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Nurse Middle-Managers: The Relationship of Managerial Motivation to Academic Education, Leadership Training, and Success Potential

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ABSTRACT

Nurse Middle-Managers: The Relationship of Managerial Motivation to Academic Education, Leadership Training, and Success Potential

Multiple applications of role-motivation theory in hierarchal organizations have shown that motivation to manage (e.g., positive attitudes toward power) is related to managerial success and can be enhanced with management development. Assuming hospitals fit the theory's domain, it was hypothesized: (a) nurse managers with baccalaureate or higher degrees and or higher success potential ratings would have more managerial motivation than those with less education and lower ratings, and (b) nurse managers' motivation would increase after leadership training. Also, a standard measurement instrument was compared to an untested one.

The quasi-experimental design with nonequivalent comparison groups included leadership training between pre and posttests of managerial motivation. Nurse middle-managers (N = 98) from four hospitals participated in the pretest (i.e., Miner's Sentence Completion Scale) and almost 50% of them (n = 45), who had attended 85% of the training, completed two posttests (i.e., Miner's scale and Thornton's In-Basket Exercise). In addition, at posttest, success potential ratings were obtained from managers' supervisors.

Data analysis that included t-tests of sample means, repeated measures ANOVA tests, and Spearman's rank correlations revealed that managerial motivation was not higher for the more educated
nurses; however, it did reveal that managerial motivation significantly increased with training and was significantly related to success potential. Also, the in-basket instrument which is expected to modernize the testing of role-motivation theory, did not correlate with the Miner scale. Because managers' attitudes toward managerial roles were positively (a) influenced by training and (b) related to success--managerial motivation should be considered in the selection, promotion, and training of nurse managers.
DEDICATION

To my mother, Viola M. Valentine, and my late father, John M. Valentine. They encouraged me to read, "look it up" instead of asking why, and to pursue advanced education. I thank them for the intense and personal interest they took in my training.
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CHAPTER I

INTRODUCTION

Many individual and organizational factors have been linked with managerial success—intelligence, personality, motivation, group cohesion, organizational structure, economic factors, and many others. Various factors and factor combinations have proven useful in the prediction of managerial success and therefore have been used as selection, promotion, and training and development criteria. One factor—motivation—has been studied to identify relationships between it, various styles and levels of management, and managerial success (see, for example, Ghiselli, 1971; Howard & Bray, 1988; McClelland, 1975; McClelland & Boyatzis, 1982; Miner, 1965, 1977c, 1978b). The motivation to assume common management roles or the "will to manage" has been singled out as a particularly important factor for predicting the success of managers in bureaucratic organizations (Miner, 1965, 1977c, 1978b). In addition, managerial role education has proven useful in improving success potential by increasing this "motivation to manage" (Miner, 1965, 1977a, 1977c, 1978b).

Many nurses manage in bureaucratic organizations. However, the relationships between their motivation to manage, success and education have been only minimally investigated (Holland, 1981; Taunton, Krampitz, & Woods, 1989a, 1989b). Therefore, this study examined these relationships.
Rationale

The current demand in the health care system to balance quality care and costs, the rapid advancements in information and medical technology, and the ongoing nursing shortage have created settings in which nurse managers need personnel, organizational, and economic management knowledge and skills to be effective (see, for example, Chaska & Alexander, 1990; McKibbin, 1990; Sides, 1990). Despite this, nurses frequently find themselves in management positions within hospitals because of seniority, clinical excellence, or salary incentives, with little desire and inadequate training to perform managerial roles (Davidhizar, 1990; Ullrich, 1978). It seems assumed that the clinical skills of staff nurses and their motivation to perform them will translate into management skills and a desire to manage.

Numerous authors agree that advanced management education enhances nurse manager effectiveness (Chaska & Alexander, 1990; Dunne, Ehrlich, & Mitchell, 1988; Sides, 1990; Walsh, 1990). In fact, according to the American Academy of Nursing's Magnet Hospital Study, (McClure, Poulin, Sovie, & Wandelt, 1983) hospitals with higher percentages of graduate prepared administrative nurses are more effective in retaining professional nurses and realizing job satisfaction for staff nurses. In these magnet hospitals, 12% of the head nurses in 1981 and 28% in 1989 had graduate degrees (McKibbin, 1990) in comparison to a 4.4% national average (U.S. Department of Health and Human Services, 1990).
In addition to advanced education, nursing literature stresses the need for managerial motivation, as reflected in these titles, "Are You Cut Out to be a Manager?" (Thomas, 1986), and "Choosing Management: It Is Not for Everyone" (Davidhizar, 1990). Both articles describe motivation problems that occur during the transition between patient care provider and nurse manager.

Thomas (1986) believes nurses "willing to make the adjustments involved in leaving patients behind, learning to work independently, and putting respect ahead of popularity...can learn to be good managers when they have strong motivation behind them" (p. 14-15). Davidhizar (1990) agrees that effective transitions between staff and management positions require managerial skills and the willingness to fulfill managerial roles (e.g., spending large amounts of time in meetings to direct, convince, and negotiate progress toward organizational goals). He describes nurse managers who discover significant educational and motivational deficits, after the transition, as frustrated.

Krembs (1983) emphasizes that management development programs should focus on the values or motivations required for managerial success. He identifies six deficits that manifest themselves when ill-prepared technicians transition into managers: strong ego identification with technical competence; strong achievement drive; low relationship orientation; low levels of strategic thinking; self-perception as a victim; and fear of technical obsolescence. He believes training new managers to associate success with
organizational rather than individual achievement, value relationship building, and exert influence is critical to managerial effectiveness. The deficits Krembs identifies seem applicable to nurses who are thrust into management, without management education, after only excelling in staff skills. Role theory clarifies these transition problems.

Role theory asserts that role incongruity—incompatibilities between skills and role obligations or between personal values and expected role behaviors—can result from inadequate, ill-prepared, or undesired role transitions. These incongruities generate role strain and result in role incompetence, role distance, and decreased productivity (Borgotta, 1961; Hardy & Hardy, 1988a; Smelser, 1961). Hardy and Hardy (1988a) feel education that addresses the incongruities can reduce the detrimental effects of role strain and therefore enhance productivity.

Social scientists agree. They have incorporated values and attitudes toward managerial roles, as variables that predict success, since the 1950s (see, for example, Ghishelli, 1971; Howard & Bray 1988; McClelland & Boyatzis, 1982; Miner, 1978b). Furthermore, McClelland (1975) and Miner (1965, 1975, 1985a) have consistently maintained that management education directed toward motivation to perform role requirements decreases role incongruity and enhances success. McClelland (1975) found that a leadership motive pattern, including high needs for power, low needs for affiliation, and maturity was an important predictor of managerial
success. In addition, he found that education in the motive pattern increased leadership potential, even among individuals who had never thought of themselves as leaders (McClelland & Burnham, 1976; McClelland, Rhinesmith, & Kristensen, 1975). Miner found that positive attitudes toward common managerial roles (e.g., toward competition and power) were "the crucial ingredient that probably contributes more than anything else to managerial success" (Miner, 1985a, p. 294). He also developed training programs that enhanced managerial motivation (Miner, 1965, 1977c, 1978b).

With all of this evidence supporting a link between managerial motivation and success—-it is reasonable to assume that managerial motivation might be an important ingredient for nurse manager success. It is also reasonable to assume nurse managers experience role incongruities and might benefit from managerial motivation training. However, the need for managerial motivation and its associated training is not established for nurses.

Statement of the Purpose

Speculating that managerial motivation might be an important consideration for nurse manager success, this investigator explored its relevance using Miner's (1965, 1977c, 1978b) managerial role-motivation theory. Specifically, the purpose of this study was to measure the managerial motivation of nurse middle-managers employed in large, acute care hospitals and then examine the relationships between their motivation and their (a) academic education, (b)
leadership training, and (c) management success potential. It was anticipated the study's findings would generate information related to managerial motivation that would be useful in the selection, promotion, and development of nurse managers. An additional purpose was to compare a traditional managerial motivation instrument to an innovative one. This was done to enhance the development of a more modern managerial motivation measure.

Theoretical Framework

Miner (1965) conceptualized managerial role-motivation theory while developing a training program for a large oil company in the late 1950s. His main objective was to stimulate interest in managing among research and development managers more interested in scientific pursuits than managing. By applying role and psychoanalytic theory to observations of managers, Miner deduced six role prescriptions with associated motivational patterns that were predictive of managerial effectiveness in large, bureaucratic organizations. He found individuals who consistently associated positive (e.g., enjoyment), rather than negative (e.g., fear), emotion toward these requirements were willing or motivated to manage and more apt to meet organizational effectiveness criteria.

The prescriptions include desires or a willingness to:

1. Respect authority—managers should deal effectively with their superiors and obtain support for higher level actions. This requires positive attitudes toward superiors; negative attitudes
make it difficult to gain support for meeting job demands.

2. Compete—managers should accept job challenges and obtain results for themselves and subordinates. This requires positive attitudes toward competition; negative attitudes limit success in attempts to gain status and acceptance of ideas.

3. Follow masculine behavior patterns—managers should take charge, make decisions, discipline, and protect other members of their group. This requires positive attitudes toward masculine behavior; negative attitudes limit decision-making. Miner (1977c, chap. 1) later referred to this component as the willingness to be assertive; however, he did not change his definition or measurement methodology for this prescription.

4. Use power—managers should exercise power over subordinates and direct their behavior. This requires positive attitudes toward imposing wishes on others; negative attitudes result in performance that threatens organizational goals.

5. Be visible—managers should deviate from subordinate groups and behave in a manner that invites attention, discussion, and criticism from subordinates. This requires positive attitudes toward assuming a position of high visibility; negative attitudes limit managerial guidance for subordinates.

6. Perform routine administrative tasks—managers should perform managerial work such as constructing budgets, serving on committees, and filling out forms. This requires positive attitudes toward routine administrative tasks; negative attitudes
result in unmet administrative demands.

In general, the theory purports that individuals with more motivation to manage will advance more quickly and have higher performance ratings than those with less motivation. In addition, it purports that management development, designed to stimulate positive attitudes toward the role behaviors, should increase managerial motivation and, in turn, managerial success. Miner (1978b) also believes that increases in motivation, prompted by the education, should endure. He stated that, "since the motives affected by this change are posited to be role congruent for structures approximating the bureaucratic form, managerial motivation scores obtained well after this course has been completed should continue to reflect the change" (p. 743).

Miner (1977c, 1978b) believes that motivation to manage energizes the hierarchic control necessary for the success of bureaucratic organizations. He does caution that it may not be as relevant in systems strongly controlled by professional norms.

Managerial motivation, traditionally, is measured with the Miner Sentence Completion Scale, Form H (Miner, 1961, 1964, 1977b, 1977d). However, Thornton (1991) has recently developed and initiated validation on an "in-basket" exercise that measures attitudes toward Miner's role prescriptions. In both methods, subjects are (a) confronted with situations that stimulate emotion toward the role prescription behaviors and then (b) given dimensional and overall motivation scores.
Definition of Terms

The variables for this study were defined as follows:

1. Motivation to manage—in accordance with role-motivation theory (Miner, 1965), it is the willingness to: (a) respect authority, (b) compete, (c) be assertive, (d) use power, (e) be visible, and (f) perform routine administrative tasks. Individuals who have positive attitudes toward the role behaviors are willing or motivated to manage. The terms "motivation to manage" and "managerial motivation" are used interchangeably.

2. Nurse middle-managers—registered nurses with 24-hour operational responsibility for patient care unit(s) within large, acute care hospitals.

3. Academic education—this refers to the highest level of academic education the nurse middle-manager had attained at the beginning of the study. The categories included registered nurses with (a) associate degrees, (b) diplomas, (c) baccalaureate degrees (in or out of the field of nursing), and (c) graduate degrees (in or out of the field of nursing).

4. Success potential—in role-motivation theory, management success refers to the ability of a manager to lead subordinates in the accomplishment of organizational goals. It has been measured indirectly by performance ratings, promotion potential ratings, and rate of attaining progressive management levels (Miner, 1978b). In this study, success potential ratings measured success. Direct supervisors rated the subject's chance of success as a chief nurse
executive on a probability scale (0-100%). The scale spanned a success continuum from no chance of success to certain success.

Assumption

In designing this study, one assumption was made—that large acute care hospitals fit within the bureaucratic organizational domain of Miner's role-motivation theory.

Limitations

1. The traditional instrument used to measure managerial motivation provides both total and dimensional scores. Although total score psychometric soundness is generally accepted, the dimensions or subscales lack reliability and validity. Despite these psychometric problems, a thorough description of subscale properties was included in the review of literature and subscale analysis was performed for one of the hypotheses. Findings related to the subscales are not generalizable.

2. The newly developed instrument (i.e., the in-basket) has no documented reliability or validity for either its total or dimensional scores. The analysis reported in this study provided information useful for future psychometric testing; however, no conclusions about the managerial motivation of nurse-middle managers can be drawn from findings related to this instrument.
Hypotheses

In order to assess the applicability of Miner's role-motivation theory to nursing management and to explore a need for managerial motivation criteria in the selection, promotion, and development of nurse managers, four hypotheses were formulated:

1. Nurse middle-managers with baccalaureate or higher degrees will have higher motivation to manage scores than nurse middle-managers with associate degrees or diplomas.

2. Nurse middle-managers who participate in a leadership building program will have significantly higher motivation to manage scores after the training than the same nurse middle-managers did before the training.

3. Nurse middle-managers who have high motivation to manage scores will have higher success potential ratings than nurse middle-managers with low motivation to manage scores.

4. The motivation to manage scores obtained by using Thornton's In-Basket will significantly correlate with the motivation to manage scores obtained by using the Miner Sentence Completion Scale.
CHAPTER II

LITERATURE REVIEW

The literature presented in this chapter is directed primarily at studies involving the motivation to perform organizational management roles. It emphasizes the theories and related investigations that associate managerial success and management education with managerial motivation. It begins with the theoretical framework for this study, Miner's (1965, 1977c) role-motivation theory, continues with studies related to McClelland's (1975) need-motivation theory, and culminates with some conceptually related research.

Studies Related to Role-Motivation Theory

Miner (1965, 1977c, 1978b) found that (a) individuals with positive, rather than negative, attitudes toward authority, competition, assertiveness, power, visibility, and administrative tasks were more likely to realize management success and that (b) management training, designed to encourage positive attitudes toward the roles, could increase managerial motivation. He recognized that verbal ability, job knowledge, emotional patterns, and physical factors also determine performance in managerial work, but found his motivational factors "of sufficient significance to consistently yield reliable correlations with appropriate organizational criteria of effectiveness" (Miner, 1965, p. 43).
Investigations involving role-motivation theory have all used Miner's Sentence Completion Scale to measure managerial motivation. This section presents a description and critical analysis of Miner's Sentence Completion Scale, a summary review of validation studies, a review of three studies conducted in the health care field, and a description of Thornton's (1991) newly developed managerial motivation measurement instrument.

**Description and Analysis of Miner's Scale**

Miner (1961, 1964, 1977b, 1977d) developed two versions of a sentence completion scale to measure managerial motivation. The projective, free response version and objective, multiple-choice version both have 40 open-ended sentences (35 scorable; 5 distracters) that are divided into seven subscales representing the six role prescriptions. Attitudes toward authority, assertiveness, power, visibility, and routine administrative tasks are each measured by one subscale, whereas attitudes toward competition are measured by two subscales (one related to games and one to situations). Sentence stems stimulate emotion toward the role behaviors and then subjects' completions are scored to reflect positive (+1), neutral (0), or negative (-1) responses. Each subscale has a score range of -5 to +5. The total motivation to manage score is computed by summing the subscales and has a range of -35 to +35. Miner (1978a, 1985b) contends that the scale is psychometrically sound using the total score; however, he and
others question the validity and reliability of the subscales.

