

TESTING OF INSTRUMENTS WHICH IDENTIFY AGING  
CONCEPTS AND CLASSIFY NURSING ACTIONS

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BY

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To the Provost of the Graduate School:

I am submitting herewith a thesis written by

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Concepts and Classify Nursing Actions

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TESTING OF INSTRUMENTS WHICH IDENTIFY  
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NURSING ACTIONS

ABSTRACT

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This methodological study tested two instruments: Theoretical Concepts of Aging and a Classification System of Nursing Actions for the Older Person (Bush, 1975). Sixteen nursing care plans which had been written by master's nursing students constituted the sample of data.

Interrater reliability was established for both tools by a panel of six master's prepared nurses. Concepts located in the nursing diagnoses were, in rank order, for the response component: anxiety, insecurity, physical problems, self-worth, and discomfort. For the etiology component, in order of importance, the concepts located were: discomfort, physical problems, pain, anxiety, and insecurity. The most implemented nursing action was teaching.

Since the concepts and nursing action which were located are found in nurses' care plans in general, the conclusion was made that the sample of students was giving

nursing care to older persons which was not specifically based on aging theories.

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## CHAPTER I

### INTRODUCTION

The present study was part of a research study entitled "Theoretical Concepts of Aging Within the Nursing Process" (Bush, 1984). Existing nursing models and theories have been developed viewing the client as patient in general regardless of age. However, a nursing theory specifically for care of older persons is not reported in the literature.

Bush (1984) generated concepts specific to aging which could form the basis for a theory of nursing care for older persons. Clinical observations of older age clients in the form of the nursing process were used as the major resource in the Bush (1984) study. The present study also used nursing care plans, examining nursing diagnoses and nursing interventions for concepts of aging in nursing care plans written by master's students in nursing.

#### Statement of Problem

The problem of the study was to test the reliability and validity of two instruments: "Theoretical Concepts of Aging" (Bush, 1975) and "Classification System of

Theoretical Nursing Actions for the Older Person" (Bush, 1975).

#### Justification of the Problem

For a number of years, the nursing literature has indicated a growth of consciousness of the need for theory development of nursing in general. Nurses recognize the importance of a well-defined and well-organized body of knowledge. Foremost are the nursing theoretical formulations by Henderson (1966), King (1971), Orem (1971), Orlando (1961), Peplau (1952), Rogers (1970), Roy (1976), and Wiedenbach (1964). The nursing literature in the form of books and articles is abundant with examples of theory generation, methods, and techniques to be used to develop theory, levels of theory development, and other related issues. The present study which tested two instruments on concepts of aging and the nursing process supported theory development for gerontologic and geriatric nursing.

Engell (1985) conducted a systematic review of the 10 existing textbooks available to nurses on the care of older patients. No nursing theory on care of aging persons was located. One textbook used Maslow's hierarchy of needs theory to organize the textbook. Though Maslow's

framework is popular in nursing circles, it is not a nursing theory. Engell surveyed gerontological nurse leaders in the United States and a group of practicing geriatric nurses for concepts important for nursing of older patients.

Engell (1985) used the textbooks to identify important concepts of aging. The concepts were rank-ordered by the study samples. The concepts need to be related within a system to form a useful framework for geriatric nurses. No such system exists within reported nursing literature.

Bush (1984) planned a study to identify the work of those nurses who give care to older persons. Though the Bush study is not completed yet, some statistics are available after 2 years of data collection. The care plans analyzed thus far were those of baccalaureate and master's nursing students. Results of the second year's analysis are not all available at the present time. The findings of year 1 revealed that the concepts located in the nursing diagnostic statements written by baccalaureate and master's students were in rank order: (a) physical problems; (b) illness, pain, and discomfort; (c) anxiety; and (d) losses. Physical problems were found in 48% of the care plans. In order of importance, the nursing actions implemented by both groups of students

were: (a) teaching, (b) supporting, (c) communicating, and (d) comforting. Teaching comprised 41% of all nursing activity. Bush concluded that the nursing students for the most part were giving nursing care that was not specifically derived from theories developed about older persons. The nursing care was instead comparable to that found in care plans in general.

The above conclusion accompanied by the lack of a nursing theory specific to older persons clearly supports the need for the present thesis research. With the population of older persons increasing at a great rate, and with the concurrent decline in the economic arena, nursing care of older persons must be critically studied in order to describe the most effective nursing for this age group.

#### Conceptual Framework

The framework was developed by Bush (1975). The major concepts were extracted by Bush from Buhler (1935), Erikson (1963), Jung (1971), Kuhlen (1964), and Peck (1968). Additionally, Bush generated a classification system of nursing actions from these five theories and the American Nurses' Association Geriatric (1969) and Gerontological (1973) Standards of Nursing Practice.

The concepts of aging taken from the theories of the life cycle were self-actualization, love, interdependence, fulfillment, insecurity, philosophy of life, hope, faith, sense of integrity, resolution, contraction, religion, death, omniconvergence, and goals for the future. The concepts taken from theories of adult development were motivation, expansion, contraction, anxiety and threat, self-worth, role orientation, learning, physical problems, decline, illness, pain, discomfort, death, wisdom, socialization, sense of satisfaction, and increased mental and social powers.

