

CHARACTERISTICS OF SUCCESSFUL

OPERATING ROOM NURSES

by

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A Master's Research Project Submitted in Partial  
Fulfillment of the Requirements for the Degree  
Masters of Arts

OTTAWA UNIVERSITY

December 1992

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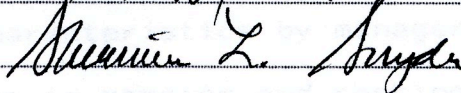
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December 1992

APPROVED:





Supervisory Committee

ACCEPTED:



Director of Graduate Studies

## Abstract

### Characteristics of Successful Operating Room Nurses

The purpose of this project was to define the characteristics of successful operating room nurses. The study defined characteristics based on literature, experience and personal interview. The research compared the ratings of these characteristics by operating room managers and operating room staff nurses.

The sample consisted of twenty operating room managers and sixty five operating room staff nurses from four hospitals in the greater Phoenix area. Contrasts and comparisons in scoring were made between the groups.

The results indicated strong agreement with the defined characteristics by managers and staff. Differences in scoring and ranking of characteristics between the groups demonstrated the concerns of management for staff development. Staff concerns for skilled and effective peer practitioners was also evident in the scoring. Opportunities exist for using this data to recruit and select operating room nurses.

## ACKNOWLEDGMENTS

The author wishes to express her sincere appreciation to Dr. Mark Rossman, my advisor and Director of Graduate Studies, for his continued support throughout this project.

Thank you to my parents Paul and Mary Buchik for their help throughout the program as they often read information and encouraged me. To my children Jason and Nicole for being patient with mom while all her papers and time were occupied. The love and support from each of them was a great assist to me throughout my education.



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## THE PROBLEM

Introduction

It has long been difficult to recruit operating room nurses following standard recruitment protocols. Staffing operating rooms is a challenge for hospital management. Education and orientation cost for operating room nurses approaches \$8,000 to 10,000 each. (Trimiglozzi 1985) Prospectively identifying nurses who would find operating room nursing a specialty of choice would assist in the recruitment and selection process. Having tools to assist the manager in matching the nurse to the specialty of perioperative nursing would improve the staffing and retention rates.

Staffing Operating Rooms continues to be a challenge for operating room managers and hospital administrators. Operating room nurses are the second most difficult nursing specialty in which to recruit. (Olsen 1988) A 1987 survey of 228 California hospitals found 60 % had difficulty recruiting. In 1988 a survey to ascertain the need for perioperative nursing in a major southeastern city estimated the vacancy rate

in the department of surgery at 12% with 76% of the respondents expecting the situation to worsen in the near future.

No specific answers appear evident to this problem, however creative alternatives need to be investigated to assist hospital, managers, physicians, patients and operating room nurses in meeting each other's needs in the provision of health care.

Operating room nurses require special training beyond their initial nursing education. A variety of Operating room nursing programs have been available in the Phoenix area during the past decade. However, increasing health care costs and decreasing educational dollars have seen all but one of these programs close. The one remaining program is offered through the community college system. This community college program graduated it's first students in December 1990. One program is not enough to meet the continuing needs of the hospitals throughout the Phoenix area.

Another contributing factor in these programs is the percentage of nurses who, after completion of the program do not find the operating room a satisfactory field of nursing. Samaritan Health Services Operating

Room program was held for roughly fifteen years. An estimated fifty percent of the nurses left the operating room by the end of the first year. (Telephone interview, Grace Middlebrook Ed.D. 1990) There is no data defining where these nurses continued their practice or if they chose another field of nursing in which to practice.

The Department of Surgery contributes a major portion of revenue to the hospital. Therefore staffing shortages have the potential of creating a great impact to the hospital's income. Olsen (1988) describes hospitals in her area being forced to reduce the Operating room schedule, limit operating hours and curtail elective admissions.

Operating rooms are also noted for their high capital expense and technological environment. Working in this environment requires knowledge not only of general nursing principles but surgical procedures and techniques as well as operating room nursing procedures, standards and skills. Some nurses are capable of and desire to make the effort required to practice nursing in this specialty. Finding these nurses continues to be a challenge for nursing management and a concern for administration.



### Significance of the Study

Perioperative nurses are required to assume the roles of leader, manager, educator, practitioner and researcher. (Key 1989) It is expected the nurse will assume these roles in an environment that is stressful, has limited avenues for positive feedback and high level of job dissatisfaction. Selection and placement of personnel in the correct job is a key issue for human resource persons and managers. Understanding the keys to nurses success in the operating room will come from clarification and identification of those characteristics. The value in defining characteristics is in their application to recruitment and selection activities.

Understanding what characteristics are representative of successful operating room nurses will assist nurses and nurse managers in improved selection and placement within the work setting of the operating room.

Selecting operating room nurses for training programs based on their characteristic similarities with those characteristics identified among the successful

operating room nurses will decrease turnover and assist in supplying hospitals with nurses to staff their operating rooms.

Operating room managers need tools that will help in selection of inexperienced nurses into operating room training programs or to be participants in on the job training. The supply of hospital operating room nurses is also limited by the large number of outpatient surgical facilities. Outpatient facilities offer standardized hours, weekends off and no 'on call'. These benefits are drawing nursing to the outpatient setting and away from inpatient hospital surgical care. Therefore competition for operating room nurses exists not only within the ranks of nursing but within the operating room nursing community.

Hospitals need to identify those characteristics that are germane to nurses practicing in the operating room. Knowing these characteristics can help in the recruitment effort. Students in nursing programs would benefit from the information gained on characteristics of successful operating room nurses. This information would help nursing students understand more dimensions of practice in the operating room setting. The impact of

this information and process of gathering data could assist in analysis of other nursing specialties. A better fit could occur between the specialty and the individual, meeting an important human resource need.

