INFERENTIAL SET ADOPTION

BY NURSING STUDENTS

DISSERTATION

Presented to the Graduate Council of the North Texas State University in Partial Fulfillment of the Requirements

For the Degree of

Doctor of Philosophy

By

Christine Seftchick Carza, R.N., M.S.

Denton, Texas

August, 1986

This study examines nursing students' adoption of inferential sets in a clinical situation. The investigation determines (1) the particular inferential set(s) nursing students adopt toward a patient in a clinical situation; (2) the particular inferential set(s) adopted by sophomore and senior nursing students in a clinical situation; and (3) whether or not inferential sets adopted by the sophomore and senior nursing students differ. Sophomore and senior nursing students at a woman's university in Texas were asked to complete a research tool designed to determine inferential set adoption.

Statistical findings generated by this study are as follows. A Mann-Whitney U test was used to determine whether senior and sophomore nursing students significantly differed in their adoption of an inferential set. It was determined that the two levels of nursing students do not significantly differ in the adoption of an inferential set.

The Kolmogorov-Smirnov Goodness of Fit test was used to determine whether senior and sophomore nursing students as a class had an equal preference for each of the three inferential sets. It was found that the two levels of nursing students predominantly adopted the causal-genetic set.
Additional findings using a Cochran's C test for homogeneity of variance suggested that sophomore nursing students are more heterogeneous in their scoring in the causal-genetic and situation-matching sets than are the seniors.

A Pearson's r was calculated to determine if a relationship existed between age and score for each inferential set. No significant relationship was found.

Based on the findings, it is concluded that the nursing profession attracts individuals who have a causal-genetic inferential set characteristic. The purpose of a nursing education program is to mold these causal-genetic individuals into a more refined causal-genetic individual who fits the ideals and values of the nursing profession.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>LIST OF TABLES</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>v</td>
</tr>
</tbody>
</table>

## Chapter

<table>
<thead>
<tr>
<th>I. INTRODUCTION</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statement of the Problem</td>
<td></td>
</tr>
<tr>
<td>Purposes of the Study</td>
<td></td>
</tr>
<tr>
<td>Hypotheses</td>
<td></td>
</tr>
<tr>
<td>Significance of the Study</td>
<td></td>
</tr>
<tr>
<td>Definition of Terms</td>
<td></td>
</tr>
<tr>
<td>Limitations</td>
<td></td>
</tr>
<tr>
<td>Basic Assumptions</td>
<td></td>
</tr>
<tr>
<td>Summary</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>II. SYNTHESIS OF THE RELATED LITERATURE</th>
<th>10</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>III. PROCEDURES FOR COLLECTION OF DATA</th>
<th>29</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Population</td>
<td></td>
</tr>
<tr>
<td>Selection of the Sample</td>
<td></td>
</tr>
<tr>
<td>Research Design</td>
<td></td>
</tr>
<tr>
<td>Summary</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IV. PRESENTATION AND ANALYSIS OF THE DATA</th>
<th>37</th>
</tr>
</thead>
<tbody>
<tr>
<td>Characteristics of the Sample and</td>
<td></td>
</tr>
<tr>
<td>Presentation of the Data</td>
<td></td>
</tr>
<tr>
<td>Statistical Findings</td>
<td></td>
</tr>
<tr>
<td>Summary</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>V. SUMMARY, FINDINGS, CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS</th>
<th>51</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summary</td>
<td></td>
</tr>
<tr>
<td>Findings</td>
<td></td>
</tr>
<tr>
<td>Conclusions and Implications</td>
<td></td>
</tr>
<tr>
<td>Recommendations for Further Research</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>APPENDIX</th>
<th>59</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>BIBLIOGRAPHY</th>
<th>64</th>
</tr>
</thead>
</table>
LIST OF TABLES

Table                                                      Page
I. Number of Sophomore and Senior Nursing Students Adopting the Causal-Genetic, Situation-Matching and Value-Maintenance Sets .......................... 39
II. Scores for the Sophomore and Senior Nursing Students for the Causal-Genetic Set ................................................................. 40
III. Scores for the Sophomore and Senior Nursing Students for the Situation-Matching Set ................................................................. 41
IV. Scores for the Sophomore and Senior Nursing Students for the Value-Maintenance Set ................................................................. 42
V. Causal-Genetic Set and the Mean, Standard Deviation, Variance and Number for Sophomore and Senior Nursing Students . . 43
VI. Situation-Matching Set and the Mean, Standard Deviation, Variance and Number for Sophomore and Senior Nursing Students ................................................................. 43
VII. Value-Maintenance Set and the Mean, Standard Deviation, Variance and Number for Sophomore and Senior Nursing Students ................................................................. 44
VIII. Scores and Percent of Nursing Students by Age Categories for the Causal-Genetic Set ................................................................. 45
IX. Scores and Percent of Nursing Students by Age Categories for the Situation-Matching Set ................................................................. 46
X. Scores and Percent of Nursing Students by Age Categories for the Value-Maintenance Set ................................................................. 47
CHAPTER I

INTRODUCTION

The nursing profession today assumes an interdependent relationship with other health care professions. Frequently, however, the nurse is expected to coordinate and direct the activities of other professionals involved in the care of a patient. This role places much responsibility on the nurse for effective decision making. A broad knowledge base and an accurate perception of the patient as a person are essential to fulfill this role.

As students, nurses are taught to make judgments founded on scientific knowledge in the fields of biology, psychology and sociology. The clinical setting affords the nursing student an opportunity to apply scientific principles in a real life situation. It also functions as the major vehicle to help students learn how to be most competent in determining a patient's emotional state and personality characteristics, and how to relate to a patient in a therapeutic manner. Clinical instructors assist the student in the development of good interpersonal skills. Students are expected to use scientific principles and good interpersonal skills in a problem solving process known as the nursing process. The nursing process essentially functions as a framework to aid in the
identification of a patient's problems and to help find ways to resolve the problems.

The effectiveness of a patient's plan of care depends on the accuracy of the student's evaluation of the patient. The student must be able to precisely identify problems arising from physiological, psychological and sociological alterations. He or she must then be able to apply the appropriate scientific principles to successfully correct the problem. How realistically the student perceives the patient as a person can have a major impact on what the student determines is a problem, and how the student decides to alleviate the problem. Insight into variables that can affect a student's judgment of a patient as a person could result in assisting the student to make more accurate evaluations and therefore be a more effective decision maker.

Considerable research has been generated on the subject of person perception. One small aspect of the literature addresses the question of what major cues, information and concepts a person uses in forming an impression or in thinking about another person. Many variables are known to influence person perception. A few of these variables are the cultural context, the situational context, the past experiences of the perceiver, and the intentions of the stimulus person. The purpose of a social interaction can also affect the judgments of the perceiver. Jones and Thibaut assert that the perceiver's interaction goal results in the adoption of an
"inferential set." The inferential set then affects cue selection and the transformation of information, thereby influencing person perception. The value-maintenance, causal-genetic, and situation-matching sets are specific inferential sets, described by Jones and Thibaut.¹

Whether or not nursing students perceive patients with regard to the adoption of a specific inferential set has not been studied. In view of the fact that inferential sets influence cue selection and information transformation, it would be of considerable benefit to ascertain whether or not nursing students adopt a particular inferential set in the assessment of a patient as a person. The acquisition of this information may provide nursing instructors with a theoretical framework from which to help students gain insight into how they perceive patients, and hence aid students in making accurate patient assessments and become effective decision makers.

Statement of the Problem

The problem of this study was nursing students' adoption of inferential sets in a clinical situation.

Purposes of the Study

The purposes of this study were to determine

1. The particular inferential set(s) nursing students adopt toward a patient in a clinical situation;

2. The particular inferential set(s) adopted by the sophomore nursing student and the senior nursing student in a clinical situation;

3. Whether or not inferential sets adopted by the sophomore nursing students differ from those adopted by the senior nursing students.

Hypotheses

1. Senior and sophomore nursing students will differ in the adoption of a particular inferential set, as measured by a research tool designed to assess inferential set adoption.

2. Senior and sophomore nursing students will differ in the number of choices assigned to each of the three inferential sets (value-maintenance, causal-genetic, and situation-matching) as measured by a research tool designed to assess inferential set adoption.

Significance of the Study

The proposed study focuses on whether or not nursing students perceive patients with regard to the adoption of a specific inferential set. No studies to date have explored whether or not health care professionals involved in a therapeutic relationship with a patient tend to adopt a particular inferential set.