The second section of the framework was made up of the nursing actions developed for care of older persons. They were teaching, supporting, caring, coordinating, communicating, counseling, comforting, and oldering. Bush (1975) devised the concept oldering to name those nursing actions specific to care of older persons. The instruments tested in the present study were based on the concepts delineated in the framework described here.

#### Assumptions

The following were assumptions for the study:

1. Master's students' nursing care plans contain statements of actual care given to clients.

2. Some concepts of aging are reflected in nursing care plans written for older patients.

#### Research Questions

1. Are selected components taken from theories of the life cycle and adult development evident in the nursing diagnoses selected for study?

(a) Would concepts taken from the theories be found in the response component of the nursing diagnosis statement?

(b) Would concepts taken from the theories be found in the etiology component of the nursing diagnosis statement?

2. Using the Bush Classification System of Nursing Actions, how would the actual nursing interventions be classified?

#### Definition of Terms

1. Nursing diagnosis statement--the statement identified as a nursing diagnosis in the written nursing care plan and which consisted of a response component and an etiology component. The two components were joined by a phrase such as "related to," "associated with," or "due to."

2. Nursing interventions--actions identified as nursing interventions in the written nursing care plan.

3. Older persons--adults over 60 years of age who constituted the clients for master's students in medical-surgical primary and tertiary nursing courses.

#### Limitations

Limitations which were recognized for the study were:

1. The sample was an available sample.
2. The clients for the nursing care plans ranged in age between 65 and 90 years.

#### Summary

This chapter has presented the problem for study and the rationale for conducting the research at the present time. Research questions and definition of specific terms were also given.

## CHAPTER II

### REVIEW OF LITERATURE

The review of literature for the study covered four areas: a brief history of nursing, nurses who first wrote about nursing process, the nursing process itself, and the process in gerontological and geriatric setting.

Process is a method of doing something that generally involves a number of steps and is intended to bring about a particular result. The nursing process is the application of scientific problem solving to nursing care (Francis, 1967). It is used to identify patient problems, to systematically plan and implement nursing care, and to evaluate the results of that care (Marriner, 1983). The term nursing process is of recent years while the practice of identifying problems and developing and implementing plans of care is intertwined throughout nursing history.

Historically, nursing is viewed in three unique time frames: events preceding World War II, events during World War II, and events following World War II. Events following World War II (WWII) are further delineated to the first 20 post-war years and events during the past 2 plus decades which are readily accessible to the researcher and reader.



### Events Preceding World War II

Nursing practice known during this time frame was based on unselfishness and love of neighbor. Most nursing behavior was done under the auspices of an apprenticeship or more contemporarily termed a role model. Florence Nightingale emphasized that a presence of deliberate actions constituted nursing practice. Nightingale believed that knowledge in the form of structured preparation was necessary. Many social forces and political structures changed between the years of Florence Nightingale and the onset of World War II. These years are referred to as "the era of maintenance" or "the era of little or no change" (Yura & Walsh 1983, p. 3). These "stagnant" years in nursing's development have been attributed to World War I and its consequential economic depression.

### Events During World War II

World War II was a propelling force behind many changes in the world. This era increased the need for technology. War casualties increased the need for nurses and doctors alike and gave birth to the multidimensional health care team that is still in existence today. Changes in treatment modalities resulting from an ever increasing knowledge base required increased numbers of

persons to meet the challenge. The contributions of the military's corpsmen set the pattern for today's auxiliary personnel in the health professions during this era.

#### Events Following World War II

The 15 years that followed V-J day brought areas of change more rapidly than did any other period in the history of nursing. An awareness of health care and what constitutes good health care was developed by the public. The central theme of nursing became "total patient care," yet there existed a vast carryover of the effect of increased numbers of varied health care providers. Esther Lucille Brown, a non-nurse, was asked to provide an unbiased assessment of the nursing profession and to suggest ways in which it could move more constructively. Her 1948 report of findings became a major turning point for nursing and it became the basis for many of the changes which occurred over the next 30 years (Yura & Walsh, 1983). Remuneration as well as the responsibility for providing quality service became significant. These concerns are as true today as they were to "professionals" of the era preceding World War II and is one of the justifications for employing the nursing process.

During the 1950s, following Brown's report, attention was focused on the appropriate use of the term

"professional". Criteria to define a profession were suggested by several authors. Most agreed that multiple criteria should guide its definition with the ultimate criteria being the achievement of autonomy. Conclusions were reached regarding nursing and the directions nursing should take by relating nursing to a summary of the characteristics of a profession. Inherent within these criteria and questions that resulted was the pertinent observation that a code of ethics was both important and essential. The code of ethics for nurses was established and nursing was seen as an "evolving profession" (Yura & Walsh, 1983).

During the decade 1960-1970, a publication of the American Nurses' Association, the ANA Position Paper, initiated many discussions and debates. Essentially, ANA proposed the education of persons who practice nursing should take place in institutions of higher education.

In 1961, the Consultant Group on Nursing was appointed by the U.S. Public Health Service to provide advice about nursing needs and problems in the U.S. The results from this group led to the appointment of the National Commission for the Study of Nursing and Nursing Education in 1967. Many of the changes in nursing

education and nursing practice were the result of these study groups and the social events of this time.

During the decade of the 1970s, nursing itself experienced reactions to the previous decades. Most of the technological growth resulted from two major wars. Specialties in nursing resulted and licensure of the professional nurse became a concern. Issues of credentialing and certification were studied but unrest was prominent about some of the basics i.e., titles of nurses--practitioner and specialists. Energy is now directed toward frameworks for nursing and the nursing process itself. Theories and models have been generated by nurses and have been and are being tested throughout the country.