Purpose of this Research is to define those

characteristics that Research Questions successful

The specific research questions for this study was based on the literature reviewed and the work experience of the researcher.

1. What are the defining characteristics of successful operating room nurses in Phoenix, Arizona?
2. Do operating room managers and staff define characteristics of successful operating room nurses with the same values or do they differ in which characteristics they rate highest?

nurses (those nurses who currently are working

in the Purpose of the Study of this study

Eighteen years of operating room management and staff experience leads this researcher to believe there are certain characteristics unique to successful operating room nurses. Through a systematic investigation of a variety of individualized



characteristics a framework for defining the characteristics of a successful operating room nurse can be formulated. These characteristics can then be utilized in the recruitment and selection process. The purpose of this research is to define those characteristics that are possessed by successful operating room nurses.

### Definitions

For the purposes of this study the following terms are defined:

Operating room nurse: A registered nurse, licensed to practice nursing in the state of Arizona and currently practicing in the specialty of the operating room.

Successful (as it relates to the Operating room nurse): Those nurses who currently are working in the operating room and find this specialty of nurses to meet their professional and personal needs.

Characteristics: Those traits, attributes and work behaviors used to define and clarify the operating room nurse.

CNOR: Certified Nurse Operating Room, a distinction given to those completing the certification examination and maintaining annual continuing education credit hours.

Internal Locus of Control: measurement of an individual's preference for internal control, designed to ascertain the subject's expectations of how reinforcement is controlled.

Job Climate: The work situation created which helps to determine the kinds of worker motivations that are actually aroused.

Perioperative: describes that which takes place before, during and after the operative course of the patient.

### Limitations

The limitations of the study were recognized as the following:

- 1) The sampling of operating room nurses is not limited to any particular work type, i.e., full time, part time or temporary and this information

will not be considered in the tabulation of the results.

- 2) Operating room nurses working in both inpatient and outpatient settings were included in the study.
- 3) The data was formatted on a limited scale which may lead to less attention to detail during completion by the participants.
- 4) Selection of operating room nurses was limited to four hospitals in the Greater Phoenix area.

## CHAPTER 2

### The Literature Review

The researcher found many articles relating to job retention and turnover. SnowAntle (1990) describes multiple causes and opportunities related to employee retention. She describes managements responsibility for predicting, diagnosing and treating the turnover problem. SnowAntle's article focuses on nursing in general and does not address specific needs of specialty areas of practice.

Dean and Haynes (1990) describe the challenge of retention in the '90's. They suggest multiple efforts to recruit personnel need to be implemented to address this decades healthcare needs. The article discusses recruitment in light of the marketing strategies necessary to locate nurses. This article continues to give global discussion and does not address the needs of nurses in specialty fields.

Prestholdt, Lane and Mathews conclude their finding on nurse staff turnover to be complex and involving multiple factors. Four categories were identified as crucial to a nurses decision to resign. One, the extent to which a nurse's present position, versus an



alternative one, provided the intrinsic rewards associated with nursing practice. Two, the nurses's expectations about the opportunities and activities that would become available by resigning. Third, nurses's beliefs about the working conditions and environment at their present hospital. The last category includes salary, benefits, and scheduling outcomes. These categories work in concert with the individuals attitude, social pressure and moral obligation when deciding whether to remain on the hospital staff or resign.

Landstrom, Biordi, and Gilles (1989) describe the emotional and behavioral process of staff nurse turnover. This study examined the emotions and behaviors experienced by staff nurses during the leave-taking decision process and describes the sequence of events which occur before, during and after they leave their jobs. It is of interest to note the most common factor for taking leave (85%) was conflict between the nurse and nursing managers. There is no information in this study related to selection criteria nor were the resignees identified by practice specialty.

Sanniti et al (1990) describe methods of selection

as the key to achieving the goals within a nursing department. The article describes an 'assessment center' process in which the candidate engages in a series of realistic exercises designed to elicit behaviors crucial to role performance. This process is designed to augment the personal interview. The article describes one hospital's experience with this method of selection and indicates that it increases the likelihood of appointing competent and satisfied employees.

These writers used a variety of approaches in evaluating job retention. The literature was limited in the area of job retention specifically within the realms of the operating room. The researcher attempted to locate articles that related job satisfaction, job success and job retention to measurable characteristics. Therefore the literature review addressed different measurement approaches that would serve as tools in the selection process.

Second, the literature review included articles that addressed the critical need for alternatives to standard recruitment techniques. These articles summarized the shortage of nurses in general and specifically in the operating room. Articles describing

nursing turnover and work related variables were also included. Opinions of operating room nurse managers are included in some articles related to the future trends in operating room nursing training, recruitment and selection.

Chasmir (1986) summarizes his research on job fulfillment with the belief that properly fitting people to their jobs, may reduce absenteeism and turnover while increasing job satisfaction, quality of work and job commitment. Chasmir goes on to say he believes motivation is critical to a proper individual-to-job fit. He suggests testing candidates for motivation needs to increase the "proper fit" success rate. The scope of this research will not encompass this aspect of job selection.

Hart's research on job satisfaction and personality suggested that certain personality variables may be successfully utilized to select nurses in specialty areas. Further implying that such selection has been indicated as a way that turnover rates within specialty areas of nursing may be decreased and hospital costs reduced. Several authors believe Operating room nurses must have particular types of personalities to be



satisfied and that not every nurse can function in an Operating room setting because certain innate characteristics are needed. (Hart 1988) The results of statistical analysis in Hart's research suggests a relationship between personality and job satisfaction among Operating room nurses.