Inasmuch as inferential sets influence cue selection and information transformation, it is of considerable value to
ascertain whether or not nursing students adopt a particular set while interacting with a patient. Nursing instructors may use this information to help students gain insight into how they interact with a patient and how to help them become more therapeutic in the nurse-patient relationship.

Jones' and Thibaut's (1958) article describing interaction goals as bases of inference suggested that further research was needed to study the perceptual consequences of role adoption in the natural environment. They were particularly interested in studying the consequences of the psychotherapeutic role, saying that we need to know a great deal more about the details of the therapeutic interaction process. Jones and Thibaut believe that the therapeutic relationship is an exceedingly complex one. The complexity is due to the fact that the therapist must maintain a simulated relationship whereby he/she does not allow personal involvement. The following three reasons are offered to explain why it is difficult to maintain a therapeutic relationship: (1) it is difficult for the therapist not to be affected by patient reactions; (2) in order to bring about change, the therapist has to interact with a patient in a personally relevant and significant way; and (3) the therapist's self-esteem is at stake in that he or she is trying to bring about a behavioral change. Jones and

---

2 Ibid., p. 175.  
3 Ibid.
Thibaut assumed that psychotherapists naturally adopt the causal-genetic set in their professional role.\(^4\)

Since nurses are health care professionals involved in a therapeutic relationship with patients, the assumptions made about the psychotherapist's role and set adoption are applied to the nurse's role and set adoption. This study attempts to validate Jones' and Thibaut's presumption that persons involved in a psychotherapeutic role naturally adopt a causal-genetic set.

Thus, this study is significant in that it determines whether or not

1. Nursing students adopt a particular inferential set in a clinical situation;

2. The less professionally acculturated sophomore nursing students will adopt a different set as compared to the set adopted by the more professionally acculturated senior nursing students.

**Definition of Terms**

1. **Causal-genetic set** is a specific inferential set in which the perceiver attempts to determine what causes the stimulus person's behavior.

2. **Inferential set** describes the process of cue selection and the transformation of information as they are conditioned by the interaction goals of the perceiver.

\(^4\) Ibid., p. 176.
3. **Interpersonal skills** are techniques used by a nurse to develop a human to human relationship with a patient in which the goal is to help the patient and to meet his/her needs.

4. **Nursing process** is an orderly system used by professional nurses whereby data is collected in order to:
   (1) determine what the patient needs from nursing; (2) develop a plan of care to meet those needs; (3) implement the plan; and (4) evaluate the results of the plan and revise the plan as needed.

5. **Nursing student** is a person in the process of completing a basic baccalaureate nursing program.

6. **Perceiver** is a person who becomes aware of his/her environment through the senses.

7. **Person perception** is a process whereby one individual comes to know and think about another individual, his/her characteristics, qualities and inner traits.

8. **Situation-matching set** is a specific inferential set in which the perceiver attempts to apply social sanctions.

9. **Stimulus person** is an individual who is outside the perceiver and provokes a response.

10. **Value-maintenance set** is a specific inferential set in which the perceiver attempts to meet a personal need or gain self-gratification.
Limitations

The limitations that must be considered were as follows.

1. Subjects may lack motivation to honestly put forth effort to complete the activities required by the research tool.

2. The sample was a nonrandom, self-selected sample and must be taken into consideration when interpreting results.

Basic Assumptions

Basic assumptions of this study include the following.

1. Inferential set patterns exist in individuals making clinical judgments.

2. Inferential set patterns can be measured and identified by using a paper and pencil test.

Summary

Nursing students are taught to make judgments founded on scientific principles in the fields of biology, psychology and sociology. The effectiveness of a patient's plan of care depends on the accuracy of the student's evaluation of the patient. The student must be able to precisely identify problems arising from physiological, psychological and sociological alterations. How realistically the student perceives the patient as a person can have a major impact on what the student determines is a problem, and how the student decides to alleviate the problem.
Considerable research has been generated on the subject of person perception. Many variables are known to influence person perception. The purpose of a social interaction is one variable known to affect person perception. Jones and Thibaut believe that a perceiver's interaction goal results in the adoption of an inferential set. The inferential set then affects cue selection and the transformation of information. The purpose of this study was to determine whether or not nursing students adopt a particular inferential set in the assessment of a patient as a person. It was assumed that inferential set patterns exist in persons making clinical judgments and that patterns can be identified and measured by use of a paper and pencil test.

Chapter II contains a synthesis of related literature. Jones' and Thibaut's theoretical framework, in which interaction goals are used as a basis of inference in interpersonal perception, is presented. Three major categories of studies describing how inferential sets affect person perception, moral judgment, and the organization and recall of information are also included.
Nursing students are required to make numerous assessments of a patient within a clinical shift. They are taught to make judgments based on knowledge founded in the biological, psychological and sociological sciences. The more skillful a student is in the application of the scientific principles, the more accurate the assessment will be. The student's perception of the patient as a person will also significantly influence his/her judgments. How realistically the student has evaluated the patient will ultimately be reflected in the effectiveness of the student's decisions.

In recent years, person perception has been an area of a prolific amount of research. Inasmuch as person perception has many connotations, this paper will refer to person perception as a process whereby one person comes to know and think about another person, his/her characteristics, qualities and inner traits.\(^1\) Formal attention was not given to the process of how we know people until the latter part of the nineteenth century. In 1872, Darwin first gave scientific impetus to this area through his work on emotional expressions

---

and their recognition. At the beginning of this century, many psychologists and sociologists began investigating questions such as: How do we know any characteristics of another? How do people perceive or know their human environment in general? An extensive body of knowledge presently exists in an attempt to answer these questions.

Jones and Thibaut (1958) wrote a thought-provoking article describing a theoretical framework in which interaction goals are used as a basis of inference in interpersonal perception. The following two fundamental assumptions underlie this framework: (1) if one could identify the goals for which an actor is striving in an interaction situation, some prediction could be made regarding the cues that will be attended to and the interpretation that will be assigned to those cues, and (2) a perceiver in any social interaction will deliberately screen or reduce the number of incoming stimuli to help sustain the interaction process.

The perceiver does not assign equal significance to all incoming information, but rather seeks to select information or cues that are relevant to the purpose of the situation interaction. The perceiver is tuned in to a certain kind of information but not others. As a result of cue selection

\[ \text{2Ibid., p. 396.} \quad \text{3Ibid.} \]

\[ \text{4Edward E. Jones and John W. Thibaut, "Interaction Goals as Bases of Inference in Interpersonal Perception," Person Perception and Interpersonal Behavior, edited by Renato Tagiuri and E. Petrullo (California, 1958), p. 152.} \]
within a specific interaction context, the same information may be treated differently at different times by the same person. The term "inferential set" is used to describe the process of cue selection and the transformation of information as they are conditioned by the interaction goals of the perceiver.\(^5\) Once the perceiver has come to an initial decision regarding the purpose of the social interaction, the perceiver will adopt one predominant inferential set.

Jones and Thibaut have identified the following three basic goals of interaction: (1) the facilitation of personal goal attainment, (2) the deterministic analysis of personality, and (3) the application of social sanctions.\(^6\) Each goal gives rise to the adoption of an inferential set. The sets are respectively labeled the value-maintenance, the causal-genetic, and the situation-matching set.

The value-maintenance set is aroused when the perceiver has an interaction goal of meeting a personal need or gaining self-gratification. The perceiver views the stimulus person as being responsible for assisting or hindering him/her from meeting a personal goal. An evaluative judgment is rendered by the perceiver through a comparison of his/her value system to the value system of the stimulus person.\(^7\) The value-maintenance set is broken down into four types of interactions,

\(^5\)Ibid., p. 153. \(^6\)Ibid., p. 159.

\(^7\)Ibid., p. 159.
each representing some kind of personal goal attainment. The interactions are derived as follows: (1) gaining cognitive clarity about the shared environment,8 (2) securing motivational and value system support,9 (3) maximizing beneficent social response (want to elicit a positive affective social evaluation),10 and (4) accomplishing some outcome external to the interaction itself (such as completing a group project).11

The causal-genetic set is aroused when there is a need to determine what causes the stimulus person's behavior. The perceiver assumes the role of a psychologist. Acts are seen to originate from the stimulus person's personality and are believed to have a complex origin in the biological, psychological and sociological components of that person.12 The perceiver's goal is to determine what personality characteristics contribute to the behavior. The stimulus person is seen to be the ultimate cause of his/her behavior and no evaluation of the probable effects of the behavior is attempted.13 Because of a primary interest in personal history and personality factors, the causal-genetic observer is interested in separating intended from unintended behaviors. Accidental behavior has little meaning in that it adds no

---

8 Ibid., p. 160. 
9 Ibid., p. 161. 
10 Ibid., p. 162. 
11 Ibid., p. 163. 
12 Ibid., p. 159. 
13 Ibid., p. 165.
information to the stimulus person's true personality characteristics.  