#### Selected Nurse/Authors

Prior to the mid-1960s, the term nursing process was seldom seen in literature, yet two noted nurse author/theorists' works contributed greatly to its development. Florence Nightingale (1946/1859), in the mid-1800s spoke of elements of nursing but not specifically the nursing process in her Notes on Nursing. She did not classify these elements or activities; however, the components she addressed were a sound base for the development of "nursing process". Virginia

Henderson, in 1939, collaborated on the Textbook of the Principles and Practice of Nursing in which a clear and complete definition of nursing with specifications of components of care are found. Henderson has included all the concepts of all the phases of the nursing process. Intellectual, interpersonal, and technical skills needed to perform nursing functions were described by Henderson.

Peplau's Interpersonal Relations in Nursing in 1952 recognized nursing as a process demanding certain roles/steps/acts to occur by the nurse and the client. She identified four overlapping phases of the nurse-patient/client relationship that resulted in problem solutions that can be related to the nursing process as it is known today. In 1961, Orlando published The Dynamic Nurse Patient Relationship in which she creatively tried to define and analyze nursing. Her efforts at identifying the process of nursing actually began in the mid-1950s. The nursing process was identified at that time as an interactive process that comprises "the behavior of the patient, the reaction of the nurse, and the nursing actions designed for the patients' benefit" (Yura & Walsh, 1983, p. 37). Orlando was the first to clearly identify a process in nursing. Other authors followed suit; an example was Yura and Walsh's The Nursing Process in 1967

and 1973. However, it was not until 1978 that the term nursing process could be found in the title of any other book. Nurse-authors/theorists turned their efforts toward framework development.

### The Nursing Process Itself

Many theoretical frameworks could be used to examine process as a concept. Carrieri and Sitzman (1983) quoted Parker who defined process as "that intellectual scheme whereby relationships are put together" (p. 8). The problem-solving process encompassed three concepts: (a) analysis--the accumulation, classification, and distinction of differences in data; (b) synthesis--establishing relationships between data, derivation of trends, performance of deductive and inductive analysis and creation of operational devices; and (c) reduction to practice --operational devices used on particular occasions in specific settings and testing for effectiveness and validity of the operational device (Carrieri & Sitzman, 1971). The three concepts have been utilized to outline the elements of the nursing process. These elements are known in nursing as assessment, planning, implementation, and evaluation, with some authors further delineating nursing diagnosis as a separate element.

The nursing process in its most concise format consists of assessing patient needs, planning nursing action to meet that need, implementing the planned nursing action, evaluating the patient's response to the nursing action, and reassessing the patient's need and its reapplication in a cyclic fashion. The goal of effective, comprehensive application of the process is a patient propelled toward maximum potential recovery (Brodt, 1978).

Nursing assessments consist of data collection and data analysis. Such data include patient interviews, laboratory reports, a medical history, and direct observation of the patient. The assessment data must be collected in a systematic fashion or many important needs may remain unrecognized. The analysis of the data leads to the second phase of the nursing process--the planning of appropriate nursing action to meet the needs identified and analyzed in assessment of patient need.

Planning is the determination of a plan of action to assist the patient toward his/her goal based on the highest level of fulfillment of human needs and to resolve the assessment or nursing diagnosis (Yura & Walsh, 1983). The planning phase is used to assign priority, specify behavioral outcomes, differentiate those problems requiring outside help, and results that occur on a time

line continuum. Nursing diagnosis is viewed by many as the second step of five steps in the process, Gordon (1982) has written extensively along with Gebbie and Lavin (1975), Kim and Moritz (1982), Mundinger (1980), and others.

The third step of the nursing process is to implement the planned nursing actions. Implementing is the initiation and completion of actions necessary to accomplish a goal established in phase two of the nursing process. The nursing literature is meager in relation to the implementation phase per se.

The last phase of the nursing process is the evaluation of effects of the planned and implemented nursing action on the assessed need. Each patient need and implemented nursing action must be evaluated to determine if the need was relieved. The data thus collected here becomes the basis for subsequent cycles of the nursing process (Brodt, 1978).

Nursing process has become operational since publication of Yura and Walsh's (1967) edition of The Nursing Process. Many research study results now attest to the difference a logical, data-based, problem-solving approach makes for nursing. The nursing process framework is one easily identified by nurses, nationally and



internationally, and provides the basis for enhancing the nursing process concepts in such a way as to lead to theory development in nursing. Such development could result in nursing's own science and, increased acceptability of nursing as a true professional entity.

#### Nursing Process in the Gerontological Setting

In the geriatric setting, there may be expansion of nursing duties within the defined areas of the nursing process as well as developmental tasks not addressed by previous theorists. Eliopoulos, in Gerontological Nursing (1979) stated a need for increased research in the area of effective gerontological nursing practice to develop specific standards by which application of the nursing process to aged individuals can be evaluated. Other gerontologic nurse leaders agree with Eliopoulos regarding nursing practice and nursing research on care of aged.

In the assessment phase, profiles can be done on the patient, family, occupation, home, and economic situation. Nurses may focus on medications past and present, and a physical exam as in any other setting.