MacDonald (1975) discusses motivation and job climate as important to job satisfaction. MacDonald indicated that a match of job climate with worker motivational need pattern of behavior does enhance job satisfaction. MacDonald also suggested that knowledge gained through motivational analysis and job climate could provide a better means to prevent those "personality conflicts" between positions and nurse which undermines job satisfaction. McClelland and Atkinson indicated that motivation is unique to the individual personality and further, that personality differences account for much of the variation of individual behavior in organizations.

Moss's (1989) research suggests that burnout can be diminished through careful planning, intervention and evaluation of your personal and professional life. The data leads this researcher to suggest that there may be



a relationship between an individual's general ability to handle stress and the persons success in the Operating room.

Pooyan, Eberhardt and Szigeti's (1990) research on work-related variables and turnover intention among registered nurses quoted the annual turnover rate among nurses to be around 30 percent. Their study results strongly suggested that demographic variables, such as age, tenure and marital status do not contribute to nursing job changes unrelated to work-related variables. This research also suggest that by allowing nurse participation and autonomy in work-related decisions, hospitals may be able to reduce turnover.

The literature therefore supports the researchers belief that the identification of characteristics of successful operating room nurses will lead to a selection tool in recruitment of operating room nurses. This research served to rank those characteristics defined by the researcher.

## CHAPTER 3

### Development of Methodology

The methodology design configuration captured data that ranked the defined characteristics of successful operating room nurses. Further understanding of these characteristics may lead to the development of tools for selection of operating room nurses. This chapter described the study design, subjects, instruments and data collection methods.

The research design was descriptive case study. This design was selected because of it's focus on examining facts about people. Because the purpose of this research was to survey and identify the difference in characteristic of people the descriptive method was selected. Descriptive methodology provides the opportunity to select instruments that may be exploratory in nature.

### Research Design

The instrument used for the study was a questionnaire designed by the researcher. The questionnaire was designed from three sources; literature review, personal interview and experience of

the researcher. (See Appendix A)

Development of the questionnaire from literature review required the researcher to extrapolate characteristics regarding the operating room nurse from articles that focused on other topic areas. One example of this is seen in question number two, "Demonstrates support of patient advocacy". This trait has long been considered important among operating room nurses and is described in Amy Haddad's article on 'Ethics' (1987). Haddad's article describes the operating room nurses responsibility to ensure the delivery of safe, quality care and protection. The article goes on to describe how the nurse must advocate for the patient when the patient is unable to do so for himself. This is an example of the method used to develop the questionnaire from literature sources.

Personal interview offered another method for questionnaire development. Through a telephone conversation with Louise Hart author of the article 'Job Satisfaction and Personality, Are they Related?' she described the characteristic of having an orderly work place and the importance of this to operating room nurses. Dr. Hart identified this trait as being



important during the process of summarizing her doctoral work on personality traits of operating room nurses. This conversation with Dr. Hart led this researcher to include characteristic number twelve for measurement in the questionnaire, 'Demonstrates an orderly clinical practice environment'.

Personal experience of the researcher assisted the questionnaire development as this led to the ability to discern from articles the characteristic of the operating room nurse. The article on Ethics by Haddad is an excellent example of observing the nurses characteristics, roles and responsibilities and defining those for the purposes of this study.

Having completed the questionnaire design it was necessary to pilot the questionnaire to evaluate quality and relevance of the content. To assist the researcher in determining the accuracy of the defined characteristics as necessary to the practice of operating room nurses the pilot was initiated. Operating room managers of four Phoenix area hospitals were contacted to participate in the pilot. Each manager was asked to have operating room nurses in a supervisory or teaching capacity complete the questionnaires. Comments



and critiques were encouraged by the pilot group. Twenty operating room nurse managers were identified and participated in this process. The completed information was returned to the researcher for initial analysis.

The pilot demonstrated a high level of agreement with the defined characteristics. It was the researchers hope that any design flaws, lack of clarity or additional information would be identified by these participants. The returned questionnaires included two comments further defining characteristics of the operating room nurse. Participant comments were included in the results chapter of this paper. There were no comments regarding clarity of information or questions regarding content leading the researcher to conclude that the questionnaire was understandable by the participants. Based on the results of the pilot the questionnaire was not modified prior to distribution to the staff nurse population. After the return of this completed data the second phase of data gathering began.

### Subjects

The study was designed to compare two subject populations, operating room managers and operating room staff nurses. The sampling of the operating room staff nurses occurred following the pilot completed by the operating room managers. The proposal for participation was presented to four Phoenix operating room managers. The four operating room managers participating in the first sampling (pilot) had their staff participate in the second portion of the study, questionnaire completion by operating room nursing staff.

Each operating room manager was presented with the researcher's questionnaire listing the characteristics of successful operating room nurses and asked to score each characteristic.

The second phase of data gathering required the operating room managers to distribute the questionnaires to the operating room nurses on their staff. These participants completed the same data that was previously completed by the managers. The managers were asked to request their staff to voluntarily participate in the data collection. The nurses previously completing the data were not included in phase two of the data

gathering. The researcher noted in the directions to second phase participants the cautions "If you have previously completed and submitted one of these questionnaires please do not complete another set". Realizing that a greater population existed among staff nurses there were sixty five nurses who submitted completed data during phase two. At the completion of this data collection the information was returned to the research and analyzed.

Demographic information was collected from each participant. This information included those facts pertinent to the participants professional and educational experience.

