Affective Training In New Nurse Graduate Orientation Programs

Myrlene Thompson Lamancusa

University of Nevada, Las Vegas

Follow this and additional works at: https://digitalscholarship.unlv.edu/rtds

Repository Citation
Lamancusa, Myrlene Thompson, "Affective Training In New Nurse Graduate Orientation Programs" (1980). UNLV Retrospective Theses & Dissertations. 2881.
https://digitalscholarship.unlv.edu/rtds/2881

This Dissertation is brought to you for free and open access by Digital Scholarship@UNLV. It has been accepted for inclusion in UNLV Retrospective Theses & Dissertations by an authorized administrator of Digital Scholarship@UNLV. For more information, please contact digitalscholarship@unlv.edu.
INFORMATION TO USERS

This was produced from a copy of a document sent to us for microfilming. While the most advanced technological means to photograph and reproduce this document have been used, the quality is heavily dependent upon the quality of the material submitted.

The following explanation of techniques is provided to help you understand markings or notations which may appear on this reproduction.

1. The sign or “target” for pages apparently lacking from the document photographed is “Missing Page(s)”. If it was possible to obtain the missing page(s) or section, they are spliced into the film along with adjacent pages. This may have necessitated cutting through an image and duplicating adjacent pages to assure you of complete continuity.

2. When an image on the film is obliterated with a round black mark it is an indication that the film inspector noticed either blurred copy because of movement during exposure, or duplicate copy. Unless we meant to delete copyrighted materials that should not have been filmed, you will find a good image of the page in the adjacent frame.

3. When a map, drawing or chart, etc., is part of the material being photographed the photographer has followed a definite method in “sectioning” the material. It is customary to begin filming at the upper left hand corner of a large sheet and to continue from left to right in equal sections with small overlaps. If necessary, sectioning is continued again—beginning below the first row and continuing on until complete.

4. For any illustrations that cannot be reproduced satisfactorily by xerography, photographic prints can be purchased at additional cost and tipped into your xerographic copy. Requests can be made to our Dissertations Customer Services Department.

5. Some pages in any document may have indistinct print. In all cases we have filmed the best available copy.
LaMancusa, Mylene Thompson

AFFECTIVE TRAINING IN NEW NURSE GRADUATE ORIENTATION PROGRAMS

University of Nevada, Las Vegas

Ed.D. 1980

University Microfilms International 300 N. Zeeb Road, Ann Arbor, MI 48106
AFFECTIVE TRAINING IN NEW NURSE GRADUATE
ORIENTATION PROGRAMS

A dissertation submitted in partial fulfillment of the
requirements for the degree of Doctor of Education

by

Myrlene Thompson LaMancusa

November 1980
The dissertation of Myrlene Thompson La Mancusa is approved:

Advisor

Examiner Committee Member

Examiner Committee Member

Graduate Faculty Representative

Graduate Dean

University of Nevada,
Las Vegas

November 1980
To my

Husband Joe

and my sons

Joseph, Peter, Anthony and Louis
ACKNOWLEDGEMENTS

The idea for this study grew out of my discussions with recent graduates of the Associate Degree Nursing Program at the University of Nevada, Las Vegas. My first thanks then are to them for their candor and interest. The opportunity to conduct the research was made possible through the cooperation of the Nursing Education Departments at Southern Nevada Memorial Hospital, Las Vegas and Washoe Medical Center, Reno. I will be eternally indebted to the nursing staff within these agencies. A "thank you" also goes to the new nurse graduates who consented to be subjects; without you, the study would not have been possible.

I would like to express a special "thank you" to my committee: Dr. Frederick Kirshner, Chairman and members Dr. Martha McBride, Dr. Kevin Crehan and Dr. John Unrue. Your encouragement, direction and criticism were instrumental in my accomplishment and the quality of this endeavor.

I am grateful to Dean Mary Ann Michel and the faculty of the University of Nevada, Las Vegas Department of Nursing. It was your encouragement and understanding that made me believe I could obtain this goal.

Finally, thank you to my family, husband Joe and sons Joseph, Peter, Anthony and Louis. Your support and understanding were necessary elements in this project. Without your encouragement and acceptance of additional responsibilities, this endeavor would not have been attempted, let alone completed.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>LIST OF TABLES</th>
<th>vii</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapter</td>
<td></td>
</tr>
<tr>
<td>1. INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>Purposes of the Study</td>
<td>1</td>
</tr>
<tr>
<td>Statement of the Problem</td>
<td>1</td>
</tr>
<tr>
<td>Background of Study</td>
<td>2</td>
</tr>
<tr>
<td>Hypotheses</td>
<td>4</td>
</tr>
<tr>
<td>Definition of Terms</td>
<td>5</td>
</tr>
<tr>
<td>Assumptions of the Study</td>
<td>6</td>
</tr>
<tr>
<td>Limitations of the Study</td>
<td>7</td>
</tr>
<tr>
<td>2. REVIEW OF THE LITERATURE</td>
<td>8</td>
</tr>
<tr>
<td>Turnover</td>
<td>8</td>
</tr>
<tr>
<td>Definitions</td>
<td>8</td>
</tr>
<tr>
<td>Extent in Nursing</td>
<td>9</td>
</tr>
<tr>
<td>Demographic Variables</td>
<td>9</td>
</tr>
<tr>
<td>Impact</td>
<td>12</td>
</tr>
<tr>
<td>Possible Determinants</td>
<td>13</td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>15</td>
</tr>
<tr>
<td>Definition</td>
<td>15</td>
</tr>
<tr>
<td>Relationship to Turnover</td>
<td>15</td>
</tr>
<tr>
<td>Factors in Job Satisfaction Identified by Various Theorists</td>
<td>16</td>
</tr>
<tr>
<td>Factors which Produce Job Satisfaction/Dissatisfaction for Nurses</td>
<td>18</td>
</tr>
<tr>
<td>Affective Learning</td>
<td>20</td>
</tr>
<tr>
<td>Inclusion in Educational Programs</td>
<td>20</td>
</tr>
<tr>
<td>Chapter</td>
<td>Page</td>
</tr>
<tr>
<td>---------</td>
<td>------</td>
</tr>
<tr>
<td>Relationship to Job Satisfaction</td>
<td>21</td>
</tr>
<tr>
<td>Methods of Facilitating Transition</td>
<td>23</td>
</tr>
<tr>
<td>Summary</td>
<td>28</td>
</tr>
<tr>
<td>3. METHODS</td>
<td>31</td>
</tr>
<tr>
<td>Design</td>
<td>31</td>
</tr>
<tr>
<td>Variables</td>
<td>32</td>
</tr>
<tr>
<td>Subjects</td>
<td>32</td>
</tr>
<tr>
<td>Materials</td>
<td>33</td>
</tr>
<tr>
<td>Experimental Setting</td>
<td>33</td>
</tr>
<tr>
<td>Measurement Device</td>
<td>35</td>
</tr>
<tr>
<td>Procedures for Data Collection</td>
<td>39</td>
</tr>
<tr>
<td>General</td>
<td>39</td>
</tr>
<tr>
<td>Treatment Group</td>
<td>42</td>
</tr>
<tr>
<td>Hawthorne Control Group</td>
<td>43</td>
</tr>
<tr>
<td>Procedures for Data Analysis</td>
<td>44</td>
</tr>
<tr>
<td>4. RESULTS</td>
<td>46</td>
</tr>
<tr>
<td>Overview</td>
<td>46</td>
</tr>
<tr>
<td>Descriptive Data on Demographic Variables</td>
<td>50</td>
</tr>
<tr>
<td>Relationship among Variables</td>
<td>56</td>
</tr>
<tr>
<td>Assumptions of Analysis of Covariance</td>
<td>63</td>
</tr>
<tr>
<td>Descriptive Data on Covariate</td>
<td>64</td>
</tr>
<tr>
<td>Hypotheses Testing</td>
<td>65</td>
</tr>
<tr>
<td>Hypothesis 1</td>
<td>67</td>
</tr>
<tr>
<td>Hypothesis 2</td>
<td>68</td>
</tr>
<tr>
<td>Hypothesis 3</td>
<td>69</td>
</tr>
<tr>
<td>Hypothesis 4</td>
<td>70</td>
</tr>
<tr>
<td>Hypothesis 5</td>
<td>71</td>
</tr>
<tr>
<td>Hypothesis 6</td>
<td>72</td>
</tr>
<tr>
<td>Hypothesis 7</td>
<td>73</td>
</tr>
<tr>
<td>Hypothesis 8</td>
<td>74</td>
</tr>
<tr>
<td>Chapter</td>
<td>Page</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Subsidiary Analysis</td>
<td>75</td>
</tr>
<tr>
<td>5. DISCUSSION</td>
<td>77</td>
</tr>
<tr>
<td>a) Summary of Hypothesized Results</td>
<td>77</td>
</tr>
<tr>
<td>b) Reasons for Nonsignificant Results</td>
<td>79</td>
</tr>
<tr>
<td>c) Summary of Subsidiary Results</td>
<td>82</td>
</tr>
<tr>
<td>d) Theoretical Implications of the Study</td>
<td>87</td>
</tr>
<tr>
<td>e) Practical Implications of Results</td>
<td>89</td>
</tr>
<tr>
<td>f) Suggestions for Further Research</td>
<td>92</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>94</td>
</tr>
<tr>
<td>APPENDICES</td>
<td>102</td>
</tr>
<tr>
<td>A. APPROVAL OF HUMAN SUBJECTS' RIGHTS COMMITTEE TO CONDUCT RESEARCH</td>
<td>102</td>
</tr>
<tr>
<td>B. AUTHORIZATION TO USE INSTRUMENT</td>
<td>105</td>
</tr>
<tr>
<td>C. LETTER TO AGENCIES</td>
<td>107</td>
</tr>
<tr>
<td>D. RESPONSE FROM AGENCY</td>
<td>114</td>
</tr>
<tr>
<td>E. SUBJECTS' CONSENT FOR PARTICIPATION</td>
<td>117</td>
</tr>
<tr>
<td>F. DEMOGRAPHIC DATA SURVEY</td>
<td>119</td>
</tr>
<tr>
<td>G. INDEX OF WORK SATISFACTION SCALE</td>
<td>121</td>
</tr>
<tr>
<td>H. OBSERVED DATA FOR SUBJECTS IN CONTROL GROUP</td>
<td>128</td>
</tr>
<tr>
<td>I. OBSERVED DATA FOR SUBJECTS IN AFFECTIVE TRAINING GROUP</td>
<td>130</td>
</tr>
<tr>
<td>Table</td>
<td>Page</td>
</tr>
<tr>
<td>-------</td>
<td>------</td>
</tr>
<tr>
<td>1. Abbreviations used in Data Tables</td>
<td>2</td>
</tr>
<tr>
<td>2. Means and Standard Deviations of Variables (Treatment and Control Group.)</td>
<td>6</td>
</tr>
<tr>
<td>3. Descriptive Data on Demographic Variables (Treatment Group)</td>
<td>9</td>
</tr>
<tr>
<td>4. Descriptive Data on Demographic Variables (Control Group)</td>
<td>10</td>
</tr>
<tr>
<td>5. Intercorrelations (Treatment)</td>
<td>57</td>
</tr>
<tr>
<td>6. Intercorrelations (Control)</td>
<td>59</td>
</tr>
<tr>
<td>7. Intercorrelations (Combined)</td>
<td>61</td>
</tr>
<tr>
<td>8. Descriptive Data on Covariate Length of Employment in Hospital Setting</td>
<td>65</td>
</tr>
<tr>
<td>9. Analysis of Variance Table for Total Index of Work Satisfaction Scores</td>
<td>67</td>
</tr>
<tr>
<td>10. Analysis of Variance Table for Index of Work Satisfaction Scores by Pay Component</td>
<td>68</td>
</tr>
<tr>
<td>11. Analysis of Variance Table for Index of Work Satisfaction Scores on Autonomy Component</td>
<td>69</td>
</tr>
<tr>
<td>12. Analysis of Variance Table for Index of Work Satisfaction Scores on Task Component</td>
<td>70</td>
</tr>
<tr>
<td>13. Analysis of Variance Table for Index of Work Satisfaction Scores on Interaction Component</td>
<td>71</td>
</tr>
<tr>
<td>14. Analysis of Variance Table for Index of Work Satisfaction Scores on Professional Status Component</td>
<td>72</td>
</tr>
<tr>
<td>15. Analysis of Variance Table for Index of Work Satisfaction Scores on Doctor-Nurse Relationship Component</td>
<td>73</td>
</tr>
<tr>
<td>16. Analysis of Variance Table for Index of Work Satisfaction Scores on Administration Component</td>
<td>74</td>
</tr>
</tbody>
</table>
Chapter 1

Introduction

Purpose of the Study

The purpose of this investigation was to expand current knowledge about the relationships between the inclusion of an affective component in nursing orientation programs and level of job satisfaction among new nurse graduates.

Enrollment in nursing programs experienced a one percent drop in 1979. If this trend continues, the United States will experience a severe nursing shortage by 1985 (Johnson, 1980). One method of alleviating this problem would be to develop strategies to encourage the nurse's continued participation in the profession.

The data generated by this study may assist nurse educators, hospital in-service personnel and counselors in the health care setting. The specific questions which this research attempted to answer were: (1) Among new nurse graduates, is level of job satisfaction influenced by the type of new employee orientation program provided? and (2) Among new nurse graduates, are the various components of job satisfaction influenced by the type of orientation program offered to the nurse?

Statement of the Problem

The problem of this study was to investigate the relationship between the addition of affective training to
traditional hospital orientation programs and the level of job satisfaction among new nurse graduates. The investigation was accomplished through the utilization of an experimental pretest-postest control group research design. An analysis of covariance statistical approach was used to determine if the independent variable had an effect on level of job satisfaction. The identified covariate was previous hospital work experience.

Background of Study

The analysis of the phenomenon of labor turnover and retention is of major interest to modern society. The abundant literature on this subject, which dates back to the early 1800's, covers data from both European countries and the United States. The main impetus for this extensive study relates to the correlation between turnover and the decreased organizational effectiveness (Price, 1977).

Price's (1977) study of the extent of turnover among various occupations indicated that hospital personnel had an extremely high percentage of turnover when compared to other professional personnel. This finding was additionally supported by an American Nurses Association Study (1962) which showed a crude separation percentage of 58 for registered nurses. During the period 1947 to 1971, the crude separation percentage for all professional, technical and kindred occupations was 13.

The high turnover rate among nurses came to national
attention when the President vetoed the Nurse Training Amendments of 1978. This bill is the main federal support for nursing education in the United States. The administration's rationale for vetoing the bill was based on statistics compiled by the Department of Labor which indicated there was an adequate supply of nurses to meet present demands (American Journal of Nursing, 1979).

In March, 1979, the American Journal of Nursing published their finding which disputed that of the administration. Utilizing data collected by the American Nurses Association, they noted that there are currently 1,400,000 registered nurses in the United States. However, only 70 percent were actively employed in nursing, and of these nurses, 40 percent were employed on a part-time basis. The results of the A and P Project (Wiche, 1978) indicated that a minimum of 1,219,300 full-time equivalent nurses will be needed by 1982.

Kramer (1974) noted that nurses spend an average of six months in their first job. Furthermore, the new nurse graduate has the highest turnover rate of all employed nurses (Cronin-Stubbs, 1977). Over one-third of the exodus of new graduates from nursing has been attributed to the phenomenon of reality shock (Kramer & Schmalenberg, 1978). This phenomenon was defined as the new graduates' startling discovery and their reaction to the discovery that school-bred values conflict with the values of the world of work (Kramer & Schmalenberg, 1978).
Values, needs and expectations are seen as determinators of job satisfaction by the process theorists. It was suggested that orientation programs for new employees can be instrumental in defining values on which they can act in the presence of the value system of the organization (Gruneberg, 1979). The inverse relationship between job satisfaction and rate of turnover has been identified by Porter and Steers (1973).

These findings led one to conclude an orientation program which incorporated the resolution of value conflict could improve the level of job satisfaction and ultimately lead to a decrease in labor turnover.

Hypotheses

The null hypotheses which were tested in this study included:

Hypothesis 1: There will be no difference in total Index of Work Satisfaction scores between new nurse graduates who participate in affective training and those who do not.

Hypothesis 2: There will be no difference in Index of Work Satisfaction scores for the pay component between new nurse graduates who participate in affective training and those who do not.

Hypothesis 3: There will be no difference in Index of Work Satisfaction scores for the autonomy component between new nurse graduates who participate in affective training and those who do not.

Hypothesis 4: There will be no difference in Index of Work Satisfaction scores for the task component between new
nurse graduates who participate in affective training and those who do not.

Hypothesis 5: There will be no difference in Index of Work Satisfaction scores for the interaction component between new nurse graduates who participate in affective training and those who do not.

Hypothesis 6: There will be no difference in Index of Work Satisfaction scores for the professional status component between new nurse graduates who participate in affective training and those who do not.

Hypothesis 7: There will be no difference in Index of Work Satisfaction scores for the doctor-nurse relationship component between new nurse graduates who participate in affective training and those who do not.

Hypothesis 8: There will be no difference in Index of Work Satisfaction scores for the administration component between new nurse graduates who participate in affective training and those who do not.

Definition of Terms

For the purpose of this study, the major variables were defined as follows:

Affective Training: A ten-hour series in which the leader facilitates the expression of conflict occurring in the work setting. The group will be directed through the problem-solving and decision-making process. Techniques such as value clarification and role-playing are included.
**Job Satisfaction:** "The individual's reaction to a particular job" (Gruneberg, 1979) operationalized by the score obtained on the Index of Work Satisfaction.

**Hospital Experience:** The total number of months the new graduates have worked in a hospital as a volunteer, aide, orderly, corpsman and/or Licenced Practical Nurse.

