

7-1-1987

The Effect Of Plush Animals On Depression In Elderly Nursing Home Residents

William J. Bergin
Mississippi University for Women

Follow this and additional works at: <https://athenacommons.muw.edu/msn-projects>



Part of the [Nursing Commons](#)

Recommended Citation

Bergin, William J., "The Effect Of Plush Animals On Depression In Elderly Nursing Home Residents" (1987). *MSN Research Projects*. 192.
<https://athenacommons.muw.edu/msn-projects/192>

This Thesis is brought to you for free and open access by the MSN Research at ATHENA COMMONS. It has been accepted for inclusion in MSN Research Projects by an authorized administrator of ATHENA COMMONS. For more information, please contact acpowers@muw.edu.

The Effect of Plush Animals on Depression
in Elderly Nursing Home Residents

by

William J. Bergin

A Thesis
Submitted to the Faculty of
Mississippi University for Women
in Partial Fulfillment of the Requirements
for the Degree of Master of Science in Nursing
in the Division of Nursing
Mississippi University for Women

Summer, 1987

ProQuest Number: 27924649

All rights reserved

INFORMATION TO ALL USERS

The quality of this reproduction is dependent on the quality of the copy submitted.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if material had to be removed, a note will indicate the deletion.



ProQuest 27924649

Published by ProQuest LLC (2020). Copyright of the Dissertation is held by the Author.

All Rights Reserved.

This work is protected against unauthorized copying under Title 17, United States Code
Microform Edition © ProQuest LLC.

ProQuest LLC
789 East Eisenhower Parkway
P.O. Box 1346
Ann Arbor, MI 48106 - 1346

The Effect of Plush Animals on Depression
in Elderly Nursing Home Residents

by

William J. Bergin

Raymond Skinner
Professor of Nursing
Director of Thesis

Mary Patricia Curtin
Associate Professor of Nursing
Member of Committee

Phyllis W. Werner
Professor of Nursing
Member of Committee

Ralph Witt
Director of the Graduate School

Dedication

This study is dedicated to the institutionalized elders who were gracious enough to participate in this research project.

Words alone do not express how much the love and encouragement from my wife Becky and son Bo did for me during this adventure. Without that love and encouragement this research could not have been possible.

To my mother who always wanted one of her children to get a formal college education--so Mom this is my contribution to your dream.

Acknowledgements

I am not able to express in words how grateful I am to my major advisor, Dr. Rayma Skinner. It was her guidance, support, encouragement, and patience that made this thesis a success.

Special thanks also go to Dr. Phyllis Werner and Mrs. Mary Pat Curtis, members of my research thesis committee, who gave positive encouragement.

Appreciation is also given to Lee Gilliland who helped me obtain many of the articles for this research.

Thanks also go to Phyllis McCorkle who did the typing for this thesis.

Abstract

A quasi-experimental study was used to study the effect of plush animals on depression in elderly nursing home residents. The researcher hypothesized that there would be no significant difference between depression prior to and following plush animal therapy. Data were collected pre- and post-plush animal therapy using the Beck Depression Inventory. There were four subjects who each selected a plush animal, kept it with them for 5 weeks, and were then retested using the Beck Depression Inventory. The results of the t test led the researcher to reject the null hypothesis. Plush animal therapy was effective in treating depression for those elderly nursing home residents.

Table of Contents

| | Page |
|---|------|
| Dedication..... | iii |
| Acknowledgements..... | iv |
| Abstract..... | v |
| List of Table..... | viii |
| Chapter | |
| I. The Research Problem..... | 1 |
| II. Theoretical Basis of Study..... | 5 |
| III. Hypothesis..... | 8 |
| Theoretical Null Hypothesis..... | 8 |
| Definitions..... | 8 |
| Operational Hypothesis..... | 8 |
| IV. Review of Literature..... | 9 |
| V. Research Design and Methodology..... | 16 |
| Research Design..... | 16 |
| Variables..... | 17 |
| Setting, Population, and Sample..... | 17 |
| Data Gathering Process..... | 19 |
| Instrumentation..... | 20 |
| Statistical Analysis..... | 21 |
| Assumptions..... | 21 |
| Limitations..... | 21 |

| | | |
|-----------------|---|----|
| VI. | Analysis of Data..... | 22 |
| | Hypothesis..... | 24 |
| VII. | Summary, Conclusions, Implications, and Recommendations..... | 25 |
| | Summary..... | 25 |
| | Conclusions and Implications..... | 25 |
| | Recommendations..... | 27 |
| | Research..... | 27 |
| | Nursing..... | 28 |
| APPENDICES | | |
| A. | Criteria for Subject Selection..... | 29 |
| B. | Participant Consent Form..... | 31 |
| C. | Nursing Home Memorandum of Agreement..... | 32 |
| D. | Beck Inventory..... | 33 |
| REFERENCES..... | | 36 |

List of Table

| Table | Page |
|---|------|
| 1. Scores Obtained on Beck Depression Inventory Along With Ages..... | 24 |

Chapter I

The Research Problem

There are 23,600 nursing homes in the United States which serve a population of 1.5 million residents (Ebersole, 1985). This number is expected to be higher as the life expectancy becomes longer and more people reach age 65 and older. A common problem affecting an estimated 5 to 65% of nursing home residents is depression (St. Pierre, Craven, & Bruno, 1982). There are many factors which contribute to depression in elderly nursing home residents. Some of these factors include loneliness, increased health problems, loss of control, feelings of uselessness, loss of significant others, and negative attitudes about nursing home placement (Erickson, 1985).