One concern of the researcher was that the nurses would feel free to complete the data or feel free to decline to participate. Therefore the researcher offered to present the idea in person. However, this did not prove necessary as the operating room managers each preferred to distribute the questionnaires themselves.

The nurses included in the study were not restricted by the number of hours worked per week, type of operating room services provided or years of

experience in the operating room. The only restriction was employment in the greater Phoenix area which includes the cities of Mesa, Tempe, Sun City, Glendale, Scottsdale, Paradise Valley and Phoenix proper.

With the data gathering concluded the results of the two groups data analysis was described. After looking at each group independently the analysis involves comparing the results of the tested characteristics. Comparisons between the groups were made.



## CHAPTER 4

### Presentation and Analysis of the Data

Twenty Operating Room managers completed the questionnaire. Managers included first line managers and administrative managers. Four hospitals were represented in the pilot. The questionnaires were given to one manager in each hospital and the manager distributed the questionnaire and returned them to the researcher.

The results of the questionnaire were included at this time. Analysis of the data was included. Analysis included questionnaire results of operating room staff nurses from the four hospitals surveyed. Comparison of the management results and the staff results were included.

Demographic summary from the pilot was included. Demographic data was also collected from the second group and summarized. Demographic information was presented for information and served to better define the population surveyed.

The study results were presented in this chapter. First, the questionnaire results were presented. Second, the comparison of results from the management

and staff group were presented. Third, the ranking of the characteristics followed by a comparison of these results. The demographic results appear last.

## Results from Operating Room Managers

Table 1

### Questionnaire

Rate the following characteristics to the degree you see them essential to the success of the nurse in the Operating Room.

Rate scale:

- 5-----Essential
- 4-----Somewhat essential
- 3-----Neither essential or nonessential
- 2-----Somewhat nonessential
- 1-----Nonessential

Number of Participants: 20

| Characteristic                                        | Rating        |       |              |                        |
|-------------------------------------------------------|---------------|-------|--------------|------------------------|
|                                                       | essential.... |       | nonessential |                        |
| 1. Seeks learning experiences in the clinical setting | 5(15)         | 4(2)  | 3(3)         | 2..1<br>mean = 4.60    |
| 2. Performs at a consistently high level              | 5(10)         | 4(10) | ...          | 3..2..1<br>mean = 4.50 |
| 3. Sets patient care priorities quickly               | 5(15)         | 4(5)  | ...          | 3..2..1<br>mean = 4.75 |
| 4. Measures self performance accurately               | 5(8)          | 4(10) | 3(2)         | 2..1<br>mean = 4.30    |

|                                                           |       |       |       |       |             |
|-----------------------------------------------------------|-------|-------|-------|-------|-------------|
| 5. Demonstrates flexibility regarding work assignments    | 5(10) | 4(9)  | 3(1)  | 2..1  | mean = 4.45 |
| 6. Learns quickly                                         | 5(6)  | 4(12) | 3(2)  | 2..1  | mean = 4.20 |
| 7. Demonstrates support of advocacy                       | 5(14) | 4(5)  | 3.... | 2..1  | mean = 4.74 |
| 8. Applies knowledge to new experiences                   | 5(12) | 4(7)  | 3(1)  | 2..1  | mean = 4.55 |
| 9. Demonstrates motivation to perform                     | 5(12) | 4(7)  | 3(1)  | 2..1  | mean = 4.55 |
| 10. Seeks change where appropriate                        | 5(12) | 4(6)  | 3(1)  | 2(1)1 | mean = 4.45 |
| 11. Seeks new challenges                                  | 5(13) | 4(5)  | 3(2)  | 2...1 | mean = 4.55 |
| 12. Demonstrates an orderly clinical practice environment | 5(12) | 4(6)  | 3(2)  | 2...1 | mean = 4.50 |
| 13. Demonstrates diligence in providing patient care      | 5(13) | 4(7)  | 3.... | 2...1 | mean = 4.65 |

#### Comments:

"Be able to work at high level of productivity in a high stress environment, as well as constant technical changes"

"at time of entry into the service level of technical expertise, ability to assess bio-psycho-social needs of patient also characteristics to be looked at"

## Results from Operating Room Staff Nurses

Table 2

## Questionnaire

Rate the following characteristics to the degree you see them essential to the success of the nurse in the Operating Room.

Rate scale:

- 5-----Essential  
 4-----Somewhat essential  
 3-----Neither essential or nonessential  
 2-----Somewhat nonessential  
 1-----Nonessential

Number of Participants: 65

| Characteristic                                         | Rating        |       |              |        |             |
|--------------------------------------------------------|---------------|-------|--------------|--------|-------------|
|                                                        | essential.... |       | nonessential |        |             |
| 1. Seeks learning experiences in the clinical setting  | 5(47)         | 4(15) | 3(3)         | 2...1  | mean = 4.68 |
| 2. Performs at a consistently level                    | 5(47)         | 4(18) | ..3....      | 2...1  | mean = 4.75 |
| 3. Sets patient care priorities quickly                | 5(60)         | 4(5)  | ..3....      | 2...1  | mean = 4.92 |
| 4. Measures self performance accurately                | 5(40)         | 4(20) | ..3(5)       | 2...1  | mean = 4.54 |
| 5. Demonstrates flexibility regarding work assignments | 5(51)         | 4(14) | ..3....      | 2...1  | mean = 4.78 |
| 6. Learns quickly                                      | 5(46)         | 4(16) | 3(2)         | 2(1) 1 | mean = 4.65 |
| 7. Demonstrates support of patient advocacy            | 5(52)         | 4(10) | 3(2)         | 2(1) 1 | mean = 4.74 |



|                                                           |                         |             |
|-----------------------------------------------------------|-------------------------|-------------|
| 8. Applies knowledge to new experiences                   | 5(52) 4(12) 3(1) 2....1 | mean = 4.78 |
| 9. Demonstrates motivation to perform                     | 5(45) 4(18) 3(2) 2....1 | mean = 4.66 |
| 10. Seeks change where appropriate                        | 5(37) 4(24) 3(4) 2....1 | mean = 4.50 |
| 11. Seeks new challenges                                  | 5(31) 4(26) 3(8) 2....1 | mean = 4.35 |
| 12. Demonstrates an orderly clinical practice environment | 5(47) 4(15) 3(2) 2....1 | mean = 4.65 |
| 13. Demonstrates diligence in providing patient care      | 5(53) 4(11) 3(1) 2....1 | mean = 4.80 |