**New Nurse Graduates:** Recent graduates of a registered nursing program, who are in their first Registered Nurse (R.N.) position.

**Assumptions of the Study**

The following assumptions were considered in the planning and conduction of this study:

1. Previous employment of the individual in the health care setting is assumed to familiarize them with the values of the organization which could affect the level of job satisfaction (Lubliner, 1978).

2. The Index of Work Satisfaction (IWS) instrument is an uncomplicated device for measuring job satisfaction. It is assumed that most employees will respond honestly, if confidentiality is assured.

3. The assumption of reliability for the IWS is supported by Stamps, Peidmont, Slavitt and Haase (1978) who found an internal reliability of .912 on the Cronbach coefficient alpha, a
random split-half reliability test.

Limitations of the Study

The following limitations of the study have been identified:

1. The graduates' grade-point average, race, sex, age, socio-economic status and educational preparation were not controlled.

2. A sample of 14 subjects comprised the total N, which reduces the statistical power.

3. Random assignment of treatment groups was utilized, rather than random selection of subjects.

4. The experimenter was the same in both the treatment and control groups, which could affect the external validity of the study.

5. The dependent variable level of job satisfaction was calculated at the end of the orientation period; thus, the study was not extended into time.
Chapter 2

Review of Literature

The review of literature focused on the three major concepts which were relevant to this study. The concepts reviewed included turnover, job satisfaction and affective learning.

Topics included under the concept of turnover included: definitions, extent in nursing, demographic variables, impact and possible determinants. The review format utilized for the concept of job satisfaction included: definition, relationships to turnover, factors in job rates of action identified by various theorists and factors which produce job satisfaction/dissatisfaction for nurses. The final phase in the review dealt with affective learning, its inclusion in education programs, relationship to job satisfaction and methods of facilitating the transition into the world of work.

Due to the extent of the literature related to these concepts, the review of literature concentrated on studies related to hospitals and nursing personnel.

Turnover

Definitions. Two types of labor turnover have been identified—voluntary and involuntary. Voluntary turnover is synonymous with resignations. The phenomenon is defined as
the employee-initiated movement across the membership boundary of a social system (Price, 1977). Involuntary turnover, on the other hand, is initiated by the employer. Turnover, in this review, was used synonymously with voluntary turnover.

**Extent in nursing.** Voluntary turnover is on the increase in the United States (Walters, 1975). Price's (1977) review of 53 studies, which reported extent of turnover, supported this assertion. Several studies of the turnover rate of hospital nurses have been completed. These report an average turnover of 35 to 67 percent yearly (American Nurses Association, 1954; Levine, 1957; American Nurses Association, 1962; Tinney & Wright, 1973; Godfrey, 1973; McCloskey, 1974; Nursing Shortage, 1979; Hallis, 1980).

The most recent study, completed by the California Hospital Association, revealed a turnover rate of 50 percent (The Southern Californian, 1980). It should be noted that except for the American Nurses Association (A.N.A.), these data are based on regional reports which may explain the wide variation.

**Demographic variables.** Demographic variables are indicators which are linked to turnover. Price (1977) produced a codification of the literature related to these correlates. He identified those having strong, medium and weak supporting evidence.

Variables related to turnovers which were pertinent to this study were reviewed and considered in the design of the
investigation. The final analysis of data incorporates the correlates of length of services, non-managers and managers and non-government and government.

1. Length of Service

Abundant data are available which support the negative relationship between length of service and rate of turnover (Price, 1977). Pettman (1975) and Walters (1975) both reported that employees with less than six months experience have a higher turnover rate than those with more service. This relationship was upheld in McCloskey's (1974) study of nursing personnel. Analysis of the data indicated that new nurse graduates had a turnover rate of 61 percent, as compared to 53 percent for employees with increased longevity.

2. Non-managers versus Managers

The proposition that non-managers have a higher rate of turnover than managers is supported by the literature (Price, 1977). Levine's (1957) study of 5,449 nursing personnel in 51 general hospitals collaborated this relationship. Additional support was presented by McCloskey (1974) who reported that staff nurses had the highest turnover rates of nursing personnel.

3. Non-government and Government

Price (1977) cited support for the proposition that there is a higher level of turnover among non-government employees than government employees. He noted that one
codification, three reviews and five empirical studies collaborate this proposition.

4. **Level of Education**

The literature regarding the relationship between level of education and turnover is contradictory (Price, 1977). The proposition that as educational level increases, the rate of turnover increases was supported by Pettman (1975). In addition, Price (1977) cited three codifications, four reviews and four empirical studies which indicated a positive relationship between education and turnover.

The most extensive of the studies conducted by the Office of State Merit Systems in 1968, involved over 15,000 professional employees in the United States public welfare and security agencies. Three studies were cited which did not support the proposition that turnover increases with educational level (Price, 1977).

5. **Age**

Age was seen as having an inverse relationship to rate of turnover (Price, 1977). McCloskey's (1974) study of 152 nurses working in general hospitals revealed that younger nurses (18 to 25) left the job sooner than older nurses. Pettman (1975) noted that not only is age seen as a variable in turnover, it is the basis for several job satisfaction measures.

6. **Race**

Feldbaum's (1980) study, which related race to
turnover rate found that Black nurses were reported to have a significantly lower turnover rate than white nurses (Feldbaum, 1980). In addition, Black nurses in the study remained with the same health agency for a longer period and spent less time employed part-time than white nurses.

7. Sex

Traditionally, females have been considered to have a higher turnover rate than males. Pettman (1975) and Price (1977) both noted that evidence for this correlate is contradictory. They suggested that standardization of investigations must be accomplished before the strengths of this relationship can be determined.

Impact. It is generally believed that turnover has a negative correlation to the effectiveness of the organization (Price, 1977). A major result of turnover is cost to the organization of hiring and retraining of new employees. The new employee does not perform at maximum capacity, nor do the personnel who are helping the individual adjust to his new work situation. In addition, a high turnover rate within an organization tends to spread to other employees (Walters, 1975). Turnover in nursing is believed to be indirectly related to increasing health care costs, decreased revenue for the agency, decreased availability of hospital beds, increased overtime by permanent staff and decreased availability of emergency care (The Southern Californian, 1980). In addition, Cronin-Stubbs (1977) pointed out that turnover results in a
reduction in the quality of patient care.

Possible determinants. Price (1977) identified four major determinants or variables which had an effect on turnover. Included in these are: integration, communication, pay and centralization.

1. Integration

Integration refers to the employee's ability to form primary relationships within the work setting. It is suggested that the higher the level of integration, the lower the level of turnover (Price, 1977; Pettman 1975).

Another aspect of integration is the employee's ability to adjust to his new role. This is commonly referred to as role integration. The importance of role integration is recognized in the nursing profession. Kramer and Schmalenberg (1976) identified the inability to integrate the role of registered nurses as a major factor in the high turnover of new graduates.

Hanson (1976) and House (1976) suggested methods of facilitating the new nurse's movement into the registered nurse role.

2. Communication

Communication is defined as the amount of information which is shared among the members of the system. It is suggested that higher amounts of communication will lead to lower rates of turnover (Pettman, 1975).

Several studies (Wright, 1957; Revans, 1964; Lyons, 1968) of hospital personnel supported communication as a
determinant of turnover. A recent survey related to why nurses leave the profession indicated that communication was a serious problem and instrumental in their decision (Hallas, 1980).

3. Centralization

Centralization refers to the location of power within an organization. An institution where power is vested in one individual would be viewed as having maximum centralization. It is proposed that higher amounts of centralization are related to higher levels of turnover.

Pettman (1975) noted that evidence to support this proposition is weak. However, when one views centralization as the amount of participation in decision-making and/or autonomy in the work situation, the data seem contradictory.

Godfrey's (1978) study of factors which promoted job satisfaction identified lack of input into decision-making as a major dissatisfaction.

4. Pay

Pay relates to money and other economic benefits which are provided employees. When discussing pay as a determinant of rate of turnover Pettman (1975) qualified the proposition by indicating that if pay is highly important, then higher pay will likely produce lower amounts of turnover.

Although pay as a determinant of turnover has strong literary support in the general population, Pettman's (1975) and Price's (1977) studies of nurses indicated that pay is not of high importance and thus, is not related to turnover. The
3,700 respondents to Hallas's (1980) survey cited pay as a major problem in only 2.5 percent of the nursing homes, 2.9 percent in hospitals and 8.9 percent in mental health and rehabilitation agencies.

**Job Satisfaction**

**Definition.** Job satisfaction may be defined as the individual's positive, affective orientation to the social system of which (s)he is a member (Price, 1977). A more precise definition of job satisfaction was offered by Ivanovich and Donnelly (1968). They defined job satisfaction as "the favorable viewpoint of the worker toward the work role he presently occupies."

The inconsistency among definitions can lead to the same individual being identified as both satisfied and dissatisfied (Carroll, 1968). This premise was further supported by Gruneberg (1980) who noted that the various definitions are reflective of the factors which the author believes influences job satisfaction.

**Relationship to turnover.** Job satisfaction has been noted to be negatively related to turnover (Pettman, 1975; Heisler & Houck, 1977; Gruneberg, 1980; Carroll, 1969; Stember, Ferguson, Conway & Yingling, 1978). Price (1977) cited nine codifications, seven reviews and five empirical studies which supported the inclusion of job satisfaction as an intervening variable in turnover.

Nichols' (1971) job satisfaction study of 181 novice Army
nurses showed that stayers were significantly more satisfied than leavers. In an attempt to determine what aspects of job satisfaction or dissatisfaction were instrumental in turnover, Ullrich (1978) interviewed 40 nurses employed at a private general hospital. He found that turnover results as much from dissatisfaction with motivational factors as hygiene/maintenance factors (policies, interpersonal relations, pay). These findings contradicted Godfrey's (1975) supposition that turnover in nursing is due to the fact that poor hygiene/maintenance factors outweigh the benefit of motivational factors.

Factors in job satisfaction identified by various theorists. The current theories of job satisfaction are included under two major headings: content and process theories. The main contributors to the content theories were Maslow and Herzberg. Both of these theorists attempted to explain job satisfaction on the basis of the factors which influence it. Maslow's theory, based on his hierarchy of needs, suggested that only after basic security needs, which include economic considerations, are met can the individual move on to the fulfillment of higher-order needs. These needs are the need for belonging, esteem and self-actualization (Maslow, 1954).

Herzberg (1959) identified two categories of factors involved in job satisfaction. These categories were identified as Hygiene/Maintenance factors and Motivation factors. Herzberg proposed that such things as working conditions, salary, interpersonal relationships, supervision, company policies, and
administration, which are inherent in the work environment, related to job dissatisfaction. On the other hand, factors which relate to the job content, achievement, recognition, responsibility, the work itself and advancement are related to level of satisfaction. Thus, he postulated that the elements which produce job satisfaction and dissatisfaction differ. The absence of job satisfaction does not necessarily mean that the individual is experiencing job dissatisfaction (Walters, 1975; Cronin-Stubbs, 1977; Gruneberg, 1980).

Three major theories are included in the process explanation of job satisfaction; expectation and equity, reference group theories and needs/value fulfillment theories. These theories concentrate on how the individual's characteristics interact with the job to produce job satisfaction.

The early contributors to expectancy theory were Solmon, Lewin, Porter and Lawler. Expectancy theory is based on the belief that individuals have expectations about future occurrences, and when these expectations are not met, dissatisfaction may ensue (Gruneberg, 1980).

Equality theorists suggest that job satisfaction is a result of the individual comparing his input and rewards in the job to the input and rewards of others in the work environment. Reference group theory seems to be an extension of equality theory (Gruneberg, 1980). Reference group theory suggests that to understand job satisfaction, it is necessary to determine to which reference group the individual relates. Thus, if the
individual perceives himself in a comparable position to other members of his group, he will experience satisfaction; if not, dissatisfaction will occur.

The need/value fulfillment approach to job satisfaction suggests that job satisfaction is related to the extent the job meets the individual's needs or values. Gruneberg (1980) noted that criticism of this theory is directed toward the fact it does not consider the importance of various needs/values.

In summary, it appears that job satisfaction involves correlating the needs, values and expectations of the individual to the job situation. Due to the variation among individuals and jobs, it seems unlikely that a single theory could explain all possible combinations of these variables (Carroll, 1969).

Factors which produce job satisfaction/dissatisfactions for nurses. Increasing research into the determinators of job satisfaction for nursing personnel has been conducted in recent years. Much of the impetus for this investigation was the high turnover rate which occurs in hospitals (Godfrey, 1975).

Several studies which attempted to identify job satisfaction factors for nursing personnel utilized Herzberg's Two-Factory theory.

Cronin-Stubbs' (1977) study of 30 new nurse graduates identified achievement and recognition as factors leading to
job satisfaction, whereas responsibility and working conditions were responsible for dissatisfaction.

Godfrey (1975) surveyed 1,500 hospital-based nurses to determine what they perceived as the satisfying and dissatisfying aspects of their jobs. The respondents indicated that they were satisfied with the content of their work, felt a sense of achievement and had pleasant and congenial relationships with their working associates. Major dissatisfiers which were identified included a lack of communication with management, little input into decision-making, minimal recognition and respect from management and lack of adequate staffing.

In 1978, Godfrey repeated her survey. These data were supplied by 17,000 nurses who were predominately employed at the staff-nurse level. Analysis of the data identified unsafe practices, poor leadership and communications breakdown as the major dissatisfiers. The study revealed that the majority of nurses have positive feelings about nursing as a profession. The respondents' work setting, job title and age had no effect on this evaluation. However, education did make a difference in the attitudes expressed. Increased education was directly related to criticism of the profession. Further analysis of the data indicated that degree of satisfaction varied with the work setting, with hospital nursing identified as the least satisfying. No correlation was found between degree of job satisfaction and hours worked or salary. The factor which was most highly correlated with job
satisfaction was a sense of accomplishment. Other factors which were positively correlated to job satisfaction were adequate staffing and the authority to do work as it should be done.

Stember, Ferguson, Conway & Yingling (1978) examined 221 employees of a community health organization; 80 percent of the respondents were nurses. Analysis of the data revealed that field nurses were most satisfied with job importance, supervision and interpersonal relationships. Areas of least satisfaction were identified as organizational policies, communication and job mechanics (paperwork, expectations, time and responsibilities).

Affective Learning

Inclusion in educational programs. Contemporary society is expressing increasing interest in affective learning. Educators and the public alike are directing criticism toward programs which do not include objectives related to the effective domain (Tyler, 1973). The affective domain encompasses such terms as interests, beliefs, values and appreciations. It is viewed as the motivation to behavior and as an integral part of the individual's decision-making (Reilly, 1978). Society expects that graduates will have developed interests, beliefs and values which are in keeping with the goals of the school (Tyler, 1973; Reilly, 1978).

The interest in affective education for students in nursing
programs has accelerated since 1970. Although values were recognized as important to the profession, educators demand that the affective domain receive the same pedagogical considerations as other domains (Reilly, 1978). Thus, strategies for teaching and evaluating this area of learning were incorporated in present nursing education programs (Carroll, 1979).

Studies which support the assumption that nursing programs effect values and attitudes of student nurses were conducted by Gunter (1969), Holliday (1961), Kramer (1974), Schultz (1965) and Williams, Block and Blair (1978).

**Relationship to job satisfaction.** Literature which discussed the impact of school-bred values on job adjustment encompassed three professions: counseling, teaching and nursing.

Stamatakos (1976) noted that one of the greatest sources of job conflict for new student personnel professionals occurred when values and ideals which the student held as necessary components of the profession were met with disinterest or hostility in the work setting.

A two-year study of 50 first-year teachers revealed that their perception of the teacher's role was in conflict with that of the principal. In addition, the mode of teaching which they valued was not accepted in the school systems where they were employed. The resulting frustration and discouragement with the real world were referred to as "reality shock." This phenomenon is a major factor in teachers learning the profession (Collela, 1974).

Metzner, Nelson and Sharpe (1972) defined "reality shock"
in teaching as the shattering realization that what was taught and valued in education classes is totally divorced from problems encountered in the classroom setting. They cited two studies (Dana and Butcher) which validated the fact that teachers experienced a drastic change in attitudes and ideals during the first year of teaching.

House (1976) suggested that problems arise for the new nurse graduate when (s)he finds that his/her beliefs and ideas about patients and nursing are either not accepted or ignored by the health care organization. Another area of conflict for the graduate is the inconsistency between expected behaviors in educational programs and the job situation.

Kramer (1974) studied the role transformation process in new nurse graduates in a sample of 220 baccalaureate nurses from 37 nation-wide medical centers. Additional data were gathered from 161 baccalaureate graduates of the University of California School of Nursing and from 12 groups (numbering 12 to 20) of new associate degree, diploma and baccalaureate graduates employed in community and medical-center hospitals. The results of this research indicated that there is a regular process through which the individual goes. This process, referred to as "reality shock," is the result of the conflict between school-bred values and values of the work world.

In response to the tension created by "reality shock," the new nurse may hop from one job to another or leave the profession of nursing altogether (Kramer & Schmalenberg, 1978).
A study of 85 new nurses employed in a 500-bed general hospital supported these findings. At the end of a five-week orientation program, 24 of the subjects indicated that they were thinking of leaving the organization and 9 of the 24 were considering leaving nursing altogether (Cronin-Stubbs & Gregor, 1980).

**Methods of facilitating transition.** One of the most relevant areas of research for this study was the review of methods utilized to reduce conflict for employees. This topic has been reviewed by researchers in management, business, economics, psychology, education, counseling and nursing.