For the projective, free-response version, Miner (1977a, 1978a, 1985b) reported a median scoring reliability coefficient among experienced scorers of greater than .90, whereas Brief, Aldag, and Chacko (1977) found scoring reliabilities between .71 to .76. A group at Rensselaer Polytechnic Institute (Steger, Kelley, Chouiniere, & Goldenbaum, 1975) constructed a forced-choice scale form in an effort to remedy low scoring reliabilities and speed scoring. The instrument yielded a total score correlation with the original scale of .68 but produced a sizable inflation of almost 10 points. Although, Miner (1978a) blamed the free-response scoring problems on inexperience, he developed his own multiple-choice version to assuage the perceived problems and reduce score inflation. With this version, Stahl, Grigsby, and Gulati (1983), found a test-retest reliability coefficient of .78 for the total score and a median coefficient of .63 for the subscales. In terms of internal consistency, Stahl, Grigsby, and Gulati (1983) and Eberhardt, Yap, and Basuray (1988) reported total score alpha coefficients of .57 to .58; however, they found unacceptable subscale coefficients of .00 to .41. In addition, Eberhardt, Yap, and Basuray (1988), through factor analysis, found no support for the seven-subscale structure—it revealed only three independent factors (i.e., being in front of groups, sports, and image) accounting for 54.7% of the total variance.

In three correlation studies between his free-response and
multiple-choice versions, Miner (1977c, 1978a, 1985b) found total score coefficients of .38, .56, and .68; however, he found low and inconsistent correlations between the subscales. He also found multiple-choice scores somewhat inflated (i.e., +1 to +5) over free-response scores.

In reviewing the concurrent and predictive studies testing the theory's validity for determining success, Miner (1985b) reported a total score median coefficient of .35 ($p < .01$ to $< .10$) for the combined studies and coefficients in the .40s for studies limited to a single firm. With the subscales, however, he found inconsistent validity coefficients. Addressing accusations that the scale appeared biased toward males, Miner, (1985b) concluded that "among actual managers no differences in total score means or validity coefficients have been found between males and females" (p. 169). In relation to construct validity, Miner (1977a, 1977c, 1978a) and Eberhardt, Yap, and Basuray (1988) found support by establishing convergence with appropriate constructs in other instruments measuring attitudes toward managerial roles (e.g., the Self-Description Inventory, and Strong Vocational Interest Blank).

In summary, the psychometric soundness of the multiple-choice total score index appears reasonable. However, there is only minimal support for the reliability and validity of the subscales. Interestingly, Miner (1985b) admitted that the individual constructs were differentiated "entirely on a conceptual, not a statistical, basis" (p. 150).
Summary of Validation Studies

In reviews of two decades of research testing role-motivation theory, Miner (1978b, 1985b) concluded that all 26 studies done (22 with the free-response scale and 4 with the multiple-choice scale), within the theoretical domain, to concur with or predict managerial success, had produced significant results (14 at $p < .01$ using the total score). In analyzing the subscales, he found that (a) the ones dealing with competition (16 at $p < .01$ or .05) and power (15 at $p < .01$ or .05) achieved the most consistent validity and that (b) the subscales dealing with the other roles yielded significant results in approximately one-third of the studies. In these studies, success criteria included: position levels, rate of change in position levels, performance ratings, promotion potential ratings, compensation, and peer ratings of supervisory potential. Miner (1978b) inferred that the findings supported the importance of "hierarchically appropriate relationships with superiors, peers, and subordinates" (p. 746) in bureaucratic organizations.

In studies conducted outside of the theoretical domain (i.e., in nonbureaucratic organizations and among nonmanagers or using success criteria such as grade point averages and sales figures), Miner (1978b) found only inconsistent, questionable support for associating success with positive attitudes toward any of the role prescriptions. Furthermore, he found the only significant results involving the total score were negative in direction.

In addition, Miner (1978b) reviewed the findings of 17
experimental studies that hypothesized increases in subjects' managerial motivation secondary to training interventions. His analysis found significant increases in total motivation scores in 16 of the 17 experimental groups, but again, found inconsistent subscale score changes.

Studies Conducted in the Health Care Field

Only three studies were found that tested role-motivation theory in health care settings. One endeavored to validate the theory for hospital administrators and two applied the theory to nursing managers. Holland, Black, and Miner (1987) tested role-motivation theory, using the multiple-choice version of the Miner Sentence Completion Scale, Form H, with 668 chief executive officers of acute care hospitals in 16 states. They hypothesized that those with higher managerial motivation scores would (a) be employed in larger facilities, (b) have spent less time in hospital employment before becoming chief executive officers, and (c) be receiving larger salaries, than those with lower scores. In terms of managerial success criteria, they assumed movement from smaller to larger facilities reflected career advancement, that high performance in lower-level positions resulted in faster promotions, and that outstanding performance was financially rewarded.

Using analysis of variance and correlation methods to analyze the relationships between scores and the various levels of hospital size, time spent in employment, and compensation, they found weak,
but consistent support for all three hypotheses. They also reported that executives characterized as having the highest salaries, working in the largest hospitals, and advancing the most rapidly had significantly higher mean scores ($M = 11.9; SD$ not reported) than those with other combinations of characteristics ($M = 6.57; SD$ not reported). In fact, the mean score of these most successful executives was found comparable to mean scores of executives in very large corporations. Holland, Black, and Miner (1987) concluded that role-motivation theory was applicable to hospital administrators and might be useful in understanding and predicting outcomes within managerial health care settings.

In the field of nursing management, Holland (1981) compared the managerial motivation of nurse administrators with that of managers in other fields. He also used role-motivation theory to investigate an implication that baccalaureate preparation in nursing enhances managerial potential. Using the free-response version of the Miner Sentence Completion Scale, Form H, he found a significantly lower mean total score ($M = -0.71, N = 34, SD = 7.20$) for a group of female nursing directors, assistant directors, and supervisors than had been found for female supervisors at General Motors ($M = 1.90, N = 40, SD = 5.06$), male and female retail store managers ($M = 5.73, N = 30, SD = 4.74$), male wood product managers ($M = 5.90, N = 30, SD = 4.88$), and male oil company middle managers ($M = 7.20, N = 37, SD = 5.67$). He also found that the nurses' mean score was lower than, but much closer to the mean score of a group
of female school administrators ($M = -0.04$, $N = 25$, $SD = 5.35$).

On further analysis, he found that the mean score of the baccalaureate prepared nurses ($M = 3.00$, $N = 17$, $SD = 8.08$) was comparable to the mean scores of the other female management groups and significantly higher than the mean score of the diploma prepared nurses ($M = -4.42$, $N = 17$, $SD = 3.59$). Even though he did not attempt to validate the theoretical predictability of nurse managerial success, Holland (1981) interpreted his findings to mean that the two different educational backgrounds reflected "differences in attitudes toward specific roles that relate to managerial performance" (p. 20).

In a pilot study investigating manager impact on job satisfaction and retention of hospital staff, Taunton, Krampitz, and Woods (1989a, 1989b) sampled eight managers (six nursing, one dietary, and one social work) of professional units (Taunton, personal communication, October, 1991) in a 504-bed university medical center hospital. They added managerial motivation, as a predictor variable, to a multi-variate nurse retention model. Using Miner's Sentence Completion Scale, Form H (multiple-choice version), they found no significant relationships between the managers' overall motivation to manage scores and employee satisfaction and retention.

**Thornton's In-Basket Exercise**

Thornton (1991) recently developed an in-basket exercise
that measures motivation toward Miner's role prescriptions. The exercise simulates a work situation and provides opportunities for manifesting emotion via written responses to in-basket items. It is scored by a judgmental content analysis method similar to methods used in managerial assessment centers (Thornton, 1991; Thornton & Byham, 1982). Psychometric testing has just been initiated and no data is available (G. C. Thornton, personal communication, October 9, 1991).

In general, various forms of in-basket exercises are popular instruments used for the training, selection, and investigation of managers. They are frequently used in assessment centers in combination with other tests (Thornton & Byham, 1982; Howard & Bray, 1988). Schippmann, Prien, & Katz (1990) performed a cumulative psychometric review of over 30 studies utilizing in-baskets. Although only a small amount of empirical data was available, they found fairly high interrater scoring reliabilities and that "the studies of criterion-related validity did reveal a large number of significant correlations between in-basket measures and various criteria" (p. 853). Particularly, they discovered that validity was generally higher when the in-basket had been specifically constructed for a defined target job. On another note, they found many investigators had been satisfied with face validity in preference to content validity procedures. In contrast, Thornton's (1991) exercise was constructed to closely align with the theoretical constructs in Miner's theory.
Studies Related to Need-Motivation Theory

McClelland (1975), renowned for his work on the achievement motive, found that individuals with high needs for achievement (i.e., a desire to individually make things better) were successful entrepreneurs but tended to be ineffective organizational managers. This surprised him as he had assumed those with strong achievement needs would work harder, get promoted faster, and end up at the top of corporate ladders. However, he discovered a leadership motive pattern more characteristic of effective organizational leaders. The pattern included: (a) a high need for power, an interest in influencing others; (b) a low need for affiliation, an ability to make difficult decisions without worrying about being disliked; and (c) high inhibition (i.e., maturity), a selfless concern with maintaining organizational systems and following orderly procedures. This section reviews research related to McClelland's leadership motive pattern.

In Power: The Inner Experience, McClelland (1975) identified this leadership motive pattern as one of two faces of power--social power (i.e., positive face of power) and contrasted it with a personal power motive pattern (i.e., negative face of power). The patterns differ only in that an individual with personal power lacks maturity (i.e., allows personal goals to dominate organizational goals). He hypothesized that individuals with the leadership motive pattern (i.e., social power) would be effective organizational managers because of their ability to influence
subordinates, at the expense of personal reward, toward
organizational goals. He also suspected potential leaders might
avoid leadership positions for fear of their own motives and, in
addition, for fear the public might accuse them of wanting power.

Based on intuition regarding his leadership motive pattern,
McClelland (1975) suggested three ways to develop organizational
leaders. First, he recommended structural changes in organizations
to prevent the climate from blocking leadership authority.
Secondly, he suggested rehabilitation of social power. He felt
that the American public frequently misinterpreted power needs as
the pursuit of personal power and therefore misunderstood effective
social leadership. Thirdly, based on his success with increasing
the achievement motive in adults, he endorsed psychological
education for leaders that included training in the positive
aspects of social power. He felt that this type of education would
make potential leaders less fearful of manifesting successful
organizational leadership behaviors (e.g., assertiveness).

McClelland, Rhinesmith, & Kristensen (1975) tested
McClelland's intuition regarding power motivation training. In
order to help the poor help themselves, they assisted several
hundred community members to (a) recognize the two types of power,
(b) understand the necessity of social power in effecting change,
and (c) develop social power behaviors. In follow-up assessments
of 167 members six months after the training, 69% felt stronger as
a result of the training and 52% were judged by interviewers to be
distinctly improved in managing community action groups.

To test the theorized leadership motive pattern, McClelland and Burnham (1976) studied 500 managers to (a) assess what motivation pattern and managerial style was associated with effective managers and to (b) assess the effectiveness of workshops intended to enhance the leadership motive pattern. First, using subordinate morale as the effectiveness criterion, they delineated a motive pattern and style common to managers leading groups with the highest morale. It included controlled needs for power greater than needs for affiliation and a democratic or coaching leadership style. Secondly, they resurveyed the managers' subordinates six months after the workshops and found significant increases in subordinate morale (actual data not reported).

McClelland and Boyatzis (1982), using data from a large sample of male managers, who had completed the Thematic Apperceptions Test in a longitudinal management study (Bray, Campbell, & Grant, 1974), correlated maturity, and the needs for achievement, affiliation, and power, with long-term management success. They found that the leadership motive pattern was related significantly with managerial success for nontechnical managers (i.e., supervised people) but not for technical managers (i.e., managed equipment more so than people). In addition, they found that a college degree was predictive of success for both the technical and nontechnical managers.

Boyatzis (1982), using constructs similar to McClelland's,
investigated the characteristics of over 2000 individuals holding 41 different management jobs in 12 organizations. He found 12 competencies involving motives, social roles, and skills related to effective performance. Furthermore, he found three of the competencies that involved motives—efficiency orientation, concern with impact, and concern with close relationships—significantly related to effectiveness criteria (i.e., work output, supervisory nominations, and performance ratings). In addition, he found superior managers had significantly higher needs for achievement (i.e., efficiency orientation) than did average managers, that superior and poor managers had significantly higher needs for power (i.e., concern with impact) than did average managers, and that poor managers had significantly higher needs for affiliation (i.e., concern with close relationships) than did average and superior managers. Boyatzis (1982) also compared his findings with McClelland’s leadership motive pattern and found that more superior managers had the pattern than did others (i.e., 34% of superior performers, 24% of average performers, and 20% of poor performers).

As a result of his research, Boyatzis (1982) recommended that management development should include training in the managerial motives associated with effectiveness. He stated that, "to be effective in competency development, the training must involve far more than teaching participants about the functions of management" (p. 253). He went on to detail a suggested management development curriculum that involved actual practice and application of the
motive, skill, and social role aspects of each desired competency.

Cornelius and Lane (1984) tested the validity of McClelland's leadership motive pattern for two levels of management personnel in a professionally oriented, service industry organization. Effectiveness criteria included subordinate attitudes, performance ratings, and the status of the location in which the manager worked. Their study was different in that the subject managers supervised professionals and required a certain amount of technical expertise in addition to personnel management expertise. Unlike the findings in other work settings, they found no relationship between the leadership motive pattern, performance ratings, and subordinate morale. However, they did find a significant relationship between location status and the leadership motive pattern. Their conclusion that a need for power was only critical for nontechnical managers supported the earlier findings of McClelland and Boyatzis (1982). In addition, they speculated, as Miner had, that managers supervising professional employees may not require needs for power and influence.

Henderson (1988) used the Power Management Inventory (Hawker & Hall, 1988), based on McClelland's leadership motive pattern, to analyze relationships between the power motivation and leadership effectiveness of 300 chief nurse executives. She hypothesized the highest effectiveness scores would be found among the managers with predominantly socialized power motives, the lowest scores among those with affiliative motives, and moderate scores among those
with personalized or no power motives. In general, she found a lack of the motive pattern. Instead the executives had high affiliation needs and moderate power needs. However, although she did not find any significant relationships among the hypothesized motive patterns and effectiveness, she did find managers needing socialized power held positions in more complex hospital settings than those needing affiliation. Henderson reasoned that the lack of the motive pattern could be secondary to (a) nursing positions requiring inordinate amounts of technical work compared to other administrative positions and (b) educational processes that historically socialized nurses into submissive roles. Ultimately, though, she expressed concern over the lack of socialized power motives among the nurse executives. She stated that managers "motivated primarily by socialized power needs are typically collaborative, concerned with fairness and the rights of others, builders of systems and people, and are sources of strength for others" (p. 136) and cautioned hospitals to consider the costs of promoting nurses lacking socialized power motives into management.

In comparison to role-motivation theory, McClelland's leadership motive pattern is similar, in that, the need for power is conceptually related to Miner's mandates for assertiveness and power over subordinates. Miner (1978b) stated that, of all motivational theories, "McClelland's views on achievement and power motivation appear to be the most conceptually similar and thus the most likely to yield overlapping results" (p. 757).
Conceptually Related Research

There are many studies that relate conceptually to role-motivation and need-motivation theory. However, there are two major works that seem most applicable.