#### Comments:

"Does not necessarily have to be a quick learner - but be able to retain over a period of time, orderly environment is also not a priority as long as she knows where things are at and patient care is a first priority."

"adapts to any environment, creative and able to improvise when needed"

"all of these characteristics are essential in the O.R. Team work is most important"

"#5 is nurse characteristic essential in all fields of nursing"

"this is appropriate in all areas of nursing as good nurses strive to attain all these characteristics. It is difficult to say that one is less important than another"

"communication skills/interpersonal skills both with patient, family; especially coworkers and doctors are essential - must be quick, effective, clear and proper working relationships"

"how about interpersonal skills with peers, orientees!!!!"

"needs to be organized"

"how could any of these no be essential - very obvious"

"applies to all nursing -not specific to O.R. nursing"

"learning quickly along with internalizing the information learned and shows great interest in the duties of an O.R. nurse. Setting priorities quickly is also most essential"

### Comparison of Mean scores by Characteristic

Table 3

| Characteristic                                         | Manager rating | Staff rating |
|--------------------------------------------------------|----------------|--------------|
| 1. Seeks learning experiences in the clinical setting  | 4.60           | 4.68         |
| 2. Performs at a consistently high level               | 4.50           | 4.72         |
| 3. Sets patient care priorities quickly                | 4.75           | 4.92         |
| 4. Measures self performance accurately                | 4.30           | 4.54         |
| 5. Demonstrates flexibility regarding work assignments | 4.45           | 4.78         |
| 6. Learns quickly                                      | 4.20           | 4.65         |
| 7. Demonstrates support of patient advocacy            | 4.74           | 4.74         |

|                                                           |      |      |
|-----------------------------------------------------------|------|------|
| 8. Applies knowledge to new experiences                   | 4.55 | 4.78 |
| 9. Demonstrates motivation to perform                     | 4.55 | 4.66 |
| 10. Seeks change where appropriate                        | 4.45 | 4.50 |
| 11. Seeks new challenges                                  | 4.55 | 4.35 |
| 12. Demonstrates an orderly clinical practice environment | 4.50 | 4.65 |
| 13. Demonstrates diligence in providing patient care      | 4.65 | 4.80 |

The greatest variance in the scoring was seen in characteristic number six with a absolute difference of .45 representing an eleven percent difference. In eleven instances the staff rated the characteristic as more essential than did the management staff. In one instance, item eleven, the staff rating was lower than the management rating. In one instance, item seven, the scores were identical.

The characteristics were divided into three groups, peer oriented, behavioral and developmental. Peer oriented were those characteristics that would have the greatest impact on the co-worker, relating to the actual performance of the job. Behavioral characteristics were those that defined the manner by which the nurse carried

out her responsibilities, these are more attitudinal in nature. Developmental characteristics were those demonstrating personal, professional growth or a commitment to that growth.

### Peer Oriented Characteristics

| characteristic                                      | manager<br>rating &<br>(ranking) | staff<br>rating &<br>(ranking) |
|-----------------------------------------------------|----------------------------------|--------------------------------|
| Performs at a consistently high level               | 4.50 (6)                         | 4.72 (5)                       |
| Sets patient care priorities quickly                | 4.75 (1)                         | 4.92 (1)                       |
| Demonstrates flexibility regarding work assignments | 4.45 (7)                         | 4.78 (3)                       |
| Learn quickly                                       | 4.20 (9)                         | 4.65 (6)                       |
| Applies knowledge to new experiences                | 4.55 (5)                         | 4.78 (3)                       |
| Demonstrates an orderly practice environment        | 4.50 (6)                         | 4.65 (9)                       |
| Demonstrates diligence in providing patient care    | 4.65 (3)                         | 4.80 (2)                       |



## Behavioral Oriented Characteristics

| characteristic                              | manager<br>rating &<br>(ranking) | staff<br>rating &<br>(ranking) |
|---------------------------------------------|----------------------------------|--------------------------------|
| Demonstrates support of<br>patient advocacy | 4.74 (2)                         | 4.74 (4)                       |
| Demonstrates motivation to<br>perform       | 4.55 (5)                         | 4.66 (8)                       |

## Developmental Oriented Characteristics

| characteristic                                        | manager<br>rating &<br>(ranking) | staff<br>rating &<br>(ranking) |
|-------------------------------------------------------|----------------------------------|--------------------------------|
| Seeks learning experiences in<br>the clinical setting | 4.60 (4)                         | 4.68 (7)                       |
| Seeks change where appropriate                        | 4.45 (7)                         | 4.50 (11)                      |
| Seeks new challenges                                  | 4.55 (5)                         | 4.35 (12)                      |

In the area of peer oriented characteristics the differences in rankings vary from one to four positions. In the behavior oriented characteristics the ranking differences are two and three respectively. The

developmental oriented characteristics had the greatest ranking differences ranging from three to five positions difference.

