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THE IMPACT OF A SHORT-TERM TRAINING PROGRAM  
ON LEARNED HELPLESSNESS AMONG STAFF  
AND RESIDENTS OF NURSING HOMES

DISSERTATION

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Fulfillment of the Requirements

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By

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The impact of a short-term training program upon learned helplessness among nursing home staff and residents was studied. Learned helplessness among staff was defined in terms of depression, self-monitoring, short-term memory, absenteeism, and turnover. Among residents, urinary incontinence was the selected measure of helplessness.

A pre-test, post-test, control group design was utilized, following Seligman's three group research paradigm. Initially, the sample consisted of two groups: one which was exposed to the short-term training, the other which received no training. Subjects participating in the training were subsequently expected to state goals for reducing urinary incontinence among residents. Those participants who attained their goals constituted the success group. A failure group was comprised of staff who failed to reach their stated goals.

No significant differences among the three groups were identified, according to the primary analyses of data.

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Secondary findings, employing reports by non biased observers and a resident self-maintenance scale, however, did suggest that residents cared for by nurses exposed to the training received more fluids and were more independent in their daily care activities.

It was concluded that models other than the learned helplessness paradigm may have greater utility in explaining perceived performance decrements among nursing homes. In addition, measures of objective vs. subjective accounts of contingencies and expectations are needed.

Replications of the study with larger, randomly selected samples are recommended. Also, investigations which integrate training with other facets of management are suggested.

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## CHAPTER I

### INTRODUCTION

Assume one is evaluating the quality of care in two nursing homes. Members of the staff in facility A have participated in more training than have those in facility B. It could be assumed that the former group is the more skilled and effective group. Yet the results of training in nursing homes have been generally undefined and/or negligible.

Nursing care is often viewed negatively by the public with families which postpone nursing home admission as a last resort. After placing a family member in a nursing home, it is likely that enormous guilt will be experienced by the responsible persons. Residents frequently express their displeasure with nursing home life by withdrawal or rejection of their families.

Even nursing home personnel experience dissonance related to their associations with the facilities. While given major responsibilities for provision of rehabilitative, maintenance, or hospice-type care, very little autonomy is granted staff. Hagan (5) has characterized providers of long term care as "helpless," floundering in

a sea of impossible regulations, unreasonable demands, unwilling and unprepared staffs.

If staffs do feel helpless, it is likely to be reflected in their care. When helplessness is diagnosed among residents, it may actually be secondary to staff helplessness. In such cases, successful intervention depends upon accurate and thorough assessment of the staff/resident relationships, with emphasis upon staff's perceptions of the circumstances. If staff training is to prove instrumental in containing costs and enhancing quality, it must effect significant reductions in both staff and resident helplessness.

#### Statement of the Problem

The problem in this study was to assess the impact of short-term training upon learned helplessness among staff as measured by depression, self-monitoring, job absenteeism, turnover, short-term memory, and by urinary incontinence among residents.

#### Purpose of the Study

The purposes of this study were as follows:

1. to investigate the effects of a short-term training program upon depression, self-monitoring, short-term memory, absenteeism, and personnel turnover;



2. to ascertain if a significant relationship exists between staff's self-reported levels of depression, self-monitoring, short-term memory, absenteeism, personnel turnover, and urinary incontinence among residents of nursing homes.

#### Research Questions

1. Will levels of depression, as measured by the Beck Depression Inventory, decrease significantly in (a) a group of nursing staff exposed to short-term training and which succeeds in its stated goals of decreased urinary incontinence among residents as compared to (b) a group exposed to short-term training but which fails to achieve its stated goal of decreased urinary incontinence among residents, and to (c) a group not exposed to short-term training and not committed to the stated goal of decreased urinary incontinence among residents?

2. Will levels of self-monitoring and short-term memory, as measured by the Snyder Self-Monitoring Scale and the Digit Span component of the Wechsler Adult Intelligence Scale, increase significantly in (a) a group of nursing staff exposed to short-term training and which succeeds in its stated goal of decreased urinary incontinence among residents as compared to (b) a group exposed to short-term training but which fails to achieve its

stated goal of decreased urinary incontinence among residents, and to (c) a group not exposed to short-term training and committed to the stated goal of decreased urinary incontinence among residents?

3. After training occurs with the two experimental groups, will job absenteeism and personnel turnover differ significantly among the experimental and control groups?

4. When measured before staff training and approximately one month afterwards, will the group of residents cared for by the experimental groups differ significantly in the numbers of incontinent residents from the resident group assigned to the control group for care?

#### Background and Significance

The effects of training are of legitimate concern to nursing home personnel because training is assumed to

1. Constitute a critical element in developing employee skills and abilities;
2. Represent a major budgetary consideration, both in program costs and in time devoted by trainers and staff; and
3. Influence the philosophy, attitudes, and practice of management and staff.

Although the relationships between training and resident outcomes remain vague, nurses in nursing homes have worked diligently during the last decade to improve care. In 1973, the Standards of Geriatric Nursing Practice (3, pp. 614-621) were published as guidelines for measuring levels of nursing competence and quality of care. Continuing education for health-care providers, both licensed and non-licensed, has received enormous financial and social support in an attempt to offer a more holistic type of care.

Pinder (7) surveyed studies of more than a decade and reported that in many instances the level of nursing home care exceeded, or at least differed from, that predicted. What has surfaced from reviewing these studies is the recognition that nurses, charged with primary responsibility for the delivery of care, have little or no control over the initiation and management of care.