Ghiselli's Managerial Success Characteristics

After 20 years of investigating determinants of managerial talent, Ghiselli (1971) identified six characteristics that played significant roles in managerial success. Using his Self-Description Inventory to measure characteristics and performance evaluations to establish success, he found that the following abilities, and motivations played the most important roles:

1. Supervisory ability--the capacity to direct the work of others so that the goal of the work group is attained.

2. Intelligence--the mind's capacity to reason, learn, analyze, and deal with abstractions, ideas, and concepts.

3. Self-assurance--a perception of being able to deal effectively with problems.

4. Decisiveness--use of quick, and self-confident approaches to decision-making.

5. Need for occupational achievement--the desire for the responsibility and prestige of high positions.

6. Need for self-actualization--the desire to utilize or realize full potential.

Among the other characteristics he studied was the
motivational need for power over others. He defined this as the desire to control the activities of others. He found a positive, but very low correlation coefficient (.03) between the need for power and managerial success. He had expected a high correlation, but reasoned that modern businesses must favor and reward democratic, rather than, authoritarian government.

According to Miner (1977c, 1978b), all of the characteristics Ghishelli found significantly related to managerial success, with the exception of intelligence, are conceptually similar to his role-motivation behaviors. In fact, Miner (1977c) compared them individually with the total score of the free-response version of the Miner Sentence Completion Scale and found decisiveness, supervisory ability, and self-assurance significantly related.

Assessment Center Research

American Telephone and Telegraph's 30-year longitudinal study, using managerial assessment center methodology, concluded that some of the best predictors of managerial success (i.e., actual promotion) were oral communication skills, human relations skills, need for advancement, resistance to stress, tolerance of uncertainty, organization and planning skills, and energy (Bray, Campbell, & Grant, 1974; Howard & Bray, 1988). The conclusions characterized successful managers as those who, for example, (a) organize work effectively, (b) make decisions willingly, (c) make forceful and likable impressions, (d) lead others to perform, and
(e) perform well, even under stress. These characteristics are conceptually related to Miner's and McClelland's role behaviors.

Summary

Support for role-motivation theory (Miner, 1965, 1977) emerged from this review of literature. First, several investigators found that successful managers have common characteristics related to managerial motivation. They are able and willing to direct, discipline, and organize subordinate activity, and to make timely, confident decisions. Therefore Miner's role prescriptions for successful managers were supported. Secondly, several investigators who implemented training programs to enhance individuals' motivation toward managerial roles were successful. Therefore Miner's belief that managerial motivation can be enhanced and should in turn increase management success potential was supported.

Although this large body of research endorsed role-motivation theory for various managers in multiple bureaucratic organizations including hospitals (Miner, 1978b, 1985b), there was scarce support for its applicability to nurses. Therefore, using role-motivation theory, the major purpose of this study was to investigate the relationships between nurse managers' motivation to manage and their: (a) academic education, (b) leadership training, and (c) success potential. A secondary purpose was to test Thornton's (1991) new method for measuring managerial motivation.
CHAPTER III

METHOD

This chapter includes a description of the study design, sample, leadership intervention, and instrumentation used to test the hypotheses listed in Chapter I. It also includes an explanation of the procedures used to collect and analyze data. This study was in conjunction with OPTIMAX (Taunton, 1989), a study funded by the National Institutes of Health (#NROI2092-03).

Design

This study had a quasi-experimental, pretest-posttest, nonequivalent comparison groups (Wave A & Wave B) design. It allowed investigation of the influence of leadership training on managerial motivation. The design was as follows:

<table>
<thead>
<tr>
<th>PRETEST</th>
<th>INTERVENTION</th>
<th>POSTTEST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wave A</td>
<td>$O_1$</td>
<td>$X$</td>
</tr>
<tr>
<td>Wave B</td>
<td>* $O_1$</td>
<td>* $X$</td>
</tr>
</tbody>
</table>

$O_1$ = preintervention observation; pretest scores
$X$ = 12-month leadership intervention
$O_2$ = postintervention observation; posttest scores
* = 6-month delay
$<A>$ = 16-month interval between intervention and posttest
$<B>$ = 10-month interval between intervention and posttest
During OPTIMAX (Taunton, 1989) nurse middle-managers completed several research assessment instruments, including a measure of managerial motivation, and then participated in a leadership training intervention. The intervention occurred in two waves with the second one commencing six months after the first. For this study, using the same subjects and wave groups, I obtained demographic and managerial motivation pretest data from OPTIMAX files and then gave managerial motivation posttests to managers who had participated in the intervention and still retained middle-management positions. In addition, during O2 I obtained managerial success ratings on participating subjects. Although the interval lengths between the intervention and O2 for the two waves differed only by six months, the difference provided comparison groups.

According to Burns and Grove (1987), pretest-posttest designs have inherent threats to validity. Pretest administration and subject maturation can influence posttest scores. In this study, the effects of pretest administration were minimal, as the posttest was given nearly two years after the pretest. On the other hand, posttest scores were vulnerable to maturation processes. The use of comparison groups with different intervals between intervention and posttest allowed some analysis of this threat.

Sample

The target population was nurse managers employed in large hospitals. The convenience sample (N = 98) consisted of nurse
middle-managers from four large (> 300 beds) acute care hospitals in a midwestern metropolitan area who had participated in the OPTIMAX training intervention. The subjects were all registered nurses with diverse academic education and management experience. Although their titles differed in each hospital, they all had 24-hour responsibility for at least one staff nurse work unit.

Leadership Training Intervention

The 12-month intervention included 77 hours of training. It consisted of three standardized programs obtained from Development Dimensions International (DDI, 1987, 1988) with documented effectiveness for changing managers' behaviors. Learning methods included reading, lecture, discussion, behavior modeling skill practice, on-the-job coaching, feedback, and reinforcement activities. Program content included:

1. Performance management: establishing employee performance objectives and the skills needed to achieve them, gaining employees' commitment to accomplish objectives, and coaching and evaluating employees' performance.

2. Interaction management: improving employee performance, improving work habits, utilizing effective follow-up action, utilizing effective disciplinary or corrective action, and maintaining improved performance.

3. Targeted management: leadership (power and influence), group leadership, and developing organizational talent.
The intervention is comparable to Miner's managerial motivation training (Miner, 1965, 1975, 1977a, 1985a). Miner's program utilized "lecture discussion and case analysis techniques to develop skills in managerial decision making and controlling through the study of methods of diagnosing and correcting the ineffective performance of subordinates" (p. 417). Furthermore, both the intervention (Taunton, 1989) and Miner's developmental techniques used Mintzberg's (1973) managerial role theory to support the content of their programs and both emphasized managerial skills over managerial theory.

Instrumentation

To obtain data, I used (a) demographic, Miner Sentence Completion Scale pretest scores, and leadership intervention information from the OPTIMAX study, (b) a demographic update questionnaire, (c) two posttest measures of managerial motivation: the Miner Sentence Completion Scale and Thornton's In-Basket Exercise, and (d) an investigator-designed Success Potential Questionnaire. I obtained permission to use the scale and the pretest data from OPTIMAX (see Appendix A).

Demographics

I obtained the following demographic information about each nurse middle-manager from OPTIMAX files and then used it to describe the subjects and explore relationships between education,
experience, and motivation to manage:

1. Age
2. Gender
3. Highest educational credential—in and out of nursing
4. Number of years, as middle-manager, in current hospital
5. Number of years, in any position, in current hospital
6. Number of years worked in the nursing profession

In addition, in order to control for history, the subjects who participated in the posttest phase of this study completed a Demographic Questionnaire (see Appendix B) to update education completed during the pretest-posttest interval.

**Miner Sentence Completion Scale**

The multiple-choice version of the Miner Sentence Completion Scale, Form H, (Miner, 1977b, 1977d) was used to measure the relationships between the managers' motivation to manage and their (a) academic education, (b) leadership training, and (c) success potential. The scale consists of 40 sentence stems that prompt emotion toward managerial roles. The 35 scorable items (5 fillers) are divided equally into the following, role-related subscales:

1. Authority Figures
2. Competitive Games
3. Competitive Situations
4. Assertive Roles (originally masculine role)
5. Imposing Wishes (power)
6. Stand Out From the Group (visibility)

7. Routine Administrative Functions

Words chosen by the respondents to complete the sentences reflect a positive, negative, or neutral attitude toward the roles (see Appendix C). For example, the following completed stems reflect, in order, a (a) positive attitude toward authority figures, (b) negative attitude toward administrative functions, and (c) neutral attitude toward assertive behavior:

Top management...I respect. (a)

Sitting behind a desk, I...become bored. (b)

When driving a car, I...try to observe the law. (c)

The items are scored as positive (+1), negative (-1), or neutral (0). The total score, is a summation of the subscale scores (range -5 to +5), and has a potential range of -35 to +35 (Miner, 1964).

Investigators feel that the scale's psychometric properties are satisfactory when using the total score, but caution against drawing conclusions from subscale scores. In terms of reliability, Stahl, Grigsby, and Gulati (1983) reported test-retest coefficients of .78 for the total score and a median coefficient of .63 for the subscales. In addition, they and Eberhardt, Yap, and Basuray (1988) reported internal consistency coefficients of .57 to .58 for the total score and .00 to .41 for the individual subscales. In terms of criterion validity, Miner's (1978b, 1985b) extensive review of multiple studies concluded that all studies done, within the theoretical domain, supported the validity of the theory with
total score median coefficients of approximately .40. On the other hand, he concluded that the individual subscales yielded inconsistent validity coefficients.

In preliminary testing of the 35-item Miner Sentence Completion Scale for this study, the total score yielded an internal consistency alpha coefficient of .67 and very low subscale coefficients of .20 to .30. However, using the alpha-if-item-deleted statistic (Norušis, 1990) to identify items that reduced internal consistency, 11 of the original 35 scorable items were eliminated to increase the total score alpha coefficient to .73.

A possible explanation for low reliability and validity involves the theory's early development. The assertive role was originally titled "masculine role" (Miner, 1965) and some related scale items, which remain unchanged, possibly influence the perceptions of men and women differently (e.g., one item prompts emotion with the word "necktie"). In addition, several items do not reflect changing roles (e.g., physicians symbolize authority).

In-Basket Exercise

In-basket tests are realistic simulations that can test for underlying components of administrative behavior (Kerlinger, 1973). Thornton's (1991) In-Basket measures the constructs in Miner's role-motivation theory (see Appendix D for in-basket and permission to use). There are 19 items (e.g., memos, complaints, requests, and subordinate performance ratings) for subjects' organization and
response—each one represents an article common to managers' in-baskets. The content of each item provides subjects with opportunities to manifest positive or negative emotion toward several of Miner's six managerial roles. Emotion is measured by related behavior (e.g., one memo provides an opportunity to lecture—acceptance signifies positive emotion toward visibility, whereas declination or avoidance signifies negative emotion). The responses are categorized into six dimensions representing the six roles. To complete the exercise, subjects pretend they are newly hired sales managers and then respond in writing (e.g., by memo) to the 19 items left in a simulated predecessor's in-basket. Scorers, following judgmental content analysis guidelines, (a) place each response in the appropriate dimension, (b) rate the responses as positive or negative, (c) subjectively determine a score for each dimension (range +1 to +5), and finally (d) sum the dimension scores to obtain a total score (range +6 to +30).

Procedures for establishing the psychometric soundness of the instrument are in progress; however, no data is available. Because the in-basket had potential to modernize the testing of Miner's theory, it was included for comparison to Miner's scale.

Thornton and one of his research assistants, Suzanne Larsh, devised the judgmental scoring guidelines. To gain scoring proficiency, I rescored in-baskets originally scored by Thornton and Larsh and then trained with them to correct scoring deficits.

Forty-five subjects completed in-baskets. After initially
scoring all of them, scoring reliability was established with significance at \( p < .05 \). Larsh randomly rescored 33.3% and I randomly rescored 18%. Comparison of inter and intrarater total and dimension scores revealed significant, acceptable correlations except for the intrarater assertive and competitive dimension correlations (see Table 1). Of note is that 80% of interrater and

Table 1

<table>
<thead>
<tr>
<th>In-Basket</th>
<th>Inter (n = 15)</th>
<th>Intra (n = 8)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total scores</strong></td>
<td>.95 (.0004)</td>
<td>.95 (.0119)</td>
</tr>
<tr>
<td><strong>Dimension scores</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Authority figures</td>
<td>.79 (.0032)</td>
<td>1.00 (.0000)</td>
</tr>
<tr>
<td>Competitive situations</td>
<td>.29 (.2710)</td>
<td>.15 (.6933)</td>
</tr>
<tr>
<td>Assertive role</td>
<td>.88 (.0010)</td>
<td>.62 (.1003)</td>
</tr>
<tr>
<td>Imposing wishes</td>
<td>.84 (.0017)</td>
<td>.90 (.0177)</td>
</tr>
<tr>
<td>Stand out from the group</td>
<td>.90 (.0007)</td>
<td>.93 (.0137)</td>
</tr>
<tr>
<td>Routine administrative functions</td>
<td>.83 (.0019)</td>
<td>1.00 (.0000)</td>
</tr>
</tbody>
</table>
63% of intrarater scores for the competitive dimension were equal with the remaining ones different by only one point. The insignificant correlations resulted from the low variability of actual scores in that dimension (+1 to +2).

Intercorrelations between the total scores and the individual dimension scores for all 45 in-baskets revealed favorable data about the instrument's internal consistency (see Table 2). Most importantly, with significance set at $p < .05$, the correlations between the total scores and all six individual dimensions were significant, varied positively, and had fair to substantial magnitude. Also, most correlations between the individual dimensions were significant with positive, definite relationships. The only nonsignificant correlations were between the competitive dimension and four other individual dimensions--again, probably due to the low variability of competitive dimension scores.

**Success Potential Questionnaire**

The Success Potential Questionnaire measured each subject's probability of managerial success (see Appendix E). Because the subjects worked in hospitals with varied methods of performance evaluation and different terminology for managerial levels, a measure of success potential in the highest, attainable position was deemed the most equitable success criterion. Each subject's current boss assumed the subject had reached a top management position and then, using a two-step process, estimated his or her
Table 2

Intercorrelations Between In-Basket Total Scores and Dimension Scores and Among Dimension Scores

<table>
<thead>
<tr>
<th>In-Basket Dimension Scores</th>
<th>AF</th>
<th>CS</th>
<th>AR</th>
<th>IW</th>
<th>SOG</th>
<th>RAF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total scores</td>
<td>.74</td>
<td>.31</td>
<td>.76</td>
<td>.75</td>
<td>.67</td>
<td>.80</td>
</tr>
<tr>
<td>Dimension scores</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Authority figures(AF)</td>
<td>.30</td>
<td>.60</td>
<td>.31</td>
<td>.43</td>
<td>.52</td>
<td></td>
</tr>
<tr>
<td>Competitive situations(CS)</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assertive role(AR)</td>
<td>.48</td>
<td>.38</td>
<td>.52</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Imposing wishes(IW)</td>
<td></td>
<td>.35</td>
<td>.58</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stand out from a group(SOG)</td>
<td></td>
<td></td>
<td></td>
<td>.53</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rout. admin. functions(RAF)</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

Note. Spearman's rank correlations. NS = not significant. All listed correlations significant from $p = .0000$ to $p = .0468$. 

probability of executive success. In the first step, the bosses evaluated subjects' potential abilities in relationship to well-known organizational leadership skills. This step was not scored or analyzed; it was only intended to help the bosses think about the
subjects within a common conceptual framework of executive level success. In the second step, the bosses estimated the subjects' probability of success on a continuum from 0 to 100%.