### Ranking of Characteristics

Table 4

#### Results of Management

Characteristics were listed in order of importance based on the results of the mean scoring. The characteristic with the highest mean score was listed first. The number of the characteristic as it appeared in the questionnaire follows the characteristic.

1. Sets patient care priorities quickly (3)
2. Demonstrates support of patient advocacy (7)
3. Demonstrates diligence in providing patient care (13)
4. Seeks learning experiences in the clinical setting (1)
5. Applies knowledge to new experiences (8)
5. Demonstrates motivation to perform (9)
5. Seeks new challenges (11)
6. Demonstrates an orderly clinical practice environment (12)
6. Performs at a consistently high level (2)

7. Demonstrates flexibility regarding work assignments (5)
7. Seeks change where appropriate (10)
8. Measures self performance accurately (4)
9. Learns quickly (6)

#### Ranking of Characteristics

#### Table 5

#### Results of Staff

Characteristics were listed in order of importance based on the results of the mean scoring. The characteristic with the highest mean score was listed first. The number of the characteristic as it appeared in the questionnaire follows the characteristic.

1. Sets patient care priorities quickly (3)
2. Demonstrates diligence in providing patient care (13)
3. Demonstrates flexibility regarding work assignments (5)
3. Applies knowledge to new experiences (8)
4. Demonstrates support of patient advocacy (7)
5. Performs at a consistently high level (2)
6. Learns quickly (6)

7. Seeks learning experiences in the clinical setting (1)
8. Demonstrates motivation to perform (9)
9. Demonstrates an orderly clinical practice environment (12)
10. Measures self performance accurately (4)
11. Seeks change where appropriate (10)
12. Seeks new challenges (11)

### Comparison of Ranking

Table 6

Comparison was made to the order of ranking, to demonstrate relationships that exist between the two groups and their ranking of the characteristics. Ranking number one indicates that characteristic receiving the greatest mean score from the group identified.

| Ranking | Management | Staff |
|---------|------------|-------|
| 1       | 3          | 3     |
| 2       | 7          | 13    |
| 3       | 13         | 5, 8  |
| 4       | 1          | 7     |
| 5       | 8, 9, 11   | 2     |



| Ranking | Management | Staff |
|---------|------------|-------|
| 6       | 12, 2      | 6     |
| 7       | 5, 10      | 1     |
| 8       | 4          | 9     |
| 9       | 6          | 12    |
| 10      | --         | 4     |
| 11      | --         | 10    |
| 12      | --         | 11    |

The greatest difference in the rating was seen in characteristics 10 and 11, where the management group rated these characteristics high (ranked 7th and 5th respectively), the staff nurse ratings were low (ranked 11th and 12th respectively). There was more clustering in the managers ranking, having more than one characteristic receiving the same ranking. Clustered ranking appeared three times in the managers rankings and one time in the staff ranking.

### Demographic Information

Demographic information was gathered and presented to assist in defining the population included in the survey. Each subject completed the information on years of experience, facility size, education and certification status. The operating room managers also included information on years of management experience. There is no comparison or analysis of the data as it is presented here for reference only.

Table 7

#### Results from Operating Room managers

Number of participants: 20

1. Number of years as an Operating Room Nurse.

Range: 4 years to 35 years

Mean: 15.8 years

2. What best describes your management position in the Operating Room?

|                    |         |                          |
|--------------------|---------|--------------------------|
| First Line manager | : n= 10 | .....50% of participants |
|--------------------|---------|--------------------------|

|                |        |                          |
|----------------|--------|--------------------------|
| Middle manager | : n= 6 | .....30% of participants |
|----------------|--------|--------------------------|

|                         |      |                          |
|-------------------------|------|--------------------------|
| Administrative manager: | n= 3 | .....15% of participants |
|-------------------------|------|--------------------------|

## 3. Years of Operating Room management experience.

Range: 3 months to 18 years

Mean: 6.5 years

## 4. Number of Operating Rooms in your facility.

16 Operating rooms .....20%

10 Operating rooms .....45%

7 Operating rooms .....30%

5 Operating rooms ..... 5%

## 5. Nursing Education: (check all that apply)

Nursing Diploma n=4 ....20%

Associate Degree n=6 ....30%

Baccalaureate Degree n=6 ....30% \*2

Master Degree: n= 4 20%

nursing n=1 \*5

business n=1 \*4

other n=2 \*1 \*3

Doctorate: n=0

## 6. Are you a CNOR?

Yes: n= 10 50%

No : n= 10 50%

\*1: Respondent also checked Associate Degree and Baccalaureate

- \*2: Respondent also checked Associate Degree
- \*3: Respondent also checked Nursing Diploma, Associate Degree and Baccalaureate
- \*4: Respondent also checked Baccalaureate
- \*5 Respondent also checked Associate Degree and Baccalaureate