In the planning phase, nurses would utilize measures to alleviate specific problems and needs that are apparent. However, the use of a multi-discipline approach is via one person, i.e., the use of all disciplines

independently often results in conflicting goals, becomes ineffective and inefficient in use of time, energy, human and/or financial resources.

In the implementation phase, the care planning is made operational. The focus of the gerontological nurse in this phase is (a) strengthen the individual's self-care capacities, (b) eliminate/minimize self-care limitations, and (c) provide direct care services by acting for, doing for, or partially assisting the individual when universal self-care or therapeutic demands cannot be independently fulfilled (Gunter & Estes, 1979).

In the evaluation phase, the degree to which plans and actions were effective in achieving desired outcomes is judged. According to Eliopoulos (1979) if the action taken by the nurse works, that is what counts in the gerontological setting.

#### Summary

The literature on the nursing process is in total agreement regarding the purpose and structure of the process. Though some nurses maintain there are four steps and other nurses believe that more steps clarify the process, no real problems result from these minor differences. The nursing process is accepted throughout the world as the vehicle for patient care.

## CHAPTER III

### PROCEDURE FOR COLLECTION AND TREATMENT OF DATA

The present study was an instrument-testing research. Instrument testing is encompassed within methodological research. Methodological research is controlled investigation applying aspects of measurements, mathematics, and statistics with primary emphasis on reliability and validity testing (Kerlinger, 1973).

#### Setting

The setting of the study occurred in two locations. Phase I of the study was implemented at a university in a large metropolitan area in the southwestern part of the United States. The college of nursing is comprised of three nursing curricula: baccalaureate, master's, and doctoral. The data used in the study were secured from master's students' nursing care plans. Phase II of the study was implemented in a large metropolitan area in the southwestern part of the United States. Six master's prepared nurses who were actively engaged

in nursing comprised the panel of judges utilized in Phase II.

### Population and Sample

The population of this research was composed of nursing care plans generated by master's nursing students in medical-surgical nursing who were enrolled in 1980 and 1981. Twenty-three nursing care plans comprised the population of data. These were written for adults of all ages. The data used for the sample were 16 nursing care plans on clients who were 65 years or older. The accessible sampling technique was used (Polit & Hungler, 1983). This type of sampling uses available data or available subjects. The sample consisted of nursing care plans which stated a nursing diagnosis consisting of a response component and an etiology component. Each nursing diagnosis had corresponding nursing interventions stated.

### Protection of Human Subjects

The components of this research fell within the guidelines of Category I (no risk) of the Federal Register published Monday, January 26, 1981, Part X, effective July 27, 1981. Written permission to conduct the study was obtained from the Human Research Review Committee of Texas Woman's University (Appendix A), from the Graduate

School (Appendix B), and from the participating agency (Appendix C). The names of students whose nursing care plans were used were not noted anywhere, nor were the names of the clients.

#### Instruments

Two instruments were used in the study: Theoretical Concepts of Aging, and Classification System of Theoretical Nursing Actions for the Older Person (Bush, 1975).

The first instrument is a list of aging concepts which Bush (1975) extracted from theories of aging and the life cycle (Appendix D). The Classification System of Nursing Actions for Older Persons was also developed by Bush (1975). The system is comprised of eight nursing actions generated from the theories of aging and the American Nurses' Association Standards for Geriatric (1969) Practice and Gerontological (1973) Practice (Appendix D).

#### Data Collection

Data for the study were obtained from 16 nursing care plans generated by the master's nursing students. The students were registered in two graduate courses: Advanced Primary Prevention in Medical-Surgical Nursing

and Tertiary Prevention in Advanced Medical-Surgical Nursing.

The procedure for data collection was comprised of the following:

#### Phase I

The researcher transferred the nursing diagnosis statements and the corresponding nursing interventions onto two numerically coded sets of index cards. Set A consisted of the nursing diagnosis statements. Set B was comprised of the nursing interventions statements.

#### Phase II

The panel consisted of six master's prepared nurses. The panel members were chosen and read certain materials containing the theories used in the study. The researcher oriented the panel to the selected concepts taken from theories of the life cycle and adult development and the Bush classification system of nursing actions.

#### Phase III

The third phase of data collection was completed by the same panel of judges. Each member of the panel of judges performed the designated task involving the 42 nursing diagnoses and 157 interventions in relation

to the various concepts and nursing actions (Appendix E). Each member performed identical tasks.

#### Task 1

The researcher provided the instructions and readings of five selected theorists. Each member of the panel then read the material of the five theorists: Buhler (1935), Erikson (1963), Jung (1971), Kuhlen (1964), and Peck (1968).

#### Task 2

The researcher distributed to each panel member three answer sheets. The first answer sheet consisted of the nursing diagnoses (card set A) and concepts of the five theorists. The second answer sheet consisted of the nursing interventions (card set B) and eight nursing actions derived by Bush (1975). Each judge was given verbal instructions for completing each answer sheet in addition to written directions. Each judge completed Tasks 1 and 2 independently.

#### Phase IV

The fourth phase of data collection was performed by the researcher. A composite table was utilized to denote the occurrence of the selected theoretical concepts

within the stated nursing diagnosis and the classification of nursing action in accordance to the Bush classification system (Bush, 1975). Interrater reliability was determined by agreement of two-thirds of the panel.

