

Ad ^a	HN	P	FP	PN	HN	P	FP
	P	-	**		P	*	*
			**				-
PD	HN	P	FP	Bas	HN	P	FP
	P	-	**		P	**	**
			-				-
Int	HN	P	FP	Sup	HN	P	FP
	P	**	**		P	-	**
			**				**
Tch	HN	P	FP	Doc	HN	P	FP
	P	-	**		P	**	**
			**				-
Pln	HN	P	FP	Saf	HN	P	FP
	P	**	**		P	-	**
			-				**
				Ov	HN	FP	P
					FP	-	-
							-

* $p < .05$ ** $p < .01$

^aAd=Administrative Functions, PD=Professional Development, Int=Interactions with Other Professionals, Tch=Patient-Family Teaching, Pln=Planning and Evaluating Patient Care, PN=Professional Nursing, Bas=Basic Nursing Care, Sup=Supportive Care, Doc=Documentation, Saf=Unit Safety and Maintenance

Table F2. Newman-Keuls Results for Supervisors', Peers', and Focal Persons' Favorability Ratings

Ad ^a		HN	FP	PN		HN	FP
	P	-	-		P	-	-
	HN		-		HN		-
PD		FP	HN	Bas		HN	FP
	P	-	-		P	-	-
	FP		-		HN		-
Int		HN	FP	Sup		HN	FP
	P	-	-		P	-	-
	HN		-		HN		-
Tch		HN	FP	Doc		HN	FP
	P	-	-		P	-	-
	HN		-		HN		-
Pln		FP	HN	Saf		HN	FP
	P	**	**		P	-	-
	FP		-		HN		-

* $p \leq .05$

** $p \leq .01$

^aAd=Administrative Functions, PD=Professional Development, Int=Interactions with Other Professionals, Tch=Patient-Family Teaching, Pln=Planning and Evaluating Patient Care, PN=Professional Nursing, Bas=Basic Nursing Care, Sup=Supportive Care, Doc=Documentation, Saf=Unit Safety and Maintenance

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