Barney (2, p. 440) assessed the position of director of nursing services in forty Detroit-area nursing homes over a three year period. It was concluded that, "Although the nursing home is uniquely the domain and responsibility of nurses, it is largely unresponsive to their efforts, skills, styles of operation, or whatever pressure they bring to bear on it."

Learned Helplessness as conceptualized and revised by Seligman and his colleagues (1) may provide a useful framework for investigating the effects of nursing staffs' perceived lack of control over patient outcomes. Martinko (6) suggests that when training is rejected, individuals are actually voicing their learned helplessness. According to the theory, past, repeated experiences with uncontrollable, aversive circumstances result in both motivational and performance deficits. Thus, if nursing staff members have met with repeated expressions of hostility, indifference, reprisal, or rejection, their own passive or depressed reactions may be adaptive and appropriate.

The literature suggests that individuals may be "immunized" against learned helplessness by experiencing repeated success. The detrimental effects of learned helplessness have been ameliorated by training in which individuals are lead to ascribe their failures to effort rather than to ability or environmental influences beyond their control. In some instances, persons are assisted in setting more realistic goals (1).

Attempts to investigate the extent of learned helplessness, its prevention, or reduction among staff or residents of nursing homes have not been reported. The need for such efforts has been indicated, however. According to Campbell and Browning (4, p. 18),

Educational opportunities are not available for the nursing assistant group which comprises a significant portion of budgeted positions for nursing personnel in these (long-term care) institutions. It is the authors' belief that the exclusion of the primary group of care givers from educational opportunities is a significant factor in the perpetuation of inadequate care.

The same authors offered a two-day workshop for all levels of nursing personnel in intermediate and long-term care facilities in the Piedmont region of North Carolina. Based on evaluations from over 350 participants, the nursing assistants were decidedly more enthusiastic about the relevance of content to their setting, were more open in group discussions, and were more diligent in carrying out assignments than were registered and licensed practical nurses. If these nursing assistants' expectations for improved care were not subsequently realized, their motivation and efforts were most likely reduced. Thus, training efforts which terminate with end-of-program evaluations may actually contribute to poor staff attitudes, decreased performance, and undesirable resident outcomes.

### Definition of Terms

Learned Helplessness - a laboratory analog of naturally occurring negative life events. Specifically, the model relates failure and a perceived noncontingency to cognitive, emotional, motivational, and esteem deficits.

Nursing Home - a skilled nursing facility as defined by federal law. Care is long-term rather than acute. Goals of treatment are categorized as rehabilitation, maintenance or hospice care.

Nursing Staff - all licensed (registered nurses and licensed vocational nurses) and nonlicensed members (nurses' aides) of the nursing services department within the nursing home.

Short-Term Training - an educational experience or activity which is offered apart from a larger curriculum or program. The program design suggests a brief, temporary period of interaction between the trainer and the participants.

Urinary Incontinence - involuntary escape of urine from the bladder and urethra. Operationally defined for this study, it is frequent urinary accidents which require three or more clothing or linen changes from between 7 a.m. and 8 p.m. on any given day.

### Assumptions

It was assumed that the sample of registered nurses, licensed vocational nurses, and nurses' aides within the two involved nursing homes was representative of the universe of nurses in skilled care nursing homes throughout the United States. It was further assumed that subjects from each home would be representative of the participating homes.

Subjects' responses on the instruments were assumed to accurately represent their thoughts and feelings about the items.

### Limitations

The sample size was small and not randomly selected.

The two groups (those experiencing training and the control group) may be dissimilar in terms of characteristics which would affect the learning outcomes.

In general, the literature suggests that limited benefits, in terms of behavioral changes, will be observed subsequent to two-to three-hour training programs.

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## CHAPTER II

### REVIEW OF THE LITERATURE

As a behavioral concept, learned helplessness can be traced back to 1967 when it was demonstrated that animals, subjected to unavoidable/inescapable shock, later failed to avoid or escape the shock when it would have been possible to do so (30). Related phenomena have subsequently been demonstrated among humans (9, 10, 16, 23).

During the late 1970's, Seligman's model was reviewed and criticized by researchers who found evidence contrary to the hypothesized relationships (5, 23, 35). Seligman, along with others, criticized his own work and later presented a reformulated model (1).

In general, the research paradigm for learned helplessness has remained unchanged. Three groups are typically involved. One group is exposed to noncontingent aversive circumstances. The second group is given control over the outcomes while a third group is not given experience with the particular aversive stimulus. The three groups are then compared on performance of a potentially "controllable" task. Learned helplessness is said to exist when subjects, after receiving noncontingent

reinforcement, exhibit behavioral deficits during the post-test phase.

It can be argued that the induction of certain behaviors in a laboratory is not sufficient to demonstrate a clinical etiology. A more profitable strategy might be to begin with field experiments and then to develop and test laboratory analogs (5). The importance of asking, "Does it occur naturally in our real world?", is central to the model's utility.

Initially, the condition of noncontingency, not failure, was believed to produce cognitive, motivational, and affective deficits. This belief has been altered in light of findings which demonstrate that noncontingent positive outcomes do not yield the same responses as do noncontingent aversive outcomes (2). When subjects are lead to believe that success is attainable, but their subsequent trials do not produce the expected results, failure is said to occur.