The situation-matching set implies the application of social sanctions. The perceiver in this set must determine whether or not the stimulus person's behavior is appropriate in terms of social norms. The observer assumes the role of a juror. The critical feature in this set is the perceiver's interpretation of the relevant situational norms. The adoption of a specifically identified norm may prove to be difficult, as most situations may be defined in terms of numerous norms. In evaluating the stimulus person in this set, the following factors need to be considered: (1) how the observer defines the norms, (2) the intentions of the stimulus person, (3) the degree to which the stimulus person was aware of the norms, and (4) the degree to which extenuating circumstances existed. As is evident, the perceiver has numerous factors to consider while evaluating the stimulus person in this set.

Jones' and Thibaut's theoretical framework has spawned several research studies. The studies fall into three major categories describing how inferential sets affect person perception, moral judgment, and the organization and recall of information. Person perception has generated the bulk of research. An overview of each of the research categories

---

14 Ibid.  
15 Ibid., p. 167.  
16 Ibid., p. 168.
will be presented. Studies will be arranged in chronological order beginning with the earliest studies.

All of the studies designed to assess the effects of inferential set and person perception have manipulated the inferential set of the subjects. Subjects were then exposed to a constant stimulus person and asked to make a series of judgments. The first study found using this methodology was Jones' and deCharmes' 1957 research.¹⁷ Groups of subjects were asked to work together to solve a series of problems. Half of the groups was told that all members must succeed at a task in order to meet the goal. If one member failed, the entire group failed. The remaining half of the groups was told to work toward the goal individually. Individual performance would not affect group success or failure. By pre-arrangement, one member in all of the groups was asked to fail a task. Trait ratings of a number of personality characteristics were obtained of the failing group member before and after the test. It was found that, when a subject's failure affected the group's goal, the subject was perceived as being less dependable and less competent; however, the level of the subject's motivation and likeability was not influenced.¹⁸


¹⁸Ibid., p. 79.
A second study using essentially the same format was conducted to determine what would happen if the group task was presented as being one of motivation. The findings indicate that there is a significant decrease in the perceived dependability of the subject. Motivation is believed to be an internally caused variable and is therefore under the control of the stimulus person, while intellectual ability is thought to be a variable over which the stimulus person has no control.\footnote{Ibid., p. 83.}

It was postulated that individuals will be more harshly judged for variables that are thought to be under their control. Basically, this study demonstrates that the value-maintenance set could be aroused, and that person perception could be altered as a function of inferential set. This study set the groundwork for future studies on inferential sets.

Jones and deCharmes (1958) followed the 1957 study with a research project involving Naval Air Cadets as subjects.\footnote{Edward E. Jones and Richard deCharmes, "The Organizing Function of Interaction Roles in Person Perception," Journal of Abnormal and Social Psychology, LVII (September, 1958), 155.} This study will be presented in detail, as it provided the framework for numerous studies that followed. Subjects were exposed to a tape recording of a bogus interview between a psychologist and an ex-prisoner of war who had allegedly signed a number of propaganda statements critical of the United States. All subjects heard a brief history of the stimulus person and were asked to rate him on thirty-two
traits. Two hundred sixty-two cadets were then divided into eight groups. Four groups heard a tape recording presenting the stimulus person as an effective, well-adjusted person to whom the norms governing his behavior as a P.O.W. were vague. The remaining four groups heard a tape recording describing the stimulus person as having a traumatic personal history and a low frustration tolerance, who found himself in a P.O.W. situation with well-defined, established norms. Subjects were then assigned to one of three specific sets. One group was told to pretend to be a member of a medical psychological board assigned to determine why the stimulus person behaved as he did, thereby inducing the causal-genetic set. The situation-matching set was simulated for the second group by asking them to act as a military court martial panel charged with the duty to determine if formal disciplinary action should be instituted. The third group was instructed to think of the stimulus person as a friend, thereby prompting the adoption of the value-maintenance set. The last group was told nothing and served as a control. Subjects in all groups were asked to examine nine standard questions that might be asked about the stimulus person to obtain more relevant information. They were instructed to rank the questions in terms of their importance and relevance in fulfilling their assigned role. Subjects were then reminded of their roles and the tape recording was played. At the completion of the tape, each subject ranked the stimulus person on the same thirty-two traits as in the
before rating. They were then required to answer a series of questions included to establish the validity of difference in stimulus quality between the two interview variations.\textsuperscript{21}

The study demonstrated that inferential sets can be induced by giving directions to assume a role. It was found that subjects in the causal-genetic and value-maintenance sets were susceptible to the halo effect. Subjects in the situation-matching set were preoccupied with determining what offense was committed and who was responsible, while those in the causal-genetic and value-maintenance sets acted as though no offense had been committed. Although it was not anticipated, it was found that causal-genetic subjects were not more sensitive to information regarding level of personal adjustment, nor were subjects in the situation-matching set more sensitive to information on norms.\textsuperscript{22} All subjects rated the stimulus person similarly on adjustment, resistance and candor. There were differences in ratings done by subjects in the situation-matching set on acceptability, patriotism and idealism.\textsuperscript{23} The results indicate that inferential sets yield a pattern of judgments that do influence person perception despite the fact that the results do not always follow a predicted direction.

Lund (1974) replicated the P.O.W. study with the primary alteration that subjects were asked to render judgments in

\begin{itemize}
  \item \textsuperscript{21}Ibid., p. 157.
  \item \textsuperscript{22}Ibid., p. 160.
  \item \textsuperscript{23}Ibid., p. 161.
\end{itemize}
each set presented in a different order to each group. They were also asked to more completely evaluate the stimulus person, varying on the dimensions of personality strength and the clarity of norms. Results revealed that set ordering led to different judgments. Overall, subjects judged the strong stimulus person as being more responsible, likeable, and more appropriate in behavior than the weak stimulus person. This may be explained by taking into consideration the idea that people may evaluate others partially based on how they feel they would have acted in a given situation, and more closely associate themselves with the stronger person.

McCall and Rae (1973) completed a study whereby two hundred and three female students were asked to read a short case study and a group of related questions. They were then asked to complete a 12-adjective pair semantic differential designed to indicate their judgment of the stimulus person. The sex of the stimulus person and the set (situation-matching or causal-genetic) were manipulated. Findings showed that subjects in the situation-matching set rated males more hard, more bold, and less emotional than subjects in the causal-genetic set. Subjects in the situation-matching set rated


25 Ibid., p. 18.

females to be more bold. Differences due to sex alone were found only for the situation-matching group. They perceived the female stimulus person to be less hard and less rugged than the male.\textsuperscript{27} It was concluded that situation-matching and causal-genetic sets can influence judgment made by subjects in the potency and activity areas, but not in areas of evaluation.*

Crockett, Mahood and Press (1974) studied the variation of impressions of a speaker as a function of the listener's set, their cognitive complexity, and initial attitudes they held about the issue.\textsuperscript{28} Subjects differing in cognitive complexity, in their initial attitudes toward the role of women, and whether they were set to understand (causal-genetic) or evaluate (situation-matching or value-maintenance) the speaker, watched a videotaped speech on the role of women. There was a significant interaction of cognitive complexity and set for both level of organization and degree of differentiation of subjects' impressions. Complex subjects' scores

\textsuperscript{27}Ibid., p. 481.

\textsuperscript{28}Walter H. Crockett, Sharon Mahood and Allan N. Press, "Impressions of a Speaker as a Function of Set to Understand or to Evaluate, of Cognitive Complexity, and of Prior Attitudes," Journal of Personality, XLIII (March, 1975), 168.

*This experiment was a replication of the 1968 Warr and Knapper study. McCall and Rae confirmed the findings of Warr and Knapper. Neither set of experimenters can explain why set did not influence the evaluative scale. Warr and Knapper suggested that, because subjects were observers and not actively involved in the network of interpersonal relationships, the findings were not congruent totally with Jones' and Thibaut's predictions.
were higher in the understand set than in the evaluate set, while set did not significantly affect noncomplex subjects' performance. The main effect of set was that subjects in the understand set said they would like the speaker significantly better than those in the evaluation set.\textsuperscript{29}

Welch (1980) conducted a dissertation research study to determine whether female attractiveness or male interaction goals exert a primary influence on the expectations of the male, the perception about the male, and/or the perception of the female in an unstructured conversation in male-female dyads.\textsuperscript{30} Results indicate that, when attractiveness does influence the expectations of the male, the influence is a direct one. Interaction goals do not exert a direct influence on male expectations. There is a tendency for male perceivers in the value-maintenance to (1) be more influenced by attractiveness when forming expectations of the female, (2) register expectations of greater desirability of attractive partners, and (3) expect unattractive females to be less desirable than males in the causal-genetic set.\textsuperscript{31}

The studies cited thus far have attempted to place a subject in an inferential set and proceeded to determine how

\textsuperscript{29}Ibid., p. 177.


