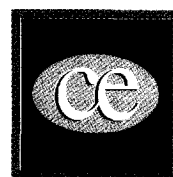


Does Certification Mean Better Performance?



2 CONTACT HOURS

BY MARY LOU REDD AND JUDITH W. ALEXANDER

Abstract: *This research addresses the efficacy of certification in nursing in terms of differences in job performance and self-esteem.*

Study results could help nurse managers determine hiring criteria, design professional development programs and re-structure pay scales and reward systems.

[Nurs Manage
1997;28(2):45-50]

Hospital management teams want to hire professionally competent nurses who deliver high quality patient care. The professional literature consistently suggests that employing certified nurses ensures quality care.¹ However, is certification necessary? While

most studies suggest that employing certified nurses ensures quality patient care, other studies imply that certification does not validate competence in practice.² Thus, the controversy continues: Does certification mean better performance?

In 1992, there were an estimated 225,000 certified registered nurses (RNs) in the United States, representing at least 35 different nursing specialties.³ Certification formally recognizes an individual's attained skill in a specialty nursing practice. The descriptions and definitions are as numerous as the number of certifications available to the nursing profession.⁴

The American Nurses' Association (ANA) initially proposed certification to recognize superior performance in nursing. However, over the years, experience and education have emerged as eligibility requirements for certification. In 1991, the ANA House of Delegates disclosed its position: A BSN will be required for the generalist's certification exam beginning in 1998.⁵ Thus, today the American Nurses' Credentialing Center (ANCC) states that certification is reserved for

those nurses who have met requirements for clinical or functional practice in a specialized

field and have pursued education beyond basic nursing preparation.⁶ After meeting these criteria, nurses take certification examinations based on nationally recognized standards of nursing practice to demonstrate their special knowledge and skills. These standards surpass the criteria required for licensure.

Supporting literature suggests that certification reflects competence in a specified area of practice.⁷ Contrary to this belief, competency with certification has not been supported by empirical evidence, thus rendering the ideas only assumptions.⁸ According to McConnell, credentials are indicators of what an individual should be able to do and not what that individual can or will do. McConnell

advises managers to be aware that credentials do not guarantee productivity and quality outcomes.⁹

Study instruments

Given these divergent views, this research investigated the job performance and self-esteem levels of certified and noncertified staff nurses. Study criteria are shown in Exhibit I. A list of the subjects' immediate supervisors was compiled from the participants' consent forms. The supervisors were asked to evaluate each subject's performance.

The Six Dimension Scale is composed of 52 items arranged into six subscales: leadership, critical care, teaching and collaboration, planning and evaluation, interpersonal relations and communications and professional development. The score range for the overall performance rating is 1 to 4. Coefficient alpha for these six subscales range from .84 to .98 as reported by Schwirian.¹⁰ McCloskey and McCain found that Cronbach coefficients alpha ranged from .79 to .95, while in the current study re-

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EXHIBIT I

CERTIFIED AND NONCERTIFIED NURSE STUDY CRITERIA

Purpose:

To determine if a difference exists between the two groups.
To identify differences in demographic characteristics.

Location:

Two acute-care hospitals
One 640-bed facility in southeast United States
One 454-bed facility in northwest United States

Population:

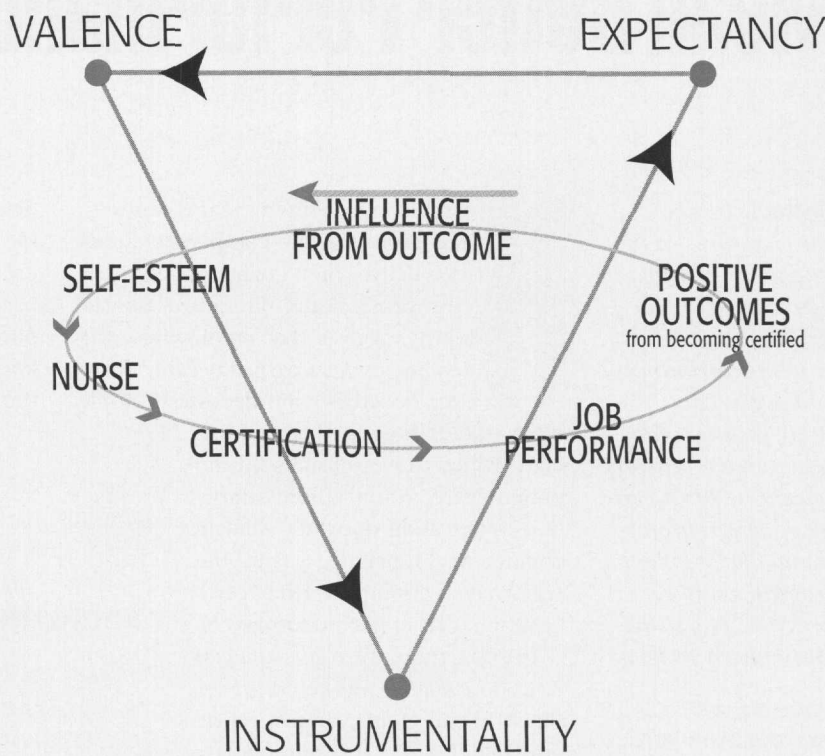
83 staff registered nurses (RNs)
40 certified
43 noncertified