1. **T-Groups**

Laboratory training groups emerged in 1946 as a result of various experiments with discussion groups to change behavior of employees in the work situation. Prominent leaders in this movement were Kurt Lewin, Kenneth Benne, Leland Bradford and Ronald Lippitt. The assumption, at that time, was that much of the conflict within organizations was related to interpersonal relations. Thus, the aim of T-group laboratories was to provide the members of the group the opportunity for interpersonal learning (Kaye, 1973), which would then be transferred to the work setting. The training sessions were designed for 1 - 2 weeks and the supposition was that participants would have an attitude change as a result of their experience (Schein & Bennis, 1965.)

A major concern related to T-group laboratories was the
transfer of learning from the group setting to the back-home setting. Schein & Bennis (1965) noted that the contrasting values of the group setting and the home setting could hinder this process.

Katz and Schwebel (1976) conducted a study on 35 middle managers to assess the level of transfer of learning. The subjects were divided into three groups: on-site training groups, off-site training groups, and control. The results of the study indicated that there was no difference in learning among the three groups.

Contradictory results were obtained by McIntire (1973) who studied 17 subjects to evaluate personality change and the endurance of the change. These data indicated that members of the T-group had a higher level of self-actualization and this, in fact, was maintained over time.

2. Organizational Development

The emergence of organizational development (O.D.) was in response to the difficulty noted in the transfer of behavioral skills and insights acquired in T-groups to organizational problems (French & Bell, 1973). The aim of O.D. is to make the organization more effective while achieving the goals and purpose of both the organization and the individual.

O.D. is a problem-solving process which utilizes a change agent, who is not part of the organization. A major focus of O.D. is on the informal system (feelings, attitudes, norms, values) of the organization and how they relate to the work
team. The change strategy utilized by O.D. practitioners is normative-reeducative. This strategy is based upon the assumption that norms (beliefs, values) are the basis of behavior and that if change is to occur, a re-education process is necessary to stimulate the acquisition of new norms (French & Bell, 1973).

The O.D. approach to improving organizations has been utilized in business, school districts and by the Bureau of Indian Affairs (French & Bell, 1973). In addition, reviews of the application of this process in higher education (Bolton & Boyer, 1973, 1973; Boyer & Crockett, 1973) and in the health care field (Byrd, La Londe & Soth, 1974; Levenstein, 1976; Drexler, 1977) have reported positive results.

One review (Fanco, 1977) suggested that O.D. is an ineffective technique in the hospital setting because medical centers have: (1) none of the formal characteristics of industry, (2) physicians who feel that they are autonomous, and (3) three differing social systems.

The O.D. approach has been utilized to facilitate the problem-solving of both existing and new employees (French & Bell, 1973). The following strategies are designed exclusively for the new employee.

(a) Orientation Programs

A new-employee orientation program is one of the most effective devices for decreasing turnover and increasing the productivity of the employee, according to Lubliner (1978).
Hospitals have traditionally conducted 5 to 8 week orientation programs for new nurse employees. These programs included classroom experience, where the employee is familiarized with the philosophy, structure, policies and objectives of the organization, and clinical practice under the guidance of the head nurse (Chapman, 1975; Hanson, 1976).

Chapman (1975) suggested that a more individualized approach be instituted. This approach was implemented through the utilization of an assessment tool to identify the graduate's skills. Clinical practice was then designed to meet the individual's learning needs.

McGrath and Koewing (1978) reported on the addition of an eight-week preceptorship to the traditional two-week orientation program. Under this program, the new graduate had an identified resource person (s)he could contact when (s)he had a problem on the unit.

Reagen (1973) described a variation of orientation programs for nurses which utilizes skits in place of lectures. These skits provided the new employee with information as well as clinical practice.

One empirical study was found that discussed the effect of orientation programs for nurses. Del Bruno and Quaife (1976) reported that the 24-month turnover rate for nurses who receive standard on-the-job orientation was 38 percent, while nurses in an orientation unit had 28 percent. (Orientation units are hospital floors that have an assigned orientation instructor to assist the new graduate.)
The literature revealed that hospital orientation programs for new nurses had traditionally focused on the dispensing of information and clinical practice. The final part of this review discusses a new-graduate orientation approach that is designed to facilitate the resolution of reality shock.

(b) Bicultural Training

Bicultural training programs are orientation programs for new nurse graduates which contain an affective, cognitive and behavioral component. These programs added nine hours of affective seminars after the sixth week of a traditional clinical orientation. In addition, during the succeeding weeks, the new nurse graduate completed thirteen (thirty-minute) modules which were on audio cassettes. The modules contained information which facilitated the resolution of conflict related to differing values. Two eight-hour workshops which focused on conflict resolution were held four and one-half months after initial employment (Kramer & Schmalenberg, 1978). A study of 307 new graduate nurses employed in eight medical centers in the United States was conducted by Kramer and Schmalenberg (1978). An experimental group which participated in bicultural training and a control group which received clinical training were examined nine months after completion of these programs. Analysis of the data revealed that graduates in the experimental group had 10 percent turnover, while those in the control group had 40 percent turnover. Furthermore, the nurses who participated in bicultural training retained higher professional role
concepts, were more involved in change agent activities and earned higher performance ratings.

The model developed by Kramer and Schmalenberg (1978) was utilized at the New England Deaconess Hospital. Data collected on these subjects showed a decreased attrition rate and an increased degree of job satisfaction in nurses who participated in the Bicultural Training Program (Holloran, Mishken & Hanson, 1980).

Summary

The review of the literature may be summarized by the following statements:


There is a negative relationship between length of service and rate of turnover (Walters, 1975; Pettman, 1975; Price, 1977; McCloskey, 1974), and age and turnover rate (McCloskey, 1974; Pettman, 1975; Price, 1977).

There is some support for the proposition that non-managers have a higher turnover rate than managers (Lewin, 1957; McCloskey, 1974; Price, 1977).

Turnover may be influenced by level of education (Pettman, 1975; Price, 1977), job location (public or private sector)
(Price, 1977), and racial origin (Feldbaum, 1980).

The determinants of integration (Kramer & Schmalenberg, 1967; Hanson, 1976; House, 1976), communication (Wright, 1957; Revans, 1964; Lyons, 1968) and centralization (Godfrey, 1978) have a major affect on turnover in nursing.

Salary is not a major determinant of turnover in the nursing profession (Hallas, 1980).


The factors which create job satisfaction are not commonly agreed upon (Gruneberg, 1980; Carroll, 1969).

Major factors in job satisfaction for nursing personnel include achievement (Godfrey, 1975, 1978; Cronin-Stubbs, 1977), recognition (Godfrey, 1975) and integration (Godfrey, 1975; Stember, Ferguson Conway & Yingling, 1978).

The most commonly identified source of dissatisfaction among nurses is communication breakdown (Godfrey, 1975, 1978; Stember, Ferguson, Conway & Yingling, 1978).

Affective learning is a necessary component of educational programs (Tyler, 1973; Reilly, 1978).

School-bred values are sustained (Holliday, 1961; Schultz, 1965; Gunter, 1969; Kramer, 1974; Block & Blair, 1978).

Counselors (Stamatakos, 1976), teachers (Metzner, Nelson & Sharp, 1972; Colleta, 1974) and nurses (Reilly, 1978; Kramer & Schmalenberg, 1979), experience a conflict between school values in the work setting.
Reality shock is a factor in the turnover rate for teachers (Colleta, 1974) and nurses (Kramer & Schmalenberg, 1978; Cronin-Stubbs & Gregor, 1980).


Organizational development (O.D.) has been effectively used to strengthen the organization in a multitude of settings (French & Bell, 1973; Bolton & Boyer, 1973; Boyer & Crockett, 1973; Byrd, La Londe & Soth, 1974; Levenstein, 1976; Drexler, 1977). One review (Danco, 1977) questioned the validity of using O.D. in the hospital setting.

Orientation programs can be effective in reducing turnover (Lubliner, 1978).

Standard orientation programs for new nurse graduates have a cognitive and psychomotor component (Chapman, 1975; Hanson, 1976; Reagen, 1973; McGrath & Koewing, 1978).

Bicultural training programs for new nurse graduates add an affective component to traditional orientation (Kramer & Schmalenberg, 1978).

New nurse graduates who participate in bicultural training programs have a lower turnover rate (Kramer & Schmalenberg, 1978; Holloran, Mishkin & Hanson, 1980) and a higher degree of job satisfaction (Holloran, Mishkin & Hanson, 1980).
Chapter 3

Methods

Design

The general design for this study was identified as a non-equivalent control group design. This design falls under the heading of a quasi-experimental design (Campbell & Stanley, 1963), which is applicable when intact groups are utilized. To control for selection bias, the groups were compared on pretest scores and demographic variables. One variable was identified as a covariate. These procedures decrease the threat to internal validity.

To increase the external validity of the study, a Hawthorne control, which is the introduction of an irrelevant, unrelated intervention (Tuckman, 1972) was utilized.

The non-equivalent control group design may be represented as follows, with 0 representing the observation, X representing the treatment and H representing the Hawthorne control. The dotted line separating the two groups indicates that intact groups were utilized, thus:

\[ \begin{array}{cccc}
0 & 1 & X & 2 \\
0 & 3 & H & 0 & 4 \\
\end{array} \]
Determination of which group was exposed to the experimental and control conditions was done on a random basis, through the flip of a coin.

Variables

The independent variable, new nurse graduates who participated in affective training versus those who do not, was manipulated by the experimenter. The covariate length of hospital experience (exclusive of educational program) was controlled statistically. In addition, data were collected on five demographic variables to determine the equivalence of the groups.

The dependent variable, Index of Work Satisfaction score, was selected to measure the effect of the independent variable and thereby, answer the questions formulated in this study.

Subjects

The population which was utilized for this study was new nurse graduates who were employed in hospitals, within the State of Nevada. Data were collected at Southern Nevada Memorial Hospital, Las Vegas, Nevada and the Washoe Medical Center, Reno, Nevada, during June and July of 1980. To be considered as a subject, the new nurse graduate had to meet the following requirements:

1. Graduation from an educational program which prepared registered nurses.
2. Graduation occurred in the past three months.
3. Eligibility to take Nevada State Board for Registered Nurses.

4. Participation in the employing agency's Orientation Program (Registered Nurse).

Seven individuals at Southern Nevada Memorial Hospital met these criteria and agreed to participate in the study. Washoe Medical Center employed 12 nurses who were eligible to be included in the study. To equalize the number in each group studies, seven subjects were randomly selected from the Washoe Medical Center population.

The random selection of the Washoe Medical Center subjects was accomplished by using a table of random numbers. If the number ending was even, the individual was included in the subject population. Odd numbers were excluded from the study. This procedure was continued, with replacement, until the necessary seven subjects were selected.

Data for analysis in this study were collected on 14 subjects. All participants in the orientation programs were exposed to the intervention; however, the identity of subjects was not disclosed.

Materials

Experimental setting. The data for this study were collected at Southern Nevada Memorial Hospital, Las Vegas, Nevada and at Washoe Medical Center, Reno, Nevada. Both general hospitals are major health facilities within their
respective communities.

Southern Nevada Memorial Hospital is a 300-bed teaching hospital under the control of the Board of County Commissioners. It is affiliated with both the University of Nevada, Las Vegas and the University of Reno, providing learning experiences for both student nurses and physicians.

Washoe Medical Center provides similar services for the students from the University of Nevada, Reno. This 550-bed, non-profit medical center is the regional medical center for the Northern Nevada and Eastern California areas. It serves a comparable client population.

The nursing mode of client care at Washoe Medical Center is team nursing. This approach to patient care places the professional nurse in a team-leader role, where (s)he is responsible for directing the care of 12-15 clients, with the aid of ancillary personnel. This approach is also utilized at Southern Nevada Memorial Hospital. However, some units on which the subjects worked during the investigation utilized a primary nursing approach, in which the professional nurse is completely responsible for the care of 6-8 clients.

At the time of the study, the subjects were involved in their respective hospitals' orientation programs. Both programs provided orientation to hospital procedures and policies, classroom instruction in nursing skills and clinical practice on all shifts. In addition to the guidance
provided by the Nursing Education Departments, all subjects were assigned a more experienced nurse to use as a resource person.

Measurement device. To assess the effect of the independent variable in this study, an Index of Work Satisfaction score was calculated using the revised Attitude Scale to Measure Occupational Satisfaction of Hospital Nurses. This instrument was developed by Paula L. Stamps, Ph.D., Eugene B. Piedmont, Ph.D., Dinah B. Slavitt, M.S. and Ann Marie Haase, Ph.D., as part of a three-year research project which was partially supported by a grant between the National Center for Health Services Research and Development and the University of Massachusetts.

The original research of this project involved the production of an instrument that measured the importance of components of satisfaction, attitude toward the components and a weighted Index of Work Satisfaction (Stamps, Piedmont, Slavitt & Haase, 1978).

Analysis of the original instrument after its use with 696 nurses in a hospital setting resulted in the revised attitude scale, which was utilized in this study. The developers employed a principle component analysis with a varimax rotation in order to assess the face validity of the original attitude questionnaire. This factor analysis indicated that seven factors accounted for 59 percent of the variance among the items.
As a result of this investigation, the developers reduced the attitude scale to the present 48-item questionnaire and suggested that the following definitions be utilized as descriptors of the seven occupational satisfaction components which are measured:

1. Pay: Dollar remuneration and fringe benefits received for work done.

2. Autonomy: Amount of job-related independence, initiative and freedom either permitted or required in daily work activities.

3. Task Requirements: Tasks that must be done as a regular part of the job and the organization of work as it relates to the amount of time allotted to patient care and administrative work.

4. Administration: Effects of administration on job procedures, personnel policy and the amount of staff participation.

5. Interaction: Opportunities and requirements presented for both formal and informal social conduct during working hours.

6. Professional Status: Generated feeling toward the profession, the skills, usefulness and status of job.

The internal reliability of the 48-item attitude questionnaire is .912. This reliability level was determined through the utilization of a random split-half reliability test, the Cronbach coefficient alpha.

The results of the Intra-Subscale Reliability Test for the seven components of the 48-item attitude scale were as follows:

- Pay: .846
- Administration: .839
- Interaction: .760
- Professional Status: .760
- Doctor-Nurse Relationships: .700
- Task Requirements: .699
- Autonomy: .696

The instrument is a Likert-type attitude scale which measures the individual's current level of satisfaction on the seven components. To protect the identity of the component being examined, the specific component items are arranged randomly throughout the questionnaire. These items are phrased both positively and negatively, so that in all cases, a higher score (nearer 6) indicates a higher level of satisfaction with the relevant component. The scores on each item are simply added to obtain the score of each individual on a particular component. In addition, scores on all components may be added to obtain the total score on Index of Work Satisfaction.
The range developed for the particular components of the scale are as follows:

- Pay: 0-54
- Autonomy: 0-30
- Task Requirements: 0-36
- Interaction: 0-42
- Professional Status: 0-48
- Doctor-Nurse Relationships: 0-18
- Administration: 0-60

A score of 0 indicated maximum dissatisfaction with the particular component, whereas the top score of the scale indicated maximum satisfaction. The range for the total of the seven components is 0 to 288.

It should be noted that in the early development of the Occupational Satisfaction Instrument, a section was included that measured the importance of each component to the subject being investigated, by the use of a paired comparison technique. The results of this rank ordering were then multiplied by the average of the component score (obtained on the attitude scale) to give a weighted total score. Analysis of this procedure by the developers indicated that there was a .86 correlation between weighted and unweighted score. In addition, the weighted-score approach was time-consuming, and the zero weighting, given the least important component, resulted in this component being entirely eliminated from
the total score. Due to these factors, Stamps, Piedmont, Slavitt and Haase (1978) suggested that the paired-comparisons part of the questionnaire be eliminated, which results in a non-weighted score being obtained for the total score. These recommendations were followed in the present investigation.

Procedure for Data Collection

General. The following procedures were followed in the process of data collection:

1. Approval of research proposal was obtained from the Human Subjects Rights Committee, Department of Nursing, University of Nevada, Las Vegas. (See Appendix A.)

2. Permission to use Occupational Satisfaction Satisfaction Scale was obtained from Dr. Paula Stamps. (See Appendix B.)

3. Request to conduct research was forwarded to Southern Nevada Memorial and Sunrise Hospitals, Las Vegas, Nevada. (See Appendix C.)

4. Approval to conduct the study was obtained from Southern Nevada Memorial Hospital. (See Appendix D.)

5. Request to conduct research was forwarded to Washoe Medical Center, Reno, Nevada. (See Appendix C.)

6. Approval to conduct the study was obtained from Washoe Medical Center.
7. Assignment of experimental and control groups was done on a random basis.

8. Conferences were held with the Nursing Education Departments to determine when the investigation could be carried out. (The agency's scheduling of orientation components was a factor in this decision, as it determined the availability of the subjects.)

9. During the initial contact with the subjects:
   a) The purpose of the research was explained verbally: "The purpose of this investigation is to identify components which could be added to existing orientation programs."
   b) Written consent to participate in the study was obtained. (See Appendix E.)
   c) Demographic data were collected (see Appendix F) from the subjects.
   d) Assessment of current job satisfaction in nursing was determined. (For purposes of this study, the subjects were identified as new nurse graduates. Analysis of data indicated some members of the orientation program had previous work experience as registered nurses. These members were not included in the final analysis of data as they did not meet the requirements for inclusion in the study.)
The independent variable which was manipulated in this study was the presence of affective training. The training was composed of three affective components which were designed to facilitate the new graduate's transition into the world of work. The presence of an outside change agent (the experimenter) would promote the inclusion of these procedures under an Organizational Development Approach (French & Bell, 1975; Gazda, 1975).