\textsuperscript{31}Ibid., p. 54.
set influenced the perception of a stimulus person. Evidence has supported the premise that inferential sets alter person perception in some way. Credence for Jones' and Thibaut's theoretical framework has been established.

The next group of studies will address how inferential sets influence moral judgments. Three studies were found which discussed this area. Farnhill's 1973 dissertation was the earliest research located. He compared two types of social-judgment situations, moral judgment and value-maintenance, with respect to their affects on children's consideration of intentionality in their evaluation of others. Moral judgments were solicited from six- to nine-year-old boys who were placed in either a value-maintenance or a situation-matching set. Farnhill found that boys' moral evaluations were differentiated more in terms of intentionality when placed in the value-maintenance set as compared to the situation-matching set. This finding lends support to the premise that evaluative perspective affects how the perceiver emphasizes intent information. Farnhill concludes that the value-maintenance set allows children greater freedom to adopt whatever basis of evaluation suits their personal goal. The use of moral judgment seems to inhibit the use of intentionality.


33 Ibid., p. 51.
Ferguson (1980) assessed whether children of different ages based their moral judgment on intent and severity information when inferential sets varied. Results indicated that older children differentiated among the responsibility levels more than younger children. Children viewed intended aggression as more reprehensible than foreseeable aggression, and viewed foreseeable aggression as more reprehensible than either accidental or justifiable aggression. Set adoption did not have a significant impact on their judgments. Inasmuch as this finding did not agree with those of Farnhill, a second investigation was planned.

Ferguson (1982) completed a second study to determine whether children's moral evaluations were affected by the adoption of a situation-matching versus a value-maintenance set, and whether children's moral judgment in a no set condition corresponded with their judgment in either of the explicit set conditions. Inferential set yielded interesting results; however, the impact was less than expected. Older children's judgments were not affected by set with regard to deservingness. Inferential set significantly

---

34 Tamara J. Ferguson and Brendon Gail Rule, "Effects of Inferential Set, Outcome Severity, and Basis for Responsibility on Children's Evaluation of Aggressive Acts," Developmental Psychology, XVI (March, 1980), 143.


36 Tamara J. Ferguson and Brendon Gail Rule, "Influence of Inferential Set, Outcome Intent, and Outcome Severity on Children's Moral Judgments," Developmental Psychology, XVIII (November, 1982), 844.
affected younger children's judgments only when the transgression accidentally caused harm. (This finding is not consistent with Piaget or Jones and Thibaut.) All children's reprehensibility judgments were affected by set in accidental outcomes, and younger children's deservingness judgments were affected by set in accidental conditions.\(^{37}\) According to Ferguson:

The reprehensibility results suggest that younger and older children naturally adopt the peer appraisal aspect of a value-maintenance orientation. They are less harsh as a peer rating a peer, but when asked to assume a position of authority over a child, their judgments are more severe.\(^{38}\)

There are differences in the research findings as to how inferential sets affect moral judgment in children. It is nonetheless clear that set adoption affects some aspect of the judgment process. Further research in the area could be of value to help reconcile the conflicting results. It should be noted that no studies were found on the affects of set and moral judgment in adults. This may be an area for future research.

Information organization and the recall process has been the third area of investigation. This topic has produced some of the most interesting and consistent results. Information organization and the recall process has been the most recently studied area, and seems to have evolved out of the earlier work done on the affects of set on person perception and moral judgment.

\(^{37}\)Ibid., p. 847.  
\(^{38}\)Ibid., p. 850.
Jeffery and Mischel (1979) investigated how the purpose for which information about a person is to be used affects the way the perceiver organizes the information. Subjects were asked to categorize and label episodes which described the behavior of a fictional character and to summarize what each category meant. The first group of subjects was asked to later expect to describe the story character's personality; the second group was asked to be expected to make predictions of behavior; and the third group was told to expect to recall the episodes. Findings revealed that the behavior prediction group and the personality impression group categorized in terms of personality characteristics. The recall group categorized the same number of personality and situation characteristics. A second study demonstrated that the strategy of categorization of the recall group in the first study enhanced recall for the subjects in this experiment.

Cohen's (1979) study hypothesized that: (1) observers with different goals would encode the stream of behavior into different units, and (2) units encoded by these two groups of observers would not necessarily be hierarchically related.

---


40 Ibid., p. 408.

41 Ibid., p. 416.

One group of subjects was told that they would later be tested on the accuracy of their impression, while a second group of subjects was told to unitize a stream of behavior. They then saw four brief behavioral videotaped sequences that contained personality and task relevant information. Results indicated that subjects whose goal was to form an impression unitized behavior differently from those told to learn a task. The second group of subjects with different goals defined units that were not hierarchically related. 

Cohen concluded that observational goals serve the important function of schema selection, choosing those that will help the perceiver achieve his goal. Perceivers with different goals, at times, will chunk up behavior differently, interpret and store information differently, and retrieve information differently.

Hoffman, Mischel and Mazze (1981) studied the role of observational purpose in the tendency to employ trait categories in the organization of behavioral information. A second purpose was to study the effects of goal-based versus trait-based organization of the information on subjects' ability to recall it. Subjects were told to read and categorize a series of episodes for the purpose of either recalling the

43 Ibid., p. 323.

material or empathizing with the main character organized the episodes in terms of the character's goals. Subjects whose purpose was to either form a personality impression or predict future behavior organized the episodes in terms of traits. It was also found that the categorizations produced by the recall oriented subjects facilitated the ability of a new sample of subjects.

A conclusion that may be drawn from these studies is summarized by Wyer (1980):

The manner in which information is organized and stored in memory may depend on the processing objectives at the time it is first received. The objective leads the perceiver to attend to different aspects of the information, and thus may lead the information to be interpreted much differently. Objectives may also influence the manner in which the information is subsequently recalled and the type of judgments based upon it.

The studies presented in the areas of person perception, moral judgment and information organization and recall have all contributed support for the concept that observational goals influence perception. This factor should be given careful consideration when an accurate assessment of an individual is critical. Health care professionals need to be aware of the effects of observational goals and how they affect their perceptions of patients as persons. A biased

Ibid., p. 218.

Ibid., p. 222.

Ibid., p. 222.

assessment of a patient as a person can lead to the development of a totally inappropriate and nontherapeutic plan of care. To date, no study has specifically addressed the effects of observational goals in health care professionals.

The procedures for collection of data are described in Chapter III. A detailed account of how the research tool was developed and the exact method of data collection is included.
CHAPTER III

PROCEDURES FOR COLLECTION OF DATA

During the late part of the fall semester in 1985, the dean of a College of Nursing at one campus of a woman's university in Texas was contacted by phone regarding permission to use the sophomore and senior nursing students in the proposed study. The dean was mailed a copy of this proposal and given a brief verbal description of the study, including its purpose, procedure for data collection, and potential use of the findings. It is the dean's policy not to consider granting permission for doctoral studies to be carried out at the university until the student has an approved proposal; therefore, initial contact with the dean was not made before the late part of the fall semester. The same procedure was followed in contacting the dean of a College of Nursing at a second campus of a woman's university in Texas. The researcher was granted permission to use the university's senior and sophomore nursing students on both campuses.

Second semester senior nursing students met as a total group for lecture in Community Health Nursing during the spring. There were two senior classes meeting for this subject, one class on each campus. An appointment was made with the instructor for each senior class one week before data
collection was anticipated. The instructors were asked for permission to use their class as participants in this study. They were given a brief verbal description of the study, including its purpose, procedure and time required for data collection, and potential use of the findings.

During the spring, the second semester sophomore nursing students met as a total group for lecture in the Fundamentals of Nursing class. There were two sophomore classes meeting for this subject, one class on each campus. An appointment was made with the instructors for each sophomore class one week before data collection was anticipated. The instructors were asked for permission to use their class as participants in this study. They were given a brief verbal description of the study, including its purpose, procedure and time required for data collection, and potential use of the findings.