Depression, the "common cold" of the psychiatric disorders affecting the elderly, is considered the most underdiagnosed and undertreated condition of the elderly population (Ebersole & Hess, 1985). Once an elderly resident has had depression, that resident has a 50-60% higher chance of recurrent episodes of depression than the rest of the population (Minot, 1986). Depression affects the elderly victim's quality of life by impacting health status. Effects on health include a decrease or increase in

appetite, activity, and sleep as well as an increase in physical ailments. Mental status may also deteriorate, and the amount of human contact may decline. If not treated, depression may lead to suicide; in fact 25% of all reported suicides are elders (Archibald, 1983).

In recent years, pets have been recognized as a preventive and therapeutic intervention for depression. Pet therapy increases social contacts and/or supplies those who are unable to find human companionship with attention which the individual needs (Pets Are Wonderful Council [PAW], 1986a). Pets can decrease complaints of somatic illness and even stress encountered during the day (PAW, 1986b). Pets have been a factor in decreasing heart rate including reductions in those who are considered "type A" personalities. This decrease in stress may occur because people can talk to a pet about things which they would not share with others. Pets also help alleviate the pain from loss of a loved one. Pets motivate a person to get up and make a person feel useful. Pet owners often feel more secure, have better mental attitudes, and get more exercise (Delta Society, 1986).

Because the effect of pets is beneficial in prevention and treatment of depression, several nursing homes use pet therapy. However, there are problems associated with pets in a nursing home. These problems include allergies to animals and expenses of upkeep, such as food and

veterinarian visits. There are problems of feeding and grooming the animal as well as restricting the animal's territory. Pets also create risks of falls for residents and breakage of their personal items. In addition, nursing homes who want to use pets may have to contend with specific governmental regulations (Delta Society, 1986).

In response to this dilemma about pet therapy, plush animal therapy has been proposed. Plush animals eliminate many problems associated with animals, such as allergies and messes the animal can cause or make. Plush animals often activate pleasant memories of a teddy bear or other stuffed animal. In a study to determine if plush animals could be used as a substitute for live animals, Francis and Baly (1986) found that plush animal therapy could be effective as an alternative to pet therapy. The initial concern of demeaning residents with use of stuffed toys was not demonstrated. However, this is the only study documenting the effect of plush animal therapy and more research is needed.

If plush animal therapy is effective in the treatment of depression, the Geriatric Nurse Clinician (GNC) could use this treatment to improve the quality of life for residents. The GNC also could teach families and colleagues about the use of plush animal therapy.

The researcher became interested in the use of plush animals after meeting several obstacles in the use of pet therapy. In searching for solutions to this obstacle the

researcher found the alternative of plush animal therapy. Plush animal therapy was intriguing as well as an answer to the obstacles of pet therapy research. Therefore, the purpose of this study is to determine the effect of plush animals on depression in elders. The question sought to be answered by this study was: What is the effect of plush animal therapy on depression in elderly residents of a nursing home?

Chapter II

Theoretical Basis of Study

Roy's Adaptation Model is the theoretical framework for this research study about the effect of plush animals on depression in elderly nursing home residents. Roy's work is classified as a systems model in which man is viewed as a system with many subsystems. The system attempts to maintain a balance among the subsystems as it reacts to stimuli in the environment (Appleton & Chalmers, 1984; Roy, 1976).

In Roy's model there are three types of stimuli which affect the individual reaction to the environment. Focal stimuli are those situations in the person's life which are occurring at the present time. Environmental situations which are present along with the focal stimuli are called contextual stimuli. Residual stimuli are those experiences such as past experiences which the individual brings into the situation (Marriner, 1986; Roy, 1976).

The system maintains balance among the many subsystems by adapting in one of four modes. The four adaptive modes are physiological, self-concept, role mastery, and interdependency (Marriner, 1986; Roy, 1976). The physiological mode involves the body's needs for life itself, such as food and oxygen. The self-concept mode encompasses the beliefs

and feelings the individual has about him/her self at any one time. The role mastery mode involves how the individual functions in relation to his/her position in society. The final mode is interdependency, which is how the person relates to others.

Roy views nursing as helping man to adapt to changes in life which affect how that individual relates to self and others (Marriner, 1986; Roy, 1976). Nurses intervene using the nursing process to help the individual to adapt to changes in a positive manner.