The nature of one's responses to failure varies in terms of attributions made for causality and the certainty with which attributions are made. According to the reformulated model, if a person perceives a set of circumstances as uncontrollable for anyone, a universal attribution is made and the transfer of helplessness is not made to other circumstances. On the other hand, if the individual

believes that others would not be helpless in the situation, but that his or her lack of control is due to an inherent deficit, similar expectations for uncontrollability will transfer to other settings and continue to inhibit performance.

According to Wortman and Dintzer (35), a person does not immediately make a causal attribution for failure but develops one or more hypotheses about the causes and any likelihood of repeated failures. The individual then tests the hypotheses by obtaining information about his or her own behavior or the behavior of others in different settings. Hypothesis-testing behavior may account for the "facilitation" effect found by various researchers (15, 36).

#### Depression and Learned Helplessness

The similarity of symptoms between learned helplessness and depression has been repeatedly demonstrated (19, 24, 26, 28). In fact, treatment of depression assumes that the affective and behavioral symptoms of depression are related to a perceived lack of control over one's circumstances with resultant negative expectations about the future. Therapy is aimed at replacing the negative set with positive thoughts.

One possible explanation for the similarities is that learned helplessness is one subset of depression. While the

experienced uncontrollability and negative expectations may be sufficient to cause depression, they are not essential. Symptoms of passivity, negative affect, low self-esteem could also follow a loss, a physiological trauma, hormonal imbalance, or severe stress.

Evans and Dinning (11) argue that it is not the level of uncontrollability but the decrease in amount of controllability that produces helplessness and depression. Working with an inpatient group of psychiatric patients, the researchers found a significantly greater amount of depression among those persons experiencing a reduction in control as opposed to the group which had experienced a relative increase in control.

Glass (13) developed a 25-item self-report measure of subjective helplessness to assess motivational deficits. In an initial evaluation of the instrument, a significant correlation with the Beck Depression Inventory was found. Donovan, O'Leary, and Walter (8) later explored the instrument's validity among a population of alcoholic patients. Subjects were categorized as high, medium, or low in helplessness based on their scores on the Glass instrument. The low-helplessness group showed significantly less depression than did the high-helplessness group. The medium helplessness group fell in the middle range of depression.

Abramson, Seligman, and Teasdale (1) have suggested that differences in attributional style determine the relationship between learned helplessness and depression. Depressed individuals tend to make global, stable, internal attributions for causes of failure. Nondepressed people appear to make more external, specific, unstable attributions for negative life events.

Rizley (29) asked students to make causal attributions following experimenter-determined success or failure on a cognitive task. The depressed students attributed failures to incompetence (internal, global, stable). Nondepressed students attributed their failures to task difficulty (external, specific, stable). Success was attributed by the depressed students to the ease of the task (external, specific, stable). Nondepressed students attributed their success to ability (internal, global, stable).

Seligman, Abramson, Semmel, and von Baeyer (31) presented further evidence of a depressive attributional style. One hundred and forty-five undergraduates were asked to complete an attributional style scale and two measures of depression. Relative to nondepressed students, the depressed students (determined by scores on the Beck Depression Inventory and the Multiple Affect Adjective Check List) attributed bad outcomes to internal, stable,

global factors. Positive outcomes were attributed by the depressed students to unstable, external factors. Since the findings are correlational, it is obviously unclear whether the combination of attributional style with a negative life event causes depression or if depression followed by a negative experience determines certain attributions.

Differences in self-esteem observed among persons experiencing an uncontrollable negative event have been explained in terms of personal versus universal attributions for failure. If subjects believe that not only they, but everyone else, is helpless in a given situation, an external attribution is made and self-esteem is not threatened. If, however, the failure is attributed internally, persons experience personal helplessness and self-esteem is affected.

Garver and Hollon (12) investigated whether depressives' cognitive distortions were specific to their beliefs about their own skilled behaviors or resulted from a belief in the general uncontrollability of the world. Following success and failure in a skill and chance task, changes in expectancies were evaluated among 32 depressed and 32 nondepressed college students. Depressed subjects showed significantly smaller changes in expectancy than did nondepressed subjects when predicting the probability

of their own success in performing skills tasks. The two groups did not differ in their estimations of another person's success at the same task. The authors inferred that depressed subjects view themselves as personally helpless rather than define the circumstances as uncontrollable (universal helplessness).

According to Wortman and Dintzer (35), attributions for causality are not immediately made. Depressed individuals first move through a hypothesis-testing phase wherein they explore a variety of causal explanations. During this period, persons may be highly motivated to participate in efforts toward success. In terms of training, this period represents the "teachable moment" or "readiness to learn" stage.

While depression may spawn activities designed to clarify the causes of noncontingency, it may also distort perceptions of reality. For example, the director of nursing services receives a written reprimand from the state monitoring agency for having a bed in the nurses' lounge. The director perceives that nothing can be initiated without prior approval of the state agency and further believes that their only answer is no. She then assumes a passive posture toward nursing services. In reality, the certainty of noncontingency may be much less than what is perceived.

An important function of training is to assist trainers to distinguish between distorted perceptions and reality. Should the goals be uncontrollable or unattainable, revised goals and expectations may be indicated. The event, or goal, may be considered as less in importance than originally thought or the individuals may need to learn new skills and to expend greater efforts.