Content validity procedures included seeking advice from nurse administrators and pilot-testing various revisions of the forms among nurses experienced in supervising middle-managers. Seven nurse experts simulated use of the final form (see Appendix F). Six of them approved the content—one objection was procedural and considered trivial.

Data Collection Procedures

First, I obtained permission from executives in the four hospitals to solicit the participation of nurse middle-managers and the managers' current bosses for the posttest phase of this study (see Appendix G). Secondly, I extracted preintervention demographic information, Miner Sentence Completion Scale pretest scores, and intervention data from OPTIMAX files. Then, I:

1. Obtained permission from the University of Kansas Medical Center's Human Subject Committee to collect data (see Appendix H).

2. Solicited nurse manager participation by presenting research needs at hospital meetings and by sending individual requests to each of the 72 managers who had participated in the OPTIMAX training and still remained in their management positions (see Appendix I for sample letter and study explanation).

3. Administered the Demographic Questionnaire, Miner
Sentence Completion Scale, and Thornton's In-Basket to subjects during scheduled group and individual sessions. Each subject formally consented prior to participation (see Appendix J).

4. Delivered an explanatory letter and Success Potential Questionnaire to the boss of each subject who completed posttests. Participating bosses signed a consent form (see Appendix K for letter and consent) and then provided success potential ratings.

Data Analysis

Data consisted of (a) demographic information, (b) pre and posttest Miner Sentence Completion Scale scores, (c) in-basket posttest scores, and (4) success potential probability ratings. Analysis consisted of descriptive statistics, Spearman's rank correlations, t-tests of sample means, and repeated measures ANOVA tests using Statistical Graphics Corporation (1991) and EMDP (1990) statistical programs. The significance level was set at $p < .05$. Because of the deficiencies of the 35-item Miner Sentence Completion scale and subscales, analysis concerning it focused on the total score for the 24 items that remained after elimination of items reducing internal consistency.
CHAPTER IV

FINDINGS, CONCLUSIONS, and IMPLICATIONS

The major purpose of this study was to enhance information related to the selection, promotion, and training of nurse managers by discerning relationships between nurse middle-managers' managerial motivation and their academic education, leadership training, and success potential. An additional purpose was to enhance information about an innovative managerial motivation instrument by comparing it to a traditional one. This chapter details findings related to the proposed relationships and conclusions related to the study's purposes. In addition, it includes implications for nursing.

Findings

Sample

The convenience sample consisted of nurse middle-managers from four large acute care hospitals in a midwestern metropolitan area who had participated in the OPTIMAX leadership training intervention (N = 98). The preintervention phase of this study included all 98 subjects; however, only 45 of the 72 subjects still holding middle-management positions after the intervention completed the postintervention posttests (n = 45). Therefore the posttest participants became the postintervention subsample. Sample and subsample characteristics are listed in Tables 3 and 4.
**Table 3**

*Age and Experience of Preintervention Sample Compared with the Postintervention Subsample*

<table>
<thead>
<tr>
<th>Category</th>
<th>Pre (N = 98)</th>
<th>Post (n = 45)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Range</td>
<td>M(SD)</td>
</tr>
<tr>
<td>Age</td>
<td>24-63</td>
<td>38.71(9.07)</td>
</tr>
<tr>
<td>Experience (years)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Middle-manager(a)</td>
<td>&lt;1-22</td>
<td>4.83(5.29)</td>
</tr>
<tr>
<td>Staff nurse/manager(a)</td>
<td>&lt;1-30</td>
<td>10.45(7.17)</td>
</tr>
<tr>
<td>Nursing profession(b)</td>
<td>3-36</td>
<td>15.05(7.86)</td>
</tr>
</tbody>
</table>

\(a\) In current hospital. \(b\) Number of years employed in the nursing profession.

The preintervention subjects ranged in age from 24 to 63 and had spent diverse time holding current middle-management positions, working in the same hospital, and being employed in the nursing profession. In addition, 96% of them were female. In terms of highest academic credentials, 70% held baccalaureate or higher degrees and 30% held associate degrees or diplomas. The vast majority (97%) of the nurses with baccalaureate or higher degrees
held at least one of these degrees in nursing, whereas only a few (3%) held only associate degrees or diplomas in nursing and baccalaureate or higher degrees in another field.

The characteristics of the postintervention subsample subjects were very similar to the characteristics of the entire sample. They had comparable ages and work histories and were all female. Again, the largest percentage (67%) had baccalaureate or higher degrees with the remaining percentage divided almost equally between associate degrees and diplomas. Only one subject attained

<table>
<thead>
<tr>
<th>Education levela</th>
<th>Percent Pre (N = 98)</th>
<th>Percent Post (n = 45)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associate degree</td>
<td>11</td>
<td>18</td>
</tr>
<tr>
<td>Diploma</td>
<td>19</td>
<td>15</td>
</tr>
<tr>
<td>Baccalaureate degree</td>
<td>55</td>
<td>49</td>
</tr>
<tr>
<td>Graduate degree</td>
<td>15</td>
<td>18</td>
</tr>
</tbody>
</table>

*aHighest academic credential held in or out of nursing.
a higher academic level between the pre and posttests---a nurse with a diploma attained a baccalaureate degree.

These summary statistics distinctly portray the average nurse middle-manager in this study. She is almost 40 years old with 15 years of nursing experience, has a baccalaureate degree in nursing, and has held a middle-management position for 5 years in a hospital she has worked in for 10 years.

In comparing educational levels with national averages, it appears this sample is more educated than most American nurse middle-managers. The U.S. Department of Health and Human Services (1990) found 25% of head nurses with associate degrees, 39.3% with diplomas, 31.1% with baccalaureate degrees, and only 4.4% with graduate degrees. The percentage of managers with baccalaureate and graduate degrees in this study is twice that of the national average and comparable to the 75% figure recently found in magnet hospitals renowned for managerial effectiveness (McKibbin, 1990).

Tests of the Hypotheses

Hypothesis 1. Nurse middle-managers with baccalaureate or higher degrees will have higher motivation to manage scores than nurse middle-managers with associate degrees or diplomas.

Because role-motivation theory purports management development can increase an individual's managerial motivation, I tested the implication that baccalaureate preparation in nursing
may lead to improved management expertise. I assumed baccalaureate curricula included more management education than associate degree or diploma curricula. Although Holland (1981) used the 35-item, free-response version of the Miner Sentence Completion Scale to measure motivation, this hypothesis partially replicated his study which concluded that nurse administrators with baccalaureate or higher degrees ($M = 3.00$, $N = 17$, $SD = 8.08$, $t = 3.46$, $p < .01$) had significantly higher motivation to manage scores than nurses with diplomas ($M = -4.42$, $N = 17$, $SD = 3.59$).

During the preintervention phase of this current study subjects completed the 24-item, multiple-choice version of the Miner Sentence Completion Scale as a pretest measure of managerial motivation. The total score mean for the entire sample was 0.99 ($N = 98$, $SD = 5.95$, score range: -14 to +15). The total score means for the hypothesized academic groups and for select demographic subgroups are listed in Table 5. Using one-tailed t-tests, I compared the total score mean of nurses with a minimum of a baccalaureate degree with the total score mean of nurses without baccalaureate degrees to determine if the mean score of the more educated nurses was significantly higher (see Table 6). Also, I compared the total score means of the demographic subgroups.

In contrast to the findings reported by Holland (1981), my analysis revealed no support for the hypothesis that subjects with baccalaureate or higher degrees would score significantly higher. In addition, it revealed no significant difference in score means
Table 5

Comparison of Miner Sentence Completion Scale (24-item) Total Score Means by Academic Education, Age, and Middle-Manager Experience

<table>
<thead>
<tr>
<th></th>
<th>n&lt;sup&gt;a&lt;/sup&gt;</th>
<th>M&lt;sup&gt;b&lt;/sup&gt;(SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Academic education&lt;sup&gt;c&lt;/sup&gt;</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Associate degree/diploma</td>
<td>29</td>
<td>0.72(7.01)</td>
</tr>
<tr>
<td>Baccalaureate/graduate degree</td>
<td>67</td>
<td>1.10(5.48)</td>
</tr>
<tr>
<td><strong>Age&lt;sup&gt;d&lt;/sup&gt;</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24-39</td>
<td>55</td>
<td>0.55(6.11)</td>
</tr>
<tr>
<td>40-63</td>
<td>37</td>
<td>1.32(5.79)</td>
</tr>
<tr>
<td><strong>Middle-manager experience&lt;sup&gt;e&lt;/sup&gt;</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 6 years</td>
<td>63</td>
<td>1.76(6.34)</td>
</tr>
<tr>
<td>6-22 years</td>
<td>29</td>
<td>-0.62(4.95)</td>
</tr>
</tbody>
</table>

<sup>a</sup>n reflects missing data. <sup>b</sup>Potential score range -24 to +24. <sup>c</sup>Highest credential held. <sup>d</sup>Divided at sample age mean. <sup>e</sup>Divided at sample years of experience in current position mean.

between subjects grouped above and below the age mean. However, subjects with less than six years of experience as middle-managers in their current positions had significantly higher scores than those with more experience.
Table 6

Analysis of Differences in Miner Sentence Completion Scale Scores by Academic Education, Age, and Middle-Manager Experience using One-Tailed t-Tests

<table>
<thead>
<tr>
<th></th>
<th>t(df)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Academic Education:</strong> a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baccalaureate/graduate degree vs.</td>
<td>0.29(94)</td>
<td>.387</td>
</tr>
<tr>
<td>Associate degree/diploma</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Age:</strong> b</td>
<td></td>
<td></td>
</tr>
<tr>
<td>40 or over vs.</td>
<td>0.61(90)</td>
<td>.271</td>
</tr>
<tr>
<td>Under 40</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Experience:</strong> c</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 6 years vs.</td>
<td>1.79(90)</td>
<td>.038</td>
</tr>
<tr>
<td>More than 6 years</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

aHighest credential held. bDivided at age mean. cDivided at years of experience mean.

Holland (1981) had concluded over a decade ago that the different educational backgrounds "did reflect differences in attitudes toward specific roles that relate to managerial performance" (p. 20). My current findings, in contrast, reflect no
significant difference in attitudes toward managerial roles between baccalaureate and nonbaccalaureate prepared nurse managers and that nurses with less management experience have more positive attitudes toward managerial roles than those with more experience. In addition, by proportionately adjusting for differences in the number of items between the 24 and 35-item scales, the overall mean score \( (M = 0.99) \) of the subjects in this study is comparable to Holland's (1981) mean score \( (M = 3.00) \) for baccalaureate prepared nurse managers. This situation poses three questions: why are there no significant differences between educational levels now, why does this current group of nurse managers have a mean score comparable to the mean score of the more educated nurses of a decade ago, and why do less-experienced nurse managers have more positive attitudes toward the managerial roles? Could it be that management education and or leadership training is now spread more generally across educational levels? Or, could on-the-job training and or development programs be mediating the differences?

In addition to the findings related to education, the overall total mean score for the entire sample seems relatively low (after adjusting for differences in number of scale items used) in comparison to reported means above six for groups of hospital administrators (Holland, Black, & Miner, 1987). This finding indicates that nurse managers, in general, may lack motivation to manage and therefore may be limiting their success potential. Henderson (1987) expressed a similar concern when she found that a
group of chief nurse executives lacked socialized power motives.

**Hypothesis 2.** Nurse middle-managers who participate in a leadership building program will have significantly higher motivation to manage scores after the training than the same nurse middle-managers did before the training.

This hypothesis directly tested Miner's proposition that leadership training focused on managerial skills (e.g., decision-making) could increase managerial motivation. During the postintervention phase of this study subjects who had completed the Miner Sentence Completion Scale as a pretest completed it again as a posttest at varied intervals after the intervention (i.e., Wave A = 16-months; Wave B = 10-months). Subjects who participated in the postintervention phase of this study had attended an average of 83% of the training hours (n = 45, M = .83, SD = .19, range = .30 to 1.00). In addition, the participation rate was approximately equal for the two waves (Wave A = 82%; Wave B = 84%).

I analyzed the data using multiple, 2-factor, repeated measures ANOVAs to test hypotheses about the effects of the intervention and about the effects of time since completion of the intervention (Waves A & B), age, education, and experience (see Table 7 for total score means). The harmonic mean adjusted for differences in group size. The main effect for the intervention was significant $F = 16.40(1, 41), p < .001$. Considering the time
Table 7

Mean Differences Between Miner Sentence Completion Scale Pretest and Posttest Total Scores by Wave, Age, Education, and Experience

<table>
<thead>
<tr>
<th>Category</th>
<th>n</th>
<th>Pre^b(SD)</th>
<th>Post^b(SD)</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Sample</td>
<td>43</td>
<td>1.09(5.55)</td>
<td>2.79(4.64)</td>
<td>.001</td>
</tr>
<tr>
<td>Waves^c</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wave A (16-month)</td>
<td>15</td>
<td>-1.13(6.51)</td>
<td>2.20(4.69)</td>
<td>.01</td>
</tr>
<tr>
<td>Wave B (10-month)</td>
<td>28</td>
<td>2.29(4.66)</td>
<td>3.11(4.67)</td>
<td>NS</td>
</tr>
<tr>
<td>Age^d</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under 40</td>
<td>22</td>
<td>0.73(6.10)</td>
<td>2.46(4.80)</td>
<td>NS</td>
</tr>
<tr>
<td>40 or over</td>
<td>20</td>
<td>1.35(5.12)</td>
<td>2.95(4.59)</td>
<td>NS</td>
</tr>
<tr>
<td>Academic education^e</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Associate degree/diploma</td>
<td>15</td>
<td>1.07(6.72)</td>
<td>4.13(4.66)</td>
<td>.01</td>
</tr>
<tr>
<td>Baccalaureate/higher</td>
<td>28</td>
<td>1.11(4.95)</td>
<td>2.07(4.55)</td>
<td>NS</td>
</tr>
<tr>
<td>Middle-manager experience^f</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 4 years</td>
<td>25</td>
<td>1.16(6.43)</td>
<td>3.40(5.12)</td>
<td>.05</td>
</tr>
<tr>
<td>More than 4 years</td>
<td>17</td>
<td>0.82(4.28)</td>
<td>1.65(3.76)</td>
<td>NS</td>
</tr>
</tbody>
</table>

Note. Newman-Keuls Multiple Comparison Tests. NS = not significant.

^a Reflects missing data. ^b Range -24 to +24. ^c Grouped by interval between intervention and posttest. ^d Divided at postintervention subsample age mean. ^e Highest credential held. ^f Divided at postintervention subsample years of experience mean.
between the intervention and the posttest, there was a significant interaction \( F = 6(1, 41), p = .02 \). The Wave A pretest total score mean was significantly lower than the Wave B pretest total score mean. Neither age, education, nor experience had a significant main effect. Although the overall \( F \) for the interaction effect with education was not significant, the Newman-Keuls contrast showed that subjects with baccalaureate or higher degrees scored significantly lower on the posttest than subjects with associate degrees or diplomas (\( p < .01 \)).