The training began with values-clarification exercises which were developed by Simon (1974) and Kramer and Schmalenberg (1977). The utilization and application of these techniques in nursing has been described by Kramer and Schmalenberg (1977), Schmalenberg and Kramer (1979), Reilly (1978), Bakdash (1978), Collela (1978) Uustal (1978), Partridge (1978) and Pinch (1979).

A study done by Ohlde and Vinitsky (1976) confirmed that values-clarification strategies are valid means for clarifying personal values. At the close of the values-clarification component, the subjects identified values they prized which seemed to have less significance for other hospital personnel.

The second component of the affective training was related to decision-making and problem-solving. French and Bell (1973) identified these as major forces of Organizational Development. The utilization of groups to facilitate personal problem-solving of nursing personnel has been reported by Menkin (1975). The specific techniques of
Problem Analysis and Decision Analysis, developed by Kepner-Tregoe, were shared with the subjects. The subjects were actively involved in this discussion and a current problem presented by one of the subjects was run through the process.

The training concluded with the subjects being introduced to assertive skills. Assertiveness is seen as a necessary attribute if nurses are to be successful in their dealings with others in the work setting (Hutchings & Colburn, 1979; Withers, 1978; Donnelly, 1978, 1979, Moniz, 1978). The subjects role-played situations which had occurred and experimented with assertive behaviors which would have been appropriate.

The last half-hour of the final session was utilized by the subjects to discuss what they had discovered and how these discoveries could be utilized.

**Treatment group.** The general procedures which were instituted with the treatment group are as follows:

1. Through random selection, the treatment affective training was implemented at Southern Nevada Memorial Hospital.

2. The experimenter met with the subjects for two hours at the end of the first week of orientation. Agency staff were not present.

3. During the following two weeks, the experimenter met with the subjects four times, for a total interaction
of ten hours.

4. The Attitude Scale to Measure Occupational Satisfaction (see Appendix G) was administered (and collected) four weeks later by the experimenter. Subjects who could not attend this session due to shift work or days off mailed the completed questionnaire directly to the experimenter.

**Hawthorne control group.** The irrelevant, unrelated intervention which was selected for the control group was a ten-hour lecture series. The theme of this cognitive presentation was leadership in nursing, with a stress on team leadership. Kron's (1966) publication was utilized as a resource for this intervention.

The material was presented in straight lecture format, with all discussion being discouraged. At the end of the ten hours, subjects were given a bibliography related to the presented material.

Procedures which were implemented for the control group were as follows:

1. Through random selection, the Hawthorne control was instituted at Washoe Medical Center.
2. The experimenter met with the subjects for five hours during the first week of orientation. Staff from the Nursing Education Department introduced the experimenter and periodically dropped in during the presentation.
3. The following week, the other five-hour lecture segment was presented.

4. The Attitude Scale to Measure Occupational Satisfaction was administered and collected by the experimenter four weeks later. Subjects who could not attend this session due to shift work or days off mailed the completed questionnaire directly to the experimenter.

**Procedure for Data Analysis**

All data were analyzed through the utilization of the Statistical Package for the Social Sciences computer program system. Means and standard deviations were calculated for the demographic data collected from each group of subjects to determine how equivalent the two groups were on these variables.

In addition, the means and standard deviations were determined for the eight Index of Work Satisfaction scores.

In an attempt to assess the validity of the IWS instrument, a Pearson product-moment correlation was calculated. For the purpose of hypotheses testing, analysis of covariance was employed. The review of literature supported the proposition that knowledge of job expectations was a factor in job satisfaction (Grunenberg, 1980; Carroll. 1969; Lubliner, 1978). It was assumed that subjects who had worked in the hospital setting would have knowledge of what was expected of the professional nurse. Thus, length of hospital work experience was identified as a covariate.
in this study and was controlled statistically through the utilization of this procedure.

Individual data on each of the seven components, as well as combined data, were analyzed.
Chapter 4

Results

The results of this investigation are presented in the following order: Overview, descriptive data on demographic variables, relationship among variables, assumptions of analysis of covariance, descriptive data on covariate, hypotheses testing, subsidiary analysis and summary.

Overview

Two groups of new nurse graduates, who were in the process of hospital orientation, were randomly assigned to a treatment or control group. The treatment group participated in affective training in addition to that hospital's usual orientation program. The control group received a lecture series for an equivalent time, plus the hospital's orientation program. Data were collected on demographic variables and job satisfaction.

An explanation of abbreviations used in the data presentation in Tables 2 through 5 is given in Table 1.
<table>
<thead>
<tr>
<th>Variable</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGE</td>
<td>Age group reported by subjects. For the purpose of analysis, individuals who indicated they were within the 20 to 29-year-old age range were labeled 1, 30 to 39, 2; 40 to 49, 3; and 50 to 59, 4.</td>
</tr>
<tr>
<td>WOR</td>
<td>Number of months work experience in a hospital as volunteer, aide, orderly, corpsmen or Licensed Practical Nurse.</td>
</tr>
<tr>
<td>ED</td>
<td>Years of educational preparation to become a registered nurse. For the purpose of analysis, Associate Degree Preparation was represented as two (2) and Baccalaureate preparation as four (4).</td>
</tr>
<tr>
<td>SHI</td>
<td>Shift the individual was working in the hospital. The following labels were used: days, 1; evenings, 2; and nights, 3.</td>
</tr>
<tr>
<td>SEX</td>
<td>Gender of subjects. For analysis purpose, male was identified as one (1) and female as two (2).</td>
</tr>
<tr>
<td>PAY</td>
<td>Score on IWS subscale for the pay component. Pay was defined as the &quot;dollar remuneration and fringe benefits received for work done.&quot;</td>
</tr>
<tr>
<td>Variable</td>
<td>Definition</td>
</tr>
<tr>
<td>----------</td>
<td>------------</td>
</tr>
<tr>
<td>AUT</td>
<td>Score on IWS subscale for the autonomy component. Autonomy was defined as the &quot;amount of job-related independence, initiative and freedom either permitted or required in daily work activities.&quot;</td>
</tr>
<tr>
<td>TAS</td>
<td>Score on IWS subscale for the task component. Task was defined as the &quot;tasks that must be done as a regular part of the job and the organization of work as it relates to the amount of time allotted to patient care and administrative work.&quot;</td>
</tr>
<tr>
<td>INT</td>
<td>Score on IWS subscale for interaction component. Interaction was defined as the &quot;opportunities and requirements presented for both formal and informal social conduct during working hours.&quot;</td>
</tr>
<tr>
<td>PS</td>
<td>Score on IWS subscale for the professional status component. Professional status was defined as the &quot;generated feeling toward the profession, the skills, usefulness and status of job.&quot;</td>
</tr>
<tr>
<td>DOC</td>
<td>Score on IWS subscale for the Doctor-Nurse Relationships component. Doctor-Nurse Relationships was defined as the &quot;amount and type of professional interaction among physicians and nurses.&quot;</td>
</tr>
</tbody>
</table>
Table 1 (Continued)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>AD</td>
<td>Score on IWS subscale for administration component. Administration was defined as the &quot;effects of administration on job procedures, personnel policy and the amount of staff participation.&quot;</td>
</tr>
<tr>
<td>TOT</td>
<td>Total IWS score. This is computed by totaling the individual's scores on the seven subscales.</td>
</tr>
<tr>
<td>TRE</td>
<td>Group of which subject was member. Subjects in the affective training group were identified as one (1). Subjects in the control group were identified as two (2).</td>
</tr>
</tbody>
</table>
Descriptive Data on Demographic Variables

Descriptive data on demographic variables were collected to determine the equivalency of the two intact groups of new nurse graduates. The resulting means and standard deviations are presented in Table 2. These data were then subjected to Z-score analysis to determine if the observable differences between the groups were real or due to sampling error. Results of this investigation revealed a significant difference at the .05 level for education and sex.
### Table 2

Means and Standard Deviations of Variables for Treatment and Control Group

<table>
<thead>
<tr>
<th>Variable</th>
<th>Treatment Group (N=6)</th>
<th>Control Group (N=7)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AGE X</td>
<td>1.83</td>
<td>1.29</td>
</tr>
<tr>
<td>S.D.</td>
<td>1.17</td>
<td>.49</td>
</tr>
<tr>
<td>WOR X</td>
<td>1.83</td>
<td>10.86</td>
</tr>
<tr>
<td>S.D.</td>
<td>.98</td>
<td>12.39</td>
</tr>
<tr>
<td>ED X</td>
<td>2.33*</td>
<td>3.71*</td>
</tr>
<tr>
<td>S.D.</td>
<td>.82</td>
<td>.76</td>
</tr>
<tr>
<td>SHI X</td>
<td>1.33</td>
<td>1.71</td>
</tr>
<tr>
<td>S.D.</td>
<td>.52</td>
<td>.95</td>
</tr>
<tr>
<td>SEX X</td>
<td>2.0*</td>
<td>1.8 *</td>
</tr>
<tr>
<td>S.D.</td>
<td>0</td>
<td>.37</td>
</tr>
<tr>
<td>PAY X</td>
<td>24.17</td>
<td>25.0</td>
</tr>
<tr>
<td>S.D.</td>
<td>2.32</td>
<td>5.0</td>
</tr>
<tr>
<td>AUT X</td>
<td>10.0</td>
<td>13.29</td>
</tr>
<tr>
<td>S.D.</td>
<td>4.47</td>
<td>2.63</td>
</tr>
<tr>
<td>TAS X</td>
<td>21.50</td>
<td>18.29</td>
</tr>
<tr>
<td>S.D.</td>
<td>4.28</td>
<td>4.41</td>
</tr>
<tr>
<td>INT X</td>
<td>18.67</td>
<td>18.86</td>
</tr>
<tr>
<td>S.D.</td>
<td>4.03</td>
<td>4.41</td>
</tr>
<tr>
<td>P.S. X</td>
<td>29.67</td>
<td>29.71</td>
</tr>
<tr>
<td>S.D.</td>
<td>5.65</td>
<td>4.07</td>
</tr>
<tr>
<td>DOC X</td>
<td>9.33</td>
<td>8.86</td>
</tr>
<tr>
<td>S.D.</td>
<td>9.87</td>
<td>2.04</td>
</tr>
<tr>
<td>AD X</td>
<td>28.83</td>
<td>24.71</td>
</tr>
<tr>
<td>S.D.</td>
<td>9.87</td>
<td>5.65</td>
</tr>
<tr>
<td>TOT X</td>
<td>141.67</td>
<td>138.71</td>
</tr>
<tr>
<td>S.D.</td>
<td>21.19</td>
<td>6.21</td>
</tr>
</tbody>
</table>

*p < .05
The review of the literature indicated that age had a positive correlation to degree of job satisfaction (Carroll, 1969; Gruneberg, 1980). Examination of the data indicated that the treatment group had a mean age of 1.83, whereas the control groups mean age was 1.29. Z-score analysis did not indicate this was a significant difference among means. The actual age range of individual subjects is reported in Tables 3 and 4. The above mean ages are conversions for computer analysis as explained in Table 1.
Table 3
Descriptive Data on Demographic Variables
(Treatment Group)

<table>
<thead>
<tr>
<th>Subject Number</th>
<th>Age</th>
<th>Education</th>
<th>Months at This Hospital</th>
<th>Shift</th>
<th>Employment Status</th>
<th>Sex</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>20-29</td>
<td>2 yr.</td>
<td>0-6</td>
<td>Evenings</td>
<td>Full</td>
<td>F</td>
</tr>
<tr>
<td>2.</td>
<td>20-29</td>
<td>2 yr.</td>
<td>0-6</td>
<td>Day</td>
<td>Full</td>
<td>F</td>
</tr>
<tr>
<td>3.</td>
<td>20-29</td>
<td>2 yr.</td>
<td>0-6</td>
<td>Evenings</td>
<td>Full</td>
<td>F</td>
</tr>
<tr>
<td>4.</td>
<td>30-39</td>
<td>2 yr.</td>
<td>0-6</td>
<td>Day</td>
<td>Full</td>
<td>F</td>
</tr>
<tr>
<td>5.</td>
<td>20-29</td>
<td>2 yr.</td>
<td>0-6</td>
<td>Day</td>
<td>Full</td>
<td>F</td>
</tr>
<tr>
<td>6.</td>
<td>50-59</td>
<td>4 yr.</td>
<td>0-6</td>
<td>Day</td>
<td>Full</td>
<td>F</td>
</tr>
</tbody>
</table>
Table 4
Descriptive Data on Demographic Variables
(Control Group)

<table>
<thead>
<tr>
<th>Subject Number</th>
<th>Age</th>
<th>Education</th>
<th>Months at This Hospital</th>
<th>Shift</th>
<th>Employment Status</th>
<th>Sex</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>20-29</td>
<td>4 yr.</td>
<td>0-6</td>
<td>Night</td>
<td>Full</td>
<td>F</td>
</tr>
<tr>
<td>2.</td>
<td>30-39</td>
<td>4 yr.</td>
<td>0-6</td>
<td>Day</td>
<td>Full</td>
<td>F</td>
</tr>
<tr>
<td>3.</td>
<td>30-39</td>
<td>2 yr.</td>
<td>0-6</td>
<td>Evenings</td>
<td>Full</td>
<td>F</td>
</tr>
<tr>
<td>4.</td>
<td>20-29</td>
<td>4 yr.</td>
<td>0-6</td>
<td>Night</td>
<td>Full</td>
<td>F</td>
</tr>
<tr>
<td>5.</td>
<td>20-29</td>
<td>4 yr.</td>
<td>0-6</td>
<td>Day</td>
<td>Full</td>
<td>F</td>
</tr>
<tr>
<td>6.</td>
<td>20-29</td>
<td>4 yr.</td>
<td>12-36</td>
<td>Day</td>
<td>Full</td>
<td>F</td>
</tr>
<tr>
<td>7.</td>
<td>20-29</td>
<td>4 yr.</td>
<td>12-36</td>
<td>Day</td>
<td>Full</td>
<td>F</td>
</tr>
</tbody>
</table>
The literature review (Carroll, 1969; Gruneberg, 1980) indicated that length of employment does relate to job satisfaction. It is thought that this relationship is due to the fact that the worker knows what to expect in the work situation. This variable was controlled statistically in this study.

The subjects in the treatment groups had a mean of 10.86 on the length of work variable. The control group mean on this variable was 1.83. However, Z-score analysis to test for the significance of this obtained difference of 9.03 indicated that it was not significant at the .05 level.

Gruneberg (1980) noted that a relationship between job satisfaction and educational level has been reported in several studies. However, the results of these studies are contradictory and are limited to comparisons between grammar school-, high school- and college-educated workers. The exception to these studies was Godfrey's (1978) investigation of job satisfaction in nursing. She reported that nurses holding doctoral degrees were more critical of the profession.

Analysis of the data reported by the subjects in the treatment and control group indicated that there was a significant difference in the means for this variable. The mean educational level for the treatment group was 2.33 years and for the control group, 3.71 years.

Data on the shift and employment status of the subjects were collected to determine if the employing agencies offered
differing job opportunities for the new graduates. (Tables 3 and 4.) These data indicated that 72 percent of the subjects in the treatment group were working days, while 28 percent of the subjects in the treatment group were on the evening shift. In the control group, 57 percent of the subjects worked days, 28.5 percent evenings and 14.5 percent nights. The test to determine if the difference among means on the shift variable was significant indicated it was not. All subjects were employed on a full-time basis.

The literature relating sex and job satisfaction was inconclusive (Gruneberg, 1980; Carroll, 1969; Feldbaum, 1980). Analysis of data of the subjects in this study showed that females comprised 100 percent of the nurses in the treatment group and 86 percent of the nurses in the control group. This resulted in the identification of a difference which was significant at the .05 level among the means on the sex variable.