Research instruments:

- Six Dimension Scale of Nursing Performance
- Rosenberg Self-Esteem Scale
- Demographic questionnaire

MARY LOU REDD, MS, RN, is Senior Vice-President for Patient Care Services at Onslow Memorial Hospital, Jacksonville, North Carolina. JUDITH W. ALEXANDER, PhD, RN, is an associate professor at the University of South Carolina, College of Nursing, Columbia, South Carolina. The authors wish to express appreciation to Dr. Jeremie Sherman and Yeoun Soo Kim.

EXHIBIT II
 CONCEPTUAL FRAMEWORK BASED ON HERZBERG'S
 TWO-FACTOR THEORY AND VROOM'S EXPECTANCY THEORY



liabilities ranged from .57 to .92 for the six subscales, and .95 for total performance score from supervisors' evaluations.¹¹ Alpha levels for the staff nurses' self-evaluation ranged from .74 to .90 for the six subscales and .95 for the total performance scale.

The Rosenberg Self-Esteem Scale has 10 items that address the concept of self-acceptance to determine the subjects' current level of self-esteem.¹² The range of possible scores was 10 to 40 using a Likert scaling method¹³ with the higher scores indicating that a higher level of self-esteem exists. Rosenberg reported a 93% reproducibility score for this scale.¹⁴ The reliability of this scale as reported by Haber was .88 and for the current study was .65.¹⁵ Demographic information described the characteristics specific to nurses with and without specialty certification. Areas addressed included: certification status, years employed in nursing, years employed in specialty area, original level of nursing education, highest level of nursing education obtained, age, reason for earning continuing education credits and reason for becoming or not becoming certified.

The participants indicated their highest level of nursing education: diploma degree (34), associate degree (22), and baccalaureate degree (23). The number of years employed in nursing averaged 17.8 years for the certified nurses, and 16.3 years for the non-certified nurses. The number of years in a nursing specialty averaged 9.4 years for the certified nurses, and 7.4 years for the noncertified nurses.

The study's framework

An extensive literature review failed to reveal research that differentiated nurses based on certification status.

The performance becomes the vehicle for goal achievement.

However, we found studies investigating relationships of similar concepts: educational preparation and performance on certification exams, performance measurement, continuing education, self-esteem and professional competence and self-esteem measurement.

Thus, we developed a framework for the study based on concepts selected from Vroom's Expectancy Theory and Herzberg's Two-Factor Theory.¹⁶ The concepts of continuing education, specialty certification and self-esteem were added to complete the frame of reference. See Exhibit II for conceptual framework.

Herzberg believed that motivator factors influenced workers to higher levels of performance because they cultivate personal satisfaction. These factors include achievement, advancement, recognition, and responsibility, and are perceived as outcomes of per-

formance on this study's framework.¹⁷

The Expectancy Theory is based on the concepts of expectancy of outcome, valence and instrumentality. It suggests that the higher the value or valence placed on a perceived outcome, the better the job performance will be.¹⁸

When interfacing the motivator of Herzberg's Two-Factor Theory and the perceived outcomes of Vroom's Expectancy Theory, a type of continuous loop process is developed. An individual's existing level of self-esteem stimulates performance to the levels needed to achieve a perceived outcome or reward, the level of self-esteem is recharged or increased, and the individual is stimulated to continue that level of performance. The performance in actuality becomes the vehicle for goal achievement.