Although ANOVA did not pinpoint responsibility for the overall increase in posttest scores to time, age, education, or experience, the bottom line is that the hypothesis was supported. The nurse middle-managers who participated in the leadership building program had significantly higher motivation to manage scores after the training than they did before the training. Therefore, the leadership training did positively influence attitudes toward managerial roles as was expected per the literature review. Miner (1977c, 1978b), McClelland, Rhinesmith, and Kristensen (1975), and McClelland and Burnham (1976) had all found increases in managerial motivation among subjects who had participated in leadership training focused on managerial skills and behavior. Most importantly, because Miner's role-motivation theory purports that increased managerial motivation represents increased potential for managerial success, the increase in posttest scores in this study suggests that success potential can
be enhanced among nurse middle-managers.

**Hypothesis 3.** Nurse middle-managers who have high motivation to manage scores will have higher success potential ratings than nurse middle-managers with low motivation to manage scores.

This hypothesis was an indirect test of Miner's proposition that individuals with more motivation to manage will advance more quickly, have higher performance ratings, and be more apt to meet organizational effectiveness criteria than those with less motivation to manage. Potential success at the chief nurse executive level served as the management success criterion. Bosses, of subjects who had completed both motivation posttests, provided a success probability rating on these subjects by completing Success Potential Questionnaires (89% response rate). The ratings ranged from 3-99% ($n = 40$, $M = 54.83$, $SD = 29.16$, range 0-100%). I applied Spearman's rank correlation coefficient to the subjects' ratings and posttest total scores (see Table 8).

To analyze these correlations I used the format suggested by Williams (1986). First, consider only statistically significant correlations. In this case, only the correlation between the Miner Sentence Completion Scale total scores and success potential ratings was significant. Second, compare the direction of the significant correlations with expectations. The significant correlation was positive, as expected. Finally, interpret the
Table 8

<table>
<thead>
<tr>
<th></th>
<th>Success Potential</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Posttest</td>
<td>rho</td>
</tr>
<tr>
<td>MSCS (24-item) total scores$^a$</td>
<td>0.34</td>
<td>0.0359</td>
</tr>
<tr>
<td>In-Basket total scores$^b$</td>
<td>0.08</td>
<td>0.6602</td>
</tr>
</tbody>
</table>

$^a_n = 40$, potential score range -24 to +24. $^b_n = 32$ (eliminates subjects who did not complete all in-basket items), potential score range +6 to +30.

The magnitude of the significant correlations. The significant correlation is low but does represent a definite small relationship between motivation to manage and success potential. In fact, it is similar to the median correlation coefficient of 0.35 reported by Miner (1985b) after his review of multiple studies.

Based on this analysis, the hypothesis was supported. Therefore, motivation to manage among nurse middle-managers does appear to be related to their potential success in meeting
organizational effectiveness criteria. Furthermore, there may be a rationale for the low correlation. The fact that these middle-managers were supervising other professionals in organizations that are adapting collaborative, decentralized approaches to decision-making and problem-solving may have played a role in their responses to scale items related to power and assertiveness.

Although Miner (1977c, 1978b, 1985b) felt that these new decision-making and problem-solving approaches did not eliminate the need for managerial motivation, he warned that managers supervising professionals may require a different set of role behaviors and motivations.

Hypothesis 4. The motivation to manage scores obtained by using Thornton's In-Basket will significantly correlate with the motivation to manage scores obtained by using the Miner Sentence Completion Scale.

I tested this hypothesis to advance information concerning an innovative measure of managerial motivation. I compared Thornton's newly developed in-basket to the multiple-choice version of the Miner Sentence Completion Scale with hopes that the in-basket will eventually modernize the testing of role-motivation theory. I tested the hypothesis by applying Spearman's rank correlation coefficient to the posttest scores of the subjects who completed both posttest instruments (n = 36). Although 45 subjects had
completed the Miner scale posttest and had attempted to complete the in-basket posttest, only 36 subjects were able to complete all of the in-basket items in the allotted time frame. I compared total score values from the 35-item and 24-item versions of the Miner Sentence Completion Scale and subscale values to augment psychometric information.

Analysis of multiple correlations (i.e., total scores versus total scores and dimensions, and dimensions versus dimensions) revealed no significant findings (see Table 9). Therefore, the hypothesis that the motivation to manage scores obtained by using Thornton's In-Basket would significantly correlate with the motivation to manage scores obtained by using the Miner Sentence Completion Scale was not supported. I had expected at least the total scores to correlate. According to Williams (1986), if no significance is found, direction and magnitude are irrelevant. This lack of correlation combined with the lack of in-basket score correlation with success potential is disappointing because in terms of face validity the in-basket appeared to be measuring managerial motivation in an updated way.

The rationale behind the lack of correlation might include one instrument being objective and the other projective; however, Miner's scales, one objective and one projective, correlated (Miner, 1978a, 1985b). Additional reasons may relate to the ones offered by Schippmann, Prien, and Katz (1990). They not only questioned the lack of psychometric soundness in a large percentage
Table 9
Comparison of Miner Sentence Completion Scale (MSCS) Scores to Thornton's In-Basket Scores using Spearman's Rank Correlation Coefficient

<table>
<thead>
<tr>
<th>MSCS Scores</th>
<th>Total</th>
<th>AF</th>
<th>CS</th>
<th>AR</th>
<th>IW</th>
<th>SOG</th>
<th>RAF</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSCS total scores</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>35-item</td>
<td>.15</td>
<td>.23</td>
<td>.06</td>
<td>.10</td>
<td>.05</td>
<td>-.08</td>
<td>.16</td>
</tr>
<tr>
<td>24-item</td>
<td>.12</td>
<td>.18</td>
<td>.04</td>
<td>.07</td>
<td>.00</td>
<td>-.03</td>
<td>.12</td>
</tr>
<tr>
<td>Dimension scoresa</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Authority figures(AF)</td>
<td>.12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Competitive games(CG)</td>
<td>.14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Competitive situations(CS)</td>
<td>.12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assertive role(AR)</td>
<td>-.09</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.17</td>
</tr>
<tr>
<td>Imposing wishes(IW)</td>
<td>.12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.00</td>
</tr>
<tr>
<td>Stand out from a group(SOG)</td>
<td>.14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.14</td>
</tr>
<tr>
<td>Rout. admin. functions(RAF)</td>
<td>.01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.02</td>
</tr>
</tbody>
</table>

Note. n = 36 (omits those who did not finish all in-basket items).
Both instruments administered simultaneously after leadership intervention. No significant correlations; p = .1567 to .9904.

aDimension scores are from the 35-item MSCS.
of in-baskets, but, in addition, deemed that validity is usually higher in in-baskets specifically constructed for defined target jobs. Although, this in-basket was constructed to closely align with role-motivation theory, it employed a general sales manager's setting which was not the target job of this study's subjects.

In addition, I encountered some problems with the in-basket that may serve as useful information for its further development. I perceived the in-basket to be a realistic, worthwhile exercise especially useful for management training; however, some problems in the administration and scoring of the instrument emerged. First, almost 20% of the subjects who attempted the in-basket did not complete an average of 25% of the 19 items. Is it possible that this resulted from a time management deficit, learned skill, or working style rather than attitudes toward managerial roles? Secondly, several of the subjects cited that a major stimulus for the competitive role behavior (i.e., a request to bet money) was in conflict with their ethical values. This conflict may have lowered overall score means and probably is related to the low variability of the competitive dimension scores. Thirdly, the role behaviors are not stimulated equally across the items. This appeared to lower the variability of dimensional scores.

Limitations

The findings of this study are limited because of nonrandom sampling, a midwestern-only setting, a higher than national average
education level of the subjects, and the psychometric uncertainties of the managerial motivation instruments. Therefore, the results are not generalizable to the general population of nurse middle-managers working in large, acute care hospitals.

Conclusions

This study was based on Miner's (1965, 1977c, 1978b) role-motivation theory under the assumption that nurse-middle managers working in complex hospital settings fit the domain of his theory--bureaucratic organizations. This was the first known study to test Miner's major theoretical propositions with a sample of nurse managers.

Three hypotheses tested the propositions that individuals with more motivation to manage would be more successful organizational managers and that management development could increase motivation to manage. In addition, a fourth hypothesis tested a supposition that Miner's traditional measure of managerial motivation would correlate with Thornton's innovative in-basket measure. Interestingly, data analysis revealed that motivation to manage, as measured by the Miner Sentence Completion Scale, (a) was not significantly higher among baccalaureate prepared nurses than among nonbaccalaureate prepared nurses, (b) was positively influenced by leadership training focused on managerial skills, (c) was significantly related to the success criterion of supervisory success potential ratings, and (d) lacked correlation with the
scores from Thornton's in-basket.

These findings support the integration of managerial motivation into the selection, promotion, training, and development of nurse managers. In addition, they support further development of the in-basket.

Implications for Nursing

From the above findings and conclusions, there are several implications for the educational, administrative, and research aspects of the nursing profession:

Education

Because leadership training focused on managerial skills positively influenced motivation toward managerial roles and because this motivation to manage was related to success potential--I suggest a reevaluation of the curricula in academic and management training programs. It is possible the current content of some programs is too focused on managerial functions and theory at the expense of actual behavioral training. How can we expect nurses to be effective managers if they have not been behaviorally trained to communicate with superiors, peers, and subordinates, deal with personnel problems, make decisions, take stands on important issues, exercise power over others, and tackle administrative paperwork? Miner (1985a) and McClelland (1975) both emphasized the fears and other negative emotions that can paralyze
an unaware and behaviorally untrained manager. For example, they agreed that the power requirement, if viewed negatively as undemocratic, can cause managers unaware of its importance to feel guilty about using power or to simply avoid exercising power.

Administration

In terms of the selection and promotion of nurse managers, the findings related to leadership training and success potential might encourage administrators to take motives, in addition to skills, into consideration. Would it not be advantageous to select nurses for managerial roles, who were already motivated to perform management roles if those nurses had a greater potential to improve overall organizational effectiveness? The selection process could include the administration of managerial motivation instruments such as Miner's Sentence Completion Scale. Managerial motivation also could be added to the behaviors and skills currently assessed in managerial assessment center contexts.

Because motivation is generally defined as energy toward a goal--anything blocking that flow of energy toward managerial roles could affect the level of managerial motivation and in turn--affect managerial effectiveness. Ghishelli (1971), McClelland (1975), and Miner (1985a) all emphasized the importance of an organizational structure that supports managerial motivation. For example, they purported that a lack of autonomy blocks a manager's willingness to make timely and responsible decisions. They also warned that
managers who are willing to exercise power and perform other managerial roles but who experience obstacles are likely to find work elsewhere. Therefore, I feel this study's findings might encourage nurse executives to survey their environments in an effort to find and reduce any obstacles to managerial motivation. Internal and external organizational structures that encourage motivation to manage might help to prevent the apathy and or turnover of potentially successful managers and therefore increase overall organizational effectiveness.

Questions for Further Research

1. Considering that nurse manager success is difficult to measure across settings--what are some criteria or measures that could be used to assess the relationship of actual success to nurse managers' motivation to manage?

2. Miner (1977c) questions whether managers that supervise professionals require a different set of motives for success (i.e., motives that stimulate ideological versus hierarchic control). An investigation into this dilemma would help decide if the requirement of managerial motivation is equally important for nurse managers and business managers.

3. Would Thornton's in-basket correlate with the projective version of Miner's scale.
References


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Hardy, M. E., & Hardy, W. L. (1988b). Role stress and role strain. In M. E. Hardy, & M. E. Conway (Eds.), Role theory: Perspectives for health professionals (2nd ed.) (pp. 159-239). Norwalk, CT: Appleton & Lange.


Miner, J. B. (1978b). Twenty years of research on role-motivation


228-232.


24.


Appendix A

OPTIMAX Permission
The University of Kansas Medical Center

School of Nursing

Roma Lee Taunton, R.N., Ph.D.
Principal Investigator
Marge Bott, R.N., M.A.
Senior Research Associate

Cynthia O. Woods, R.N., Ph.D.
Leadership Program Manager
Helen Hansen, R.N., Ph.D.
Leadership Specialist

November 4, 1991

TO: Ruth Anderson
OPTIMAX Research Assistant

FROM: Roma Lee Taunton, RN, PhD

RE: Permission to Use Research Data

As a student research assistant for the research project entitled, "Nurse Managers, Nurse Retention, Patient Outcomes" (OPTIMAX, NIH #NR02092-03), you have permission to use the study's data for your thesis. Use the following guidelines:

1. You may develop and complete your thesis using data related to the managers prior to the primary publication of data.

2. You may present your study proposal and research findings to your thesis committee members and collection site participants without further permission; however, always cite the OPTIMAX study and its funding source.

3. You may submit articles with your research findings for publication and present your findings in research forums or educational programs; however, obtain permission from the OPTIMAX research team and always cite the OPTIMAX study and its funding source. Any articles you submit for publication will be co-authored by an appropriate member(s) of the team.

4. Also, because your study is embodied in OPTIMAX, you have permission to use our copies of the multiple-choice version of the Miner Sentence Completion Scale, Form H, to retest subjects for your thesis.

Roma Lee Taunton, RN, PhD
Principal Investigator

OPTIMAX

39th and Rainbow Blvd., Kansas City, Kansas 66103 • (913) 588-3392
Appendix B

Demographic Questionnaire
DEMOGRAPHIC QUESTIONNAIRE

What is the highest academic degree you hold?
PLEASE CIRCLE!

a. Associate Degree in Nursing
b. Nursing Diploma
c. Baccalaureate Degree in Nursing
d. Baccalaureate Degree in Another Field
e. Master's Degree in Nursing
f. Master's Degree in Another Field
g. Other: ____________________________

Did you receive this degree in the last two years?

YES _____ NO _____

If yes, what date did you receive it?

MONTH _______ YEAR _______
Appendix C

Miner Sentence Completion Scale, Form H

Multiple-Choice Version
OPTIMAX

MINER
SENTENCE
COMPLETION
SCALE
MINER SENTENCE COMPLETION SCALE

DIRECTIONS:

Please read carefully each item on this questionnaire about your work and your personal characteristics. Each of the items is followed by several response options. Select ONE response for each item and fill in the corresponding bubble on the separate answer sheet. In some instances it may seem difficult to select one option over another. Your first response probably will be the most accurate. Please try to respond to every item.

Example

QUESTIONNAIRE

1. Fair reward ....

A. should be expected by all
B. should take into account
   one's education and training
C. is a pipe dream
D. should be given only for a
   job well done
E. is an employer's obligation
F. can be difficult to determine

PLEASE BEGIN
Please complete these sentences by checking the one among the six alternatives that best expresses your real feelings. There may be situations in the sentence stems that are not applicable in your current lifestyle. However, based on your exposure to many different situations, it is likely that you have feelings about those situations. Respond to such items from an "If I were to . . . ." perspective. Try to complete each sentence.