#### Self-Monitoring and Learned Helplessness

When training professionals, the end product is some form of specified behavior change. Identification of the behavioral determinants must precede the implementation of programs. The learned helplessness model offers one schema for assessing the personal and situational contributions to behavior; the social-psychological construct of self-monitoring (32) offers another. Both learned helplessness and self-monitoring emphasize the interplay between personal and situational factors.

According to Snyder (32), there exist significant differences in the extent to which individuals can and do monitor their self expressions, nonverbal and verbal. Some individuals consider their own behaviors to be lacking or inappropriate. Thus, they look to the environment for cues to guide their behaviors. Other persons may depend less on the situation to monitor their behavior. They seem



to be controlled internally by their affective states. In order to measure individual differences in self-monitoring, Snyder (32) developed and validated an instrument. Basically, the 25-item self-report measure distinguishes individuals who seek out and successfully use social cues for appropriate behavior from persons who are less sensitive to situational factors. A series of laboratory and field studies have confirmed the instrument's validity.

The dichotomy between low and high self-monitors resembles that between depression and non-depression. Just as the low self-monitor tends to seek internal explanations for events or relationships, so does the depressed individual. Both high self-monitors and non-depressives appear sensitive to external cues. Rahaim, Waid, Kennelly, and Stricklin (27) tested the hypothesis that individuals' levels of depression are inversely related to their self-monitoring skills. Snyder's scale and the Beck Depression Inventory were administered to samples from two different populations, community-residing women volunteers and psychiatric patients. Data from both samples supported the hypothesis. It seems likely that highly depressed, low self-monitors should be less affected by naturally occurring negative life events than should low depressed, high self-monitors. The low depressed, high self-monitors

appear to be more sensitive to environmental cues. Thus it might be predicted that they would experience learned helplessness to a greater degree.

#### Cognitive Functioning and Learned Helplessness

Additional insights into learned helplessness are gained by exploring the role of cognitive functioning in producing performance deficits.

According to Coyne, Metalsky, and Lavelle (7), cognitive interference associated with anxiety is a likely cause of performance decrements found in learned helplessness studies. When subjects were exposed to failure, success, or no treatment, their responses were consistent with those of subjects in previous helplessness studies. Subsequently, subjects were exposed to one of the following treatments: an imagination task, the same task but with a rationale, or a short delay before attempting to solve an anagram problem. The induced performance deficits disappeared when subjects were exposed to the imagination task plus were given a rationale. A similar effect was not achieved by the imagination exercise alone. Subjects who had not experienced the failure pretreatment, but who were exposed to the imagination exercise and rationale, performed poorly the anagram problems. According to the researchers, exposure to the imagination exercise and rationale decreases subjects' anxiety which is

characterized by cognitive impairments. Thus the subjects do not experience performance deficits. Conversely, subjects who have not had failure induced, but who are told to imagine something pleasant and are given a rationale, are being taught to worry.

Evidence that success reduces the effects of experimenter-induced failure has been provided by Teasdale (34). Interestingly, a difference was reported between effects of real versus recalled success. Subjects who received the "recalled success" treatment reported thinking about the experiment more than did the "real success" subjects. Buchwald, Coyne, and Cole (5) have suggested that success works by eliminating task irrelevant thoughts.

Bensen and Kennelly (3) have investigated the possibility of short-term memory being the cognitive determinant of performance outcomes in helplessness studies. Significant short-term memory deficits were observed in subjects exposed to either uncontrollable or 100 per cent positive feedback. Subjects exposed to intermittent (75 per cent and 50 per cent) positive feedback did not show significant deficits. Findings were interpreted as supportive of a cognitive processing explanation of helplessness.

Some negative feedback supposedly stimulates cognitive efforts to solve the problems, whereas positive feedback gives no indication of a needed change in behavior. Continued negative feedback produces a functional debilitation in cognitive functioning. The study of various reinforcement schedules has implications for "immunization" or treatment programs.

### Training and Learned Helplessness

Training has two primary goals where learned helplessness is concerned. First, training aims at "immunizing" persons against helplessness effects. Second, training represents a therapeutic intervention in cases of existing deficits.

Subjects have been "immunized" against the effects of researcher-induced failure by exposure to partial reinforcement (17, 18, 22). Exposure to control or no control affects subjects' expectations, moods, and efforts. Reattribution training has also prevented helplessness deficits (9). By training people to realistically evaluate their performance in terms of effort, ability, or circumstances they can supposedly better predict the likelihood of their future successes or failures. The effects of this sort of training should not be taken cavalierly since one's sense of ability is intricately linked to one's sense of worth in

society. Omelich and Covington (25) explored what happens when individuals can no longer externalize the causes for failure. Eighty college students were provided multiple test study opportunities until they demonstrated a minimal competence level. Although subjects increased their scores on subsequent parallel tests, they perceived their performances as failures. As subjective failure increased, so did attributions to inability. Low self-concept students were particularly apt to attribute their failures to a personal lack of ability.

Abramson, Seligman, and Teasdale (1) proposed a series of therapeutic strategies to correspond with their explanation of helplessness deficits. The four causal explanations and corresponding interventions follow.

According to the reformulated model of helplessness, cognitive, motivational, affective, and self-esteem deficits are associated with the following.

1. Cause. A low estimation of success or a high estimation of failure.

Intervention. Environmental manipulation is applied to either reduce the likelihood of aversive outcomes or to increase the probability of success.