**Relationship among Variables**

The data were analyzed with the Pearson Correlation program of the SPSS in an effort to determine the construct validity of the measurement tool. The interrelation of the subscale scores and the total Index of Work Satisfaction score for the treatment group, control group and combined groups were obtained. These data are presented in Tables 5, 6 and 7.
Table 5
Intercorrelations among Demographic Variables, Index of Work Satisfaction Subscale Scores and Total Index of Work Satisfaction Score for the Treatment Group (N=6)

<table>
<thead>
<tr>
<th></th>
<th>AGE</th>
<th>WOR</th>
<th>ED</th>
<th>SHI</th>
<th>SEX</th>
<th>PAY</th>
<th>AUT</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGE</td>
<td>1.0000</td>
<td>.1450</td>
<td>.9080</td>
<td>-.2209</td>
<td>99.0000</td>
<td>.2339</td>
<td>.0765</td>
</tr>
<tr>
<td>WOR</td>
<td>.1450</td>
<td>1.0000</td>
<td>.0830</td>
<td>.1313</td>
<td>99.0000</td>
<td>-.3366</td>
<td>-.6823</td>
</tr>
<tr>
<td>ED</td>
<td>.9080†</td>
<td>.0830</td>
<td>1.0000</td>
<td>-.3162</td>
<td>99.0000</td>
<td>-.0352</td>
<td>.1095</td>
</tr>
<tr>
<td>SHI</td>
<td>-.2209</td>
<td>.1313</td>
<td>-.3162</td>
<td>1.0000</td>
<td>99.0000</td>
<td>.2786</td>
<td>.5196</td>
</tr>
<tr>
<td>SEX</td>
<td>99.0000</td>
<td>99.0000</td>
<td>99.0000</td>
<td>99.0000</td>
<td>99.0000</td>
<td>99.0000</td>
<td>99.0000</td>
</tr>
<tr>
<td>PAY</td>
<td>.2339</td>
<td>-.3366</td>
<td>-.0352</td>
<td>.2786</td>
<td>99.0000</td>
<td>1.0000</td>
<td>.4247</td>
</tr>
<tr>
<td>AUT</td>
<td>.0765</td>
<td>-.6823</td>
<td>.1095</td>
<td>.5196</td>
<td>99.0000</td>
<td>.4247</td>
<td>1.0000</td>
</tr>
<tr>
<td>TAS</td>
<td>.3399</td>
<td>-.5944</td>
<td>.2863</td>
<td>.0000</td>
<td>99.0000</td>
<td>.0706</td>
<td>.6168</td>
</tr>
<tr>
<td>INT</td>
<td>.1555</td>
<td>-.5716</td>
<td>.2834</td>
<td>-.3201</td>
<td>99.0000</td>
<td>.4781</td>
<td>.3216</td>
</tr>
<tr>
<td>PS</td>
<td>-.6162</td>
<td>-.3724</td>
<td>-.8389*</td>
<td>.3202</td>
<td>99.0000</td>
<td>.5404</td>
<td>.1743</td>
</tr>
<tr>
<td>DOC</td>
<td>.0417</td>
<td>-.0993</td>
<td>-.1195</td>
<td>-.1890</td>
<td>99.0000</td>
<td>-.2738</td>
<td>-.0982</td>
</tr>
<tr>
<td>AD</td>
<td>.3439</td>
<td>-.6631</td>
<td>.1076</td>
<td>-.1832</td>
<td>99.0000</td>
<td>.6314</td>
<td>.4215</td>
</tr>
<tr>
<td>TOT</td>
<td>.1346</td>
<td>-.8287*</td>
<td>-.0385</td>
<td>.0305</td>
<td>99.0000</td>
<td>.7143</td>
<td>.6605</td>
</tr>
</tbody>
</table>

* p < .05
† p < .01
### Table 5 (continued)

<table>
<thead>
<tr>
<th></th>
<th>TAS</th>
<th>INT</th>
<th>PS</th>
<th>DOC</th>
<th>AD</th>
<th>TOT</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGE</td>
<td>0.3399</td>
<td>0.1555</td>
<td>-0.6162</td>
<td>0.0417</td>
<td>0.3439</td>
<td>0.1346</td>
</tr>
<tr>
<td>WOR</td>
<td>-0.5944</td>
<td>-0.5716</td>
<td>-0.3724</td>
<td>-0.0993</td>
<td>-0.6631</td>
<td>-0.8287*</td>
</tr>
<tr>
<td>ED</td>
<td>0.2863</td>
<td>0.2834</td>
<td>-0.8389*</td>
<td>-0.1195</td>
<td>0.1076</td>
<td>-0.0385</td>
</tr>
<tr>
<td>SHI</td>
<td>0</td>
<td>-0.3201</td>
<td>0.3202</td>
<td>-0.1890</td>
<td>-0.1832</td>
<td>0.0305</td>
</tr>
<tr>
<td>SEX</td>
<td>99.0000</td>
<td>99.0000</td>
<td>99.0000</td>
<td>99.0000</td>
<td>99.0000</td>
<td>99.0000</td>
</tr>
<tr>
<td>PAY</td>
<td>0.0706</td>
<td>0.4781</td>
<td>0.5404</td>
<td>-0.2738</td>
<td>0.6314</td>
<td>0.7143</td>
</tr>
<tr>
<td>AUT</td>
<td>0.6168</td>
<td>0.3216</td>
<td>0.1743</td>
<td>-0.0982</td>
<td>0.4215</td>
<td>0.6605</td>
</tr>
<tr>
<td>TAS</td>
<td>1.0000</td>
<td>-0.0811</td>
<td>-0.0497</td>
<td>0.6502</td>
<td>0.6941</td>
<td>0.6464</td>
</tr>
<tr>
<td>INT</td>
<td>-0.0811</td>
<td>1.0000</td>
<td>0.0205</td>
<td>-0.6291</td>
<td>0.2848</td>
<td>0.4313</td>
</tr>
<tr>
<td>PS</td>
<td>-0.0497</td>
<td>0.0205</td>
<td>1.0000</td>
<td>0.0951</td>
<td>0.3758</td>
<td>0.5205</td>
</tr>
<tr>
<td>DOC</td>
<td>0.6502</td>
<td>-0.6291</td>
<td>0.0951</td>
<td>1.0000</td>
<td>0.4352</td>
<td>0.2187</td>
</tr>
<tr>
<td>AD</td>
<td>0.6941</td>
<td>0.2848</td>
<td>0.3758</td>
<td>0.4352</td>
<td>1.0000</td>
<td>0.9284†</td>
</tr>
<tr>
<td>TOT</td>
<td>0.8464</td>
<td>0.4313</td>
<td>0.5205</td>
<td>0.2187</td>
<td>0.9284†</td>
<td>1.0000</td>
</tr>
</tbody>
</table>

* _p < .05_  
† _p < .01_
<table>
<thead>
<tr>
<th></th>
<th>AGE 1.0000</th>
<th>MOR -3.505</th>
<th>ED -6.455</th>
<th>SHI -1.539</th>
<th>SEX -1.729</th>
<th>PAY -0.598</th>
<th>AUT 1.000</th>
<th>ED -0.645</th>
<th>SHI -0.598</th>
<th>SEX -0.8949</th>
<th>PAY -0.3129</th>
<th>AUT 0.598</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGE</td>
<td>0.00</td>
<td>0.5675</td>
<td>-2.049</td>
<td>-0.2628</td>
<td>-0.8449</td>
<td>-0.1667</td>
<td>0.3311</td>
<td>1.0000</td>
<td>0.2628</td>
<td>0.3311</td>
<td>-0.1667</td>
<td>1.0000</td>
</tr>
<tr>
<td>MOR</td>
<td>-3.505</td>
<td>-0.4457</td>
<td>0.1264</td>
<td>-0.5382</td>
<td>-0.8949</td>
<td>-0.1667</td>
<td>0.3311</td>
<td>1.0000</td>
<td>0.2628</td>
<td>0.3311</td>
<td>-0.1667</td>
<td>1.0000</td>
</tr>
<tr>
<td>ED</td>
<td>-6.455</td>
<td>0.5675</td>
<td>-0.4457</td>
<td>0.2628</td>
<td>0.3311</td>
<td>-0.1667</td>
<td>0.3311</td>
<td>1.0000</td>
<td>0.2628</td>
<td>0.3311</td>
<td>-0.1667</td>
<td>1.0000</td>
</tr>
<tr>
<td>SHI</td>
<td>-1.539</td>
<td>-0.598</td>
<td>0.1264</td>
<td>0.2628</td>
<td>0.3311</td>
<td>-0.1667</td>
<td>0.3311</td>
<td>1.0000</td>
<td>0.2628</td>
<td>0.3311</td>
<td>-0.1667</td>
<td>1.0000</td>
</tr>
<tr>
<td>SEX</td>
<td>-1.729</td>
<td>-0.598</td>
<td>0.1264</td>
<td>0.2628</td>
<td>0.3311</td>
<td>-0.1667</td>
<td>0.3311</td>
<td>1.0000</td>
<td>0.2628</td>
<td>0.3311</td>
<td>-0.1667</td>
<td>1.0000</td>
</tr>
<tr>
<td>PAY</td>
<td>-0.598</td>
<td>-0.8949</td>
<td>-0.3129</td>
<td>-0.5382</td>
<td>-0.8949</td>
<td>-0.1667</td>
<td>0.3311</td>
<td>1.0000</td>
<td>0.2628</td>
<td>0.3311</td>
<td>-0.1667</td>
<td>1.0000</td>
</tr>
<tr>
<td>AUT</td>
<td>1.0000</td>
<td>0.6455</td>
<td>-0.2049</td>
<td>-0.0404</td>
<td>-0.3129</td>
<td>-0.1667</td>
<td>0.3311</td>
<td>1.0000</td>
<td>0.2628</td>
<td>0.3311</td>
<td>-0.1667</td>
<td>1.0000</td>
</tr>
</tbody>
</table>

*P < .05
+P < .01
Table 6 (continued)

<table>
<thead>
<tr>
<th></th>
<th>TAS</th>
<th>INT</th>
<th>PS</th>
<th>DOC</th>
<th>AD</th>
<th>TOT</th>
<th>TRE</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGE</td>
<td>.3511</td>
<td>.0144</td>
<td>-.4675</td>
<td>.0257</td>
<td>.3731</td>
<td>-.1411</td>
<td>-.3240</td>
</tr>
<tr>
<td>WOR</td>
<td>-.2297</td>
<td>.0702</td>
<td>-.2240</td>
<td>.0162</td>
<td>-.2855</td>
<td>-.1841</td>
<td>.4704</td>
</tr>
<tr>
<td>ED</td>
<td>-.0906</td>
<td>.3404</td>
<td>-.4097</td>
<td>-.1448</td>
<td>-.2324</td>
<td>-.0727</td>
<td>.6905†</td>
</tr>
<tr>
<td>SHI</td>
<td>-.3908</td>
<td>-.3799</td>
<td>.6046*</td>
<td>.2178</td>
<td>.1331</td>
<td>.1743</td>
<td>.2546</td>
</tr>
<tr>
<td>SEX</td>
<td>.1969</td>
<td>.0569</td>
<td>.1095</td>
<td>-.3387</td>
<td>.0237</td>
<td>-.0224</td>
<td>-.2673</td>
</tr>
<tr>
<td>PAY</td>
<td>-.4704</td>
<td>.2168</td>
<td>.4016</td>
<td>-.3871</td>
<td>.0251</td>
<td>.3738</td>
<td>.1119</td>
</tr>
<tr>
<td>AUT</td>
<td>.0325</td>
<td>.2690</td>
<td>.1127</td>
<td>-.2519</td>
<td>.0635</td>
<td>.4743</td>
<td>.4448</td>
</tr>
<tr>
<td>TAS</td>
<td>1.0000</td>
<td>.1810</td>
<td>-.3266</td>
<td>.2107</td>
<td>.3957</td>
<td>.3347</td>
<td>-.3947</td>
</tr>
<tr>
<td>INT</td>
<td>.1810</td>
<td>1.0000</td>
<td>-.1851</td>
<td>-.6581†</td>
<td>-.1919</td>
<td>.2472</td>
<td>.0243</td>
</tr>
<tr>
<td>PS</td>
<td>-.3266</td>
<td>-.1851</td>
<td>1.0000</td>
<td>.1715</td>
<td>.3753</td>
<td>.5221*</td>
<td>.0053</td>
</tr>
<tr>
<td>DOC</td>
<td>.2107</td>
<td>-.6581†</td>
<td>.1715</td>
<td>1.0000</td>
<td>.6024†</td>
<td>-.1857</td>
<td>-.1448</td>
</tr>
<tr>
<td>AD</td>
<td>.3957</td>
<td>-.1919</td>
<td>.3753</td>
<td>.6024†</td>
<td>1.0000</td>
<td>-.7995Δ</td>
<td>-.2734</td>
</tr>
<tr>
<td>TOT</td>
<td>.3347</td>
<td>.2472</td>
<td>.5221*</td>
<td>.1857</td>
<td>.7995Δ</td>
<td>1.0000</td>
<td>-.1060</td>
</tr>
<tr>
<td>TRE</td>
<td>-.3947</td>
<td>.0243</td>
<td>.0053</td>
<td>-.1448</td>
<td>-.2734</td>
<td>-.1060</td>
<td>1.0000</td>
</tr>
</tbody>
</table>

* p < .05
† p < .01
Δ p < .001
Table 7
Intercorrelation among Demographic Variables, Index of Work Satisfaction
Subscale Scores and Total Index of Work Satisfaction Score
for Total Subjects (N=13)

<table>
<thead>
<tr>
<th></th>
<th>AGE</th>
<th>WOR</th>
<th>ED</th>
<th>SHI</th>
<th>SEX</th>
<th>PAY</th>
<th>AUT</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGE</td>
<td>1.0000</td>
<td>-0.2658</td>
<td>0.0423</td>
<td>-0.2166</td>
<td>0.1845</td>
<td>-0.0322</td>
<td>-0.0095</td>
</tr>
<tr>
<td>WOR</td>
<td>-0.2658</td>
<td>1.0000</td>
<td>0.4059</td>
<td>-0.3327</td>
<td>-0.8847Δ</td>
<td>0.0118</td>
<td>0.2885</td>
</tr>
<tr>
<td>ED</td>
<td>0.0423</td>
<td>0.4059</td>
<td>1.0000</td>
<td>0.0477</td>
<td>-0.2673</td>
<td>0.1535</td>
<td>0.2772</td>
</tr>
<tr>
<td>SHI</td>
<td>-0.2166</td>
<td>-0.3327</td>
<td>0.0477</td>
<td>1.0000</td>
<td>-0.2084</td>
<td>0.2416</td>
<td>0.1853</td>
</tr>
<tr>
<td>SEX</td>
<td>0.1845</td>
<td>-0.8847Δ</td>
<td>-0.2673</td>
<td>0.2084</td>
<td>1.0000</td>
<td>0.0479</td>
<td>-0.2533</td>
</tr>
<tr>
<td>PAY</td>
<td>-0.0322</td>
<td>0.0118</td>
<td>0.1535</td>
<td>0.2416</td>
<td>0.0479</td>
<td>1.0000</td>
<td>0.3312</td>
</tr>
<tr>
<td>AUT</td>
<td>-0.0095</td>
<td>0.2885</td>
<td>0.2772</td>
<td>0.1853</td>
<td>-0.2533</td>
<td>0.3312</td>
<td>1.0000</td>
</tr>
<tr>
<td>TAS</td>
<td>0.3511</td>
<td>-0.2297</td>
<td>-0.0906</td>
<td>-0.3908</td>
<td>-0.1969</td>
<td>-0.4704</td>
<td>0.0325</td>
</tr>
<tr>
<td>INT</td>
<td>0.0144</td>
<td>0.0702</td>
<td>0.3404</td>
<td>-0.3799</td>
<td>0.0569</td>
<td>0.2168</td>
<td>0.2690</td>
</tr>
<tr>
<td>PS</td>
<td>-0.4675</td>
<td>-0.2240</td>
<td>-0.4097</td>
<td>0.6046*</td>
<td>0.1095</td>
<td>0.4016</td>
<td>0.1127</td>
</tr>
<tr>
<td>DOC</td>
<td>0.0257</td>
<td>0.0162</td>
<td>-0.1448</td>
<td>0.2178</td>
<td>-0.3387</td>
<td>-0.3871</td>
<td>-0.2519</td>
</tr>
<tr>
<td>AD</td>
<td>0.3731</td>
<td>-0.2855</td>
<td>-0.2324</td>
<td>0.1331</td>
<td>0.0237</td>
<td>0.0251</td>
<td>0.0635</td>
</tr>
<tr>
<td>TOT</td>
<td>0.1411</td>
<td>-0.1841</td>
<td>-0.0727</td>
<td>0.1743</td>
<td>0.0224</td>
<td>0.3738</td>
<td>0.4743</td>
</tr>
<tr>
<td>TRE</td>
<td>-0.3240</td>
<td>0.4704</td>
<td>0.6905†</td>
<td>0.2546</td>
<td>-0.2673</td>
<td>0.1119</td>
<td>0.4448</td>
</tr>
</tbody>
</table>

* p < .05
† p < .01
Δ p < .001
<table>
<thead>
<tr>
<th></th>
<th>TAS</th>
<th>INT</th>
<th>PS</th>
<th>DOC</th>
<th>AD</th>
<th>TOT</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGE</td>
<td>.1264</td>
<td>-.2101</td>
<td>-.2038</td>
<td>-.1199</td>
<td>.2160</td>
<td>-.0236</td>
</tr>
<tr>
<td>WOR</td>
<td>-.0339</td>
<td>.1215</td>
<td>-.3810</td>
<td>.1180</td>
<td>-.2722</td>
<td>-.3147</td>
</tr>
<tr>
<td>ED</td>
<td>.2611</td>
<td>.5852</td>
<td>-.2476</td>
<td>-.0309</td>
<td>-.3346</td>
<td>.1217</td>
</tr>
<tr>
<td>SHI</td>
<td>-.5187</td>
<td>-.4481</td>
<td>.9223</td>
<td>.4058</td>
<td>.6027</td>
<td>.7174*</td>
</tr>
<tr>
<td>SEX</td>
<td>.1469</td>
<td>.0856</td>
<td>.1857</td>
<td>-.4642</td>
<td>-.1004</td>
<td>-.0203</td>
</tr>
<tr>
<td>PAY</td>
<td>-.7512*</td>
<td>.1360</td>
<td>.4176</td>
<td>-.4094</td>
<td>-.3069</td>
<td>.4455</td>
</tr>
<tr>
<td>AUT</td>
<td>-.3051</td>
<td>.2772</td>
<td>.0245</td>
<td>-.3650</td>
<td>-.2968</td>
<td>.3429</td>
</tr>
<tr>
<td>TAS</td>
<td>1.0000</td>
<td>.4528</td>
<td>-.7469*</td>
<td>-.1212</td>
<td>-.2478</td>
<td>-.5452</td>
</tr>
<tr>
<td>INT</td>
<td>.4528</td>
<td>1.0000</td>
<td>-.4108</td>
<td>-.6892</td>
<td>-.8510†</td>
<td>-.0504</td>
</tr>
<tr>
<td>PS</td>
<td>-.7469*</td>
<td>-.4108</td>
<td>1.0000</td>
<td>.2557</td>
<td>.4308</td>
<td>.7214*</td>
</tr>
<tr>
<td>DOC</td>
<td>-.1212</td>
<td>-.6892*</td>
<td>.2557</td>
<td>1.0000</td>
<td>.8802†</td>
<td>.2367</td>
</tr>
<tr>
<td>AD</td>
<td>-.2478</td>
<td>-.8510†</td>
<td>.4308</td>
<td>.8802</td>
<td>1.0000</td>
<td>.3489</td>
</tr>
<tr>
<td>TOT</td>
<td>-.5452</td>
<td>-.0504</td>
<td>.7214*</td>
<td>.2467</td>
<td>.3489</td>
<td>1.0000</td>
</tr>
</tbody>
</table>

* p < .05  
† p < .01
Significant correlations between subscale scores and total Index of Work Satisfaction were identified for Professional Status, Autonomy and Administration in either the treatment or control group and the combined group. Two subscales scores, Doctor-Nurse Relationships and Administration and Doctor-Nurse Relationships and Interactions, had significant correlations for both the control group and the combined group.