In this study, the focal stimuli are the feelings and attitudes residents have about being in the long-term facility as well as daily activities and interactions. The contextual stimuli are residents' rooms, the nursing home, and other factors such as temperature and noises. The residual stimuli are past experiences the individuals bring into the situation. Past experiences include those with a pet and methods of dealing with stress. When the elder does not adapt to these stimuli in any or all of the modes, an imbalance results. One maladaptive state which may result is depression.

Interventions to resolve maladaptations are designed to change the stimuli, adaptive levels, or adaptive modes. In this study, it is believed that adding a focal stimulus, a plush animal, will give the elder a way to modify contextual and other focal stimuli. The plush animal will be a way for

the elder to express feelings which may otherwise be held inside. Stuffed animals also may stimulate positive past experiences with stuffed animals (residual stimuli). As a result of this change in stimuli, adaptation may occur resulting in a decrease in depression.

Chapter III

Hypothesis

Theoretical Null Hypothesis

There will be no significant difference in depression of those institutionalized elders pre- and post-plush animal therapy.

Definitions

1. No significant difference: using a t test, at a significance level of .05.
2. Depression: as measured by scores on the Beck Depression Inventory.
3. Institutionalized elders: persons over the age of 65, who reside in a nursing home.
4. Plush animal therapy: the presence of a stuffed plush animal of at least 6 inches and no more than 14 inches in length.

Operational Hypothesis

When compared using the t test at the .05 level of significance, there will be no difference in depression as measured by the Beck Depression Inventory in persons over the age of 65 who reside in a nursing home before and after the presence of a stuffed plush animal.

Chapter IV

Review of Literature

Very little research has been conducted about the effects of plush animal therapy. However, plush animal therapy is based on the findings of studies about the effects of pet therapy. Therefore, this selected review of literature focuses on research studies about the use of pet therapy with elders and its effect on depression.

Burkholder (1986) used a quasi-experimental design to determine the effect of pet therapy on the social interaction and cardiovascular responses of elders. Subjects were 16 residents of a nursing home. Each resident in the experimental group held a rabbit for 30 minutes, and social interactions and cardiovascular effects were measured. The findings demonstrated a significant increase in the social interaction of those in pet therapy, but there were no significant cardiovascular effects. The researcher recommended continued research in the use of pet therapy with elders.

In the literature, the organization--Pets Are Wonderful Council (PAW)--is mentioned frequently. The researcher contacted the organization by telephone and requested information. The organization sent the researcher materials

describing research studies. However, the description of this research was often incomplete, and the researcher was unable to obtain the actual research article. Thus, authors and dates of some of these studies are missing.

A survey of a representative national sample of 175 male and female heads of households was sponsored by the Pets Are Wonderful Council (PAW, 1986b). The purpose of the survey was to determine what causes stress for people and how they cope with it. The results showed common causes of stress were driving in heavy traffic, meeting deadlines, work problems, serious arguments, and death of a family member or friend. Pet owners evaluated their personal lives as less stressful than work lives while non-pet owners stated the opposite. Pet owners perceived more control over their lives and had more self-confidence. Pet owners relieved stress by petting, playing with, and talking to pets while non-pet owners watched television, read, slept, exercised, ate, and drank. Men without pets were identified as most stressed while men with pets were found to be the least stressed. Ninety percent of the pet owners and 84% of non-pet owners indicated pets provide comfort during stressful times and would recommend a pet to friends to help with depression or loneliness.

Baun, Bergstrom, Langston, and Thoma (1984) investigated the effects of a dog on the owner's blood pressure, heart rate, and respiratory rate in 24 subjects who were

between the ages of 24 and 74 years. These subjects did not have hypertension; were not taking medications known to affect blood pressure, heart rate, or respiratory status; were not allergic to dogs; and had a dog to which they had started to bond. There were 5 men and 19 women who had lived with a dog for a minimum of 6 months. The blood pressure, heart rate, and respiratory rate of each subject were measured during three procedures (quiet reading, petting a strange dog, or petting own dog). Blood pressure, heart rate, and respiratory rate were measured baseline and at 3-minute intervals for 9-minute sessions. Analysis of the data revealed that when the subject petted his/her own dog blood pressure rose then went down. Blood pressure and pulse also lowered while petting the unknown dog. The researchers concluded that the bonding which the owner had with his/her dog had a significant effect on blood pressure and heart rate and that this effect was equal to that of reading in a quiet area. The researchers recommended further research using longer periods of time to determine when the decline in blood pressure and heart rate stopped.

Savishinsky (1985), in a study using anthropological methods, investigated the effects of a pet visitation program in three nursing homes. The goals of this research study were to examine the impact of pet sessions on residents and the differences noted between the three facilities, in order to make the program more effective. Data

collection consisted of direct observations of the interactions, interviews with no set structure, and life history information. Although all three facilities were different, the findings were similar. Residents reported that the pet visitation program made them remember past experiences with a pet and loss of a pet was similar to loss of a significant other. It also was reported that pet visitation helped make nursing home residency more enjoyable. For some residents, the human contact from those who brought the pets meant more than the pets. The researcher recommended further research which explored the feelings of the resident who had to give up a pet when coming to the nursing home.