#### Treatment of Data

The collected data were analyzed and reported using descriptive statistics. Research question 1 asked whether selected components taken from theories of the life cycle and adult development were evident in the nursing diagnoses selected for study. The concept found in either the response or the etiology component was reported. The number and percentages of the concepts in each component was calculated and reported.

Research question 2 asked how would the actual nursing intervention be classified utilizing the Bush classification system. The panel classified the actual nursing interventions into the classification system.



## CHAPTER IV

### ANALYSIS OF DATA

An instrument-testing study was conducted to determine validity and reliability of two tools. One instrument was developed by Bush (1975) to ascertain whether concepts of aging could be located within nursing diagnosis statements written by master's students. The second tool classified actual nursing interventions written by the same group of master's students into the Bush classification system of nursing actions for the older persons. This chapter presents the results of analysis of the data.

#### Description of Sample

The nonprobability sample was obtained from an accessible population of 23 nursing care plans collected from master's level clinical nursing course assignments. The clinical nursing course assignments were originally collected in Primary Prevention in Advanced Medical-Surgical Nursing and Tertiary Prevention in Advanced Medical-Surgical Nursing. The sample consisted of all care plans that met the following criteria: (a) contained a nursing diagnosis statement consisting of a response component and

an etiology component; (b) the response and etiology components were joined by a connecting phrase such as "related to," "due to," "associated with," or "secondary to;" and (c) nursing interventions were recorded. Of the 23 nursing care plans, 16 met the criteria producing 42 diagnoses statements and 157 nursing interventions that served as the study's sample of data.

### Findings

The findings are presented under five major headings: (a) etiology classification, (b) response classification, (c) assessment of the Theoretical Concepts of Aging, (d) intervention classification, and (e) assessment of Classification System of Theoretical Nursing Interventions for the Older Person.

#### Etiology Classification

Of the 42 etiology items in the sample, all were classified as containing concepts derived from the five theorists. A total of 298 tallies was cast by the six-member panel as each was asked to identify all the concepts found in each etiology listed. Thirty-six of the 42 etiologies were classified as containing concepts predominantly from Peck. An etiology was determined to contain predominantly one theorist's concepts based on the majority

agreement (67%) by the judges. Table 1 illustrates the rank order of theorist, frequency, and percentage.

Table 1

Theorist, Etiology in Diagnosis Statement, and  
Percentage of Occurrence of Theorists' Concepts

Theorist	Etiologies	Percent of occurrence of theorists' concepts
Peck	36	86%
Buhler	3	7%
Kuhlen	2	5%
Erikson	1	2%
Jung	0	0%

Of the 42 etiologies classified, the most frequently identified concept was category number 16 (15%) which indicated the nature of the etiology was discomfort. The second most frequently used concept was category number 12 (14%) which reflected physical problems. Category number 15 (pain) and 31 (anxiety) were equally identified at 11% each. Category number 28 (9%) was the fourth most frequently reported which represented insecurity. Categories 21 through 24 were the least identified concepts. Table 2 illustrates the rank order,

Table 2

Aging Concept, Theorist, Frequency of Concept, and Percentage

Rank order of concept	Theorist	Frequency	Percent
Discomfort	Peck	44	15%
Physical problems	Peck	42	14%
Pain	Peck	34	11%
Anxiety	Kuhlen	34	11%
Insecurity	Buhler	28	9%

frequency, theorist, and percentage of the concepts most frequently identified.

#### Response Classification

Of the 42 response items in the sample, all were classified as containing concepts derived from the five theorists. A total of 322 tallies was cast by the six-member panel as each was asked to identify all the concepts found in each response listed. Twenty-six of the 42 responses were classified as containing concepts predominantly from Peck. A response was determined to contain predominantly one theorist's concepts based on the majority agreement (67%) by the judges. Table 3 illustrates the rank order of theorist, frequency, and percentage.

Of the 42 responses classified, the most frequently identified concept was category number 31 (18%) which indicated the nature of the response was anxiety. The second most frequently used concept was category 28 (14%) which reflected insecurity. Category number 12 (10%) was third identifying physical problems and category number 8 (7%) was fourth identifying self-worth. Category number 16 (6%) ranked fifth. Categories 21 through 24 (Jung) were the least identified concepts. Table 4 illustrates the rank order, frequency, theorist, and percentage of the concepts most frequently identified.

Table 3

Theorist, Response in Diagnosis Statement, and  
Percentage of Occurrence of Theorists' Concepts

Theorist	Response	Percent of occurrence of theorists' concepts
Peck	26	62%
Kuhlen	9	21%
Buhler	4	10%
Erikson	2	5%
Jung	1	2%

Assessment of Theoretical Concepts  
of Aging

The validity of a measuring instrument may be defined as the extent to which a tool measures what it is supposed to measure or the extent to which its use provides data compatible with other relevant data (Polit & Hungler, 1983). All the concepts utilized in the instrument were based on theories by Buhler (1935), Erikson (1963), Jung (1971), Kuhlen (1964), and Peck (1956). The conceptual framework by Peck (1956) was most frequently identified by a six-member panel and included items that tapped physical realms as well as psychosocial and environmental

Table 4

Aging Concept, Theorist, Frequency of Concept, and Percentage

Rank order of concept	Theorist	Frequency	Percent
Anxiety	Kuhlen	57	18%
Insecurity	Buhler	44	14%
Physical problems	Peck	33	10%
Self-worth	Peck	21	7%
Discomfort	Peck	19	6%

realms. Additionally, all the concepts were found in the nursing diagnoses' etiology and response components. Agreement of two-thirds of the panel members identified most of the concepts came from Buhler (1935), Kuhlen (1964), and Peck (1956). Concepts from Erikson (1963) and Jung (1971) were found only a few times. Table 5 provides the average of percentages of the etiology and response components.