Assumptions of Analysis of Covariance

Analysis of covariance is an appropriate statistical procedure when utilizing intact groups, and there is a need to control a variable which could affect the results of the experiment (Kirk, 1968). However, certain conditions must be met prior to the utilization of analysis of covariance. These conditions are:

1. There is a variable (the covariate) in the experiment which affects the dependent variable. However, this variable is irrelevant to the treatment under examination.

2. There is not the possibility or feasibility of controlling for the covariate in the design of the experiment.

3. There is an interval or ratio measure of the covariate which may be obtained that does not include effects of the treatment. Situations which
meet this condition include:

a) the covariate data are obtained prior to treatment.

b) the covariate data are obtained after the treatment, but prior to its influence on the covariate.

c) the covariate can be assumed to be unaffected by the treatment.

This study met the required conditions in that the identified covariate, length of employment, does affect the dependent variable, degree of job satisfaction (Carroll, 1969; Gruneberg, 1980). Inasmuch as the study dealt with techniques in orientation programs for new registered nurse graduates, previous hospital employment in differing positions was irrelevant to the objectives of the study.

Experimental control of the variable was impossible. The intact groups had to be utilized to fit with agency scheduling for the subjects.

The third condition was readily met in that it was impossible for the treatment, affective training, to have an affect on length of previous work experience.

Descriptive Data on Covariate

Analysis of the data on length of hospital experience in the non-registered nurse role indicated that the control group had a mean work experience of 10.86 months, whereas the treatment group reported 1.83 months work experience. The data on this covariate are presented in Table 8.
Table 8
Descriptive Data on Covariate Length of Employment in Hospital Setting

<table>
<thead>
<tr>
<th>Subject Number</th>
<th>Treatment Group Months of Hospital Experience</th>
<th>Control Group Months of Hospital Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>-</td>
<td>7</td>
</tr>
</tbody>
</table>

\[ \bar{X} = 1.83 \quad \bar{X} = 10.86 \]
\[ \text{S.D.} = .98 \quad \text{S.D.} = 12.39 \]

Hypotheses Testing

All data were subjected to analysis of covariance, an analysis of covariance, utilizing the SPSS, sub-program ANOVA. The alpha level was set at .05 for each hypothesis testing.

One subject in the original treatment group was absent when the data on the dependent variable were collected. Repeated attempts to acquire this information were unsuccessful. Due to this factor, there was an unequal N in the two groups.
To provide clarity for the reader, the results of this study have the following format: statement of statistical null hypothesis, report of analysis of data, presentation of covariance table.
Hypothesis 1. There will be no difference in total Index of Work Satisfaction scores between new nurse graduates who participate in affective training and those who do not.

Hypothesis 1 was accepted. Statistical analysis indicated that there was no significant difference in the two groups on total work satisfaction scores. The analysis of variance table for these variables is presented in Table 9.

Table 9
Analysis of Variance Table for Total Index of Work Satisfaction Scores

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS adjusted</th>
<th>MS</th>
<th>F ratio</th>
<th>F crit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Covariate plus main effects</td>
<td>2</td>
<td>86.115</td>
<td>43.058</td>
<td>.178</td>
<td>4.10</td>
</tr>
<tr>
<td>2. Residual</td>
<td>10</td>
<td>2418.808</td>
<td>241.881</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Total</td>
<td>12</td>
<td>2476.01</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Hypothesis 2: There will be no difference in the Index of Work Satisfaction scores for the pay component between new nurse graduates who participate in affective training and those who do not.

Statistical analysis of the data supported the second hypothesis. No significant differences in scores on the pay component were discovered. Table 10 presents the analysis of variance table for these data.

Table 10
Analysis of Variance Table for Index of Work Satisfaction Scores on Pay Component

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS adjusted</th>
<th>MS</th>
<th>F ratio</th>
<th>F crit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Covariate plus main effects</td>
<td>2</td>
<td>2.627</td>
<td>1.313</td>
<td>0.074</td>
<td>4.10</td>
</tr>
<tr>
<td>2. Residual</td>
<td>10</td>
<td>176.450</td>
<td>17.645</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Total</td>
<td>12</td>
<td>179.077</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Hypothesis 3: There will be no difference in Index of Work Satisfaction scores for the autonomy component between new nurse graduates who participate in affective training and those who do not.

There was no significant difference in the scores on the autonomy component among the affective training and the control group. Summary of the statistical analysis for these data is presented in Table 11.

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS adjusted</th>
<th>MS</th>
<th>F ratio</th>
<th>F crit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Covariate plus main effects</td>
<td>2</td>
<td>36.301</td>
<td>18.51</td>
<td>1.296</td>
<td>4.10</td>
</tr>
<tr>
<td>2. Residual</td>
<td>10</td>
<td>140.006</td>
<td>14.001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Total</td>
<td>12</td>
<td>176.308</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Hypothesis 4: There will be no difference in Index of Work Satisfaction scores for the task component between new nurse graduates who participate in affective training and those who do not.

Statistical analysis of the data supported hypothesis 4. The F ratio obtained was not significant at the .05 level. The analysis of variance summary for these data is presented in Table 12.

Table 12
Analysis of Variance Table for Index of Work Satisfaction Scores on Task Component

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS adjusted</th>
<th>MS</th>
<th>F ratio</th>
<th>F crit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Covariate plus main effects</td>
<td>2</td>
<td>33.912</td>
<td>16.956</td>
<td>.940</td>
<td>4.10</td>
</tr>
<tr>
<td>2. Residual</td>
<td>10</td>
<td>180.395</td>
<td>18.040</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Total</td>
<td>12</td>
<td>214.308</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Hypothesis 5: There will be no difference in Index of Work Satisfaction scores for the interaction component between new nurse graduates who participate in affective training and those who do not.

Hypothesis 5 was accepted. Statistical analysis of the data indicated that there was no significant difference in the scores among the two groups for the interaction component. The analysis of variance table for the variables is presented in Table 13.

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS adjusted</th>
<th>MS</th>
<th>F ratio</th>
<th>F crit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Covariate plus main effects</td>
<td>2</td>
<td>.996</td>
<td>.498</td>
<td>.025</td>
<td>4.10</td>
</tr>
<tr>
<td>2. Residual</td>
<td>10</td>
<td>197.312</td>
<td>19.731</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Total</td>
<td>12</td>
<td>198.308</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Hypothesis 6: There will be no difference in Index of Work Satisfaction scores for the professional status component between new nurse graduates who participate in affective training and those who do not.

Statistical analysis of the data related to the professional status component supported the hypothesis. No significant difference was found among the groups on this variable. Summary statistics for these data are found in Table 14.

Table 14

Analysis of Covariance Table for Index of Work Satisfaction Scores on Professional Status Component

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS adjusted</th>
<th>MS</th>
<th>F ratio</th>
<th>F crit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Covariate plus main effects</td>
<td>2</td>
<td>17.054</td>
<td>8.527</td>
<td>.353</td>
<td>4.10</td>
</tr>
<tr>
<td>2. Residual</td>
<td>10</td>
<td>241.715</td>
<td>24.172</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Total</td>
<td>12</td>
<td>258.769</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Hypothesis 7: There will be no difference on Index of Work Satisfaction scores for the doctor-nurse relationship component between new nurse graduates who participate in affective training and those who do not.

Hypothesis 7 was accepted. No significant difference in the scores on the doctor-nurse relationship component was found when the data were subjected to statistical analysis. The analysis of variance table for these data is presented in Table 15.

Table 15
Analysis of Variance Table for Index of Work Satisfaction Scores on Doctor-Nurse Relationship Component

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS adjusted</th>
<th>MS</th>
<th>F ratio</th>
<th>F crit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Covariate plus main effects</td>
<td>2</td>
<td>1.052</td>
<td>.526</td>
<td>.155</td>
<td>4.10</td>
</tr>
<tr>
<td>2. Residual</td>
<td>10</td>
<td>33.871</td>
<td>3.387</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Total</td>
<td>12</td>
<td>34.923</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Hypothesis 8: There will be no difference on Index of Work Satisfaction scores for the administration component between new nurse graduates who participate in affective training and those who do not.

Statistical analysis of the data on the administration component supported the hypothesis. There was no significant difference in the scores for the administration component at the .05 level. Table 16 presents the analysis of variance summary for these data.

Table 16
Analysis of Variance Table for Index of Work Satisfaction Scores on Administration Component

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS adjusted</th>
<th>MS</th>
<th>F ratio</th>
<th>F crit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Covariate plus main effects</td>
<td>2</td>
<td>77.985</td>
<td>38.993</td>
<td>.595</td>
<td>4.10</td>
</tr>
<tr>
<td>2. Residual</td>
<td>10</td>
<td>655.092</td>
<td>65.509</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Total</td>
<td>12</td>
<td>733.077</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Subsidiary Analysis

The data were previously subjected to analysis by the Pearson r correlation test to determine the relationship among the demographic variables and among the scores on the components of the measurement tool and the total score. The assumption on which the analysis of this study was based was that the covariate, length of hospital experience, would have an affect on the dependent variable. The obtained correlation coefficient for these data was -.1841, which is not significant at the .05 level.

However, examination of the three correlation matrices (Tables 5, 6 and 7) reveals several significant correlations among the variables, which had not been included in the main hypothesis.

Examination of the correlation matrix for the treatment group revealed significant correlation coefficients among the following variables: Age/Education: $r = .908 \ (p < .05)$, months of work experience/total score on IWS: $r = -.8287 \ (p < .05)$ professional status/years of education: $r = -.8389 \ (p < .05)$ and administration/total score on IWS: $r = .9284 \ (p < .01)$. In addition, the correlation between pay and total score on the IWS for the treatment group was $r = .7143$. This correlation is significant at the .055 level.

Variables which showed significant relationship in the control group were: length of work experience/sex: $r = -.8949 \ (p < .01)$; pay/task: $r = -.7512 \ (p < .05)$; shift worked/total
score on the IWS: \( r = 0.7145 \) (\( p < 0.05 \)); task/professional status: \( r = -0.7469 \) (\( p < 0.05 \)); shift worked/professional status: \( r = 0.9223 \) (\( p < 0.01 \)); interactions/Doctor-Nurse Relationships: \( r = -0.6892 \) (\( p < 0.05 \)); interactions/administrations: \( r = -0.8510 \) (\( p < 0.01 \)); professional status/total score on the IWS: \( r = 0.7214 \) (\( p < 0.05 \)); and Doctor-Nurse Relationships/administration: \( r = 0.8802 \) (\( p < 0.01 \)).

Examination of the combined data for relationships among the variables revealed significant correlation between the following variables: length of work experience/sex: \( r = -0.8847 \) (\( p \leq 0.001 \)); shift worked/professional status: \( r = 0.6046 \) (\( p < 0.05 \)); interactions/Doctor-Nurse Relationships: \( r = -0.6581 \) (\( p < 0.01 \)); professional status/total score on IWS: \( r = 0.5221 \) (\( p < 0.05 \)); administration/Doctor-Nurse Relationships: \( r = 0.6024 \) (\( p < 0.05 \)); and administration/total IWS score: \( r = 0.7995 \) (\( p < 0.001 \)).
Chapter 5

Discussion

Summary of Hypothesized Results

This study involved the application of a treatment, affective training, to a group of new nurse graduates. The control group received an unrelated treatment. Six weeks after the treatments were completed, data were collected on the subjects' level of work satisfaction.

Both groups of subjects were employed in Nevada hospitals and were currently participating in the agency's registered nurse orientation program. The research attempted to answer the following two questions:

1. Among new nurse graduates, is level of work satisfaction influenced by the type of new employee orientation program provided?
2. Among new nurse graduates, are the various components of work satisfaction influenced by the type of orientation program offered?

In an attempt to answer these questions, eight hypotheses were generated. As a convenience to the reader, these are stated:

Hypothesis 1: There will be no difference in total Index of Work Satisfaction scores between new nurse graduates who participate in affective training and those who do not.
Hypothesis 2: There will be no difference in total Index of Work Satisfaction scores for the pay component between new nurse graduates who participate in affective training and those who do not.

Hypothesis 3: There will be no difference in total Index Work Satisfaction scores for the autonomy component between new nurse graduates who participate in affective training and those who do not.

Hypothesis 4: There will be no difference in total Index of Work Satisfaction scores for the task component between new nurse graduates who participate in affective training and those who do not.

Hypothesis 5: There will be no difference in total Index of Work Satisfaction scores for the interaction component between new nurse graduates who participate in affective training and those who do not.

Hypothesis 6: There will be no difference in total Index of Work Satisfaction scores for the professional status component between new nurse graduates who participate in affective training and those who do not.

Hypothesis 7: There will be no difference in total Index of Work Satisfaction scores for the doctor-nurse relationship component between new nurse graduates who participate in affective training and those who do not.

Hypothesis 8: There will be no difference in total Index of Work Satisfaction scores for the administration
component between new nurse graduates who participate in affective training and those who do not.

An alpha level of .05 was selected, and the data were tested for significance by the statistical procedure analysis of covariance. F ratios obtained for each group were below the critical level for significance. All hypotheses were supported. No significant difference was found in IWS scores between the treatment and control subjects.

Reasons for Nonsignificant Results

It is suspected that the nonsignificant results obtained in this study emanated from procedural error and/or the effect of unidentified variables.

The major weakness of the study was the small sample (N=13) which was studied. Borg and Gall (1979) noted that this is a common problem seen in graduate student research. Small sample size is seen as a contributing factor in the obtainment of results which are not statistically significant, when studying variables with low relationship. The power of the test, or its ability to reject the null hypotheses when it is false is directly related to the size of the sample. Increase in power is obtained through an increase in sample size. In addition, extreme variation within a small sample will have noticeable impact on the results of the investigation. Examination of the collected data indicated a very high degree of variation among scores in the treatment group. Scores for this group on total work
satisfaction had a standard deviation of 19.67.

Another questionable element in the procedure was the timing of data collection. Several subjects noted that they had difficulty completing the questionnaire due to their limited exposure (6-7 weeks) in the agency.

It is also possible that some of the subjects were responding to the questionnaire while in the "honeymoon" phase of reality shock. Kramer and Schmalenberg (1977) described this as the initial response the new nurse graduate exhibits. In this phase, everything is seen as stimulating or wonderful by the graduate, and (s)he approaches all aspects of the job with enthusiasm. The extent of this period varies among individuals. An eight-month post-treatment assessment was utilized for the bicultural training research (Kramer & Schmalenberg, 1978). This study indicated that bicultural training, which has an affective component, did decrease rate of resignation and increased performance ratings.

It is suspected that the length of the treatment (10 hours) was instrumental in the obtainment of nonsignificant results. Training groups have traditionally been held for one to two weeks or 40-80 hours (French & Bell, 1973; Galenbiewski & Blumberg, 1977). Carkhuff (1969) indicated that forty hours of training were needed to effect a change in the individual. A further indication that the affective training was not long enough is that assertive training alone usually
takes twenty hours (Alberti & Emmons, 1970),

The timing of the treatment may also have been a factor in the negative results which were obtained. Treatment was completed within a three-week period in this study, whereas Kramer and Schmalenberg (1978) utilized six weeks. The shorter time period may not have provided ample opportunity for subjects to practice their skills and receive feedback from the group. This is seen as a common problem with the workshop approach to training (El-Shamy, 1978).

It was assumed that the manager-nonmanager variable was controlled in the study by limiting the population to new nurse graduates. However, the subjects in the control group were assuming a team-leading role. This role requires the supervision and coordination of other team members (Kron, 1966). It is possible that these subjects viewed themselves in a management role and, as a result, reported a higher level of job satisfaction. Support for this relationship has been reported by Carroll (1969) and Gruneberg (1980).

Any one or combination of these five factors could have impacted on the results of the study. Limited size of sample decreases the ability to discern statistical differences. The timing of data collection varies in effect, depending upon the individual. The inclusion of a management variable could have increased scores on the IWS for the control group, whereas the compact presentation and
length of the treatment may have decreased its potency.

Summary of Subsidiary Results

The intent of the subsidiary analysis was to investigate factors which could have influenced the original study and reevaluate the collected data.

The test for significance of means on the demographic variables indicated that the treatment and control groups were similar in age, work experience, shift assignment and employment status. The nonsignificant difference on length of work experience (the identified covariate) suggests that this variable would not be a major factor in observed differences on the IWS, for the two groups. However, a significant difference in means of the educational variable was calculated. It seems that the more appropriate variable for selection as a covariate in the present study would have been years of education.

The Pearson correlation analysis of the inter subscales relationships and the subscales' relationship to the total Index of Work Satisfaction seemed to support the test developers claim of validity. Three of the seven subscale's scores showed a significant correlation (at the .05 level) to the total IWS score. Significant inter-correlations on the subscales was only evidenced twice. This appears to indicate that the subscales are in fact measuring different traits.