1. My family doctor . . .
   A. is a good doctor
   B. is a very important person in my life
   C. is someone I see when necessary
   D. could show more interest in patients
   E. is always available when needed
   F. is a quack and does not know much

2. Sitting behind a desk, I . . .
   A. do a lot of work
   B. become bored
   C. often wonder if I will get the work done
   D. feel confined
   E. feel obligated to do my job effectively
   F. feel comfortable

3. Shooting a rifle . . .
   A. takes skill and accuracy
   B. is relaxing
   C. I try to be careful
   D. is a sport I enjoy
   E. doesn't appeal to me
   F. can be very dangerous

4. Being interviewed for a job . . .
   A. is necessary
   B. is a pain in the neck
   C. you should tell the truth
   D. is very interesting
   E. makes me nervous
   F. I am confident

5. Giving orders . . .
   A. is something I am not very good at
   B. is not always a pleasant task
   C. should be done in a tactful manner
   D. is better than receiving them
   E. is sometimes necessary
   F. gives me a good feeling
6. Brothers and sisters . . .
   A. have the same mother and father
   B. are nice to grow up with
   C. should help each other
   D. sometimes fight
   E. can mean a lot to each other
   F. can be very difficult to understand

7. Athletic contests . . .
   A. are something I like to participate in
   B. are not my cup of tea
   C. are exciting
   D. are very competitive
   E. have questionable value
   F. should always be played to win

8. Wearing a necktie . . .
   A. is uncomfortable in hot weather
   B. does not bother me at all
   C. is a status symbol
   D. doesn't do a thing for me
   E. makes me feel that I am well dressed
   F. makes me feel important

   A. are fun to make
   B. are sometimes good, sometimes bad
   C. should be made and stuck to
   D. should be carefully thought out
   E. must be made
   F. sometimes hurt, when they're wrong

    A. would be interesting and challenging
    B. is not for me
    C. you should be an honest person
    D. requires a lot of hard work
    E. would be exciting
    F. could be nerve wracking
11. When one of my men asks for advice . . .
   A. I try to be helpful
   B. I feel good
   C. I give it freely
   D. I listen, but do not give advice
   E. I always listen with sincerity
   F. I try to help him make the decision by remaining neutral

   A. are fine for those who belong to a country club
   B. are very formal
   C. can be relaxing
   D. bore me
   E. are fun
   F. are a waste of time

13. Conducting a meeting . . .
   A. makes me nervous
   B. is something I like to do
   C. does not necessarily produce the intended result
   D. is good experience
   E. is not difficult
   F. takes planning

   A. make questionable decisions at times
   B. are enlightened individuals
   C. make important decisions
   D. are relatively fair and impartial
   E. are dull
   F. are o.k. I guess

15. Getting ahead . . .
   A. is my main objective
   B. means many things to many people
   C. is impossible to achieve
   D. is not the most important thing to me
   E. is gratifying
   F. means a lot of hard work

   A. you should express yourself clearly
   B. can be a bore
   C. makes me feel important
   D. saves a great deal of time
   E. doesn't bother me
   F. is time consuming
17. Punishing children . . .
   A. is necessary at times
   B. requires some thought
   C. when they're wrong, is best for everyone concerned
   D. is not the best way to correct behavior
   E. is a depressing task
   F. now will have its rewards later

18. If I were running my own business . . .
   A. I would make it a success
   B. I would really enjoy it
   C. I would do my best to make a profit
   D. I would probably not enjoy it
   E. I would be my own boss
   F. I would probably go bankrupt

19. Marriage . . .
   A. has it ups and downs
   B. is a serious thing
   C. serves no useful purpose
   D. is a two-way partnership
   E. is wonderful
   F. can be satisfying and rewarding

20. If I were physically disabled . . .
   A. I would try to make the best of my remaining capabilities
   B. I would need a lot of help
   C. It would be quite a blow
   D. I don't know for sure what I would do
   E. I would try to get involved in something
   F. I would become very depressed

21. Top management . . .
   A. can make mistakes
   B. I respect
   C. seems to be o.k. most of the time
   D. are people doing a good job
   E. isn't involved with the lower levels enough
   F. sometimes has a difficult task
22. Teaching a class . . .
   A. interests me
   B. you must be prepared and able to get your viewpoint across
   C. is not a job I want to do
   D. is a very rewarding experience
   E. requires patience and understanding
   F. makes me nervous

23. Making long distance telephone calls . . .
   A. should be kept to a minimum
   B. saves a lot of time
   C. is o.k. when needed
   D. is easy today
   E. is a good way to stay in touch
   F. costs a lot of money

   A. is very relaxing and enjoyable
   B. attracts an older crowd
   C. is a time consuming hobby
   D. is for those who enjoy it
   E. is not my game
   F. is one thing I would like to do more

25. My education
   A. will never be complete
   B. is very important to me
   C. hasn't helped me much
   D. is not what it should have been
   E. is something I am very proud of
   F. has required hard work

26. Getting my shoes shined . . .
   A. is not something I do often
   B. improves my appearance
   C. doesn't do anything for me
   D. makes me feel important
   E. is a bore
   F. is routine
27. If I am promoted . . .
   A. I would be proud
   B. I would lose many friends
   C. I will try to do my best
   D. it will be based on what I know, not who I know
   E. I'll faint
   F. I will get a raise in pay

   A. usually lose
   B. like to win
   C. get bored easily
   D. have a good time
   E. concentrate on what I am doing
   F. do not cheat

29. Getting other people to do what I want . . .
   A. is not always easy
   B. gives me a feeling of accomplishment
   C. doesn't always seem that important
   D. is one of my ideals
   E. is sometimes necessary
   F. if they don't want to, is hard for me

30. My father . . .
   A. has disappointed me
   B. is (was) a wonderful person
   C. is (was) the head of his household
   D. is (was) a man I admired very much
   E. has had a great effect on me
   F. is best forgotton

31. Arguing for a point of view
   A. is exciting
   B. I stand up for what I feel is right
   C. can cause ill feelings
   D. is alright if you know what you're talking about
   E. sometimes seems pointless
   F. I listen to all that is said
32. When driving a car, I . . .
   A. drive defensively
   B. try to observe the law
   C. feel good
   D. remind myself to be alert
   E. feel at ease
   F. tend to tighten up

33. Presenting a report at a staff meeting
   A. requires preparation
   B. makes me nervous
   C. is o.k.
   D. can be satisfying
   E. would be pain in the neck
   F. is the kind of thing I like

34. When running a race, I . . .
   A. usually don't do too well
   B. hold my own
   C. try to pace myself
   D. get out of breath
   E. try to win
   F. enjoy the competition

35. Writing memos . . .
   A. is a means of expression and communication
   B. is a necessary evil
   C. can be boring
   D. is a good habit to get into
   E. should be done carefully and completely
   F. helps me to remember things

36. Making introductions . . .
   A. helps to put people at ease
   B. should be done properly
   C. is awkward at times
   D. gives me pleasure
   E. does not present a problem
   F. can sometimes become a bore
37. Final examinations . . .
   A. take a lot of study
   B. give me anxiety
   C. help to show what you have learned
   D. are a challenge I enjoy
   E. are a poor way to measure knowledge
   F. are not difficult, if you are prepared

38. Policeman . . .
   A. have a difficult job to do
   B. are brave
   C. are underpaid and not appreciated enough
   D. represent authority
   E. generally think they are superior to everyone else
   F. sometimes misuse the law

39. Yacht racing . . .
   A. is expensive
   B. is beautiful
   C. is exciting
   D. is something I know nothing about
   E. doesn't really interest me
   F. looks like it would be fun

40. Going to Sunday school . . .
   A. is a good place to meet people
   B. is a source of peace
   C. generally isn't very rewarding
   D. helps in making a well rounded person
   E. is a chore
   F. is an individual matter
Appendix D

Thornton's In-Basket with Permission to Use

(The in-basket sample includes "Instructions for Participant" and 6 of the 19 in-basket items.)
October 9, 1991

Ruth Anderson
1616 Roanoke Drive
Warrensburg, MO 64093

Dear Ruth:

It was good to talk with you about your thesis. I'm sorry for any confusion I introduced about the use of the in-basket. You are free to use the in-basket at no charge. We have done no more revision of the scoring standards. I have enclosed another copy for your review.

We agreed that you would (1) study the scoring guidelines, (2) score three in-baskets, & (3) come to Fort Collins to confer about the scoring. Please call to set up a time.

In exchange for use of the in-basket you will send me a copy of the data from the nurses, including the in-basket scores and the Miner sentence completion test scores.

Call if you have questions. Good Luck.

Cordially,

George C. Thornton III
Professor and Chair
Industrial/Organizational Psychology Program

Encl. IB scoring guidelines
3 completed IB's
3 scoring sheets
SALES SUPERVISOR
Instructions for participant

You are Pat, the newly appointed sales supervisor for Super Clean Company. Super Clean is a distributor of a variety of household cleaners and detergents. As supervisor, you are in charge of six team leaders. The team leaders' main function is to organize and direct sales people activities in allocated residential and industrial areas. Super Clean's sales philosophy is to use word of mouth and a large number of sales people that function on a commission basis. Team leaders are remunerated partially on a salary and partially on a commission basis. They organize door to door sales, tea parties, demonstrations or any means to increase or at least maintain sales figures.

Your application for the position of sales supervisor was successful and you have been asked to move into the position of Sam, the previous supervisor, who moved to a division of Super Clean in another part of the country. Your position is official and in effect now. Due to the fact that you were asked by the District Marketing Manager (Mark) to attend a supervisors orientation program at a remote meeting place during the week of October 16, you will only be back at work on Monday, October 23, and you can not be reached. However, Mark (the District Marketing Director) said that things were not going so well at your section and that he would appreciate your coming in on Saturday, October 14, to look over the situation and take care of the most urgent problems.

It is now Saturday, October 14, and you are at your new desk. You have 45 minutes to look over the material that Anne, your secretary, left for your attention. The switchboard is closed, so you can make no phone calls. You must work alone and you have access only to the materials which were left for you. It is important to let the relevant parties know exactly what you plan with each of the items in the in-basket, so everything you do or plan to do should be in writing. Going through the items, you can write notes, memos, and letters, plan meetings, phone calls and make decisions. You may write directly on the items or use the supply of stationary that is provided. Clip any notes or letters to the in-basket items to which they refer.
To: Pat  
From: Anne  
RE:  

Welcome aboard!

To help you with your first day on the job, short though it may be, I have assembled some material which may be helpful to you. We are looking forward to having you on our sales team. Let me know if I can do anything for you while you're gone.

a) Organizational chart  
b) Calendar  
c) Performance records for your sales staff  
d) Some unfinished business  

Since you will be gone next week, I will be working most of the time on work that Benson gave me to do.
DISTRICT ORGANIZATION CHART

District Director
Andre

District Admin Manager
James

District Marketing Manager
Mark

Shipping Manager
Julie

Secretary: Anne

Sales Supervisor
Sam

6 x Team leaders

Sales Supervisor
Benson

Sales Supervisor
Julie

6 x Team leaders

Team Leaders
Charles
Eddie
Joan
Kim
Lynn
Steve
<table>
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<td>8:30 District Sales Meeting</td>
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Quarterly Sales Performance Summary

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<td>Lynn</td>
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<td>Steve</td>
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</table>

Rank in terms of performance of all division team leaders

Rank = (1 = best performer; 16 = worst performer)
TO: Pat
FROM: Mark
RE: District Sales Meeting

At our next meeting (October 23) we will be sharing ideas on how to increase sales in low income areas. Give me some good suggestions before you leave and I will put them on a list from all the supervisors for us to discuss at that meeting.

We can give you extra time to make a presentation on your suggestions if you want to. This might give the sales team a chance to get to know you better. Alternatively we can discuss your suggestions in the group as we usually do. Please let me know of your decision.
TO: Pat
FROM: Eddie (Team leader)
RE: Sales territories

October 13

Congratulations on your new job. I am glad we have someone new as supervisor, because maybe someone will do something about Joan. She has been visiting homes in my area for some time. I have told Sam about this but with no effect. What are you going to do?
Appendix E

Success Potential Questionnaire
SUCCESS POTENTIAL QUESTIONNAIRE

Assume that ___________________________ has, at some time in the future, reached the top nursing management position (chief nurse executive or equivalent) in a medical center with 300 or more beds. Please rate the probability of her success in that role by using a two-step process: (1) rate her on three leadership skills, and then (2) use that information to help you assess her overall probability of success.

STEP 1

Consider that leadership, self-confidence, political savvy, creativity, critical thinking, humor, flexibility, risk taking, strategic planning, creating organizational vision, building employee trust, and gaining employee commitment are perceived as characteristics or skills important for success in executive level organizational management. Using the scales below, place an "X" at the point you believe ___________________________’s potential ability lies in regard to three of these factors:

CREATING ORGANIZATIONAL VISION: Low Medium High

BUILDING EMPLOYEE TRUST: Low Medium High

GAINING EMPLOYEE COMMITMENT: Low Medium High

STEP 2

Now weighing the factors you considered in step 1 and any other factors you think are important to success at the nursing executive level, please complete the scale below:

PLACE AN 'X' AT THE POINT YOU BELIEVE TO BE THE PROBABILITY OF ___________________________’S SUCCESS AT THE NURSING EXECUTIVE LEVEL.

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Appendix F

Success Potential Questionnaire

Content Validity Forms and Letters
TO: February 14, 1992

FROM: Ruth Anderson, RN, BSN

RE: Assistance with Content Validity

I am completing a thesis as part of the requirements for a Master's Degree in Nursing from the University of Kansas School of Nursing under the guidance of Dr. Roma Lee Taunton. The research study is entitled "Nurse Middle-Managers: The Relationship of Managerial Motivation to Academic Education, Leadership Training, and Success Potential."

I developed a Success Potential Questionnaire to measure managerial success potential. I need your help to verify this tool measures what I intend it to measure. Please critique it for clarity and appropriateness.

Thinking about the nurse managers you evaluate, please (a) read the tool, (b) attempt to rate one or more of your managers, and then (c) critique the tool:

Is it clear that I'm trying to get a measure of executive level success potential versus a measure of current effectiveness? If not, what would clarify this?

Do you have any other criticisms or suggestions?

You will not be identified personally in any publication of this data, but please complete the attached demographic questionnaire. This will be used to describe the collective expertise and preparation of all individuals helping with the content validity of this tool.

Please return this form to me by using the self-addressed, enclosed envelope. I sincerely thank you for your assistance.

Ruth M. Anderson, RN
Graduate Student
University of Kansas Medical Center
School of Nursing
DEMOGRAPHIC DATA FOR NURSE EXPERTS

CURRENT POSITION: ________________________________

NUMBER OF YEARS IN THIS SPECIFIC POSITION: _________

EDUCATIONAL PREPARATION: (PLACE AN X BY ALL THAT APPLY.)

___ ASSOCIATE DEGREE IN NURSING
___ NURSING DIPLOMA
___ BACHELOR'S DEGREE IN NURSING
___ BACHELOR'S DEGREE (OTHER FIELD)
___ MASTER'S DEGREE IN NURSING
___ MASTER'S DEGREE (OTHER FIELD)
___ DOCTORAL DEGREE IN NURSING
___ DOCTORAL DEGREE (OTHER FIELD)
___ OTHER: ______________________

MANAGEMENT EXPERIENCE: (LIST # OF YEARS FOR ALL THAT APPLY.)

___ NUMBER OF YEARS MANAGING ONE PATIENT CARE UNIT
___ NUMBER OF YEARS MANAGING TWO/MORE PATIENT CARE UNITS
___ NUMBER OF YEARS AS ASSOCIATE/ASSISTANT DIRECTOR OF NURSING
___ NUMBER OF YEARS AS CHIEF EXECUTIVE/VICE-PRESIDENT FOR NURSING
___ OTHER: ________________________________________
Appendix G

Collection Site Permissions
Mr. Rick Klein  
Vice-President for Patient Care Services  
6601 Rockhill Road  
Baptist Medical Center  
Kansas City, MO 64131  

Dear Mr. Klein:  

I am completing a thesis as part of the requirements for a Master's Degree in nursing under the guidance of Dr. Roma Lee Taunton. The primary objectives of this study are to determine if motivation to manage: (a) is related to promotion potential, and (b) is increased with leadership training. Results of this study may enhance the selection, promotion and development of nurse managers.