Francis, Turner, and Johnson (1985) investigated how a weekly pet visitation program affected the health, self-concept, life satisfaction, mental well-being, social competence and interest, appearance, and functioning of elderly nursing home residents. The quasi-experimental pretest and posttest design was executed in two adult nursing homes. There were 21 subjects from one nursing home in the experimental group and 19 subjects from the other nursing home in the control group. Data were analyzed using t tests. The results of the statistical analysis showed a significant difference on seven of the nine measured variables. Subjects in the experimental group, which had weekly pet visitation, had more social contacts, functioned better mentally and psychosocially, were less depressed and more satisfied

with life, and had better self-concepts than subjects in the control group. There were no significant differences between the groups for the variables hygiene and feelings about health status.

Robb, Boyd, and Pristash (1986) examined the effects of a wine bottle, a plant, and a puppy on the social behavior of ill nursing home residents. Residents in a day room were observed over a period of 20 weeks. After establishing a baseline of behavior, the researchers systematically introduced three objects and observed social behaviors. The social behaviors observed were spoken words, facial expressions, eye contact with the object, and movement toward the object. A modified frequency time sampling plan was used. Data were analyzed to compare the mean number of times per resident that each of the social behaviors was demonstrated at baseline and in the presence of a wine bottle, plant, and puppy. The social behaviors were highest in the presence of the puppy and lowest in the presence of the wine bottle.

Muschel (1984) explored the benefits of using a pet visitation program with patients dying of cancer. The purpose of this study was to determine the effect of pets on patients' anxiety and despair and the relationship of those effects to personality. There were 15 subjects who resided in a nursing home facility for the terminally ill. Data were collected using a researcher-designed questionnaire and five Thematic Apperception Test cards pre- and post-pet

visitation. Pets were held once a week for one hour over a 15-week period. Analysis of the data indicated that pets lessened feelings of anxiety and despair and assisted subjects move toward acceptance of death. Those subjects who showed more warmth, humor, creativity, capacity for enjoyment, and empathy benefited the most from pet therapy.

Based on the positive benefits of pet therapy to elders, Francis and Baly (1986) proposed a research study using pets in a nursing home in their area. However, permission to bring animals into the facility was denied. As a result, Francis and Baly substituted plush animals for real ones. The purpose of their study was to determine if a plush animal would affect nursing home residents' health concept, life appearance, mental functioning, and depression. A pretest and posttest using an experimental and control group were utilized on 22 and 18 residents in the same institution. The residents did not come in contact with one another. The experimental group had the plush animals for an 8-week period of time. The results of data analysis using a t test indicated that those who had plush animals were significantly better in mental well-being, interest in life, mental functioning, life satisfaction, depression, and psychosocial function. There were no significant differences in relation to health concept, social competence, or appearance. Researchers recommended

replication of this study with more subjects and over a longer period of time.

The findings of the studies in this review of literature indicate pets have many positive effects on elders. Pet therapy has been shown to increase social interaction, feelings of security, and physical and emotional functioning. In addition, pet therapy has been shown to decrease stress, depression, and feelings of isolation. The influence of pet therapy on cardiovascular response (blood pressure, heart rate, and respiratory rate) remains controversial. Some studies showed a significant difference, while others did not. Plush animal therapy produced results similar to pet therapy. Plush animal therapy affects depression, life satisfaction, and social interest. Since there was very limited research on plush animal therapy, further research in this area is needed to document its effects on elders.

Chapter V

Research Design and Methodology

Research Design

This study of the effect of plush animals on depression in elderly nursing home residents used a quasi-experimental research design. Quasi-experimental research is defined as "a study in which subjects cannot be randomly assigned to treatment conditions, although the researcher does manipulate the independent variable and exercises certain controls to enhance the internal validity of the results" (Polit & Hungler, 1983, p. 620). In a quasi-experimental design at least one of the three components making up an experimental design (manipulation, control, or randomization) is not used. In this study, subjects were pretested for depression, and then a plush animal was selected by them. After 5 weeks, subjects were retested for depression.

The researcher had planned to use a control group. However, the researcher was unable to obtain subjects for a control group so that a one group pretest and posttest design was used.

Variables

The independent variable in this study is plush animal therapy. The dependent variable is depression as measured by the Beck Depression Inventory. The controlled variables are mental status, age, setting, and physical ability. The intervening variables are the effect of past experiences with pets or plush animals, effect of feeling of significant others about him/her having a plush animal, and behaviors of staff toward the resident having a plush animal.

Setting, Population, and Sample

The setting for this study is the northeast region of Mississippi. The county has a reported population of 57,304 with a projected population for 1987 of 66,790 (United States Bureau of Census, 1980). Within this population, 47.30% are males and 52.70% are females; 64.84% are white and 34.12% are black (United States Bureau of Census, 1980). Within this county, 45.84% live in rural areas and 54.16% live in urban areas. The largest city in the county has a population of 30,000 (Chamber of Commerce, personal communication, May 14, 1987). Those between 65 and 74 comprise 5.81% of the county population, and 3.45% are over the age of 75 years (United States Bureau of Census, 1980).