The instrument's average completion time was 42 minutes for the etiology component and 42 minutes for the response component. It utilized a closed-ended checklist format that provided easy utilization by each of the panel members. The instrument itself contained 30 concepts which constituted a fairly long instrument that tends to be more reliable than shorter ones (Polit & Hungler, 1983).

Reliability often refers to the stability and consistency of a measure (Diers, 1979). It can be seen as the extent to which repeated administrations of the instrument will provide the same data or the extent to which a measure administered once, but by different people, produces equivalent results.

The instrument has been previously tested in the realm of nursing (Bush, 1984). The overall findings



Table 5

Theorist and Percentage of Time Concepts Were Located  
in Both Etiology and Response Component of the Nursing  
Diagnosis Statement

Theorist	Percent
Peck	74%
Kuhlen	13%
Buhler	8%
Erikson	4%
Jung	1%

of the Bush study showed all of the concepts were found in both the etiology and response components of the student care plan diagnoses. The previous study utilized care plans from both the baccalaureate and master's programs. Table 6 illustrates the average of percentages of theorist concepts from the Bush (1984) study.

The present study has produced equivalent results utilizing master's program care plans only. Table 7 illustrates the average of percentages of theorist concepts from the 1984 study, the present study, and the two studies' average percentages.

Table 6

Theorist and Percentage of Time Concepts Were Located  
in Both Etiology and Response Component of the Nursing  
Diagnosis Statement of the Bush Study

Theorist	Percent
Peck	61%
Kuhlen	24%
Buhler	9%
Jung	3%
Erikson	3%

Classification of Actual Nursing  
Interventions

Of the 157 nursing interventions in the sample, 129 were classified with 67% or greater agreement by the six member panel. Sixteen items were not categorized because the judges were evenly divided. An additional 12 interventions were lost when there was 33% or less agreement by the panel.

Table 7

Percentage of Concepts Found in Present Study and Bush's (1984) Study

Theorist	Bush (1984)	Present	Average
Peck	61%	74%	67.5%
Kuhlen	24%	13%	18.5%
Buhler	9%	8%	8.5%
Erikson	3%	4%	2.0%
Jung	3%	1%	2.0%

Of the 129 nursing interventions classified, the most frequently identified concept was teaching (49%) which indicated a large percentage of what the nurses designated as nursing interventions, and the panel determined involved influencing and changing the motives of the older person. All six panel members were in agreement 93% of the time this concept was identified. The second most frequently identified concept was communication (16%), indicating the nature of the intervention involved listening and verbalization skills. The third most frequently identified concept was comforting (15%). Comforting was those nursing actions performed in regard to physical needs. Caring, counseling, coordinating, supporting, and olderling followed in order. Table 8 illustrates the rank ordered concepts, frequency identified, and percentage.

A comparison was done using the present study and the Bush study. Table 9 displays the nursing action and the percentage of agreement by the panel of judges. Differences were found in two nursing actions: coordinating and supporting.

The instrument's average completion time was 60 minutes. It utilized a close-ended format that provided easy utilization by each of the panel members. The

Table 8

Nursing Action, Frequency of Identification of Action,  
and Percentage of Occurrence of Nursing Action

Rank order of nursing action	Frequency	Percent of occurrence of nursing action
Teaching	63	49%
Communicating	21	16%
Comforting	20	15%
Caring	9	7%
Counseling	7	5%
Coordinating	5	4%
Supporting	3	2%
Oldering	3	2%

instrument itself contained eight nursing actions with forced choice of one. The sample contained 157 nursing interventions with 129 producing useable information based on two-thirds agreement of panel members.

#### Summary of Findings

The following is a summary list of the findings of the present study:

Table 9

Nursing Actions and Percentage of Occurrence of Nursing  
Actions in Present Study and in Bush's (1984) Study

Nursing action	% present study	% Bush study
Teaching	49%	41%
Communicating	16%	14%
Comforting	15%	10%
Caring	7%	4%
Counseling	5%	3%
Coordinating	4%	8%
Supporting	2%	15%
Oldering	2%	5%

1. The concepts located in rank order in the response component were (a) discomfort, (b) physical problems, (c) pain, (d) anxiety, and (e) insecurity. In the etiology component the concepts in order of importance were (a) anxiety, (b) insecurity, (c) physical problems, (d) self-worth, and (e) discomfort.

2. The concepts located were predominantly from Peck's (1956) theory with Kuhlen's (1964) theory ranking

second. Very few concepts from Buhler (1935), Jung (1971), and Erikson (1963) were located.

3. Teaching was the most implemented nursing action with communicating and comforting ranking second and third.

## CHAPTER V

### SUMMARY OF THE STUDY

This chapter presents a summary of the study and a discussion of the findings. Conclusions and implications as well as recommendations for further study are stated.