Examination of the Pearson Correlation Matrixes revealed
several significant relationships. In the treatment group, length of work experience was negatively related to total IWS score. For this group then, increasing work experience in the hospital was correlated to a lowering level of work satisfaction. It is possible these subjects, because of their previous work experience, had unrealistic expectations of the registered nurse role. Age and education had an \( r \) of .908, which is not surprising as the one Baccalaureate graduate in the group was in the 50-59 age range. Professional status and years of education had a negative correlation. This finding was also noted in Godfrey's (1978) study. The most significant correlation \( (p= .004) \) found in the treatment group was between the administration subscale scores and total Index of Work Satisfaction score. This finding appears to indicate that the new nurse graduates in this group considered administration as a major determinant of job satisfaction. The correlation of administration and job satisfaction has not been consistently identified in the literature. However, Godfrey (1978) did identify lack of input into decision making as a major dissatisfier for nurses.

The relationship between the pay subscale and total IWS for the treatment group was significant at the .055 level. It is recognized that this relationship does not fall within the parameters of statistical significance; however, it is felt that this relationship is of practical importance.
The review of literature did not reveal any relationship between these two variables. In fact, the literature stressed that pay was not a factor in job satisfaction for nurses.

Correlations which were significant at the .05 level or below in the control group included: length of work experience/sex, pay/task, shift/total IWS, task/professional status, shift/professional status, interactions/Doctor-Nurse Relationships, interactions/administrators and professional status/total IWS score.

Many of the findings in this group indicated that as one variable increased, the other decreased. The negative relationship between sex and length of work experience can be explained by the fact that there was only one male subject. The components of pay and task had an $r$ of -.7512. This would indicate that subjects in the treatment group who were more satisfied with the requirements of the job and the time allotted to fulfill requirements were less likely to be satisfied with the pay they received. No support for this relationship was found in the literature. Task and professional status also had a significant negative relationship. This would seem to indicate that the graduates in the control group who had strong positive feelings toward the requirements and skills of the profession would experience greater dissatisfaction with the tasks of the job. This could be related to the amount of time allotted for patient
care. Godfrey (1975) and Cronin-Stubbs (1977) reported lack of adequate staffing as being responsible for job dissatisfaction among nurses.

The new graduates in the control group also reported data which indicated a negative relationship between interactions and Doctor-Nurse relationships and interactions and administration. This suggests that the more satisfied the subjects were with the amount of social interaction with peers and other nursing personnel, the less satisfied they were with Doctor-Nurse interactions and administration. These relationships have not previously been reported in the literature. It is possible that individuals who are most comfortable within these peer groups have difficulty relating to those in authority.

The correlation between shift worked and total IWS score was .71. This significant finding could be related to the fact that the night shift has less interaction with physicians and administration. In addition, due to the decreased registered nurse staffing, the new graduate would be more autonomous. A final factor could be that a pay differential is given to night shift.

A significant correlation was additionally revealed between shift and professional status. This finding is contrary to that reported by Godfrey (1978). It seems that the night shift facilitates the new graduate's movement into a management role - charge nurse. The positive relationship between
managers and job satisfaction was reported by Carroll (1969).

The final significant correlation which was identified in the control group was between Doctor-Nurse relationships and administration $r = .8802$. It seems that members of this group who were satisfied with Doctor-Nurse interactions were also satisfied with the policies and regulations set forth by administration. This relationship could be affected by the nurse's relationship abilities with authority figures, as both doctors and administrators would fit that category.

Examination of the Pearson Correlation Coefficient for the combined data irregardless of group designation revealed several significant correlations which were also evidenced in the treatment and control groups. Significant correlations at the .05 levels were: administration/Doctor-Nurse relationships, shift worked/professional status, and professional status/total score on IWS. The interactions and Doctor-Nurse relationships coefficient was significant at the .01 level. Both length of work experience/sex and administration/total IWS score had correlation coefficients which were significant at the .001 level. The former relationships can be explained on the basis of one male being included in the sample. The later correlation indicates that administration is a major factor in job satisfaction for the nurses who were studied.
Theoretical Implications of the Study

This study adds to the expanding body of knowledge regarding the management of reality shock in new nurse graduates. Reality shock was first identified by Kramer and Schmalenberg in 1971. The 1975 study of 307 new nurse graduates in eight United States Medical Centers was the initial attempt at identifying a hospital-based orientation program which would facilitate the new nurses' transition into the world of work (Kramer & Schmalenberg, 1978). Results indicated that subjects involved in Bicultural Training, which had an affective, cognitive and clinical component, who were more involved in change agent activities, retained higher professional standards, had less resignations and earned higher performance ratings. However, this program was not significant in lowering role deprivation, increasing self-esteem, self-actualization and valuation of conflict. The utilization of bicultural training decreased attrition in new nurse graduates from 42 percent to 3 percent. It "tended" to increase work satisfaction (Holloran, Mishkin & Hanson).

The present research is an initial attempt at studying the influence of the affective component of bicultural training on work satisfaction.

The dependent variable was the score on the Index of Work Satisfaction (Stamps, Peidmont, Slavitt & Haase, 1978). This measurement tool includes seven components: pay,
administration, interaction, professional status, Doctor-Nurse relationships, task requirements and autonomy. These areas are commonly utilized when investigating work satisfaction in nursing (Godfrey, 1975, 1978), and are based upon Herzberg's (1959) conceptualization of satisfiers and dissatisfiers in the work situation. Correlation studies done in the present study seem to support the developer's claim for at least face validity.

Subjects reported that the questionnaire touched on many relevant areas in professional nursing and was viewed as an appropriate tool for the measurement of work satisfaction. The one area of concern expressed was the perceived over-emphasis on questions related to the pay component. As noted earlier, pay does not seem to be a major factor in work satisfaction for registered nurses (Godfrey, 1978; Feldbaum, 1980), and could account for the subjects' reaction to these questions. However, a correlation between pay and total IWS score was found to be .055. This finding, although not statistically significant, is contrary to previous reports.

An analysis of the data collected on the various components indicated that new nurse graduates who participated in affective training frequently responded more favorably than the control group on the autonomy and task components of work satisfaction. Utilizing Herzberg's analysis of factors, these two components fell in the satisfiers category and
suggested a possible relationship between affective training and increased satisfiers, but not the components which would be classified as dissatisfiers.

Subsidiary analysis of the data found a negative correlation between educational level and work satisfaction. Similar findings were reported by Godfrey (1978) in her analysis of work satisfaction among nurses. Additional studies which have cited this negative relationship include Klein and Maher (1966) and Feldbaum (1980).

The strong relationship (p = .001) between administration and job satisfaction had not previously been identified. Administration is identified as a hygiene/maintenance factor according to Herzberg's theory of job satisfaction (Gruneberg, 1980). As such, administration would be seen as a factor in job dissatisfaction but not job satisfaction.

Practical Implications of Results

The findings in the present study have implications for nurse educators, nursing service personnel and counselors. It was noted (Kramer & Schmalenberg, 1978) that reality shock originates from the conflict between school-bred values from the world of work. It behooves nurse educators to prepare the graduate to function comfortably in the real world. Nursing students need to be made aware of the realities of the work world. Techniques such as having the student work a full shift and being given assignments equivalent to what is expected in the work situation could
help to ease the graduates' transition from student to employee. The need for and utilization of affective techniques in nursing education is receiving increasing attention in the literature (Reilly, 1978; Connors, 1979). It seems if their recommendations are followed, the new nurse graduate would be better equipped to understand and deal with conflicts which occur in the work situation.

Hospital nursing service personnel are those most directly affected by the new graduates' reality shock. This phenomenon accounts for over one-third of the turnover in new graduates. United States is facing a critical nursing shortage. This will result in a decrease in the quantity and quality of patient care. Present staff will be overworked and understaffed. The conflict between nursing education and service needs to be resolved (Kramer & Schmaldenberg, 1978).

Agreement should be reached on the number and level of technical skills which are absolutely necessary for the new nurse graduates' functioning. Resolution of this dilemma would ultimately increase the confidence of the new graduates and facilitate their transition into the registered nurse role. Nursing service personnel need to be supportive of these new employees, recognize their competencies and be consistent in their expectations and requirements of the new graduates.

Subjects were questioned as to activities which would
have facilitated the movement into the work world. Examples of these responses are:

1. "Assignment to floors where staff are receptive to new graduates."
2. "Don't switch new staff from floor to floor."
3. "Orientation to unit where assigned."
4. "Voice in administrative, decision-making policies."

The study utilized an outside change agent for the presentation of the treatments. Kramer and Schmalenberg (1978) noted the utilization of staff for bicultural training created a potential conflict for the new graduates since they were not sure if concerns they shared were kept confidential. This factor could ultimately influence the outcome of the program. It seems that the health care field would be an appropriate area for counselor involvement. The skills and techniques utilized in affective training are based upon the counseling theories of Gazda (1975), Simon (1974) and Alberti and Emmons (1974).

The significant correlation between the new nurse graduate's view of administration and level of job satisfaction also has implication for nursing service personnel. Interestingly, the previously quoted comments from subjects relate to matters which are under the control of nursing administration. It is suggested that nursing administration may have to institute changes in policies to facilitate the new graduates obtainment of job satisfaction.
The literature review also cited several other professions in which graduates had difficulty in making the transition from student to employee (Collela, 1975; Kramer & Schmalenberg, 1978; Klein & Maher, 1966). These findings seem to indicate an emerging area for counselor intervention.

Suggestions for Further Research

Analysis of the results of this study provoked the following suggestions for further research:

1. A follow-up testing of the subjects in the present study should be done to assess if change has occurred in level of work satisfaction.

2. The relationship between affective training and work satisfaction should be studied with a larger sample of new nurse graduates. Data collection should occur at least three months post-treatment.

3. Further studies on new nurse graduates should include control for education level.

4. Critical analysis of the IWS should be carried out to determine if the instrument is biased in relationship to the weight given individual components.

5. The relationship of job satisfaction in nursing to administration, professional status, autonomy and pay should continue to be investigated.

6. Investigation of other professions should be carried out to determine if reality shock is a factor for recent graduates.
7. The relationship between affective training and reduction of reality shock should be studied in other professions, where applicable.
References


Cronin-Stubbs, D. Job satisfaction and dissatisfaction among new graduate staff nurses. Journal of Nursing Administration, 1977, 7, 44-49.

Danco, W. Hospital managers seek ways to cope with change. Hospitals, 1977, 4, 133-138.


Donnelley, G. F. Assertiveness workbook: But you should have known how I felt. RN, 1979, 42/2, 54-57.

Donnelley, G. F. Assertiveness workbook: Doctoring reality to nurse your nerves back to health. RN, 1979, 42/4, 30-33.

Donnelley, G. F. Assertiveness workbook: Frankly, I can't work another double. RN, 1979, 42/1, 79-81.

Donnelley, G. F. Assertiveness workbook: How to face a crowd. RN, 1979, 42/5, 34-37.


Donnelley, G. F. Assertiveness workbook: How to take your assertiveness home. RN, 1979, 42/8, 50-53.

Donnelley, G. F. Assertiveness workbook: That role is not in my repertoire. RN, 1979, 42/7, 48-53.

Donnelley, G. F. Assertiveness workbook: When it's best not to assert. RN, 1979, 42/9, 48-53.
Donnelley, G. F. Assertiveness workbook: You're right, I'm not all that terrific. *RN*, 1979, 42/6, 40-43.


Godfrey, M. A. Job satisfaction - or should that be dissatisfaction? How nurses feel about nursing. *Nursing 78*, 1979, 8, 89-104.


House, K. The graduate looks at service and education. *Supervisor Nurse*, 1976, 7, 14-16.


Menkin, P. How a group can help you solve your problems. Nursing 75, 1975, 5, 67-70.


Nichols, G. A. Job satisfaction and nurses' intentions to remain with or to leave an organization. Nursing Research, 1971, 20, 218-219.

"Nursing shortage? Yes!" American Journal of Nursing, 1979, 3, 469-480.


Schmalenberg, C., & Kramer, M. Bicultural training: A cost-effective program. *Journal of Nursing Administration,* 1979, 9, 10-16.


Schultz, E. Personality traits of nursing students and faculty concepts of desirable traits. *Nursing Research,* 1965, 14, 261-264.


"The Southern California nursing shortage: Retention or recruiting?" *Health Care Horizons,* 1980, 19, 1.


Withers, J. Background: Why women are unassertive. *Nursing Digest, 1978, 6*, 68-70.

APPENDIX A

APPROVAL OF HUMAN SUBJECTS' RIGHTS

COMMITTEE TO CONDUCT RESEARCH
UNIVERSITY OF NEVADA, LAS VEGAS

DEPARTMENT OF NURSING

Application for the Conduct of a Project Involving Human Subjects

Project Title: Affective Training in New Nurse Graduate Orientation Programs

Agency Proposed to: UNLV-Department of Nursing Human Rights Committee

Proposed Period: Ten hours of treatment for each group during June to July

Investigators: Myrlene LaMancusa, R.N., MEd.

Sponsoring Faculty:

(if student investigator)

In making this application I certify that I have read and understand the guidelines and procedures developed by the nursing department for the protection of human subjects, and that I fully intend to comply with the letter and spirit of the policy. I also acknowledge my responsibility to report significant changes in the protocol (method) and to obtain written approval for these changes prior to making these changes.

Principal investigator Date

Other investigators: Date

Date

Date

The Department of Nursing-UNLV Human Subjects Rights Committee has reviewed and has granted approval for the above mentioned project which involves human subjects with the following provisions:

May 27, 1980

Principal investigator

Committee Chairperson

May 28, 1980
CALL TO ORDER:

The meeting was called to order at 11:35 by Margaret Louis.

PRESENT:

Margaret Louis, chairman; Elsie Reder; Mary Watson; and Margaret Simon.

BUSINESS:

Reviewed the proposal submitted by Myrlene LaMancusa "Affective Training in the New Nurse Graduate Orientation."

Committee decision was to approve implementation of the proposal with a motion by Mary Watson, and seconded by Elsie Reder and the following stipulations:

1. Do not administer instrument (data collection) until subjects have been working for at least one month, otherwise committee felt subject put in jeopardy position.
2. Use a written consent to participate form for all subjects.
3. Principal investigator must be only one handling data.
4. Have acceptable method for maintaining confidentiality of subjects.

The committee also suggests the investigator clarify use of the words "training" and "new nurse"

ADJOURNMENT:

The meeting was adjourned at 12:15 p.m.

Respectfully submitted,

[Signature]

Margaret Louis,
Chairperson of Committee

ML/mja
APPENDIX B

AUTHORIZATION TO USE INSTRUMENT
Myrlene LaMancusa, R.N., M.Ed.
2812 Ashworth Circle
Las Vegas, Nevada 89107

Dear Ms. LaMancusa:

Dr. Haase referred your letter requesting information on our Occupational Satisfaction Scale to me.

I am enclosing one copy of the scale as we last used it and the description of the scoring procedures. We do not have any copies of the scale pre-printed, so you can make any copies that you need to.

Please let me know if you have any other questions about this material. Also, I would be most interested in learning about the results of your study.

Thank you for your interest in our work.

Sincerely yours,

Paula L. Stamps, Ph.D.
Associate Professor
Health Administration Program

PLS: smh

Enclosure
APPENDIX C

LETTERS TO AGENCIES
April 21, 1980

Sunrise Hospital
Ms. Jackie Taylor Joyce, R.N., M.Ed.
Director of Nurses
3186 So. Maryland Parkway
Las Vegas, NV 89109

Dear Ms. Joyce,

I would like to request permission to meet with the new nurse graduates during your agency’s orientation (June 1980) in order to present ten (10) hours of educational material.

I am currently a Doctoral Candidate in the College of Education, Department of Educational Foundations and Counseling at the University of Nevada, Las Vegas. My dissertation research deals with methods of facilitating the new nurse graduate’s transition into the world of work. It is hoped this investigation will identify techniques which increase the graduate’s tenure in the initial employing agency.

I am most anxious to meet with you to discuss your orientation schedule and how my presentation will integrate with your program. At this time any questions you may have related to this presentation could also be clarified.
Ms. Jackie Taylor Joyce, R.N., M.Ed.
April 21, 1980
Page Two

Please contact me at the Department of Nursing,
University of Nevada, Las Vegas 739-3360.

Sincerely,

Myrlene LaMancusa
Myrlene LaMancusa, R.N., M.Ed.

ML/mja

cc: Dorothy Denman, R.N.
    Director of Education Department

Approved

Fredrick Kirshner, Ed.D.
Committee Chairman
April 21, 1980

Southern Nevada Memorial Hospital
Ms. Carol Callahan, R.N., M.S.
Director of Nurses
1800 W. Charleston Blvd.
Las Vegas, NV 89106

Dear Ms. Callahan,

I would like to request permission to meet with the new nurse graduates during your agency's orientation (June 1980) in order to present ten (10) hours of educational material.

I am currently a Doctoral Candidate in the College of Education, Department of Educational Foundations and Counseling at the University of Nevada, Las Vegas. My dissertation research deals with methods of facilitating the new nurse graduate's transition into the world of work. It is hoped this investigation will identify techniques which increase the graduate's tenure in the initial employing agency.

I am most anxious to meet with you to discuss your orientation schedule and how my presentation will integrate with your program. At this time any questions you may have related to this presentation could also be clarified.
Ms. Carol Callahan, R.N., M.S.
April 21, 1980
Page Two

Please contact me at the Department of Nursing, University of Nevada, Las Vegas 739-3360.

Sincerely,

Myrlene LaMancusa
Myrlene LaMancusa, R.N., M.Ed.

ML/mja

cc: Joan Harned, R.N.
Director of Staff Development

Approved

Fredrick Kirshner, Ed.D.
Committee Chairman
June 10, 1980

Sandra Ballard, R.N.
Department of Nursing Education
Washoe Medical Center
77 Pringle Way
Reno, NV 89520

Dear Miss Ballard,

I want to thank you for the time you spent with me on the phone yesterday. I hope the enclosed information will give you a clearer idea of the purposes of my research. (As noted the proposal has been approved by the Human Subjects Rights Committee of the Department of Nursing at UNLV.)