The county has two nursing homes, both located in the largest city within this county. The two long-term care facilities are within 5 miles of each other. The largest facility was used to select subjects for plush animal

therapy. The facility has 120 beds (N. Hanson, personal communication, May 12, 1987). Approximately 8% of the residents are black and the remainder are white. The majority of the residents are women, less than 25% of residents are male. There are four residents who are under the age of 65.

The facility is privately owned with an administrator, director of nursing, activity director, social designee (social and activity work), and one activity aide who also does physical therapy. The facility employs 3 registered nurses, 16 licensed practical nurses, and 42 nurses' aides and cares for residents classified as skilled and intermediate. The facility is located on one floor with the nurse's station located centrally. The facility does not participate in a pet visitation program and has no plans to do so in the future. The facility has at least one activity program a day including weekends.

The criteria for subject selection included the ability to write or answer questions verbally and physically hold and talk to a plush animal, aged 65 years or older, exhibition of at least 10 of 24 identified depressive behaviors, and nursing residency of at least 6 months but no longer than 5 years. The Director of Nursing of the nursing home was given a checklist, Criteria for Subject Selection (see Appendix A). To select subjects, residents identified by the Director of Nursing of the facility as meeting

subject selection criteria were asked to participate. The study was explained to each identified resident and a signed consent form was obtained (see Appendix B). The sample consisted of 5 female subjects.

Data Gathering Process

The researcher discussed the study with the Director of Nursing and requested the Nursing Home Memorandum of Agreement (see Appendix C) be signed. After subjects were selected and agreed to participate, the Beck Depression Inventory (see Appendix D) was administered to all subjects on an individual basis on the same day.

After administration of the Beck Depression Inventory, subjects were asked to meet in the dining hall at a convenient time to select a plush animal. After selection of a plush animal, each subject was seen everyday for one week to enhance bonding. During each visit the subject was asked if she had named the plush animal. If a name had not been chosen, names for her plush animal were explored. Where the plush animal was in reference to each subject was determined, and if not being held and it was appropriate the plush animal was placed in the subject's lap. At the end of the experiment, the plush animal remained the property of the subject. Five weeks after institution of plush animal therapy, each subject was administered the Beck Depression Inventory. In addition, each subject was interviewed about plush animal therapy.

Instrumentation

The Beck Depression Inventory was developed by Beck in 1978 for the purpose of measuring the degree of depression. The inventory has 21 questions concerning how the individual felt about him/her self during the past week, including the day of administration. Each question has four possible responses concerning changes in feelings about self. The choices range from no change from any other time to a change so great that the individual cannot stand it. Each response is assigned a numerical value from 0 to 3 based on the amount of change: 0 indicates no change and 3 indicates the greatest amount of change. Thus, the Beck Depression Inventory has a score range of 0-63 and the higher the score, the more depressed the subject is. A score of 0 is considered normal, and any score above 30 is considered severe depression. The inventory has a reported internal consistency of $\underline{r} = 0.93$ and criterion-related validity of $\underline{r} = 0.55$ to $\underline{r} = 0.96$ (Francis & Baly, 1986).

Criteria for Subject Selection is a researcher-designed instrument. It is a list of common signs and symptoms associated with depression compiled from a review of the literature. The instrument is a checklist and has no established validity or reliability.

Statistical Analysis

The information obtained from the scores on the Beck Depression Inventory was subjected to a t test at the .05 level of significance. A t test is defined as "a parametric statistical test used for analyzing the difference between two means in groups under 30" (Polit & Hungler, 1983, p. 624).

Assumptions

1. Depression exists and can be measured.
2. Subjects will respond honestly.

Limitations

1. Generalizations of the results are limited to the northeast region of Mississippi.
2. Results are limited to females over the age of 65 living in a nursing home.

Chapter VI

Analysis of Data

The purpose of this quasi-experimental research study was to determine the effects of plush animals on depression in elderly nursing home residents. Data were collected pre- and post-plush animal therapy using the Beck Depression Inventory. In addition, each subject was interviewed at the end of plush animal therapy. The purpose of the interview was to determine how the individual felt about the plush animal experience. There were five subjects in this one group pretest and posttest design. One subject was hospitalized and unable to complete the posttest. Thus, data were analyzed for four subjects.

Subject number 1 is an 88-year-old white female who has been at the nursing home for one year. In the interview she stated she enjoyed her plush animal and that the plush animal reminded her of past pets. Throughout the interview, she smiled frequently, used a lot of inflection in her voice, and held the plush animal in her lap. She commented that many of her friends made favorable comments about her plush animal.