2. Cause. An expected outcome that is either highly positive or aversive.

Intervention. Highly preferred outcomes are made less desirable. For example, becoming a millionaire within one year may be unrealistic for a new graduate nurse. Earning a steady income with a base salary of \$15,000 to \$25,000 could replace the first goal.

3. Cause. A perceived noncontingency between responses and outcomes.

Intervention. Change perceived noncontingencies to expectations of controllability. If the responses are not within the persons repertoire, training may produce the appropriate skills. When the skills are present but the individual doubts his ability to succeed, therapy may take the form of prompt task performance, specific activities in goal setting and implementing the plan, clarifying attributions for success or failure, and training in assertiveness or problem solving and decision making.

4. Cause. Making global, stable, and internal attributions about the noncontingency.

Intervention. Modify unrealistic attributions for failure toward external, unstable, specific factors. Change unrealistic attributions for success to internal, stable, global factors. External attributions for failure should raise self-esteem. Unstable attributions should limit the chronicity of deficits. Specific attributions make deficits less generalizable.

Three of the four strategies above directly involve cognitive changes. Even the success of environmental manipulation depends upon the individual's knowledge that circumstances are less threatening or more supportive than before.

#### Nursing Processes and Resident Outcomes

The issue of helplessness or competence among nursing staff finds meaning in measures of resident outcomes. Unless the results of care for residents are positive, training and/or nursing efforts are wasted. To measure resident outcomes is not so easy, however. Relationships between nursing processes and resident outcomes are complex and multiple. Measurements of psychosocial variables are often indirect and imprecise. Recognizing the problems, the nursing profession has declared the identification of accurate outcome measures as a priority of nursing research (21).

That a causal relationship exists between what nurses do and how their patients recover is central to the issue of quality of care. Therefore, research studies which ask specific questions with regard to the relationship between nursing processes and patient outcomes are vital.

The literature documents the fact that a common, significant problem facing care providers of the elderly

is urinary incontinence. Brocklehurst (4) reported a study by Isaacs and colleagues which showed an eight per cent incidence of urinary incontinence in patients admitted to a medical ward as opposed to a 51 per cent incidence among those admitted to a geriatric ward. Caird (6) cited urinary incontinence as a major cause of disability among the elderly. The nature of incontinence poses multiple problems for its sufferers. Skin irritation and breakdown are risked. The development of urinary tract infections is likely, especially when indwelling catheters are utilized. Fear and anxiety about odors and social avoidance may cause persons with incontinence to withdraw from interpersonal relationships.

Despite the high incidence of urinary incontinence among older people, health care providers have shown comparatively little interest in its treatment. One category of incontinence, iatrogenic incontinence, implies a treatment-induced lack of bladder control. Among contributing environmental factors are the attitudes of health care providers. When a staff accepts and expects that old people are incontinent, a self-fulfilling prophecy among residents, families, and staff is set into motion (33, p. 390). The few reported investigations of relationships between treatment and outcomes reflect varying success rates (14, 20). Among the influencing factors are



the patients' physical and mental conditions and their motivation to regain bladder control.

The reeducation of patients for bladder control is considered an essential part of the therapeutic plan. With optimum treatment, a fifty per cent success rate may be expected (33).

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## CHAPTER III

### DESIGN OF THE STUDY

#### Organization of the Study

This study is an example of a field experiment. The situation was realistic and the independent variable (short-term training) was manipulated by the experimenter under as carefully controlled conditions as the situation permitted (3, p. 401).

Although control was limited due to the choice not to randomize subjects or to randomly assign treatments to groups, certain benefits were realized. One of the independent variables (short-term training) was manipulated by the experimenter; the other independent variables (success or failure at achieving goals of urinary continence) were explored ex post facto. The applied study, by attending to multiple, complex relationships will strengthen generalizations to other situations. The design made it possible to explore the applicability of important theoretical concepts within a natural environment. The selection of valid, reliable measures of the dependent variables (effects on nursing staff and urinary incontinence among residents) aided in detecting variance

which had been engendered by the independent variables (3, p. 402-405).

The basic three-group design found in most studies of learned helplessness was employed. Group number one experienced success in achieving its stated goal of bladder control among residents. Group number two experienced an aversive condition in that its members failed to meet the stated expectation of bladder control among residents. The third group did not have expectations for success since it did not participate in the short-term training. Thus, failure or success for the third group was not defined in terms of achievement of bladder control among residents.

#### The Sample

The sample consisted of the total nursing staffs of two Fort Worth, Texas, proprietary nursing homes. Both homes are licensed as skilled nursing facilities. The two facilities have received excellent yearly inspection reports from state regulatory agencies. This could suggest that the homes are not representative of nursing homes throughout the country. It could indicate that if the conditions of helplessness and urinary incontinence are problems in exemplary homes they may exist to an even



greater degree in homes which are considered as minimum or less than adequate.

The entire nursing staff in each home was invited to participate in the study. It was anticipated that this approach would provide two groups of no less than 30 members each. The home with a total nursing staff size of 42 was arbitrarily assigned as the control group. The experimental home had a nursing staff of 70 professionals and paraprofessionals. A total nursing staff sample of 57 was realized. One hundred and twenty five residents were involved.

The varying sizes of the two homes determined which facility would receive the experimental treatment and which would be the control group. Because the participants in the short-term training would later be categorized according to their success or failure at reaching their goals, the home with the larger staff was designated as the experimental group.