On each day of data collection, the researcher arrived fifteen minutes before the class was scheduled to begin. This allowed time to prepare for the handout of the research tool and to briefly meet with the instructor. Before the distribution of the research tool, the students were told the following: "My name is Christine Garza. I have worked clinically for three years in Medical-Surgical Intensive Care, and I have taught Medical-Surgical Nursing for six years. I'm here to ask you to participate in my doctoral dissertation research study. The purpose of this study is
to understand how nursing students prioritize information. The research procedure requires you to read a case study and prioritize a list of questions. The results of this study will be used to help nurse educators improve teaching methods. Your participation in this study is voluntary. I can assure you that your individual responses will be kept strictly confidential. In no way will your individual responses be identified. Your willingness to read the case study and prioritize the questions will constitute your consent to participate in the study. No more than fifteen minutes are needed to complete the case study. I will now pass out the research tool. Please DO NOT put your name anywhere on the research tool. I'd like to thank you for your time and willingness to participate in this study." The tool was then distributed and collected when the students had completed the task. The instructor was thanked for her time and cooperation. The same procedure was followed for each class.

In view of the fact that no study has previously explored whether or not nursing students adopt a particular inferential set, a research tool needed to be developed. The researcher developed such a tool based on material in the review of the literature and experience as a nurse educator. (See Appendix A.) The review of the literature failed to give insight into how researchers derived the questions used to determine the inferential set of the subject. About six examples of
questions were located. The questions appeared to have been developed by simply applying the definition of the set. The tool was designed to be a case study, as nursing students are familiar with this format. The tool begins with a cover sheet entitled 'Informal Consent.' Participants are briefly given information regarding the purpose, research procedure and use of the findings. Demographic data requesting the following information is also included: age; sex; educational level of student; religion; are you currently a licensed R.N. or L.V.N.?; and do you currently hold a degree? If so, in what field?

The cover sheet is followed by instructions and presentation of the case study. Using an understanding of alcoholic behavior, the content of the case study was developed for a purely fictional character.

The case study is then followed by nine questions intended to allow the student to ask for more information about the case. The students are asked to rank each question in order of importance, beginning with number one as being most important, and number nine as being least important. There are three questions representing each of the three inferential sets. The order of presentation of the questions was determined by randomly selecting each question from a bowl. Finally, the student is allowed to ask any other questions he/she wishes.
The tool was validated by a panel of experts. In the fall of 1985, five nursing doctoral students at a woman's university in Texas enrolled in a research course were asked to evaluate the tool. They were given a copy of the tool and a brief description of each inferential set. The doctoral students were then asked to critique the following: the tool's format; the clarity of directions; the preciseness of the questions; and the ease with which they were able to identify to which inferential set the question belonged.

None of the five doctoral students noted any problems with the tool's format, clarity of directions, or preciseness of the questions. Three of the five doctoral students were able to correctly identify the inferential set that each of the nine questions belonged to. Two students were not able to correctly identify one question. Each student missed a different question. One misidentified question belonged to the situation-matching set and was incorrectly labeled a value-maintenance set. The second mislabeled question belonged to the value-maintenance set and was incorrectly identified as the situation-matching set. Since both incorrectly identified questions require an evaluative judgment, it is conceivable for these two items to be mislabeled. After reviewing the overall results of the panel of experts, the researcher deemed the research tool to be acceptable. It is recognized that the use of a panel of experts provided qualitative content and construct validity.
Once the panel of experts had validated the tool, five volunteer sophomore nursing students were asked to pilot test the instrument. They were requested to comply with the tasks set forth by the tool and asked to give comments regarding the instrument's format, clarity of directions, preciseness of questions, and ease with which they were able to complete the task.

None of the five sophomore nursing students had any difficulty in completing the tasks required by the tool. They noted no problems with the instrument's format, clarity of directions, or preciseness of questions. They required ten to fifteen minutes to complete the task. They reported no problems understanding the technical words. Since the panel of experts and pilot test group noted no major problems with the research tool, no changes were made. The tool was used as it was originally developed.

An inverse scoring procedure was used. Since students were asked to rank nine questions in order of importance, with the number one choice as being most important, and the number nine choice as being least important, the inverse scoring procedure assigned nine points to the number one choice, eight points to the number two choice, and so on. In view of the fact that each of the three inferential sets has three questions designed to represent that set, the points assigned to a given set's questions were added, and the group of questions receiving the largest number of points was interpreted to represent the student's inferential set.
The Population

The population consisted of all the senior and sophomore nursing students at two campuses of a woman's university in Texas. There was no effort made to contact those students who were absent from class the day of data collection.

Selection of the Sample

The sample was self-selected. Senior and sophomore nursing students were asked to participate in this study. It was felt that voluntary participation would yield students who were motivated to give thoughtful consideration to the required task. A minimum of thirty students in each group was expected to participate in the study. This would yield a minimum total of sixty seniors and sixty sophomores.

Research Design

The purpose of this study was to determine whether nursing students adopt a particular inferential set in a clinical setting. There are no previous studies addressing this question. This study was therefore a factor-searching design. This design fits the description given by Diers. According to Diers

Factor-searching studies literally look for ways to categorize, classify or conceptualize situations. They are used when the researcher wants to take a new look at an old situation, or when there is no useable information about the particular phenomenon available. Factor-searching studies are also called descriptive, exploratory and formulative.¹

¹Donna Diers, Research in Nursing Practice (New York 1979), p. 100.
Summary

This chapter described the specific procedures used for data collection. It provided a detailed account of the method of data collection and reported how the research tool was developed and validated.

The procedures for analysis of data are addressed in Chapter IV. The Mann-Whitney U test was used to determine whether the senior and sophomore nursing students differed in their adoption of an inferential set. The Kolmogorov-Smirnov Goodness of Fit test was used to determine whether the senior and sophomore nursing students differed in the number of choices assigned to each of the three inferential sets.
CHAPTER IV

PRESENTATION AND ANALYSIS OF THE DATA

This study examined nursing students' adoption of inferential sets in a clinical situation. To date, no study has determined whether or not nursing students perceive patients with regard to the adoption of a specific inferential set.

The study sought to determine (1) the particular inferential set(s) nursing students adopt toward a patient in a clinical situation; (2) the particular inferential set(s) adopted by the sophomore nursing student and the senior nursing student in a clinical situation; and (3) whether or not inferential sets adopted by the sophomore nursing students differ from those adopted by the senior nursing students. Sophomore and senior nursing students at a woman's university in Texas were asked to complete a research tool designed to determine inferential set adoption.

The statistical results of the investigation are reported in this chapter. The findings of the study have been divided into two sections. The characteristics of the sample and the data are presented in the first part. The statistical findings in order of the hypotheses formulated in Chapter I are presented in the second section.
Characteristics of the Sample and Presentation of the Data

The sample consisted of a total of 178 participants. Eighty-nine subjects were sophomores and eighty-nine of the remaining subjects were seniors. Two campuses of a woman's university in Texas were used. One campus yielded nineteen sophomore nursing students and sixty-four senior nursing students, while the second campus produced seventy sophomore nursing students and twenty-five senior nursing students. The ages of the participants were divided into the following categories: 19-23; 24-28; 29-33; and 34-46. The number of students in each respective category were: 108; 31; 20; and 19. The sample consisted of 5 males (2 sophomores and 3 seniors), and 173 females (87 sophomores and 86 seniors). Thirteen seniors held degrees, as compared to eight sophomore students. There were three R.N.'s and four L.V.N.'s in the senior classes, with only one L.V.N. reported in the sophomore classes. All the students' scores were included in this study except for four sophomores. Their responses had to be discarded due to the use of an improper ranking procedure.

A research tool was designed to determine the student's adoption of an inferential set. Participants were asked to read a case study, which was followed by nine questions intended to allow the student to ask for more information about the case in order or priority. There were three questions representing each of the three inferential sets. An
inverse scoring procedure assigned nine points to the student's number one choice, eight points to the number two choice, and so on. The points assigned to a given set's three questions were added, and the group of questions receiving the greatest number of points was interpreted to represent the student's inferential set.

The following table presents a count of the number of sophomore and senior nursing students adopting each of the three inferential sets. As revealed in Table I, an overwhelming majority of the sophomore and senior nursing students adopted the causal-genetic set. The number of students adopting the remaining two sets was small. The fewest number of students adopted the situation-matching set.