Subject number 2 is an 81-year-old white female who has been at the nursing home for 4 years. In the interview she

stated she really enjoyed having her plush animal and that the plush animal reminded her of live animals she had had. She remembered always having a stuffed animal in bed in her younger years. During the interview she smiled frequently and used a lot of inflection in her voice. She also maintained eye contact during the interview. Upon entering the room, the researcher found the plush animal in her dresser drawer. She had just dressed.

Subject number 3 is a 77-year-old white female who has been at the nursing home for 2 years. Upon interview she stated she enjoyed her plush animal and would suggest others get one. During the interview she smiled frequently and the researcher found the plush animal on her dresser. She had just returned from breakfast.

Subject number 4 is a 75-year-old white female who has been at the nursing home for 3 years. During the interview she stated she really enjoyed her plush animal and remembered past experiences with live pets. During the interview she used a lot of voice inflection and smiled. She also mentioned that many of the other residents also had plush animals on their beds. Upon entering the room, the researcher found the plush animal on the dresser. The subject had just returned from breakfast. These data may be found in Table 1.

Table 1

Scores Obtained on Beck Depression Inventory Along With Ages

| Subject | Age | Pretest Score | Posttest Score |
|---------|-----|---------------|----------------|
| 1 | 88 | 12 | 7 |
| 2 | 81 | 21 | 19 |
| 3 | 77 | 18 | 15 |
| 4 | 75 | 17 | 12 |

Hypothesis

The hypothesis which stated depression as measured by Beck Depression Inventory would decrease with the use of plush animal therapy was tested using a t test. The mean of the scores on the Beck Depression Inventory for the pretest was 17 and for the posttest 13.25. The calculated $t(3)$ equaled 5.00 which was significant at the .05 level. Thus, the researcher rejected the null hypothesis.

Chapter VII

Summary, Conclusions, Implications, and Recommendations

Summary

A quasi-experimental design was used to study the effect of plush animals on depression in elderly nursing home residents. The researcher hypothesized that there would be no significant difference between depression prior to and following plush animal therapy. Data were collected pre- and post-plush animal therapy using the Beck Depression Inventory. There were four subjects who each selected a plush animal, kept the animal with them for 5 weeks, and were then retested using the Beck Depression Inventory. The results of the t test led the researcher to reject the null hypothesis. Plush animal therapy was effective in treating depression for those elderly nursing home residents.

Conclusions and Implications

The use of plush animals decreased the scores obtained on Beck Depression Inventory. This conclusion corresponds with findings of Francis and Baly (1986). While this study had no control group, these findings suggest plush animal therapy may be an effective alternative to pet therapy.

The decrease in depression from the use of plush animal therapy parallels the findings of Baun, Bergstrom, Langston, and Thoma (1984); Francis, Turner, and Johnson (1985); Robb, Boyd, and Pristash (1980); and Savishinsky (1985). The researcher had difficulty in finding an adequate number of subjects. This difficulty could be lessened by selecting a facility where the researcher is known. If unable to do so, the researcher needs to establish credibility by spending time at the facility. Or the researcher needs to select a facility whose Director of Nursing has a research background. The researcher needs to allot sufficient time to spend with the Director of Nursing so that the subject selection process can be accomplished smoothly.

According to Roy's model, the use of plush animal therapy should control stimuli in a positive manner so that there is a positive adaptation. The results of this study indicate a positive adaptation of decreased depression which occurred after the use of a new stimuli, plush animals, to control other stimuli. The stimuli may have been controlled through the process of reminiscing since subjects reported they remembered past positive experiences with plush animals and pets. The findings of this study do support Roy's Adaptation Model.

The information obtained through this research has many implications for the Geriatric Nurse Clinician (GNC). The GNC may encourage the use of plush animal therapy in

depressed elderly nursing home residents. Elders reported plush animal therapy helped them by reminding them of past pets they once owned. The elders' voices had a lot of inflection and they smiled frequently. The plush animal served as a conversation piece which helped the elder to come out of her self. Plush animal therapy is relatively inexpensive, is not time intensive, and has none of the side effects of medicines. The GNC can use this information in other areas where elders reside, but research is needed to document the effects of plush animal therapy in settings other than nursing homes. Plush animal therapy can also be implemented as a part of reminiscence therapy since plush animal therapy tended to cause subjects to recall pets they had in the past.

Recommendations

The following recommendations are made, based upon the findings from this study:

Research

1. Conduction of similar study with a randomly selected sample and control group.
2. Conduction of study to differentiate effects of reminiscence and plush animal therapy.
3. Conduction of longitudinal study to determine the effects of plush animal therapy over time.