#### Summary

The problem of this methodological study was to determine the reliability and validity of two instruments: "Theoretical Concepts of Aging" (Bush, 1975) and "Classification System of Theoretical Nursing Actions for the Older Person" (Bush, 1975). An available sample of 16 nursing care plans was obtained from an accessible population of 23 nursing care plans which had been written by master's students in medical-surgical nursing courses.

Nursing diagnosis statements and nursing interventions were extracted from the care plans. A panel of six master's prepared nurses constituted the experts who used the two tools to identify concepts of aging in the diagnostic statements and categorize nursing interventions into a classification system of nursing actions. Forty-two



nursing diagnosis statements and 157 nursing interventions were extracted from the care plans.

The results of the study were as follows:

1. The theoretical concepts of aging which comprise instrument number 1 were located in the 42 response and etiology components of the nursing diagnosis statements.

2. The concepts found most frequently in the response component were in rank order: anxiety, insecurity, physical problems, self-worth, and discomfort.

3. The concepts found most frequently in the etiology component were in rank order: discomfort, physical problems, pain, anxiety, and insecurity.

4. The most frequently located nursing action was teaching. In rank order the actions were teaching, communicating, and comforting. Caring, counseling, coordinating, supporting, and oldering were located much less frequently.

#### Discussion of Findings

Of the 31 concepts determined to be major or necessary concepts by Bush (1975), only 6 were focused upon by the master's students in their nursing diagnoses. The 6 concepts were anxiety, insecurity, physical problems, discomfort, pain, and self-worth. Physical problems, pain, discomfort, and anxiety were also found to be

dominant in the Bush study. Insecurity and self-worth constitute new findings in the present sample. The two advanced medical-surgical courses in which the master's students were enrolled focused on the concepts of anxiety, self-worth, pain, and selected physical problems. This may have had some effect on the present study findings. Further, the concepts located in the care plans are not unique to the aging person; they could be located in nursing care plans of any age group.

The nursing action implemented most frequently was teaching. This finding was identical to the Bush study. The actions taken by the master's students which ranked second and third were communicating and comforting. In the Bush study, supporting and communicating ranked second and third, respectively. The similarity in nursing diagnoses with discomfort, physical problems, and pain ranking highest in the etiology component would seem to indicate comforting as the most needed nursing action. However, with teaching predominating, the master's students chose to teach the patients almost 50% of the time with comforting being applied only 15% of the time. This result may be due to the importance attached to the use of teaching plans in the master's program. Since the master's courses were primary and tertiary prevention

with no patient care being given in the acute care setting, the results may be viewed as resulting somewhat from this factor also.

### Conclusions and Implications

The conclusions and implications of the study necessarily focus on the two instruments tested in the research. With all theoretical concepts having been located in the nursing care plans, a conclusion could be made that the nursing care given by the master's students was appropriately based on aging theories. The fact that only 6 of the 30 concepts were focused upon raises a question as to whether the theories used by the nursing students may have been general theories rather than theories of aging. The six concepts of physical problems, pain, discomfort, anxiety, insecurity, and self-worth are not unique to theories of aging. A more probable conclusion would be that aging theories were not being used by the sample in the study. The implication of this seems to be that aging theories need to be taught to nurses. At the present time, the textbooks on nursing care of the aged cover theories of aging only briefly, with physical problems being the major focus.

Regarding the second instrument devised to classify actual nursing interventions, since teaching was the most implemented nursing action in the present study as well as the Bush study, the conclusion must be made that teaching was thought to be more needed than any other kind of nursing care. The question raised here then becomes, does nursing of older persons in primary and tertiary settings consist very heavily and primarily of teaching? This could lead to a specific definition of nursing care of relatively healthy older persons.

#### Recommendations for Further Study

The following recommendations for further research are made:

1. The two instruments tested in the present study should be used again with nursing care plans of associate degree and diploma nursing students as well as practicing nurses.
2. The samples should be enlarged as much as possible in terms of numbers of care plans studied as well as inclusion of samples in different parts of the United States.

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## APPENDICES



APPENDIX A

Research Review Committee Form

TEXAS WOMAN'S UNIVERSITY  
COLLEGE OF NURSING

PROSPECTUS FOR THESIS/DISSERTATION/PROFESSIONAL PAPER

This prospectus proposed by: Brenda Mygrant, R.N., B.S.N.

\_\_\_\_\_ and entitled:

CONCEPTS OF AGING WITHIN THE NURSING PROCESS

Has been read and approved by the members of (~~his~~/hers)  
Research Committee.

This research is (check one):

Is exempt from Human Subjects Review Committee  
review because this study meets the qualifications  
for Category I of the Health and Human Services  
Regulations incurring no risk to the subject.

Requires Human Subjects Review Committee review  
because \_\_\_\_\_

Research Committee:

Chairperson, Helen A. Bush

Member Jandra Finckland

Member Sue Ann Good

Dallas Campus  Denton Campus  Houston Campus

APPENDIX B

Approval Letter from Graduate School



Texas Woman's University

P.O. Box 22479, Denton, Texas 76204 (817) 383-2302, Metro 434-1757

THE GRADUATE SCHOOL

August 15, 1983

Ms. Brenda Mygrant  
1704 Forest Hills Drive  
Harker Heights, TX 76541

Dear Ms. Mygrant:

Thank you for providing the materials necessary for the final approval of your prospectus in the Graduate Office. I am pleased to approve the prospectus, and I look forward to seeing the results of your study.

If I can be of further assistance, please let me know.