**TABLE I**

**NUMBER OF SOPHOMORE AND SENIOR NURSING STUDENTS ADOPTING THE CAUSAL-GENETIC, SITUATION-MATCHING AND VALUE-MAINTENANCE SETS**

\[ N = 178 \]

<table>
<thead>
<tr>
<th>Level of Student</th>
<th>Causal-Genetic Set</th>
<th>Situation-Matching Set</th>
<th>Value-Maintenance Set</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sophomore</td>
<td>76</td>
<td>1</td>
<td>12</td>
<td>89</td>
</tr>
<tr>
<td>Senior</td>
<td>80</td>
<td>2</td>
<td>7</td>
<td>89</td>
</tr>
<tr>
<td>Total</td>
<td>156</td>
<td>3</td>
<td>19</td>
<td>178</td>
</tr>
</tbody>
</table>
The scores of the sophomore and senior nursing students are presented in the next three tables with regard to each of the three inferential sets. The specific scores of the sophomore and senior nursing students for the causal-genetic set are presented in Table II.

**TABLE II**

**SCORES FOR THE SOPHOMORE AND SENIOR NURSING STUDENTS FOR THE CAUSAL-GENETIC SET**

\( N = 178 \)

<table>
<thead>
<tr>
<th>Scores</th>
<th>Number of Sophomores</th>
<th>Number of Seniors</th>
</tr>
</thead>
<tbody>
<tr>
<td>6-9</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>10-13</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>14-17</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>18-21</td>
<td>31</td>
<td>28</td>
</tr>
<tr>
<td>22-24</td>
<td>51</td>
<td>60</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>89</strong></td>
<td><strong>89</strong></td>
</tr>
</tbody>
</table>

The scores for the causal-genetic set were heavily loaded by both the sophomore and senior nursing students in the high scoring range of 22-24 points. Scores ranging from 18-21 also attracted a significant number of both levels of students. Few students in either level scored low in this set. These scores indicate that the causal-genetic set was most highly ranked.
The specific scores of the sophomore and senior nursing students for the situation-matching set are presented in Table III. The sophomore and senior nursing students predominantly selected the moderate 14-17 score range. This was followed by the 10-13 range and the 18-21 range. These scores indicate that the situation-matching set was moderately ranked.

The specific scores of the sophomore and senior nursing students for the value-maintenance set are presented in Table IV. The value-maintenance set attracted the majority of sophomore and senior nursing students in the low scale.

### Table III

<table>
<thead>
<tr>
<th>Scores</th>
<th>Number of Sophomores</th>
<th>Number of Seniors</th>
</tr>
</thead>
<tbody>
<tr>
<td>6-9</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>10-13</td>
<td>29</td>
<td>22</td>
</tr>
<tr>
<td>14-17</td>
<td>32</td>
<td>44</td>
</tr>
<tr>
<td>18-21</td>
<td>17</td>
<td>19</td>
</tr>
<tr>
<td>22-24</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>89</td>
<td>89</td>
</tr>
</tbody>
</table>
ranges of 6-9 and 10-13. Few students in either level scored high in this set. The value-maintenance set was the least highly ranked set by both levels of students.

### TABLE IV

**SCORES FOR THE SOPHOMORE AND SENIOR NURSING STUDENTS FOR THE VALUE-MAINTENANCE SET**

* N = 178

<table>
<thead>
<tr>
<th>Scores</th>
<th>Number of Sophomores</th>
<th>Number of Seniors</th>
</tr>
</thead>
<tbody>
<tr>
<td>6-9</td>
<td>60</td>
<td>72</td>
</tr>
<tr>
<td>10-13</td>
<td>23</td>
<td>14</td>
</tr>
<tr>
<td>14-17</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>18-21</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>22-24</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>89</strong></td>
<td><strong>89</strong></td>
</tr>
</tbody>
</table>

The next three tables are categorized by class and inferential set presenting the mean, standard deviation, variance and number. The information for the causal-genetic set is presented in Table V. A difference in the variance between the sophomore and senior students for the causal-genetic set is shown in Table V.
TABLE V

CAUSAL-GENETIC SET AND THE MEAN, STANDARD DEVIATION, VARIANCE AND NUMBER FOR SOPHOMORE AND SENIOR NURSING STUDENTS

<table>
<thead>
<tr>
<th>Level of Student</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Variance</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entire Population</td>
<td>21.8539</td>
<td>2.5734</td>
<td>6.6626</td>
<td>178</td>
</tr>
<tr>
<td>Sophomore</td>
<td>21.5169</td>
<td>3.0004</td>
<td>9.0026</td>
<td>89</td>
</tr>
<tr>
<td>Senior</td>
<td>22.1910</td>
<td>2.0219</td>
<td>4.0881</td>
<td>89</td>
</tr>
</tbody>
</table>

The situation-matching set and the mean, standard deviation, variance and number for the sophomore and senior nursing students is presented in Table VI. There is a difference in the variance between the sophomore and senior students for the situation-matching set.

TABLE VI

SITUATION-MATCHING SET AND THE MEAN, STANDARD DEVIATION, VARIANCE, AND NUMBER FOR SOPHOMORE AND SENIOR NURSING STUDENTS

<table>
<thead>
<tr>
<th>Level of Student</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Variance</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entire Population</td>
<td>15.0112</td>
<td>3.4559</td>
<td>11.9434</td>
<td>178</td>
</tr>
<tr>
<td>Sophomore</td>
<td>15.0000</td>
<td>3.9457</td>
<td>15.5682</td>
<td>89</td>
</tr>
<tr>
<td>Senior</td>
<td>15.0225</td>
<td>2.9076</td>
<td>8.4540</td>
<td>89</td>
</tr>
</tbody>
</table>
The value-maintenance set and the mean, standard deviation, variance and number for the sophomore and senior nursing students is presented in Table VII. There is a difference noted in the mean, standard deviation, and variance for the value-maintenance set between the sophomore and senior nursing students.

### TABLE VII

VALUE-MAINTENANCE SET AND THE MEAN, STANDARD DEVIATION VARIANCE, AND NUMBER FOR SOPHOMORE AND SENIOR NURSING STUDENTS

<table>
<thead>
<tr>
<th>Level of Student</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Variance</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entire Population</td>
<td>8.1292</td>
<td>2.5929</td>
<td>6.7233</td>
<td>178</td>
</tr>
<tr>
<td>Sophomore</td>
<td>8.4831</td>
<td>2.7474</td>
<td>7.5480</td>
<td>89</td>
</tr>
<tr>
<td>Senior</td>
<td>7.7753</td>
<td>2.3920</td>
<td>5.7217</td>
<td>89</td>
</tr>
</tbody>
</table>

The scores of the nursing students categorized by age groups and scores with regard to each of the three inferential sets are presented in the concluding tables. These tables also include the percent of nursing students categorized by age and score selecting each of the three inferential sets. The information for the causal-genetic set is presented in Table VIII.
TABLE VIII
SCORES AND PERCENT OF NURSING STUDENTS BY AGE CATEGORIES FOR THE CAUSAL-GENETIC SET

N = 178

<table>
<thead>
<tr>
<th>Score</th>
<th>19-23</th>
<th>24-28</th>
<th>29-33</th>
<th>34-46</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>6-9</td>
<td>1</td>
<td>1%</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>10-13</td>
<td>1</td>
<td>1%</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>14-17</td>
<td>3</td>
<td>3%</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>18-21</td>
<td>38</td>
<td>35%</td>
<td>9</td>
<td>29%</td>
</tr>
<tr>
<td>22-24</td>
<td>65</td>
<td>60%</td>
<td>22</td>
<td>71%</td>
</tr>
<tr>
<td>Total</td>
<td>108</td>
<td>31%</td>
<td>20</td>
<td>50%</td>
</tr>
</tbody>
</table>

A majority of students in each age category scored in the 22-24 range. The 18-21 range was the second most selected rank chosen by all age groups. The causal-genetic set was highly ranked by all age groups.

The scores and percent of nursing students by age categories for the situation-matching set is presented in Table IX. The age categories of nursing students in the situation-matching set showed more variation in the percent of students selecting any given score range. The 14-17 range...
was the only score range predominantly ranked by the 24-28-year-old age group. No other score range received a majority of the ranking by any age category.