To meet these objectives, I am requesting your permission to do a follow-up survey of your clinical coordinators who participated in the OPTIMAX Leadership Building Program. I would like to administer two motivation to manage instruments: a new in-basket exercise and 40 multiple-choice questions from the original OPTIMAX instrument. I prefer to administer them to groups of clinical coordinators in your facility in early January 1992. Both measures can be completed within one hour.

In addition, I need a promotion potential rating for each of the clinical coordinators who participate in this study. This should be done by the person who would normally evaluate their performance; completion of each instrument (one question) requires only five minutes.

If it can be arranged conveniently, I would like to talk with the coordinators in a naturally occurring meeting and explain the study objectives in detail. At this meeting, I would solicit their support and explain how they would benefit from participating in the in-basket exercise.

I will call in a few days to make an appointment to discuss my study further with you and to answer any questions you may have. If you wish to contact me, my phone number is (816) 747-6564.

I am looking forward to talking with you soon.

Sincerely yours,

Ruth M. Anderson, RN  
Graduate Student

Roma Lee Taunton, RN, PhD  
Principal Investigator and Advisor

OPTIMAX

39th and Rainbow Blvd., Kansas City, Kansas 66103 • (913) 588-3392
Dear Ms. Westrope:

I am completing a thesis as part of the requirements for a Master's Degree in nursing under the guidance of Dr. Roma Lee Taunton. The primary objectives of this study are to determine if motivation to manage: (a) is related to promotion potential, and (b) is increased with leadership training. Results of this study may enhance the selection, promotion and development of nurse managers.

To meet these objectives, I am requesting your permission to do a follow-up survey of your nurse managers who participated in the OPTIMAX Leadership Building Program. I would like to administer two motivation to manage instruments: a new in-basket exercise and 40 multiple-choice questions from the original OPTIMAX instrument. I prefer to administer them to groups of nurse managers in your facility in early January 1992. Both measures can be completed within one hour.

In addition, I need a promotion potential rating for each of the nurse managers who participate in this study. This should be done by the person who would normally evaluate their performance; completion of each instrument (one question) requires only five minutes.

If it can be arranged conveniently, I would like to talk with the nurse managers in a naturally occurring meeting and explain the study objectives in detail. At this meeting, I would solicit their support and explain how they would benefit from participating in the in-basket exercise.

I will call in a few days to make an appointment to discuss my study further with you and to answer any questions you may have. If you wish to contact me, my phone number is (816) 747-6564.

I am looking forward to talking with you soon.

Sincerely yours,

Ruth M. Anderson, RN
Graduate Student

Roma Lee Taunton, RN, PhD
Principal Investigator and Advisor

The University of Kansas Medical Center
School of Nursing

Cynthia Q. Woods, R.N., Ph.D.
Leadership Program Manager
Helen Hansen, R.N., Ph.D.
Leadership Specialist

Ann Westrope, M.N.A., CNAA
Senior Associate Director
Director of Nursing
St. Luke's Hospital
4400 Wornall
Kansas City, MO 64111

Roma Lee Taunton, R.N., Ph.D.
Principal Investigator
Marge Bott, R.N., M.A.
Senior Research Associate

Ann Westrope, M.N.A., CNAA
Senior Associate Director
Director of Nursing
St. Luke's Hospital
4400 Wornall
Kansas City, MO 64111

Ruth M. Anderson, RN
Graduate Student

39th and Rainbow Blvd., Kansas City, Kansas 66103 • (913) 588-3392
Dear Ms. Allen:

I am completing a thesis as part of the requirements for a Master’s Degree in nursing under the guidance of Dr. Roma Lee Taunton. The primary objectives of this study are to determine if motivation to manage: (a) is related to promotion potential, and (b) is increased with leadership training. Results of this study may enhance the selection, promotion and development of nurse managers.

To meet these objectives, I am requesting your permission to do a follow-up survey of your head nurses who participated in the OPTIMAX Leadership Building Program. I would like to administer two motivation to manage instruments: a new in-basket exercise and 40 multiple-choice questions from the original OPTIMAX instrument. I prefer to administer them to groups of head nurses in your facility in early January 1992. Both measures can be completed within one hour.

In addition, I need a promotion potential rating for each of the head nurses who participate in this study. This should be done by the person who would normally evaluate their performance; completion of each instrument (one question) requires only five minutes.

If it can be arranged conveniently, I would like to talk with the head nurses in a naturally occurring meeting and explain the study objectives in detail. At this meeting, I would solicit their support and explain how they would benefit from participating in the in-basket exercise.

I will call in a few days to make an appointment to discuss my study further with you and to answer any questions you may have. If you wish to contact me, my phone number is (816) 747-6564.

I am looking forward to talking with you soon.

Sincerely yours,

Ruth M. Anderson, RN
Graduate Student

Roma Lee Taunton, RN, PhD
Principal Investigator and Advisor

OPTIMAX
39th and Rainbow Blvd., Kansas City, Kansas 66103 • (913) 588-3392
The University of Kansas Medical Center

School of Nursing

Roma Lee Taunton, R.N., Ph.D.
Principal Investigator
Marge Bott, R.N., M.A.
Senior Research Associate

Cynthia Q. Woods, R.N., Ph.D
Leadership Program Manager
Helen Hansen, R.N., Ph.D
Leadership Specialist

Susan Fry, RN
Chief Nurse Executive
Suite 1215
University of Kansas Medical Center
39th and Rainbow
Kansas City, KS 66103

Dear Ms. Fry:

I am completing a thesis as part of the requirements for a Master's Degree in nursing under the guidance of Dr. Roma Lee Taunton. The primary objectives of this study are to determine if motivation to manage: (a) is related to promotion potential, and (b) is increased with leadership training. Results of this study may enhance the selection, promotion and development of nurse managers.

To meet these objectives, I am requesting your permission to do a follow-up survey of your head nurses who participated in the OPTIMAX Leadership Building Program. I would like to administer two motivation to manage instruments: a new in-basket exercise and 40 multiple-choice questions from the original OPTIMAX instrument. I prefer to administer them to groups of head nurses in your facility in early January 1992. Both measures can be completed within one hour.

In addition, I need a promotion potential rating for each of the head nurses who participate in this study. This should be done by the person who would normally evaluate their performance; completion of each instrument (one question) requires only five minutes.

If it can be arranged conveniently, I would like to talk with the head nurses in a naturally occurring meeting and explain the study objectives in detail. At this meeting, I would solicit their support and explain how they would benefit from participating in the in-basket exercise.

I will call in a few days to make an appointment to discuss my study further with you and to answer any questions you may have. If you wish to contact me, my phone number is (816) 747-6564.

I am looking forward to talking with you soon.

Sincerely yours,

Ruth M. Anderson, RN
Graduate Student

Roma Lee Taunton, RN, PhD
Principal Investigator and Advisor

OPTIMAX

39th and Rainbow Blvd., Kansas City, Kansas 66103 • (913) 588-3392
November 27, 1991

Mr. Rick Klein
Vice-President for Patient Care Services
6601 Rockhill Road
Baptist Medical Center
Kansas City, MO 64131

Dear Mr. Klein:

Thanks for meeting with me on November 21, 1991 to review my master's thesis proposal. I sincerely appreciate you allowing me to conduct research in your medical center.

The attached consent form includes the items we discussed in regard to data collection procedures. Your signature will allow me to proceed with data collection after approval of the proposal by the University of Kansas Medical Center's Human Subjects' Committee. Please complete the form and return it to me in the enclosed envelope.

Again, thank you very much for your interest and cooperation in this research. I am looking forward to meeting with the clinical coordinators who agree to participate.

Ruth M. Anderson, RN
Graduate Student
University of Kansas Medical Center
School of Nursing
November 27, 1991

Ann Westrope, MNA, CNAA
Senior Associate Director
Director of Nursing
St. Luke's Hospital
4400 Wornall
Kansas City, MO 64111

Dear Ms. Westrope:

Thanks for meeting with me on November 21, 1991 to review my master's thesis proposal. I sincerely appreciate you allowing me to conduct research in your hospital.

The attached consent form includes the items we discussed in regard to data collection procedures. Your signature will allow me to proceed with data collection after approval of the proposal by the University of Kansas Medical Center's Human Subjects' Committee. Please complete the form and return it to me in the enclosed envelope.

Again, thank you very much for your interest and cooperation in this research. I am looking forward to meeting with your nurse managers on December 11, 1991 to present my study and solicit their participation.

Ruth M. Anderson, RN
Graduate Student
University of Kansas Medical Center
School of Nursing
November 27, 1991

Nikki Allen, RN, MA
Vice-President of Nursing
Shawnee Mission Medical Center
9100 W. 74th Street
Box 2923
Shawnee Mission, KS 66201

Dear Ms. Allen:

Thanks for allowing me to present my master's thesis study to your Nursing Leadership Council on November 20, 1991. I sincerely appreciate you allowing me to conduct research in your medical center.

The attached consent form includes the items we discussed in regard to data collection procedures. Your signature will allow me to proceed with data collection after approval of the proposal by the University of Kansas Medical Center's Human Subjects' Committee. Please complete the form and return it to me in the enclosed envelope.

Again, thank you very much for your interest and cooperation in this research. I am looking forward to meeting with the head nurses who agree to participate.

Ruth M. Anderson

Ruth M. Anderson, RN
Graduate Student
University of Kansas Medical Center
School of Nursing
November 27, 1991

Susan Fry, RN
Chief Nurse Executive
Suite 1215
University of Kansas Medical Center
39th and Rainbow
Kansas City, KS 66103

Dear Ms. Fry:

Thanks for meeting with me on November 19, 1991 to review my master’s thesis proposal. I sincerely appreciate you allowing me to conduct research in your medical center.

The attached consent form includes the items we discussed in regard to data collection procedures. Your signature will allow me to proceed with data collection after approval of the proposal by the University of Kansas Medical Center’s Human Subjects’ Committee. Please complete the form and return it to me in the enclosed envelope.

Again, thank you very much for your interest and cooperation in this research. I am looking forward to meeting with your nurse managers on December 10, 1991 to present my study and solicit their participation.

Ruth M. Anderson, RN
Graduate Student
University of Kansas Medical Center
School of Nursing
Clinical Agency Consent

I have been fully informed of the proposed thesis study by Ruth M. Anderson, RN, BSN, a student in the master's program at the University of Kansas School of Nursing. I understand that:

1. The study is drawn from the OPTIMAX study already ongoing in this facility and that it is under the direction of Roma Lee Taunton, RN, PhD.

2. The requested participants include the clinical coordinators who participated in the OPTIMAX Leadership Building Program and their bosses.

3. Participation in the study will be completely voluntary for both the nurses who agree to participate as subjects and for their bosses who will be asked to provide individual success potential ratings. In addition, any participant will be free to withdraw at any time, without prejudice.

4. An explanation of the study will be given to all participants prior to data collection and that the subjects will be given individual results from the managerial motivation instruments upon request.

5. Consent will be obtained from each participant in accordance with the recommendations of the University of Kansas Medical Center's Human Subject's Committee.

6. Study results will be provided upon request. However, all personal data will be kept STRICTLY CONFIDENTIAL and neither the subjects nor this institution will be identified in any publication of this data.

7. The University of Kansas Medical Center does not maintain a policy of medical treatment or compensation for medical injuries incurred as a result of participating in biomedical or behavioral research.

I hereby give my consent for the proposed study to be performed at Baptist Medical Center. You may:

1. Schedule one/two group sessions in this hospital during January, 1991 to collect the data from the clinical coordinators during their duty time. In addition, you may schedule individual data collection with those that can't attend the group sessions.

2. Deliver/mail the success potential scales to the bosses of the clinical coordinators who participate.

3. Incorporate the following guidelines or restrictions: _Ruth Anderson will contact all coordinators and their bosses individually for their participation in this study. The hospital will not be responsible for organizing this activity._

Richard B. Eli
Vice-President of Patient Care Services  Date
Clinical Agency Consent

I have been fully informed of the proposed thesis study by Ruth M. Anderson, RN, BSN, a student in the master’s program at the University of Kansas School of Nursing. I understand that:

1. The study is drawn from the OPTIMAX study already ongoing in this facility and that it is under the direction of Roma Lee Taunton, RN, PhD.

2. The requested participants include the nurse managers who participated in the OPTIMAX Leadership Building Program and their bosses.

3. Participation in the study will be completely voluntary for both the nurses who agree to participate as subjects and for their bosses who will be asked to provide individual success potential ratings. In addition, any participant will be free to withdraw at any time, without prejudice.

4. An explanation of the study will be given to all participants prior to data collection and that the subjects will be given individual results from the managerial motivation instruments upon request.

5. Consent will be obtained from each participant in accordance with the recommendations of the University of Kansas Medical Center’s Human Subject’s Committee.

6. Study results will be provided upon request. However, all personal data will be kept STRICTLY CONFIDENTIAL and neither the subjects nor this institution will be identified in any publication of this data.

7. The University of Kansas Medical Center does not maintain a policy of medical treatment or compensation for medical injuries incurred as a result of participating in biomedical or behavioral research.

I hereby give my consent for the proposed study to be performed at St. Luke's Hospital. You may:

1. Schedule one/two group sessions in this hospital during January, 1991 to collect the data from the nurse managers during their duty time. In addition, you may schedule individual data collection with those that can't attend the group sessions.

2. Deliver/mail the success potential scales to the bosses of the nurse managers who participate.

3. Incorporate the following guidelines or restrictions: ___________________________

______________________________
Senior-Associate Director/Director of Nursing

10/10/91
Clinical Agency Consent

I have been fully informed of the proposed thesis study by Ruth M. Anderson, RN, BSN, a student in the master’s program at the University of Kansas School of Nursing. I understand that:

1. The study is drawn from the OPTIMAX study already ongoing in this facility and that it is under the direction of Roma Lee Taunton, RN, PhD.

2. The requested participants include the head nurses who participated in the OPTIMAX Leadership Building Program and their bosses.

3. Participation in the study will be completely voluntary for both the nurses who agree to participate as subjects and for their bosses who will be asked to provide individual success potential ratings. In addition, any participant will be free to withdraw at any time, without prejudice.

4. An explanation of the study will be given to all participants prior to data collection and that the subjects will be given individual results from the managerial motivation instruments upon request.

5. Consent will be obtained from each participant in accordance with the recommendations of the University of Kansas Medical Center's Human Subject's Committee.

6. Study results will be provided upon request. However, all personal data will be kept STRICTLY CONFIDENTIAL and neither the subjects nor this institution will be identified in any publication of this data.

7. The University of Kansas Medical Center does not maintain a policy of medical treatment or compensation for medical injuries incurred as a result of participating in biomedical or behavioral research.

I hereby give my consent for the proposed study to be performed at Shawnee Mission Medical Center. You may:

1. Schedule one/two group sessions in this hospital during January, 1991 to collect the data from the head nurses during their duty time. In addition, you may schedule individual data collection with those that can't attend the group sessions.

2. Deliver/mail the success potential scales to the bosses of the head nurses who participate.

3. Incorporate the following guidelines or restrictions:____________

____________________________
Vice-President of Nursing

12-5-91
Date
Clinical Agency Consent

I have been fully informed of the proposed thesis study by Ruth M. Anderson, RN, BSN, a student in the master’s program at the University of Kansas School of Nursing. I understand that:

1. The study is drawn from the OPTIMAX study already ongoing in this facility and that it is under the direction of Roma Lee Taunton, RN, PhD.

2. The requested participants include the nurse managers who participated in the OPTIMAX Leadership Building Program and their bosses.

3. Participation in the study will be completely voluntary for both the nurses who agree to participate as subjects and for their bosses who will be asked to provide individual success potential ratings. In addition, any participant will be free to withdraw at any time, without prejudice.