Pretest scores and absenteeism measures were used to estimate the similarities between the two homes.

#### The Instruments

The Beck Depression Inventory has been validated by numerous researchers as appropriate for both research and

clinical use (2). The 21-item questionnaire is described by its author as having the potential to give a rapid assessment of the severity of depression. The instrument can also highlight problem areas such as feelings of failure or the belief that one is helpless to do anything (See Appendix A).

The categories of the inventory describe specific behavioral manifestations of depression.

Specific categories are

mood	social withdrawal
pessimism	indecisiveness
sense of failure	distortion of body image
lack of satisfaction	work inhibition
guilty feeling	sleep disturbance
sense of punishment	fatigability
self dislike	loss of appetite
self accusations	weight loss
suicidal wishes	somatic preoccupation
crying spells	loss of libido
irritability	

By using the Kruskal-Wallis Non-Parametric Analysis of Variance by Ranks, Beck showed that all categories of the instrument related significantly to the total inventory score. Significance was beyond the .001 level for all but

the weight-loss category, which was significant at the .01 level (2).

Internal consistency was further determined by the split-half reliability method. The Pearson correlation was computed between odd and even categories and yielded a reliability coefficient of .86. With a Spearman-Brown correction, the coefficient was .93 (2).

Changes in inventory scores tended to parallel changes in clinical ratings of depression which reflected a consistent relationship between the instrument and the subject's clinical state.

The means and standard deviations of Depression Inventory (DI) scores were compared among four groups categorized by depth of depression as none, mild, moderate, and severe. As increments occurred in the magnitude of depression, progressively higher mean scores were obtained. The Kruskal-Wallis One-Way Analysis of Variance by Ranks was used to evaluate the statistical significance of findings. Reported differences were significant at .0001 level (2).

A product moment correlation of .75 was found between the DI and the depression scale of the Minnesota Multiphasic Personality Inventory (MMPI) in a study by Nussbaum (2).

The basic theory of depression as described by Beck postulated that persons scoring high on the inventory have

had life experiences during their developmental period that predisposed them to later react to stress by the appearance or exacerbation of depressive symptomatology. The major predictions were that the most depressed persons were likely to (1) have dreams characterized as masochistic; (2) have a negative self concept; (3) identify with the "loser" on projective tests about success and failure; (4) have had a childhood history of deprivation that sensitized them to depression later in life; and (5) respond to experimentally induced failure with a disproportionate loss of self-esteem and an increase in hopelessness. Using the Depression Inventory as a criterion measure, the hypotheses have been largely supported.

Another index of construct validity is the prediction of patients' responses to antidepressant drugs. Patients who scored in the depressed range (13 or 14 and above) on the DI had significant decreases in their scores after being administered imipramine, a tricyclic antidepressant. The changes in scores also paralleled clinical improvement (2).

In terms of the influence of extraneous variables upon DI scores, significant correlations ( $p < .01$ ) have been obtained between depression, sex, and education. Women have a tendency to be more depressed than men. A negative

correlation has been found between level of education and depression (2).

Snyder Self Monitoring Scale was developed to measure the extent to which individuals differ in their selection of dispositional or situational cues to guide their social behaviors (See Appendix B).

Using the Kuder-Richardson Formula 20, a reliability coefficient of .70 was obtained. A test-retest reliability coefficient of .83 ( $p < .001$ ) has been reported (7).

Snyder (7) presented data to support the validity of the instrument in the form of comparisons with other instruments. Slightly negative relationships were found between the self-monitoring scale, the Marlow-Crowne Social Desirability Scale, and the Minnesota Multiphasic Personality Inventory Psychopathic Deviate Scale. The self-monitoring scale was unrelated to scales measuring Machiavellianism, achievement anxiety, and inner-other directedness. Findings were interpreted to mean that the scale measures a phenomenon independent of the other variables.

Other studies provide further evidence of the instrument's validity. High self-monitoring individuals were described by their peers as being good at learning socially appropriate behaviors, having good self control

and using their knowledge to successfully create their desired impressions. Theater actors scored higher and psychiatric patients scored lower than did university students on the self-monitoring scale. High self-monitors did better than did low scorers in expressing both vocal and facial behaviors. During a self-presentation task, high self-monitors were more likely than low monitors to seek out social comparison data about their peers (7).

Digit Span Subtest of Wechsler Adult Intelligence Scale (WAIS) was used in this study as a measure of cognitive functioning; specifically, short-term memory (See Appendix C).

Reliability for the subtest has been determined from the correlation between Digits Forward and Digits Backward scores (N=1700). Coefficients were in the .60's for three age groups: 18-19, 24-34, and 45-54 (1). Criterion-related validity has repeatedly been shown by correlations with performance ratings, academic grades, and other well-known intelligence scales (1).

Physical Self-Maintenance Scale. The Lawton and Brody Scale (1969) is an adaption of a scale developed earlier at the Langley-Porter Neuropsychiatric Institute by Simon, Lowenthal, and their associates (5). Observers are asked to rate an individual according to competence in

toileting, feeding, dressing, grooming, locomoting, and bathing (See Appendix D).

The instrument's form grew out of a desire for a measure of concrete behavior that was generally free of technical jargon. Because the progress of older persons is often minimal in terms of complete cures, this tool which emphasizes minimal progress is important.