**TABLE IX**

**SCORES AND PERCENT OF NURSING STUDENTS BY AGE CATEGORIES FOR THE SITUATION-MATCHING SET**

<table>
<thead>
<tr>
<th>Score</th>
<th>19-23</th>
<th>24-28</th>
<th>29-33</th>
<th>34-46</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>6-9</td>
<td>7</td>
<td>6%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>10-13</td>
<td>35</td>
<td>32%</td>
<td>7</td>
<td>23%</td>
</tr>
<tr>
<td>14-17</td>
<td>40</td>
<td>37%</td>
<td>19</td>
<td>61%</td>
</tr>
<tr>
<td>18-21</td>
<td>22</td>
<td>20%</td>
<td>5</td>
<td>16%</td>
</tr>
<tr>
<td>22-24</td>
<td>4</td>
<td>4%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Total</td>
<td>108</td>
<td></td>
<td>31</td>
<td></td>
</tr>
</tbody>
</table>

The scores and percent of nursing students by age categories for the value-maintenance set is presented in Table X. A majority of students in each age category scored in the 6-9 range. The 10-13 range was the second most selected rank chosen by all age groups. The value-maintenance set was very lowly ranked by all age groups.
TABLE X

SCORES AND PERCENT OF NURSING STUDENTS BY AGE CATEGORIES FOR THE VALUE MAINTENANCE SET

N = 178

<table>
<thead>
<tr>
<th>Score</th>
<th>19-23</th>
<th>24-28</th>
<th>29-33</th>
<th>34-46</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n %</td>
<td>n %</td>
<td>n %</td>
<td>n %</td>
</tr>
<tr>
<td>6-9</td>
<td>76</td>
<td>26</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>70%</td>
<td>84%</td>
<td>75%</td>
<td>79%</td>
</tr>
<tr>
<td>10-13</td>
<td>25</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>23%</td>
<td>13%</td>
<td>20%</td>
<td>21%</td>
</tr>
<tr>
<td>14-17</td>
<td>7</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>6%</td>
<td>3%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>18-21</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>0%</td>
<td>0%</td>
<td>5%</td>
<td>0%</td>
</tr>
<tr>
<td>22-24</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Total</td>
<td>108</td>
<td>31</td>
<td>20</td>
<td>19</td>
</tr>
</tbody>
</table>

Statistical Findings

Hypothesis 1

Hypothesis 1 stated that senior and sophomore nursing students would differ in the adoption of a particular inferential set, as measured by a research tool designed to assess inferential set adoption.
To test this hypothesis, a Mann-Whitney U test was used to determine whether the senior and sophomore nursing students significantly differed in their adoption of an inferential set. The .05 level was set as the level of significance for this study. A U value of 3725.0 was derived through the use of SPSSX on a DEC 20 computer. A two-tailed p value of .3273 was computed. Based on these findings, Hypothesis 1 was not supported. The senior and sophomore nursing students do not significantly differ in the adoption of a particular inferential set.

Hypothesis 2

Hypothesis 2 stated that senior and sophomore nursing students would differ in the number of choices assigned to each of the three inferential sets, as measured by a research tool designed to assess inferential set adoption.

To test this hypothesis, a Kolmogorov-Smirnov Goodness of Fit test was used to determine whether the senior nursing students and the sophomore nursing students as a class had an equal preference for each of the three inferential sets. The level of significance was again set at .05. For the seniors, a Kolmogorov-Smirnov Z score of 8.480 was derived with a two-tailed p value of <.0001. A Kolmogorov-Smirnov Z score of 7.995 was derived for the sophomores with a two-tailed p value of <.0001. Based on the findings, Hypothesis 2 was supported. That is, the senior and
sophomore nursing students as separate groups did differ within their groups as to the number of choices assigned to each of the three inferential sets.

Additional Findings

Further statistical analysis revealed the following. A Cochran's C test for homogeneity of variance was calculated for the seniors and the sophomores in each inferential set. When applied to the causal-genetic set, the Cochran's C test yielded a value of .6877 (p < .0001). A value of .6481 (p = .005) was calculated for the situation-matching set. Lastly, the Cochran's C test did not yield a significant p value when applied to the value-maintenance set. The results suggest that sophomore nursing students are more heterogeneous in their scoring in the causal-genetic and situation-matching sets than are the seniors.

A Pearson's r was calculated to determine if a relationship existed between age and score for each inferential set. In the causal-genetic set, the Pearson's r yielded a value of .00995 (p = .4475). A value of .06243 (p = .2039) was calculated for the situation-matching set. The value-maintenance set yielded a value of -.09368 (p = .1068). These results suggest that age is not significantly related to scores for each of the three inferential sets.
Summary

The data and statistical findings generated by this study are presented in this chapter. A Mann-Whitney U test was used to determine whether senior and sophomore nursing students significantly differed in their adoption of an inferential set. It was determined that the two levels of nursing students do not significantly differ in the adoption of an inferential set.

The Kolmogorov-Smirnov Goodness of Fit test was used to determine whether senior and sophomore nursing students as a class had an equal preference for each of the three inferential sets. It was found that the two levels of nursing students predominantly adopted the causal-genetic set.

Additional findings using a Cochran's C test for homogeneity of variance suggested that sophomore nursing students are more heterogeneous in their scoring in the causal-genetic and situation-matching sets than are the seniors.

A Pearson's r was calculated to determine if a relationship existed between age and score for each inferential set. No significant relationship was found. A summary, findings, conclusions, implications and recommendations for future studies are presented in Chapter V.
CHAPTER V

SUMMARY, FINDINGS, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

Summary

The problem of this study was nursing students' adoption of inferential sets in a clinical situation. The purposes of this study were to determine: (1) the particular inferential set(s) nursing students adopt toward a patient in a clinical situation; (2) the particular inferential set(s) adopted by the sophomore nursing student and the senior nursing student in a clinical situation; and (3) whether or not inferential sets adopted by the sophomore nursing students differ from those adopted by the senior nursing students.

A review of related literature focused on a theoretical framework of Jones and Thibaut (1958) in which interaction goals are used as a basis of inference in interpersonal perception.¹ It is believed that perceivers adopt an inferential set in any given interaction. The adoption of an inferential set influences cue selection and the transformation of information as they are conditioned by the interaction goals of the perceiver. Jones and Thibaut have identified the following three basic goals of interaction: (1) the facilitation

of personal goal attainment; (2) the deterministic analysis of personality; and (3) the application of social sanctions. The sets are respectively labeled the value-maintenance, the causal-genetic, and the situation-matching set.

The review of literature also addressed studies spawned by Jones' and Thibaut's theoretical framework. The studies fell into three major categories describing how inferential sets affect person perception, moral judgment, and the organization and recall of information.

A research tool was developed to determine the students' adoption of an inferential set. Students were asked to read a case study which was followed by nine questions intended to allow the student to ask for more information about the case in order or priority. There were three questions representing each of the three inferential sets. An inverse scoring procedure assigned nine points to the number one choice, eight points to the number two choice, and so on. The points assigned to a given set's three questions were added; the group of questions receiving the greatest number of points was interpreted to represent the student's inferential set.

Two campuses of a woman's university in Texas were used as sites for data collection. The two campuses combined yielded a total of 178 volunteer participants. Eighty-nine subjects were sophomore nursing students and eighty-nine were senior nursing students.
Findings

The findings of this study were presented in relation to the two hypotheses. The .05 level was set as the significance level for this study.

Hypothesis 1 stated that senior and sophomore nursing students would differ in the adoption of a particular inferential set, as measured by a research tool designed to assess inferential set adoption. No statistically significant difference was obtained utilizing the Mann-Whitney U test \((U = 3725.0; p = .3273)\). Hypothesis 1 was therefore not supported. The senior and sophomore nursing students do not significantly differ in the adoption of a particular inferential set.

Hypothesis 2 stated that senior and sophomore nursing students would differ in the number of choices assigned to each of the three inferential sets (value-maintenance, causal-genetic, and situation-matching) as measured by a research tool designed to assess inferential set adoption. Hypothesis 2 was supported. The Kolmogorov-Smirnov Goodness of Fit test yielded a \(Z\) score of 8.480 \((p < .0001)\) for the senior nursing student group. The sophomore nursing student group's Kolmogorov-Smirnov Goodness of Fit \(Z\) score was 7.995 \((p < .0001)\). That is, the senior and sophomore nursing students as separate groups did differ within their groups as to the number of choices assigned to each of the
three inferential sets (see Table I, p. 39). The causal-genetic set is predominantly adopted by both groups.

Additional findings were generated through the use of the Cochran's C test for homogeneity of variance. The Cochran's C test was used for the senior and sophomore nursing students' scores in each inferential set. As applied to the causal-genetic set, the Cochran's C test yielded a value of .6877 (p < .0001). A value of .6481 (p = .005) was calculated for the situation-matching set. The Cochran's C test for the value-maintenance set did not yield a significant p value. The results suggest that sophomore nursing students are more heterogeneous in their scoring in the causal-genetic and situation-matching sets than are the seniors.