For example, if an RN chooses to become certified in a specialty practice to fulfill a strong need for personal achievement, she or he places a high value (valence) on being certified. Af-

ter completing the application process and paying a fee, the nurse must pass a written examination, usually preceded by much study and preparation. This activity represents a first-level outcome. Once certification is achieved, the positive feedback from supervisors and coworkers supports the nurse's personal achievement need. This aspect represents a second-level outcome. In addition to meeting a personal need, the praise and rewards increase the level of self-esteem, thus stimulating the individual to continue the current level of performance.

The same process can be applied to certification renewal. To renew the certification, a moderate number of continuing education (CE) credits may be required. The process of acquiring those credits may be a direct result of stimulation from an elevated level of self-esteem.

For nurses without a specialty certification, personal achievement also may be a perceived outcome with a high valence. To meet this need, these nurses may attend courses, workshops and seminars to increase and maintain a knowledge base of current treatment modalities. This activity represents a first-level outcome. The gratification one receives from successfully satisfying their individual need for personal achievement increases the level of self-esteem, thus stimulating the individual

to continue this mode of performance. In this case the second-level outcome would be the gratification received.

A secure sense of self-worth and confidence usually indicates that a high level of self-esteem is present. According to Logan, nurses who feel good about themselves are confident, take pride in their work and demonstrate a true feeling of concern for their patients and coworkers.¹⁹ In addition, a high degree of self-esteem causes an enormous amount of energy to be released, which nurses channel into the area of expertise where they are committed.²⁰ Logan's ideation of self-esteem lends support to the framework developed for this study. The following research questions were analyzed.

Research question one: *Is there a difference in the performance scores of certified and noncertified nurses as measured by the Schwirian's Six Dimension Scale?*

Prior to comparing job performance between certified and noncertified nurses, descriptive statistics, a t-test and a Pearson's Correlation Coefficient procedure for each subscale were used to examine consistency of responses between staff and supervisor groups. For the Six Dimension Scale, the distribution of mean scores for the staff nurse and supervisor evaluations is pre-

sented in Exhibit III. Significant differences resulted in leadership (subscale 1), interpersonal relationship (subscale 5) and professional development (subscale 6) (.0002, $p = .0076$), with staff nurses reporting the higher scores. A Pearson's Correlation Coefficient indicated that a weak positive relationship existed in teaching/collaboration (subscale 3) ($r = .32876$, $p = .0024$) and in planning/evaluation (subscale 4) ($r = .31031$, $p = .0046$) between the staff nurses and their supervisors.

Given the inconsistent response between the staff and supervision evaluation, determining which set of scores represented the most accurate performance evaluation was not achieved. Therefore, in investigating this research question, results are analyzed separately. The t-test results showed that staff nurse evaluations had no significant difference in overall scores for the certified and noncertified nurses. However, the supervisor scores indicated that the certified nurse group scored significantly higher in planning/evaluation (subscale 4) ($p = .0141$), and showed a tendency to be higher than the noncertified nurses in teaching/collaboration (subscale 3) ($p = .0567$) and in the total performance scale ($p = .0579$).

Research question two: *Is there a difference in the self-esteem scores of certified and noncertified nurses as measured by the Rosenberg Self-Esteem Scale?*

The t-test procedure was used to analyze self-esteem scores of certified and noncertified nurses. Analysis of the mean self-esteem scores showed that the certified nurses had significantly higher scores ($p = .0018$).

Research question three: *What are the demographic characteristics of each group?*

Demographic characteristics by certification status were examined using bivariate statistical analyses. Continuous

EXHIBIT III

SIX DIMENSION SCALE OF NURSING PERFORMANCE

Subscale contents	Staff evaluation scores		Supervisor evaluation scores	
	Cert. ^a	Noncert. ^b	Cert. ^a	Noncert. ^b
Sub 1: Leadership	3.302	3.354	3.121	3.000
Sub 2: Critical care	3.404	3.298	3.399	3.266
Sub 3: Teaching/collaboration	2.992	2.894	3.084	2.847
Sub 4: Planning/evaluation	3.109	3.013	3.250	2.916
Sub 5: Interpersonal relationship	3.393	3.427	3.299	3.176
Sub 6: Professional development	3.492	3.477	3.337	3.157
Total performance	3.300	3.250	3.263	3.063

^a $n = 40$ ^b $n = 43$

variables, years employed in nursing and years employed in specialty area were examined by t-tests. The t-tests indicated no significant difference between the certified and noncertified nurses on any of these demographic variables. Categorical variables, original level of nursing education, highest level of nursing education obtained, age (collapsed to three categories) and reasons for earning CE credits were tested by chi-square test. Only the reasons for earning CE credits were significantly related to certification status. Significant differences were found among the reasons of personal achievement ($p = .018$), professional dedication ($p = .007$), desire for professional recognition ($p = .001$), and recertification requirements ($p = .010$), but not for improved performance.