### Demographic Information

Table 8

Results from Operating Room staff nurses

Number of participants: 65

#### 1. Number of years as an Operating Room Nurse.

Range: 8 months to 35 years

Mean: 10.69 years

#### 4. Number of Operating Rooms in your facility.

\*2: Respondent 16 Operating rooms .....25%

\*3: Respondent 13 Operating rooms .....25%

\*4: Respondent 10 Operating rooms .....18%

\*5 Respondent 8 Operating rooms .....20%

\*6 Respondent 7 Operating rooms .....12%



## 5. Nursing Education: (check all that apply)

Nursing Diploma n=15 ....23%

Associate Degree n=37 ....57% \*4 \*8

Baccalaureate Degree n=16 ....25% \*2 \*5 \*6 \*7

Master Degree:

nursing n=0

business n=0

other: n=2 .... 3% \*1 \*3

Doctorate: n=0

## 6. Are you a CNOR?

Yes: n= 15 23%

No : n= 49 77%

note: 1 respondent answered both yes and no

\*1: Respondent also checked Nursing Diploma

\*2: Respondent also checked Nursing Diploma

\*3: Respondent also checked Associate Degree

\*4: Respondent also checked Nursing Diploma

\*5 Respondent also checked Associate Degree

\*6 Respondent also checked Associate Degree

\*7 Respondent also checked Associate Degree

\*8 Respondent also checked Nursing Diploma

## CHAPTER 5

## Summary, Conclusions and Recommendations

Summary

Recruiting, Hiring and maintaining an operating room staff continues to challenge operating room managers and staff. Time commitments and expense in recruiting, training and orientation encourages one to explore ways to increase retention and success in selection. The literature demonstrates the varied skill, abilities and behaviors needed for successful operating room nursing. Once defined these characteristics could serve as a model for selection by both the employer and the prospective employee. The purpose of this study was to define the characteristics of successful operating room nurses. Once defined by the researcher, the characteristics were rated by operating room managers and operating room nurses to determine their import. These ratings of managers and staff were compared and serve as the results of the study.

Conclusions

The results of the study reflect a high level of

agreement with the characteristics listed by both the management and staff group. The comments offered by the staff group indicated a need for interpersonal relation which was not identified as one specific characteristics rated. Interpersonal skills are encompassed in aspects of several characteristics i.e., motivation, support, flexibility and advocacy. The ability to retain knowledge was also addressed as a comment and is considered in the characteristic 'Applies knowledge to new experiences'.

Based on the high degree of agreement with the characteristics listed the researcher concluded that the characteristics are essential to the success of the operating room nurse.

### Recommendations

The defined characteristics have great potential use in the work setting. First, the information could be used in the selection of candidates for operating room nursing through a variety of means.

Managers could use this tool to rank potential candidates. The characteristics could serve as a guideline for the interview process, i.e., interview

questions could be designed to ascertain to what degree the candidates possesses these characteristics.

No specific criteria for evaluating candidates was found by the researcher during literature search. Selection tools are typically developed over time, through experience of the interviewer and frequently consist of much subjective data. While subjective data will not be removed from the interview process, the addition of an objective outline for guiding the interview may assist in the selection process.

New managers may find helpful a more concise tool addressing skills and behaviors defined as important to the success of the operating room nurse. The questionnaire could be a tool included in the mentoring and development of new managers.

The list of characteristics also gives the operating room manager opportunity to define for staff members the managers individual rating of the characteristics. This offers a tool for increasing communication and setting expectations with staff.

Prospective employee's would benefit from the knowledge of what characteristics have been found to be important to the success of the nurse working in the



operating room. Candidates could evaluate themselves on how they rate on the characteristics comparing their scoring to that of the manager and staff.

Nursing students deciding on their specialty could benefit from understanding what characteristics are essential to the success of the nurse in the operating room. A ranking of the characteristics available to students could help them in the selection of a nursing specialty.

Once used during the hiring process, the tool could be used during the exit interview process to determine if there were characteristics that the employee did not possess. Additional key characteristics may be defined through this process and lead to further evaluation.

Human Resource departments could use the tool to screen prospective applicants, scoring individuals and comparing those scores to those of the specific hospital and staff. This would narrow the interview pool and give prospective candidates an opportunity to see the expectations of the workplace and manager prior to interviewing.

### Recommendations for Future Studies

The following recommendations for further study have been identified. During analyzes of the data, the researcher noticed some hospital staff demonstrated more congruency in responses than did other hospitals. This leads to the question, Is congruency in defining essential characteristics an indication of more congruent values among the nursing staff? This is interesting because it intertwines so with job satisfaction in that, if the group values the characteristics at the same level is that evident in the way they work together? Is the turnover rate lower in these departments? Do nurses with like work values relate better and find greater job satisfaction? This opens many of possibilities for additional research.

Research that correlated the congruency of responses within a department with the rate of job satisfaction and turnover could be a valuable tool in selection.

Another opportunity for study may exist with those nurses leaving the operating room. Sampling this population would give information on those individuals experience in the operating room environment. Comparing

these results with those of practicing operating room nurses would enhance the validity of the defined characteristics as necessary to success.

Finally, it is recommended that the study be replicated to determine if the results would be consistent in other hospitals and other geographical locations.



## Reference Listing

- Applegeet, Carol J. 1989. Surgical conscience, intuitive skills are essential for perioperative nurses. AORN Journal Vol. 49 No. 4 April
- Borover, W.A. 1988. Defining the Characteristics of a Positive, Enthusiastic Staff. AORN Journal Vol. 47 No.1 January
- Bradham, C.U., Dalme, F.C., Thompson, P.J., 1990. Personality Traits Valued by Practicing Nurses and Measured in Nursing Students. Journal of Nursing Education Vol. 29, No. 5 May
- Chusmir, L. H. 1986. How fulfilling are health care jobs? HCM Review/Winter
- Cox, H. 1987. The Peri-Operative Role (A Personal View). NATNews January
- Dean, Larrie J., Haynes, Patricia R. 1990. Health Care Personnel: Meeting a Growing Challenge. Journal of Healthcare Education and Training Vol. 5 No. 1 Nov.
- Fox, V., Blue, M.R. Sr., 1988. Job Analysis. AORN Vol.47, No. 5 May
- Fredericks, C. D. 1979. Selection and placement of Professional Nurse Applicants. SN p. 16ff
- Gouty, L.J. 1989. O.R. Nursing ...Behind Closed Doors. Ethicon Point of View. Vol. 26, No. 3 pp 15-16
- Hankes, D.D. 1984. Setting Priorities in the O.R. Dimensions of Critical Care Nursing Vol. 3. No. 6 November-December
- Hart, L. A. 1988. Job Satisfaction and Personality, Are they Related? AORN Journal Vol. 47, No 2
- Hart, L. A. 1991. March 25., Operating Room Nurses personality profiles as related to job satisfaction. Telephone conversation to discussion of Dissertation results.