A Pearson's r was calculated to determine if a relationship existed between age and score for each inferential set. In the causal-genetic set, the Pearson's r yielded a value of .00995 (p = .4475). A value of .06243 (p = .2039) was calculated for the situation-matching set. The value-maintenance set yielded a value of -.09638 (p = .1068). The results suggest that age is not significantly related to scores for each of the three inferential sets.

Approximately 95 percent of the students in each of the four classes asked to participate in this study opted to be a subject. This was an unexpectedly high proportion of volunteer participants. Both levels of students appeared to have no difficulty utilizing the case study format employed
by the research tool. Only four sophomore students failed to follow directions to correctly rank the nine questions. All students completed the research tool within fifteen minutes.

After completing the tool, several of the senior nursing students expressed concern to the researcher over the inclusion of several of the questions on the list to be ranked. (They were referring to the value-maintenance questions.) It was their opinion that such questions would never be asked by a good nurse and wanted an explanation as to why they were put into the research tool. The seniors were curious as to the "real" purpose of the study and wanted immediate feedback as to how well they did and what the study intended to find out.

Conclusions and Implications

Based on the analysis of the data, the findings of the study led to several conclusions. Jones and Thibaut assumed that psychotherapists naturally adopt a causal-genetic set in their professional role. The literature does not refute nor support this assumption as, to date, no data regarding this assumption has been generated.

This study proposed that, since nurses are health care professionals involved in a therapeutic relationship with patients, the assumptions made about the psychotherapist's role and set adoption are applicable to the nurse's role and set adoption. The finding that both the sophomore and
senior nursing students predominantly adopt the causal-genetic set validates Jones' and Thibaut's presumption that persons involved in a psychotherapeutic role naturally adopt the causal-genetic set. It further supports the theory that nursing students do adopt an inferential set and shows that inferential set theory may be applied to the nursing profession.

The fact that beginning sophomore nursing students predominantly adopted the causal-genetic set makes one query if there is an inferential set characteristic of individuals choosing the nursing profession. Perhaps individuals intrinsically possess an inferential set characteristic. The finding that age is not significantly related to scores in any of the three inferential sets provides some support for this statement. Regardless of age, it appears that individuals bring their natural tendency to adopt an inferential set with them to a given setting. Causal-genetic set individuals seem to be attracted to the nursing profession.

The results of the Cochran's C test for homogeneity of variance indicates that sophomore nursing students are more heterogeneous in their scoring in the causal-genetic and situation-matching sets than are the senior nursing students. This may reflect nursing educators' attempt to reinforce the tendency to adopt the causal-genetic set in their quest to professionally acculturate students. This could conceivably account for the more homogeneous scoring of the senior nursing
students. This finding could also be explained by the attrition of students who are unable to fit the expected professional role of the nurse. The homogeneous scoring senior nursing students may indeed represent those students whom nurse educators have cultivated to reflect the values of the nursing profession.

Based on the findings, it is concluded that the nursing profession attracts individuals who have a causal-genetic inferential set characteristic. The purpose of a nursing education program is to mold these causal-genetic individuals into a more refined causal-genetic individual who fits the ideals and values of the nursing profession. The progression through the various levels of a nursing program seems to gradually acculturate the student to the expected professional role of the nurse.

Recommendations for Further Research

As a result of this study, the following recommendations are made.

1. Research needs to be conducted using nursing students who do not adopt a causal-genetic set with regard for their G.P.A., instructors' rating, overall performance in the nursing program, and whether or not they tend to drop out of nursing.
2. Further studies related to the use of set adoption as a predictor for success in a nursing program, a counseling tool, and a screening device for program entry should be conducted.

3. There is a need to determine whether non-causal-genetic individuals can be taught to be causal-genetic.

4. Research should be conducted to see if there is a correlation between personality type and choice of inferential set.

5. Further studies need to be completed to see if set adoption holds true in other professions, such as law, business or art.
APPENDIX A
INFORMED CONSENT

The purpose of this study is to understand how nursing students prioritize information. The research procedure requires nursing students to read a case study and prioritize a list of questions. The results of this study will be used to help nurse educators improve their teaching methods.

The responses made by each student will be kept strictly confidential. In no way will your individual responses be identified. Your willingness to read the case study and prioritize the questions will constitute your consent to participate in the study.

DO NOT PUT YOUR NAME ANYWHERE ON THIS DOCUMENT!

Please begin by supplying the following demographic data.

Thank you for your time and participation.

Christine Garza, R.N., M.S.

Age_______

Sex_______

Circle the appropriate level: Sophomore or Senior Nursing Student

Religion________________

Are you currently a licensed R.N. or L.V.N.?_______

Do you currently hold a degree?_____. If so, in what field?

You may now go on to read the instructions and the case study.
Case Study

Instructions: You are a nursing student assigned to take care of Mr. A. You will be given some information describing him. While reading this information, keep in mind additional information you would like to have. After you have read Mr. A's description, you will be presented with nine questions. The questions are intended to allow you to ask for more information about Mr. A. Carefully read over all nine questions. After reading the questions, please rank them in order of those that are most important to you. Begin ranking the most significant question with a #1 and continue ranking the questions until you have assigned each question a number. In other words, you will rank each question with #1 through #9, beginning with #1 as being the most important and #9 being the least important. Take as much time as you need to carefully read the case study and the questions. Be sure to give thoughtful consideration to how you rank the questions. You may re-read the case study as many times as you wish.

Mr. A is a 45-year-old white male, married, with two children. He is a criminal lawyer. Mr. A's friends think of him as an intelligent, generous person with a great sense of humor. He possesses a unique ability to make others feel comfortable and important.

Mr. A has been an alcoholic for the past 15 years. He is a binge drinker, during which he consumes a quart of vodka. While intoxicated, he becomes abusive and violent. He has beaten his wife on several occasions. Mr. A refuses to acknowledge that he has a problem with alcoholism. Meanwhile, Mrs. A exerts much time and energy trying to hide the fact that her husband is an alcoholic.

Mr. A is well known nationally for excellence in his profession. He often donates his time as a guest lecturer in law schools throughout the United States.
past month, however, Mr. A's alcoholism has seriously affected his professional competency. It is alleged that an innocent man was given a life sentence because of Mr. A's inadequate preparation and presentation of the case.

Mr. and Mrs. A are very involved in their church's activities. They are especially interested in fund-raising projects designed to help the destitute. Mrs. A also helps her husband carry out his responsibilities as president of the school board in a small suburban community.

Mr. A has been admitted to a hospital in another city three times in the past two years for treatment of cirrhosis of the liver. He is now being admitted for acute alcohol intoxication and worsening liver disease. The cirrhosis has progressed to a state that is now complicated by severe edema of the legs, ascites (edema of the abdomen), and a severe upper gastro-intestinal hemorrhage. Mr. A is profoundly anemic with severe alterations in his electrolytes and clotting factors. Despite repeated warnings regarding the consequences of any alcohol consumption, Mr. A has continued to drink.
At this point in the case study, you may assume that you will automatically be given any and all information needed to assess and treat Mr. A's physiological problems. This includes the physician's history and physical, medical orders, lab results, X-ray findings and any other data you feel is pertinent. Assuming you have this information, please proceed to rank the following questions in order of priority. What other information would you like to have? Remember to rank the most important question as #1 and continue ranking all the questions until you have assigned a #9 to the least important question.

I would like to ask the following questions in this order:

Rank

1. What are the stressors in Mr. A's life?
2. Why can't Mr. A see he's ruining other people's lives?
3. What was Mr. A's childhood like?
4. Is the legal professional association planning to bring charges against Mr. A for his alleged incompetent behavior?
5. Does Mr. A have a record of being in trouble with the law, such as being cited for driving while intoxicated?
6. How can Mr. A allow his personal life to affect his excellent professional reputation?
7. Has Mr. A ever thought of contacting Alcoholics Anonymous?
8. What is Mr. A's relationship like with his family?
9. Does Mr. A think that because he has money and power he can get away with anything?

If there are other questions you would like to ask, please feel free to list them in the space provided on the following page. Try to list them in order of importance to you.
Additional Questions:

I appreciate your willingness to participate in this study. Thank you!!
BIBLIOGRAPHY

Books


Articles


Ferguson, Tamara J. and Brendon Gail Rule, "Influence of Inferential Set, Outcome Intent, and Outcome Severity on Children's Moral Judgments," Developmental Psychology, XVIII (November, 1982), 843-851.
Ferguson, Tamara J. and Brendon Gail Rule, "Effects of Inferential Set, Outcome Severity, and Basis for Responsibility on Children's Evaluations of Aggressive Acts," Developmental Psychology, XVI (March, 1980), 141-146.


Unpublished Materials