4. Conduction of study to determine the effect of plush animal therapy on elders in settings other than nursing homes.

Nursing

1. Use of plush animals for treating depression in nursing home residents.

2. Use of a teaching program for caregivers about the use of plush animal therapy in treatment of depression.

3. Use of plush animals for reminiscence therapy.

Appendix A

Criteria for Subject Selection

Subject # _____

1. Must be over 65 years of age. Present Age: _____
2. Must be able to read and write or understand verbal instructions. Can read and write: Yes _____ No _____
3. Be able to hold and talk with a plush animal.
4. In nursing home > 6 months: _____ < 5 years: _____
5. Have at least 10 of the below behaviors for at least 2 weeks. Check appropriate boxes:
 - a. Sleeping problem
 - _____ Not enough
 - _____ Sleep all the time
 - b. Appetite
 - _____ Eat all the time
 - _____ Eat very little
 - c. Physical complaints--all without known cause
 - _____ GI upsets
 - _____ Palpitations
 - _____ Headaches
 - _____ Loss of energy
 - _____ Backaches
 - _____ Any other vague complaint without cause
 - d. _____ Activity--less than usual

e. Mental

_____ Tearful
_____ Anger
_____ Irritable
_____ Sad
_____ Loss of patience
_____ Sits and looks into space

f. _____ Suicide--may speak of

g. Miscellaneous

_____ Little to no eye contact
_____ Poor self-esteem
_____ Loss of interest in life
_____ Less interaction with others than before
_____ Does not do usual habits
_____ Lack of concern with appearance

Appendix B

Subject # _____

Participant Consent Form

My name is William J. Bergin. I am a registered nurse and a graduate student at Mississippi University for Women in Columbus, Mississippi. I am conducting a research study about plush animals and depression in the elderly in a nursing home.

The study has been explained to me and if I agree to participate I am aware that:

1. I will provide the written data as requested. This will include a pretest and posttest.
2. I will be receiving a plush animal for the period of time April to July 1987.
3. The responses will be coded, and all information will be considered confidential. The data will be analyzed as a group and will serve as a means to protect anonymity.
4. Participation in this research is voluntary. I have the right to refuse to participate and the right to withdraw up to time of data analysis.
5. Participation in the study will not affect the services I receive in this agency.
6. If I have any other questions, I am free to contact Bill Bergin any time at 329-3318.

The information gained from this study will serve as the basis for a master's thesis. Upon request, a summary of findings will be made available.

 Resident

 Researcher

 Date

Appendix C

Nursing Home Memorandum of Agreement

Title of Study:

The Effect of Plush Animals on Depression
in the Elderly in a Nursing Home

Name of Institution:

Study discussed with and explained to:

Name of Representative

Involvement in Study:

_____ Cooperation: Consent from subjects

_____ Participation: Director of Nursing and licensed
practical nurses in identifying subjects who meet the
designed criteria

Comments:

Director of Nursing and unit licensed practical nurses
will be given a list of criteria for this study and
will be asked to submit a list of those residents who
meet that criteria to the investigator.

Date: _____

Agency Representative:

(Signature of Director of Nursing)

Researcher:

(Signature of Investigator)

Appendix D

Beck Inventory

Code: _____

Experimental _____ Control _____

Pretest _____ Posttest 1 _____ Posttest 2 _____

Age _____ Sex _____

Have you had a positive past experience with a pet?

Yes _____ No _____

Directions: The statements have to do with how the person has been feeling the past week. Circle the number which best describes the person from his point of view.

1. 0 I do not feel sad.
1 I feel sad.
2 I am sad all the time and I can't snap out of it.
3 I am so sad or unhappy that I can't stand it.
2. 0 I am not particularly discouraged about the future.
1 I feel discouraged about the future.
2 I feel I have nothing to look forward to.
3 I feel that the future is hopeless and that things cannot improve.
3. 0 I do not feel like a failure.
1 I feel I have failed more than the average person.
2 As I look back on my life, all I can see is a lot of failures.
3 I feel I am a complete failure as a person.
4. 0 I get as much satisfaction out of things as I used to.
1 I don't enjoy things the way I used to.
2 I don't get real satisfaction out of anything any more.
3 I am dissatisfied or bored with everything.
5. 0 I don't feel particularly guilty.
1 I feel guilty a good part of the time.
2 I feel quite guilty most of the time.
3 I feel guilty all of the time.

6. 0 I don't feel I am being punished.
1 I feel I may be punished.
2 I expect to be punished.
3 I feel I am being punished.
7. 0 I don't feel disappointed in myself.
1 I am disappointed in myself.
2 I am disgusted with myself.
3 I hate myself.
8. 0 I don't feel I am any worse than anybody else.
1 I am critical of myself for my weakness or mistakes.
2 I blame myself all the time for my faults.
3 I blame myself for everything bad that happens.
9. 0 I don't have any thoughts of killing myself.
1 I have thoughts of killing myself, but I would not carry them out.
2 I would like to kill myself.
3 I would kill myself if I had the chance.
10. 0 I don't cry any more than usual.
1 I cry now more than I used to.
2 I cry all the time now.
3 I used to be able to cry, but now I can't cry even though I want to.
11. 0 I am no more irritated now than I ever am.
1 I get annoyed or irritated more easily than I used to.
2 I feel irritated all the time now.
3 I don't get irritated at all by the things that used to irritate me.
12. 0 I have not lost interest in other people.
1 I am less interested in other people than I used to be.
2 I have lost most of my interest in other people.
3 I have lost all of my interest in other people.
13. 0 I make decisions about as well as I ever could.
1 I put off making decisions more than I used to.
2 I have greater difficulty in making decisions than before.
3 I can't make decisions at all anymore.
14. 0 I don't feel I look any worse than I used to.
1 I am worried that I am looking old or unattractive.
2 I feel there are permanent changes in my appearance that make me look unattractive.
3 I believe that I look ugly.