Sincerely yours,

A handwritten signature in cursive script that reads "Barbara J. Cramer".

Barbara J. Cramer  
Provost, ad interim

ec

cc Dr. Helen Bush  
Dr. Anne Gudmundsen

APPENDIX C

Agency Permission Form

TEXAS WOMAN'S UNIVERSITY  
COLLEGE OF NURSING

AGENCY PERMISSION FOR CONDUCTING STUDY\*

THE \_\_\_\_\_

GRANTS TO Brenda Mygrant  
a student enrolled in a program of nursing leading to a  
Master's Degree at Texas Woman's University, the privilege  
of its facilities in order to study the following problem.

To investigate the concepts of aging within the  
nursing process.

The conditions mutually agreed upon are as follows:

1. The agency (~~may~~) (may not) be identified in the final report.
2. The names of consultative or administrative personnel in the agency (~~may~~) (may not) be identified in the final report.
3. The agency (~~wants~~) (does not want) a conference with the student when the report is completed.
4. The agency is (willing) (~~unwilling~~) to allow the completed report to be circulated through interlibrary loan.
5. Other \_\_\_\_\_

Date: July 1, 1983

\_\_\_\_\_  
Signature of Agency Personnel

Brenda Mygrant  
Signature of Student

Helena A. Bush  
Signature of Faculty Advisor

\*Fill out & sign three copies to be distributed as follows:  
Original - Student; First copy - Agency; Second copy - TWU  
College of Nursing.

APPENDIX D  
Instruments

## Theoretical Concepts of Aging

1. Philosophy of life
2. Death
3. Hope
4. Faith
5. Sense of integrity
6. Sense of fulfillment
7. Resolution
8. Self-worth
9. Self-actualization
10. Role orientation
11. Learning
12. Physical problems
13. Decline
14. Illness
15. Pain
16. Discomfort
17. Wisdom
18. Socialization
19. Sense of Satisfaction
20. Mental and social powers increase
21. Contraction
22. Religion
23. Omniconvergence
24. Goals for future
25. Love
26. Interdependence
27. Insecurity
28. Motivation
29. Expansion
30. Anxiety

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Note. From H. A. Bush, A theory of nursing care for older persons, unpublished manuscript, 1975.



Theoretical Nursing Actions for  
Older Persons

Comforting--nursing actions performed in regard to physical needs.

Caring--the use of the presence of the nurse as a person.

Supporting--emphasizing to the older person not so much the solution to a problem, but the continuous work on a problem.

Counseling--assisting the older person to limit goals to the attainable.

Communication--being willing and able to talk about and listen to ideas, views, opinions, and so on of concern to the older persons.

Coordinating--those actions which bring together persons and resources to facilitate the care of the older person.

Teaching--influencing and changing the motives of the older person by exposing the individual to a new set of reward patterns.

Oldering--those nursing actions which focus on concepts related specifically to the aging person.

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Note. From H. A. Bush, A theory of nursing care for older persons, unpublished manuscript, 1975.

APPENDIX E

Panel of Judges Directions

## Directions to Panel of Judges

Part 1:

Read each of the following articles by the five theorists Kuhlén, Erikson, Jung, Buhler, and Peck. Pay particular attention to the concepts discussed by each author.

Erikson

philosophy of life  
hope  
faith  
sense of integrity  
resolution

Buhler

self-actualization  
love  
interdependence  
fulfillment  
insecurity  
religion

Peck

self-worth  
role orientation  
learning  
physical problems  
decline  
illness, pain; discomfort  
death  
wisdom  
socialization  
sense of satisfaction  
mental and social powers increase

Kuhlén

motivation  
expansion  
contraction  
anxiety and threat

Jung

contraction  
religion  
death  
omniconvergence  
goals for future

Part 2:

A. You have completed Part 1 by reading selected material by five theorists. Utilizing this knowledge of the concepts brought forth by each of the theorists, place an E under the appropriate concept or concepts if the concept is present within the stated nursing diagnosis etiology component. Place an R under the appropriate conceptual heading if the concept appears within the response component of the stated nursing diagnosis. These answers will be marked on Answer Sheet #1.

A blank or no mark indicates the concept did not occur within the stated nursing diagnosis or intervention.

Term Definition

Response component--that designated by the researcher as the response component and set off by underlining.

Etiology Component-- that designated by the researcher as the etiology component and not underlined or set aside in any manner.

Nursing intervention--that action identified as a nursing intervention by the author of the nursing care plan.

ANSWER SHEET #1

CNPOP

Theoretical Concepts of Aging derived by Bush (1975)

Philosophy of Life - - - - - Anxiety and threat

Nursing Diagnosis

1.



42.

Pain related to burn

R = response component

E = etiology component

Underlined portion

Part 3:

On the following page you will now find eight nursing actions determined by Bush (1975) and their associated definitions. Using this knowledge, complete Answer Sheet #2 noting the occurrence of the nursing intervention within a category of one of the eight nursing actions by placing an X in the most appropriate column.

Place all completed answer sheets in the envelope provided and return to the researcher. Thank you for your participation and cooperation.

ANSWER SHEET #2

NARSAOP

Nursing Actions derived by Bush (1975)

Interventions	Comforting	Caring	Supporting	Counseling	Communicating	Coordinating	Teaching	Oldering
1.								
2.								
3.								
↓								