I am currently a Doctoral Candidate in the College of Education, Department of Foundations and Counseling at the University of Nevada, Las Vegas. As we discussed, my dissertation research deals with methods of facilitating the new nurse graduate's transition into the world of work. It is hoped this investigation will identify techniques which increase the graduate's tenure in the initial employing agency.

My approach to this project is to present ten (10) hours of varying educational content to new nurse graduates within the agency's orientation program. At the end of the orientation program, the graduates are asked to complete a Work Satisfaction Inventory.

From our conversation, it seems the Orientation Program at Washoe Medical Center which would generate the most appropriate data is the July 14th group. The time(s) of my presentation would be at your convenience. As soon as you have your schedule solidified please let me know.
I am reimbursing Southern Nevada Memorial Hospital for the salary paid the graduates while they are involved in the ten (10) hour workshop, and would be willing to do the same at Las Vegas Medical Center. Please inform me if you would like me to follow the same procedure at your agency.

If you have any additional questions, please contact me at the Department of Nursing (702) 739-3369.

Sincerely,

Myrline LaMancusa, R.N., M.Ed.

ML/mja

enclosures
APPENDIX D

RESPONSE FROM AGENCY
May 20, 1980

Ms. Myrlene LaMancusa, R.N., M.Ed.
College of Education
Department of Educational Foundations and Counseling
University of Nevada, Las Vegas
4505 Maryland Parkway
Las Vegas, Nevada 89154

Dear Myrlene:

I enjoyed our discussion of last week concerning the subject matter of your dissertation and potential use of this facility in obtaining your data.

You have permission to use our facility in your study under the following conditions:

1) Employees in the New Graduate Transition Program will be told that your subject matter has been added to their program as a means of assisting them in their transition from student to graduate. Based on their evaluation, our evaluation and your evaluation of the subject matter and other findings this material, in some form, may be formally incorporated into future programs. It is our feeling that an introduction such as this will allow them to voice any misgivings which would be helpful to you to know prior to the study.

2) You will be responsible for the salary of all new graduates who attend your section of the program at the salary rate paid by the Hospital. Separate attendance will be taken at your session which will include length of the session. At the end of the sessions, you will be billed for their hourly salaries for the time you spent with them. If you wish, we can provide you with a tentative amount prior to the sessions.

3) All arrangements as to dates, times, room, etc., will be coordinated with Joan Earned, Director of Staff Development.

SOUTHERN NEVADA MEMORIAL HOSPITAL
If you have any problems with any of the foregoing, or during the length of your study, please feel free to contact me.

I will look forward to participating and to knowing the outcome of your study.

Sincerely,

Carol B. Callahan, R.N. M.S.N.
Associate Administrator for Nursing Service

cc: Joan Harned
APPENDIX E

SUBJECT'S CONSENT FOR PARTICIPATION
I, ________________________________, hereby give my consent to participate in research study on _______________ ________________________________, the general plan of which has been explained to me including anticipated benefits, risks, and potential complications.

I fully understand as it has been explained to me that by giving notice to the principle investigator I may withdraw from this research project anytime that I may elect to do so.

__________________________
Participant's signature

__________________________
Date
APPENDIX F

DEMOGRAPHIC DATA SURVEY
PLEASE CIRCLE THE MOST APPROPRIATE ANSWER TO THE FOLLOWING ITEMS:

1. Usual work shift:
   a. Day
   b. Evening
   c. Night

2. Are you employed:
   a. Part-time minus
   b. Part-time plus
   c. Full-time

3. Basic Nursing Education Program:
   a. RN - Baccalaureate
   b. RN - Diploma
   c. RN - Associate

4. Total number of months experience in the hospital nursing setting. (Do not include the time spent in training.)

5. Number of months employed at this hospital.
   a. 6 months or less
   b. More than 6 months, less than one year
   c. More than one year, less than three years
   d. More than three years, less than seven years
   e. More than seven years

6. Age
   a. Under 20
   b. 20-29
   c. 30-39
   d. 40-49
   e. 50-59
   f. 60 or over

7. Sex
   a. Female
   b. Male
APPENDIX G

INDEX OF WORK SATISFACTION

SCALE
OCCUPATIONAL SATISFACTION INSTRUMENT FOR HOSPITAL NURSES

Developed by:
Paula L. Stamps, Ph.D
Eugene B. Piedmont, Ph. D
Dinah B. Slavitt, Ph.D
Ann Marie Haase, Ph.D.

through Grant No. HS-00709
OCCUPATIONAL SATISFACTION INSTRUMENT

The following items represent statements about satisfaction with an occupation. Please respond to each item. It may be very difficult to fit your responses into the seven categories: In that case, select the category that comes closest to your response to the statement. It is very important that you give your honest opinion. Please do not go back and change any of your answers.

INSTRUCTIONS FOR SCORING: In the far right hand space, place the number that most closely indicates how you feel about each statement. The left set of numbers indicates degrees of Disagreement. The right set of numbers indicates degrees of Agreement. The center number means "undecided," please use it as little as possible. For example, if you strongly disagree with the first statement, you would write 5 in the place provided.

REMEMBER: The more strongly you feel about the statement, the further from the center you should circle, with disagreement to the left and agreement to the right.

<table>
<thead>
<tr>
<th>DISAGREE</th>
<th>AGREE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strong</td>
<td>Moderate</td>
</tr>
</tbody>
</table>

1. My present salary is satisfactory. 0 1 2 3 4 5 6

2. When I'm at work in this hospital, the time generally goes by quickly. 0 1 2 3 4 5 6

3. The nursing personnel on my service don't hesitate to pitch in and help one another out when things get in a rush. 0 1 2 3 4 5 6

4. There is too much clerical and "paper work" required of nursing personnel in this hospital. 0 1 2 3 4 5 6

5. It's my general impression that most of the nursing staff at this hospital really like the way it is organized and done. 0 1 2 3 4 5 6

6. Physicians in general don't cooperate with the nursing staff on my unit. 0 1 2 3 4 5 6
7. I feel that I am supervised more closely than I need to be, and more closely than I want to be.
   DISAGREE AGREE
   0 1 2 3 4 5 6

8. Excluding myself, it is my impression that a lot of nursing service personnel at this hospital are dissatisfied with their pay.
   0 1 2 3 4 5 6

9. Even if I could make more money in another hospital nursing situation I am more satisfied here because of the working conditions.
   0 1 2 3 4 5 6

10. New employees are not quickly made to "feel at home" on my unit.
    0 1 2 3 4 5 6

11. I think I could do a better job if I didn't have so much to do all the time.
    0 1 2 3 4 5 6

12. There is a great gap between the administration of this hospital and the daily problems of the nursing service.
    0 1 2 3 4 5 6

13. I sometimes feel that I have too many bosses who tell me conflicting things.
    0 1 2 3 4 5 6

14. Considering what is expected of nursing service personnel at this hospital, the pay we get is reasonable.
    0 1 2 3 4 5 6

15. There is no doubt whatever in my mind that what I do on my job is really important.
    0 1 2 3 4 5 6

16. There is a good deal of teamwork and cooperation between various levels of nursing personnel on my service.
    0 1 2 3 4 5 6

17. The amount of time I must spend on administration ("paper") work on my service is reasonable and I'm sure that patients don't suffer because of it.
    0 1 2 3 4 5 6

18. There are plenty of opportunities for advancement of nursing personnel at this hospital.
    0 1 2 3 4 5 6

19. There is a lot of teamwork between nurses and doctors on my unit.
    0 1 2 3 4 5 6
20. On my service, my supervisors make all the decisions; I have little direct control over my own work.  

21. The present rate of increase in pay for nursing service personnel at this hospital is not satisfactory.  

22. I am satisfied with the types of activities that I do on my job.  

23. The nursing personnel on my service are not as friendly and outgoing as I would like.  

24. I have plenty of time and opportunity to discuss patient care problems with other nursing service personnel.  

25. There is ample opportunity for nursing staff to participate in the administrative decision-making process.  

26. It is possible, at this hospital, for some nursing service personnel to get better pay because of "favoritism" or "knowing somebody in the right place."  

27. What I do on my job doesn't add up to anything really significant.  

28. There is a lot of "rank consciousness" on my unit; nursing personnel seldom mingle with others of lower ranks.  

29. I don't spend as much time as I'd like to taking care of patients directly.  

30. There is no doubt that this hospital cares a good deal about the welfare of its employees, nursing personnel included.  

31. I am sometimes required to do things on my job that are against my better professional nursing judgment.  

32. From what I hear from and about nursing service personnel at other hospitals, we at this hospital are being fairly paid.

<table>
<thead>
<tr>
<th>DISAGREE</th>
<th>AGREE</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Strong</td>
<td>Moderate</td>
<td>Weak</td>
</tr>
<tr>
<td>0 1 2 3</td>
<td>4 5 6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>DISAGREE</td>
<td>AGREE</td>
</tr>
<tr>
<td>---</td>
<td>---------</td>
<td>-------</td>
</tr>
<tr>
<td>33. Administrative decisions at this hospital interfere too much with patient care.</td>
<td>0 1 2 3</td>
<td>4 5 6</td>
</tr>
<tr>
<td>34. It makes me proud to talk to other people about what I do on my job.</td>
<td>0 1 2 3</td>
<td>4 5 6</td>
</tr>
<tr>
<td>35. I have the feeling that this hospital in general - and my service too - is not organized with the needs of patients given top priority.</td>
<td>0 1 2 3</td>
<td>4 5 6</td>
</tr>
<tr>
<td>36. The nursing personnel on my service don't often act like &quot;one big happy family.&quot;</td>
<td>0 1 2 3</td>
<td>4 5 6</td>
</tr>
<tr>
<td>37. I could deliver much better care if I had more time with each patient.</td>
<td>0 1 2 3</td>
<td>4 5 6</td>
</tr>
<tr>
<td>38. I'm generally satisfied with the way nursing work is organized and gets done at this hospital.</td>
<td>0 1 2 3</td>
<td>4 5 6</td>
</tr>
<tr>
<td>39. Physicians at this hospital generally understand and appreciate what the nursing staff does.</td>
<td>0 1 2 3</td>
<td>4 5 6</td>
</tr>
<tr>
<td>40. The only way that nursing personnel at this hospital will ever get a decent pay schedule will be to organize, and if necessary, strike.</td>
<td>0 1 2 3</td>
<td>4 5 6</td>
</tr>
<tr>
<td>41. If I had the decision to make all over again, I would still go into nursing.</td>
<td>0 1 2 3</td>
<td>4 5 6</td>
</tr>
<tr>
<td>42. Nursing personnel at this hospital do a lot of bickering and backbiting.</td>
<td>0 1 2 3</td>
<td>4 5 6</td>
</tr>
<tr>
<td>43. I have all the voice in planning policies and procedures for this hospital and my unit that I want.</td>
<td>0 1 2 3</td>
<td>4 5 6</td>
</tr>
<tr>
<td>44. Considering the high cost of hospital care, every effort should be made to hold nursing personnel salaries about where they are, or at least not to increase them substantially.</td>
<td>0 1 2 3</td>
<td>4 5 6</td>
</tr>
<tr>
<td>45. My particular job really doesn't require much skill or &quot;know-how.&quot;</td>
<td>0 1 2 3</td>
<td>4 5 6</td>
</tr>
</tbody>
</table>
46. The nursing administrators generally consult with the staff on daily problems and procedures.  

47. I have the freedom in my work to make important decisions as I see fit, and can count on my supervisors to back me up.  

48. An up-grading of pay schedules for nursing personnel is needed at this hospital.
APPENDIX H

OBSERVED DATA FOR SUBJECTS IN
CONTROL GROUP
Data Collected from Subjects in Control Group for Length of Work Experience, Education, and Index of Work Satisfaction Scores

<table>
<thead>
<tr>
<th>Subject Number</th>
<th>Work</th>
<th>Education</th>
<th>Pay</th>
<th>Autonomy</th>
<th>Task</th>
<th>Interaction</th>
<th>Prof. Status</th>
<th>Doctor Nurse</th>
<th>Adm.</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>1</td>
<td>4</td>
<td>29</td>
<td>10</td>
<td>14</td>
<td>13</td>
<td>34</td>
<td>11</td>
<td>32</td>
<td>143</td>
</tr>
<tr>
<td>2.</td>
<td>3</td>
<td>4</td>
<td>24</td>
<td>15</td>
<td>22</td>
<td>22</td>
<td>25</td>
<td>8</td>
<td>24</td>
<td>140</td>
</tr>
<tr>
<td>3.</td>
<td>6</td>
<td>2</td>
<td>23</td>
<td>15</td>
<td>16</td>
<td>13</td>
<td>32</td>
<td>9</td>
<td>29</td>
<td>137</td>
</tr>
<tr>
<td>4.</td>
<td>2</td>
<td>4</td>
<td>25</td>
<td>14</td>
<td>18</td>
<td>22</td>
<td>35</td>
<td>9</td>
<td>25</td>
<td>148</td>
</tr>
<tr>
<td>5.</td>
<td>36</td>
<td>4</td>
<td>24</td>
<td>15</td>
<td>17</td>
<td>18</td>
<td>28</td>
<td>11</td>
<td>26</td>
<td>139</td>
</tr>
<tr>
<td>6.</td>
<td>12</td>
<td>4</td>
<td>17</td>
<td>9</td>
<td>25</td>
<td>20</td>
<td>25</td>
<td>9</td>
<td>23</td>
<td>128</td>
</tr>
<tr>
<td>7.</td>
<td>16</td>
<td>4</td>
<td>33</td>
<td>15</td>
<td>16</td>
<td>24</td>
<td>29</td>
<td>5</td>
<td>14</td>
<td>136</td>
</tr>
</tbody>
</table>

$\bar{X}$ 10.86  3.71  25.00  13.29  18.29  18.86  29.71  8.86  24.71  138.71
S.D. 12.38  .76  5.00  2.63  3.86  4.41  4.07  2.04  5.64  6.21
APPENDIX I

OBSERVED DATA FOR SUBJECTS IN
AFFECTIVE TRAINING GROUP
Data Collected from Subjects in Affective Training
Group for Length of Work Experience, Education,
and Index of Work Satisfaction Scores

<table>
<thead>
<tr>
<th>Subject Number</th>
<th>Work</th>
<th>Education</th>
<th>Pay</th>
<th>Autonomy</th>
<th>Task</th>
<th>Interaction</th>
<th>Prof. Status</th>
<th>Doctor Nurse</th>
<th>Adm.</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>2</td>
<td>2</td>
<td>25</td>
<td>13</td>
<td>26</td>
<td>13</td>
<td>33</td>
<td>11</td>
<td>35</td>
<td>153</td>
</tr>
<tr>
<td>2.</td>
<td>0</td>
<td>2</td>
<td>24</td>
<td>14</td>
<td>26</td>
<td>22</td>
<td>33</td>
<td>10</td>
<td>38</td>
<td>167</td>
</tr>
<tr>
<td>3.</td>
<td>2</td>
<td>2</td>
<td>25</td>
<td>13</td>
<td>17</td>
<td>21</td>
<td>31</td>
<td>7</td>
<td>18</td>
<td>132</td>
</tr>
<tr>
<td>4.</td>
<td>2</td>
<td>2</td>
<td>27</td>
<td>6</td>
<td>18</td>
<td>21</td>
<td>35</td>
<td>9</td>
<td>36</td>
<td>152</td>
</tr>
<tr>
<td>5.</td>
<td>3</td>
<td>2</td>
<td>20</td>
<td>3</td>
<td>18</td>
<td>14</td>
<td>26</td>
<td>10</td>
<td>15</td>
<td>106</td>
</tr>
<tr>
<td>6.</td>
<td>2</td>
<td>4</td>
<td>24</td>
<td>11</td>
<td>24</td>
<td>21</td>
<td>20</td>
<td>9</td>
<td>31</td>
<td>140</td>
</tr>
<tr>
<td>*7.</td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\[
\bar{X} = 1.83\quad 2.33\quad 24.17\quad 10\quad 21.50\quad 18.67\quad 29.67\quad 9.33\quad 28.83\quad 141.67
\]

\[
\text{S.D.} = .98\quad .98\quad 2.32\quad 4.47\quad 4.27\quad 4.03\quad 5.64\quad 1.36\quad 9.86\quad 21.19
\]

*Not included in final analysis
This study investigated the relationship between participation in affective training and level of job satisfaction among new nurse graduates. The thirteen subjects were recent registered nurse graduates who were participating in Orientation Programs at two Nevada hospitals. Members of one orientation group received ten hours of affective training while the other group received a ten-hour lecture series. The affective training included three components: values clarification, decision making and assertive skills. The lecture series topic was team leading.

Demographic data regarding age, sex, previous hospital experience, educational preparation and shift were collected on all subjects. Four weeks post-treatment, the subjects completed the Index of Work Satisfaction questionnaire. In addition to providing a Total Index of Work Satisfaction score, this instrument also provided data on level of work satisfaction related to pay, autonomy, task, interaction, professional status, Doctor-Nurse relationships and administration.
Analysis of the data indicated no significant differences (.05 level) in level of work satisfaction among the two groups of new graduates. Correlation studies to determine the relationship among the variables revealed significant findings between total level of work satisfaction and the following: administration, professional status, shift worked, and previous hospital experience. Professional status was significantly correlated to educational preparation, task and shift worked. In addition, a correlation between pay and total level of work satisfaction at the .05 level was revealed.

The study seems to indicate a change in the factors the new nurse graduate considers important in the work situation. Follow-up studies should be carried out to validate these findings. Subsequent strategies to increase the level of job satisfaction among new nurse graduates should take into consideration these results.