- Kee, C. C. 1988. Perioperative Nursing: The neglected specialty. Today's OR Nurse Vol. 11 No. 7
- Koerner, Melissa., Gatch, Gayle., Taylor, Cheryl 1984. Communicating in the OR. AORN Journal Vol. 40 No. 6 December
- Landstrom, Gay L., Biordi, Diana L., Gillies, Dee Ann. 1989. The Emotional and Behavioral Process of Staff Nurse Turnover. JONA Vol. 19 No. 9 September
- Langford, R.W., Harmon, V. 1987. Self-Image, Characteristics of Operating Room Nurses. AORN Journal Vol. 45 No.4 April
- MacDonald, M. R. 1975. Matching Personalities with Position: A Study of Job Satisfaction. SN p. 43ff
- Mazza, John 1985. The perioperative role of the OR nurse. NATnews March
- Moss, V. A. 1989. Burnout, Symptoms, Causes, Prevention. AORN Journal Vol. 50, No. 5
- Olsen, C. C. 1988. Staff Retention in the OR. AORN Journal Vol. 47, No. 5
- Olson, Cheryl. 1986 Perioperative Nursing: An Evolving Specialty. AARN September
- Pooyan, A., B.J. Eberhardt, and E. Szigeti. 1990. Work-related Variables and Turnover Intention Among Registered Nurses. Nursing and Health Care Vol. 11, Number 5 May
- Prestholdt, Perry H., Lane, Irving M., Mathews, Robert C., 1988. Predicting Staff Nurse Turnover. Nursing Outlook Vol. 36 No. 3 May/June
- Sanniti, Kathleen J., McAliley, Lauren G., Urbancic, Cindy J., Ivons, Dorothy A., Frankowski, Susan J., Soltysiak, Vickey F. 1990. Selection, Promotion and Development of Employees. Nursing Management Vol. 21 No. 1 January

SnowAntle, Sharon 1990 Turnover: Strategies for Staff Retention. Journal of Healthcare Education and Training Vol. 5 No. 1 Nov.

Trimiglozzi, B., Cooke, K. 1985. Meeting demands for qualified OR Nurses. Today's OR Nurse July

# Appendix A

## Questionnaire of Characteristics

## Questionnaire

Rate the following characteristics to the degree you see them essential to the success of the nurse in the Operating Room.

Rate scale:

- 5-----Essential  
 4-----Somewhat essential  
 3-----Neither essential or nonessential  
 2-----Somewhat nonessential  
 1-----Nonessential

| Characteristic                                         | Rating                    |   |   |   |   |
|--------------------------------------------------------|---------------------------|---|---|---|---|
|                                                        | essential....nonessential |   |   |   |   |
| 1. Seeks learning experiences in the clinical setting  | 5                         | 4 | 3 | 2 | 1 |
| 2. Performs at a consistently high level               | 5                         | 4 | 3 | 2 | 1 |
| 3. Sets patient care priorities quickly                | 5                         | 4 | 3 | 2 | 1 |
| 4. Measures self performance accurately                | 5                         | 4 | 3 | 2 | 1 |
| 5. Demonstrates flexibility regarding work assignments | 5                         | 4 | 3 | 2 | 1 |
| 6. Learns quickly                                      | 5                         | 4 | 3 | 2 | 1 |
| 7. Demonstrates support of patient advocacy            | 5                         | 4 | 3 | 2 | 1 |
| 8. Applies knowledge to new experiences                | 5                         | 4 | 3 | 2 | 1 |
| 9. Demonstrates motivation to perform                  | 5                         | 4 | 3 | 2 | 1 |



- |                                                              |                   |
|--------------------------------------------------------------|-------------------|
| 10. Seeks change where appropriate                           | 5...4...3...2...1 |
| 11. Seeks new challenges                                     | 5...4...3...2...1 |
| 12. Demonstrates an orderly<br>clinical practice environment | 5...4...3...2...1 |
| 13. Demonstrates diligence in<br>providing patient care      | 5...4...3...2...1 |

Comments:

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# Appendix B

## Demographic Survey Tool

## Demographic Information

Please complete the following information:

1. Number of years as an Operating Room Nurse. \_\_\_\_\_
2. What best describes your management position in the Operating Room?

First Line manager \_\_\_\_\_  
Middle manager \_\_\_\_\_  
Administrative manager \_\_\_\_\_

3. Years of Operating Room management experience. \_\_\_\_\_
4. Number of Operating Rooms in your facility. \_\_\_\_\_
5. Nursing Education: (check all that apply)

Nursing Diploma \_\_\_\_\_  
Associate Degree \_\_\_\_\_  
Baccalaureate Degree \_\_\_\_\_

Master Degrees:  
nursing \_\_\_\_\_  
business \_\_\_\_\_  
other \_\_\_\_\_

Doctorate \_\_\_\_\_

6. Are you a CNOR? Yes \_\_\_\_\_ No \_\_\_\_\_

NOTE: Question number two was removed when surveying the staff nurse population.

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