4. An explanation of the study will be given to all participants prior to data collection and that the subjects will be given individual results from the managerial motivation instruments upon request.

5. Consent will be obtained from each participant in accordance with the recommendations of the University of Kansas Medical Center’s Human Subject’s Committee.

6. Study results will be provided upon request. However, all personal data will be kept STRICTLY CONFIDENTIAL and neither the subjects nor this institution will be identified in any publication of this data.

7. The University of Kansas Medical Center does not maintain a policy of medical treatment or compensation for medical injuries incurred as a result of participating in biomedical or behavioral research.

I hereby give my consent for the proposed study to be performed at the University of Kansas Medical Center. You may:

1. Schedule one/two group sessions in this hospital during January, 1991 to collect the data from the nurse managers during their duty time. In addition, you may schedule individual data collection with those that can’t attend the group sessions.

2. Deliver/mail the success potential scales to the bosses of the nurse managers who participate.

3. Incorporate the following guidelines or restrictions:__________________

_________________________ 12/9/91
Chief Nurse Executive Date
Appendix H

University of Kansas Medical Center

Human Subjects' Committee Approval
Dear Dr. Bartholome:

We are extending the nurse manager data collection for our project "Nurse Managers, Nurse Retention, Patient Outcomes" (4132-88). We will be conducting one-hour group data collection sessions for nurse managers (head nurses) in the four participating hospitals in late January 1992. In addition nurse administrators will respond to short questionnaires about the managers who report to them respectively. The data obtained relate to variables already included in our study, and all of the current assurances related to confidentiality, anonymity, and informed consent will be maintained.

Ruth Anderson will be conducting this data collection under my supervision as part of her master's thesis. The focus is the nurse manager's motivation toward the management role, which was assessed at the beginning of our study in 1989 with the 40-item Miner Sentence Completion Scale. The Miner scale has not performed as reliably as we would like, and we are seeking additional information about that construct.

In the group sessions, each manager nurse will complete both the original Miner scale and a recently available in-basket exercise that assesses motivation toward management from the same theoretical perspective as the Miner scale. The in-basket exercise is a simulation experience that will elicit managers' actions in regard to 19 examples of requests, projects, and complaints commonly found in manager's work.

The nurse administrator questionnaire, which should take less than 5 minutes, includes three Likert items and one 10-point probability scale designed to rate a head nurse's potential for success in an executive level position in a complex medical center. The questionnaires will be delivered to the respective administrator's hospital mailbox and returned to Ms. Anderson via U. S. mail.
Human subjects considerations for this data collection differ from other data collections in two ways. First, administrator ratings of managers have not been part of the research data, although such ratings were part of a needs assessment that preceded the leadership building intervention. Second, the in-basket simulation has not been used as a measurement technique; however, some of the managers completed a time management in-basket exercise in one of the optional modules for the leadership building intervention.

We do not see increased potential risk to subjects and will continue to follow the procedures approved for our project in collecting, managing, analyzing, and reporting the additional data. Participation will be voluntary, and administrators will receive questionnaires only after the respective nurse manager's have provided their data. The attached consent forms are included for review if you think written consent is warranted.

Please call me if you have questions or need additional information. Ms. Anderson and I appreciate your consideration and support of our work.

Sincerely yours,

Roma Lee Taunton, RN, PHD
Principal Investigator

Attachments (2)
This is an addendum to a previously approved project. The change appears to be primarily administrative. The risk factors are not altered.

The addendum is approved. This action was approved unanimously.

CHAIRMAN'S SIGNATURE: [Signature]
DATE OF ACTION: 01/14/92

Note: Unless indicated above, signature alone does not imply approval for implementation.
Appendix I

Subject Letters and Study Explanation
January 16, 1992

TO:

Baptist Medical Center

FROM: Ruth M. Anderson, RN, BSN
1616 Roanoke Dr.
Warrensburg, MO 64093
(816) 747-6564 (call collect)

RE: Research Data Collection

Rick Klein has given me the approval to seek your participation in the research project explained in the attached handout. I am now ready to collect the data and sincerely request your support.

I'll be collecting the data in two small group sessions in your hospital. If at all possible, please try to attend ONE of the sessions; however, it does not matter which one you come to. I have the rooms scheduled for two hours, but your individual part will only take about one hour. It does not matter how much of the leadership training you participated in.

The sessions will be held in Classroom #128 on:

Friday, January 24, 1992, 2:00 pm to 4:00 pm. (If you come late, I will be happy to get you started individually--you may come as late as 2:45 pm.)

and

Wednesday, January 29, 1992, 2:00 pm to 4:00 pm. (If you come late, I will be happy to get you started individually--you may come as late as 2:45 pm.)

You do not need to bring anything with you.

Thank you for considering this request! I hope to see you either on January 24th or January 29th. Please call me if you have any questions.

Sincerely,

Ruth Anderson, RN, BSN
Graduate Student
University of Kansas Medical Center
School of Nursing
January 16, 1992

TO:
St. Luke's Hospital

FROM: Ruth M. Anderson, RN, BSN
1616 Roanoke Dr.
Warrensburg, MO 64093
(816) 747-6564 (call collect)

RE: Research Data Collection

Ann Westrope has given me the approval to seek your participation in the research project explained in the attached handout. I am now ready to collect the data and sincerely request your support.

I'll be collecting the data in two small group sessions in your hospital. If at all possible, please try to attend ONE of the sessions; however, it does not matter which one you come to. I have the rooms scheduled for two hours, but your individual part will only take about one hour. It does not matter how much of the leadership training you participated in.

The sessions will be held in the Nursing Conference Room on:

Monday, January 27, 1992, 10:00 am to 12:00 noon. (If you come late, I will be happy to get you started individually--you may come as late as 10:45 am.)

and

Tuesday, February 4, 1992, 12:00 noon to 2:00 pm. (If you come late, I will be happy to get you started individually--you may come as late as 12:45 pm.)

You do not need to bring anything with you.

Thank you for considering this request! I hope to see you either on January 27th or February 4th. Please call me if you have any questions.

Sincerely,

Ruth Anderson, RN, BSN
Graduate Student
University of Kansas Medical Center
School of Nursing
January 16, 1992

TO:
Shawnee Mission Medical Center

FROM: Ruth M. Anderson, RN, BSN
1616 Roanoke Dr.
Warrensburg, MO 64093
(816) 747-6564 (call collect)

RE: Research Data Collection

Nikki Allen has given me the approval to seek your participation in the research project explained in the attached handout. I am now ready to collect the data and sincerely request your support.

I'll be collecting the data in two small group sessions in your hospital. If at all possible, please try to attend ONE of the sessions; however, it does not matter which one you come to. I have the rooms scheduled for up to two hours, but your individual part will only take about one hour. It does not matter how much of the leadership training you participated in.

The sessions will be held in the Harvest Room on:

Wednesday, January 22, 1992, 10:30 am. This session is directly after the Nursing Leadership Council meeting.

and

Wednesday, January 29, 1992, 10:00 am to 12:00 noon. There is no leadership council scheduled for this day. (If you come late, I will be happy to get you started individually—you may come as late as 10:45 am.)

You do not need to bring anything with you.

Thank you for considering this request! I hope to see you either on January 22nd or January 29th. Please call me if you have any questions.

Sincerely,

Ruth Anderson, RN, BSN
Graduate Student
University of Kansas Medical Center
School of Nursing
January 16, 1992

TO: University of Kansas Medical Center

FROM: Ruth M. Anderson, RN, BSN
1616 Roanoke Dr.
Warrensburg, MO 64093
(816) 747-6564 (call collect)

RE: Research Data Collection

Susan Fry has given me the approval to seek your participation in the research project explained in the attached handout. I am now ready to collect the data and sincerely request your support.

I'll be collecting the data in two small group sessions in your hospital. If at all possible, please try to attend ONE of the sessions; however, it does not matter which one you come to. I have the rooms scheduled for two hours, but your individual part will only take about one hour. It does not matter how much of the leadership training you participated in.

The sessions will be held in 2041 A or 2041 B on:

Friday, January 24, 1992, 10:00 am to 12:00 noon in 2041 A. (If you come late, I will be happy to get you started individually--you may come as late as 10:45 am.)

and

Monday, January 27, 1992, 1:00 pm to 3:00 pm in 2041 B. (If you come late, I will be happy to get you started individually--you may come as late as 1:45 pm.)

You do not need to bring anything with you.

Thank you for considering this request! I hope to see you either on January 24th or January 27th. Please call me if you have any questions.

Sincerely,

Ruth Anderson, RN, BSN
Graduate Student
University of Kansas Medical Center
School of Nursing
THESIS RESEARCH

EXPLANATION TO MANAGERS AND ADMINISTRATORS

I am Ruth M. Anderson, a graduate student at the University of Kansas School of Nursing, working on a thesis under the direction of Roma Lee Taunton, RN, PhD. I am investigating managerial characteristics in conjunction with the OPTIMAX Research Project.

Specifically, I'm studying a characteristic that has to be measured after completion of the Leadership Building Program. In order to measure this characteristic, I would like the nurses who participated in the leadership training to complete two short questionnaires and an in-basket exercise. It will take approximately one hour to complete these. Managers from four hospitals, are being asked to participate.

The questionnaires include one that you have already completed once, the Miner Sentence Completion Scale, and a short demographic information sheet. The in-basket exercise is an effort to obtain an additional assessment of managerial behavior—you will be asked to write short memos about how you would accomplish the work commonly found in managers' in-baskets. This exercise is actually fun to do and the results may prove very valuable to you. Some of you have participated in a similar in-basket exercise during one of the optional Leadership Building Program modules.

In addition, I'm seeking a measure of success potential in nursing administration on each manager who participates. I will ask their bosses to provide an estimate of success potential—this questionnaire will be mailed and is extremely short—one question!

If I explained the characteristic under investigation, I would bias your responses to the questions in my study. However, upon completion of my project, I would be happy to explain group results and your test results to you individually.

Your participation is strictly voluntary and you can withdraw, at any time, without any effect on your job. Your individual data will be kept confidential. An identification number will be assigned to your testing
materials so that your name will never actually be attached to the data or be entered into a computer. Only group data will be reported in any publications; individual participants or facilities will not be identified.

The risks involved in this research are very minimal; however, please understand that the University of Kansas Medical Center does not maintain a policy of medical treatment or compensation for injuries incurred as a result of participating in behavioral research.

I plan to collect this data during the month of January, 1992, in one/two group session(s). If you participated in the Leadership Building Program, I will send you letters requesting your participation and specifying the dates and times.

Please call me collect (816-747-6564), at any time, with questions or comments about this research project. Just identify yourself as a nurse manager involved in research.

Thank you very much for your time and interest in nursing research. I hope to see you in January!

Ruth M. Anderson, RN
Graduate Student
University of Kansas Medical Center
School of Nursing
Appendix J

Subject Consent Form
Appendix J

Subject Consent Form
MANAGER CONSENT FORM

I agree to participate in an extension of the OPTIMAX project related to characteristics of nurse managers. I understand that this data collection is being conducted under the direction of Dr. Roma Lee Taunton by Ruth M. Anderson, RN, as part of her Master's thesis. I understand that I can call Ms. Anderson (816) 747-6664 or Dr. Taunton (913) 588-3386 if I have any questions or comments about this research.

I understand that I will complete a 41-item questionnaire and an in-basket exercise. For the in-basket exercise I will be expected to write short memos and annotations about how I would handle 19 items commonly found in managers' in-baskets. I understand that it should take approximately one hour to complete the questionnaire and in-basket process.

I understand that my employer has given permission for me to participate in this project during on-duty time. I also understand that my supervisor will be asked to provide an estimate of my future success as a executive and that I will not have access to that information.

I acknowledge that my participation in this study is strictly voluntary and that I may withdraw from participation at any time with no effect on my job. In addition, my individual data will be kept confidential. An identification number will be assigned to my data so that my name will never be attached to the data or entered into a computer, and only group data will be reported. I understand that I may obtain the results of my individual responses to the questionnaire and in-basket exercise from Ruth M. Anderson upon completion of the study.

I understand that, although the University of Kansas Medical Center does not provide free medical treatment or other forms of compensation to persons injured as a result of participating in research, such compensation may be provided under the terms of the Kansas Tort Claims Act. If I believe I have been injured as a result of participating in research, I should contact the office of Legal Counsel, University of Kansas Medical Center, Kansas City, Kansas 66103. I understand that I will be provided a copy of this signed consent form.

Date ____________ Nurse Manager's Signature ____________

RESPONSIBLE INVESTIGATOR

The above information has been explained, and it appears that ____________ understands it.

Date ____________ Investigator's Signature ____________

_____ I DO want to be contacted about my individual results. Please call me at ____________ or write to me at ____________.

_____ I DO NOT want to be contacted about my individual results.
Appendix K

Boss Explanatory Letter and Consent Form
FROM: Ruth Anderson, RN, BSN
RE: Research Assistance (ONLY TAKES A FEW MINUTES)

I request your assistance in providing data for a thesis research project. I am a research assistant for the OPTIMAX Research Project currently ongoing in your facility and am pursuing additional information about managerial characteristics. I have permission to ask for your assistance from [Chief Nurse Executive], and the nurse managers who are participating in my study. What I need from you is an assessment of managerial success potential for the participating nurse manager(s) whom you evaluate.

If you are willing to participate please: (a) sign and date the consent form, (b) complete the "success potential" questionnaire(s), and (c) return the consent form and the questionnaire(s) to me in the enclosed, postage paid envelope (I will send a signed copy of your consent back to you). If you have not been the evaluator for the listed individual(s) for 90 or more days, please just send the blank form(s) back to me. Please be assured that the information you provide will be kept STRICTLY CONFIDENTIAL!

I sincerely thank you for considering this request. Your completion of the questionnaire(s) will be extremely valuable to me! Please call me collect at (816) 747-6564, if you have any questions.

Ruth M. Anderson, RN
Graduate Nursing Student
School of Nursing
University of Kansas Medical Center
ADMINISTRATOR CONSENT FORM

I agree to participate in an extension of the OPTIMAX project related to characteristics of nurse managers. I understand that this data collection is being conducted under the direction of Dr. Roma Lee Taunton by Ruth M. Anderson, RN, as part of her Master's thesis. I understand that I can call Ms. Anderson (816) 747-6564 or Dr. Taunton (913) 588-3386 if I have any questions or comments about this research.

For nurse managers (head nurses) that report to me, I understand that I will complete 4-item rating scales that assess the respective manager's potential for future success as a nurse executive. I understand that each manager for whom I receive a questionnaire has consented to participate in this project. I also understand that my information will remain confidential and that only group data will be reported. An identification number will be assigned to my data so that my name will never be attached to the data or entered into a computer.

I understand that my employer has given permission for me to participate in this project during on-duty time. Each questionnaire is expected to require less than 5 minutes. I acknowledge that my participation in this study is strictly voluntary and that I may withdraw from participation at any time with no effect on my job.

I understand that, although the University of Kansas Medical Center does not provide free medical treatment or other forms of compensation to persons injured as a result of participating in research, such compensation may be provided under the terms of the Kansas Tort Claims Act. If I believe I have been injured as a result of participating in research, I should contact the office of Legal Counsel, University of Kansas Medical Center, Kansas City, Kansas 66103. I understand that I will be provided a copy of this signed consent form.

Date Nurse Administrator's Signature

RESPONSIBLE INVESTIGATOR

The above information has been explained, and it appears that understands it.

Date Investigator's Signature