The scale has demonstrated utility in widely diverse settings. Moderate correlations with other measures of patient status indicate the validity of the instrument.

Bladder Control Survey. A one-page, short-answer form was developed to ascertain if nurses considered urinary incontinence to be a problem and to identify what factors they believed to most directly affect bladder control. Subjects were also asked their length of employment within a nursing home (See Appendix E).

Absenteeism and turnover are commonly used indicators of employees' performance. As such, the two variables may be associated with the quality of care.

To determine the extent of absenteeism within each group, the number of days missed by each individual was first calculated. The mean number of days missed by the group was then figured.

The extent of turnover per group was described by counting the number of staff who either quit or were fired and the number which remained.

Urinary incontinence may be assessed at a variety of symptomatology levels. When discussing the relationship of nursing care to incontinence, it is important that the measure be one which has meaning for both nurses and residents. Such a measure is the frequency of changes required to outer personal garments, bed linens, or chair pads due to urinary mishaps.

Incontinence may be viewed as a continuous variable with infinite gradations of pathology, but its measurement is often in discreet terms, as in this study. A measure was taken during the month prior to the experimental treatment, and during the month afterwards, of the numbers of required changes in residents' personal garments, bed linens, or chair pads due to leakage of urine from the urethra or from improperly maintained drainage equipment.

#### Procedures for Collection of Data

Questionnaire Administration. All questionnaires, both pre-treatment and post-treatment, were administered by either the Director of Nursing Service of one of the homes or the Director of Inservice Training for both homes.



Both persons were told that the researcher was studying the effectiveness of a particular training program. Each knew that short-term training would be conducted between the two times of questionnaire administration. Neither person was aware of specific research questions.

Arrangements were made for all pretreatment data to be collected prior to the training. One month following the second training session, post-treatment data were to be gathered. Two weeks were allowed for both pre- and post-treatment data collection.

All forms, with the exception of the Digits Forward and Backward Scales, were administered in small groups at the nursing homes. The WAIS scales were administered on an individual basis.

An informed consent paper was affixed to the top of each battery of instruments. Subjects were asked to read and sign the form before responding to any of the instruments. It was explained by the questionnaire administrator that participation in the study was voluntary and that all information would be handled in a strictly confidential manner. Persons were informed that a general description of the findings and discussion would be available once the final report was written and approved by the researcher's advisory committee.

Tabulation of Nursing and Resident Data. The Director of Nursing Services at each home calculated the absenteeism and turnover figures for the one-month period preceding the training. The same information was obtained for the one-month period following the second training session.

Using the definition of incontinence selected for this study, individual nursing staff members rated residents as continent or incontinent. The measurement rating of residents was supervised by the Director of Nursing Services at each home. Nursing care assignments were held constant during the project so that between-group comparisons could be made with regard to residents' urinary incontinence.

Although urinary incontinence was the resident measure of helplessness selected, it was recognized that knowledge of additional physical responses would yield a more holistic picture of the relationships among staff training, helplessness, and resident outcomes. The Lawton and Brody Scale was selected to measure resident competence, not only in toileting, but in feeding, dressing, grooming, locomotion, and bathing. The Directors of Nursing Services delegated the completion of the scale to supervisory staff on each nursing unit. The nursing supervisors then observed and recorded the residents' levels of independence

and control in each of the six areas during the same weeks that the other measures were being obtained.

Observations. Two persons were employed as non-biased observers. Selection requirements were

1. Trustworthiness (as perceived by researcher);
2. Observation, recording skills;
3. Lack of expressed bias toward nursing homes;
4. Flexible schedule;
5. Agreement to maintain confidentiality of the facilities, employees, and residents;
6. Willingness to work for \$4 per hour; and travel expenses.

Both observers were public school teachers. Pre-employment interviews with the researcher indicated that they met all of the selection requirements.

The researcher met with the two individuals to describe the nature of their assignments. The overall project was presented as an examination of nursing care problems in nursing homes. The problem of urinary incontinence was given as an example. Specific behavioral and situational matters to observe were discussed. Two 45-minute role-play sessions were conducted by the researcher and observers prior to the actual observation experiences. No major differences were noted in the way the observers responded to cases presented.

While at the two nursing homes, the observers presented themselves to residents as visitors. A designated staff person introduced the observers at each nursing unit as "ladies who are visiting the homes as part of a course in aging". No specific relationship between the observers, the collection of other data, or the short-term training was indicated to either staff. However, the nursing home administrators and directors of nursing services were fully informed of the arrangements.

A brief observation form was completed for each resident observed. The areas of attention were: resident activity, resident-nurse interactions, use of call lights, fluid intake, urine control, and general comments (See Appendix F). The observations were recorded outside the residents' rooms or in the dining areas immediately following the interactions.

Two days were spent in each home prior to the training and two days afterwards. The observers were told that they needed to make observations early and late in the project. They were not told the specific nature of other project activities or of group divisions.

#### The Short-Term Training

Original plans were to teach the Seminar for Successful Goal Planning as two one-hour sessions with a

short break in between. However, the nursing home specifically requested that each total session be limited to one hour so that their time and pay schedules would not be affected. Thus, the two one-hour sessions were conducted two weeks apart at the times of regularly scheduled meetings.

The objective of the seminar was to have staff state specific goals for reducing urinary incontinence among residents. A definite process for reaching goals was discussed.