15. 0 I can sleep as well as usual.
1 I don't sleep as well as I used to.
2 I wake up 1-2 hours earlier than usual and find it hard to get back to sleep.
3 I wake up several hours earlier than I used to and cannot get back to sleep.
16. 0 I don't get more tired than usual.
1 I get tired more easily than I used to.
2 I get tired from doing almost anything.
3 I am too tired to do anything.
17. 0 My appetite is no worse than usual.
1 My appetite is not as good as it used to be.
2 My appetite is much worse now.
3 I have no appetite at all anymore.
18. 0 I haven't lost much weight, if any lately.
1 I have lost more than 5 pounds.
2 I have lost more than 10 pounds.
3 I have lost more than 15 pounds.

I am purposely trying to lose weight by eating less.
Yes _____ No _____

19. 0 I am no more worried about my health than usual.
1 I am worried about physical problems such as aches and pains; or upset stomach; or constipation.
2 I am very worried about physical problems and it's hard to think of much else.
3 I am so worried about my physical problems that I cannot think about anything else.
20. 0 I can work about as well as before.
1 It takes an extra effort to get started at doing something.
2 I have to push myself very hard to do anything.
3 I can't do any work at all.
21. 0 I have not noticed any recent change in my interest in sex.
1 I am less interested in sex than I used to be.
2 I am much less interested in sex now.
3 I have lost interest in sex completely.

References

- Appleton, P., & Chalmers, H. (1984). The Roy Adaptation Model. Nursing Times, 9(80), 45-48.
- Archibald, J. W. (1983, November). Is it really senility or just depression? RN, 49.
- Baun, M. M., Bergstrom, N., Langston, N. F., & Thoma, L. (1984). Physiological effects of human/companion animal bonding. Nursing Research, 33(3), 126-129.
- Burkholder, K. H. (1985). Effects of pet facilitation on social interactions and cardiovascular responses among institutionalized elderly. Unpublished master's thesis, Mississippi University for Women, Columbus, MS.
- Delta Society. (1986, September). California study shows that seniors with pets make better tenants. (Available from Delta Society, Century Building, Suite 303, 321 Burnett Avenue South, Renton, WA, 98055-2569).
- Ebersole, P. (1985, July-August). Gerontological nurse practitioners past and present. Geriatric Nursing, 219-220.
- Ebersole, P., & Hess, P. (1985). Toward healthy aging. St. Louis, MO: C. V. Mosby.
- Erickson, R. (1985, March-April). Companion animals and the elderly. Geriatric Nursing, 92-96.

- Francis, P., & Baly, A. (1986, May-June). Plush animals-- Do they make a difference. Geriatric Nursing, 140-142.
- Francis, G., Turner, J. T., & Johnson, S. B. (1985). Domestic animal visitation as therapy with adult home residents. International Journal of Nursing Studies, 22(3), 201-206.
- Marriner, A. (1986). Nursing theorists and their work. St. Louis, MO: C. V. Mosby.
- Minot, S. R. (1986, March). CE depression. American Journal of Nursing, 285-291.
- Muschel, I. J. (1984, October). Pet therapy with terminal cancer patients. Social casework. Journal of Contemporary Social Work, 451-458.
- Pets Are Wonderful Council. (1986a). Pets can rescue the lonely. (Available from Pets Are Wonderful Council, 500 North Michigan Avenue, Suite 200, Chicago, IL 60611).
- Pets Are Wonderful Council. (1986b). RX: "One pet a day," study reveals. (Available from Pets Are Wonderful Council, 500 North Michigan Avenue, Suite 200, Chicago, IL 60611).
- Polit, D., & Hungler, B. (1983). Nursing research principles and methods (pp. 620-624). Philadelphia, PA: J. B. Lippincott.
- Robb, S. S., Boyd, M., & Pristash, C. L. (1980, December). A wine bottle, plant, and puppy. Journal of Gerontological Nursing, 6(12), 721-728.

- Roy, S. C. (1976). Introduction to nursing: An adaption model. Englewood Cliffs, NJ: Prentice-Hall.
- Savishinsky, J. (1985, Summer). Pets and the family relationship among nursing home residents. Marriage Family Review, 109-134.
- St. Pierre, J., Craven, R. F., & Bruno, P. (1982). Late life depression: A guide for assessment. Journal of Gerontological Nursing, 12(7), 5-10.
- United States Bureau of Census. (1980). Census '80--Full data report plus estimates and projections Lowndes County, MS. Obtained from Chamber of Commerce-Columbus-Lowndes County.