Research question four: *What are the reasons that nurses become certified or remain uncertified?*

A total of 22 categories of answers

were identified among the handwritten responses of the entire sample. The 11 categories for each group are presented in Exhibit IV. Personal achievement occurred most frequently among the certified nurse sample. The second most frequent response among the certified nurses was professional growth. Lack of experience and lack of personal time were the most frequent reasons for not becoming certified.

Certification and job performance

The t-test results indicate that no significant difference existed between the performance scores of the certified and noncertified nurses as measured by the staff's self-evaluations. However, the supervisors' scores showed that the certified nurses had higher performance scores in planning/evaluation (subscale 4), and a tendency to have higher scores in both the total scale and in teaching/collaboration (subscale 3). Although there is no previous

empirical evidence with which to compare, these findings tend to suggest that nurses with specialty certifications perform better than those nurses without certifications, thus partially answering research question one.

Findings suggested that a statistically significant difference in the self-esteem levels of nurses exists, with certified nurses having the higher scores. However, even though the current research suggests that certi-

fied nurses have higher self-esteem levels, conclusions must not be hastily drawn. Given the discussion of the conceptual framework, more detailed research into this phenomenon is necessary before question two can be completely answered. Therefore, before discussing the implications of these results, two categories of demographic characteristics need to be mentioned: lack of experience and a lower number of years employed in nursing and in a nursing specialty. These characteristics are associated with low self-esteem of noncertified nurses.

The demographic information indicated that the distribution of certified to noncertified nurses was relatively even. However, when examining why nurses earned CE credits, more certified nurses selected personal achievement, professional dedication, professional recognition and recertification than the noncertified nurses. Improved performance was indicated by both groups, of which the frequency was evenly distributed.

The study's limitations included a small sample size, the use of a subjective performance evaluation tool and a limited self-esteem inventory. The performance evaluation tool may be too general to address the standards and expectations specific to specialty practice. Finally, a single self-esteem inventory may not provide an accurate measurement of self-esteem.

Because nurse administrators are responsible for selecting and retaining qualified nurses, this study may assist them in determining criteria for hiring, designing staff education and professional development programs, restructuring pay scales and reward systems that foster nurse retention and enhance practice, and identifying nurses to encourage to receive certification. This study also provides baseline data for the phenomenon of job

EXHIBIT IV

Reasons for obtaining certification	(n = 40)
1. Personal achievement	17 (42.5%)
2. Professional growth	6 (15.0%)
3. Increase knowledge of specialty	5 (12.5%)
4. Recognition for dedication to profession	3 (7.5%)
5. Gauge level of knowledge	2 (5.0%)
6. Increase competency	2 (5.0%)
7. Primer for returning to school for BSN	1 (2.5%)
8. New wave in nursing	1 (2.5%)
9. Vital to specialty nursing	1 (2.5%)
10. Demonstrate competence to health care insurers	1 (2.5%)
11. Validate performance as equal to younger nurses	1 (2.5%)
Reasons for not obtaining certification	(n = 43)
1. Lack of time	12 (28%)
2. Lack of experience	10 (23%)
3. Not considered a necessity	6 (14%)
4. No money incentive	3 (7%)
5. Lack of knowledge of certification process	3 (7%)
6. Lack of personal motivation	2 (5%)
7. High initial cost	2 (5%)
8. Fear of failing the test	2 (5%)
9. Chose hospital-sponsored program over certification	1 (2%)
10. Certification doesn't increase competency	1 (2%)
11. Age factor and working too long to benefit	1 (2%)

performance and specialty certification, and though not conclusively substantiating any result, does suggest superior performance, validation of professional competence and assurance of quality care by certified nurses. Study results suggest that certified nurses perform better than noncertified nurses, particularly in the areas of teaching/collaboration and planning/evaluation. More in-depth research in the areas of performance, certification and experience is needed to accurately determine if a difference in job performance does exist between the certified and noncertified nurse, and to determine if, indeed, the certification is responsible for making that difference.

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