A series of eight overhead transparencies were used to guide discussions. Content was organized as follows:

- The Desire to Succeed
- Why Goals Contribute to Success
- How to Set Goals
- Seven Steps to Reaching Goals
- Seven Steps to a Successful, Rewarding Life
- Helping Residents Meet Goals
- The Goal of Bladder Control

Terminology and examples from Ziglar's book, See You at the Top (8) were utilized in organizing the presentation.

At the close of the first session, participants were guided to state specific goals for reducing urinary incontinence among residents. Goals were stated in terms of specific residents whom the staff planned to help gain

bladder control by one month after session two. The goals were recorded and signed by each staff member.

One month following session two, the Director of Nursing Services determined which residents were incontinent. She then identified which nursing staff members had reached their goals. Nursing staff members received a note from the researcher either complimenting them for reaching their goals or encouraging those who did not reach their goals to revise their plans as an effort for succeeding during the coming year.

#### Procedures for Analysis of Data

Data analysis for each of the four research questions is described below. A significance level of .05 was utilized in the analysis of all data.

Question 1. Will levels of depression, as measured by the Beck Depression Inventory, decrease significantly in (a) a group of nursing staff exposed to short-term training and which succeeds in its stated goal of decreased urinary incontinence among residents as opposed to (b) a group exposed to short-term training but which fails to achieve its stated goal of decreased urinary incontinence among residents, and to (c) a group not exposed to short-term training or asked to affirm the goal of decreasing urinary incontinence among residents?

Analysis of covariance was used to determine if a significant difference existed in the adjusted means of the three groups on the Beck Depression Inventory. The analysis of covariance procedure was selected in order to statistically control or match the control and experimental groups with respect to pretest scores on the instrument (6, p. 351).

Question 2. Will levels of self monitoring, and short-term memory, as measured by the Snyder Self Monitoring Scale and the Digit Span component of the Wechsler Adult Intelligence Scale, increase significantly in (a) a group of nursing staff exposed to short-term training and which succeeds in its stated goal of decreased urinary incontinence among residents as opposed to (b) a group exposed to short-term training but which fails to achieve its stated goal of decreased urinary incontinence among residents, and to (c) a group not exposed to short-term training or asked to affirm the goal of decreasing urinary incontinence among residents?

This question was also answered via data treated with analysis of covariance.

Question 3. After training, will job absenteeism and personnel turnover differ significantly among the three nursing groups?

Analysis of covariance was again used to determine if, after treatment, a significant difference existed among the three groups in terms of the adjusted means on job absenteeism.

The relationship between group membership (one of the three nursing groups) and personnel turnover was measured by the chi-square contingency test (6).

Question 4. When measured before staff training and approximately one month afterwards, will the group of residents cared for by the experimental groups differ significantly in the numbers of incontinent residents from the resident group assigned to the control group for care?

Nonparametric tests of significance (chi-square and Cochran Q test) were used to determine if a relationship existed between membership in the group of residents treated by either the experimental or control groups of nurses and being identified as continent or incontinent. Also, it was determined if this relationship changed from time one until time two.



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## CHAPTER IV

### RESULTS

Data were analyzed in accordance with each research question and resulted in separate categories of data for the nursing staffs and for the residents. In addition, secondary analyses were done to identify interactions not reflected by the analyses of covariance or chi-square tests. The findings are reported sequentially by research question, with secondary analyses following the primary tests as outlined in Chapter Three.

Question one asked if a short-term training program, followed by success or failure in goal attainment, would significantly impact levels of depression among nursing staff. The mean scores and standard deviations for the nursing groups are in Table I. Also in Table I are the findings concerning self-monitoring, short-term memory, and absenteeism which stemmed from questions two and three.

Overall, the groups did not change as predicted. Depression decreased in all groups while all components of short-term memory showed improvement. Little change in self-monitoring was reflected across groups. Absenteeism did increase in the failure and control groups but decreased in the success group.

TABLE I  
 GROUP MEANS AND STANDARD DEVIATIONS ON DEPRESSION, SELF-MONITORING,  
 SHORT-TERM MEMORY, AND ABSENTEEISM FOR NURSES  
 AT TIMES ONE AND TWO

Dependent Variable	Success Group						Failure Group						Control Group					
	T <sub>1</sub>		T <sub>2</sub>		T <sub>1</sub>		T <sub>2</sub>		T <sub>1</sub>		T <sub>2</sub>		T <sub>1</sub>		T <sub>2</sub>			
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD		
Depression	5.69	4.55	3.93	3.47	9.54	8.23	7.85	7.35	8.05	9.28	3.50	2.58						
Self-Monitoring	9.30	3.96	9.33	3.37	10.00	4.01	9.90	4.65	7.88	2.69	7.33	2.63						
Short-Term Memory	5.07	1.44	6.57	1.69	5.33	1.65	6.52	1.57	5.11	1.36	7.60	1.07						
Digits Forward	3.38	0.96	4.28	1.81	3.45	1.06	4.47	1.46	3.72	0.82	5.00	1.05						
Digits Backward	8.46	2.18	10.85	3.25	8.79	2.16	11.00	2.74	8.83	1.94	12.60	1.83						
Total																		
Absenteeism	0.64	1.15	0.26	1.03	0.70	1.08	1.29	1.78	0.55	.98	1.61	2.56						

Analysis of covariance, with pretests as covariates, was used to compare the nursing groups on depression, short-term memory, self-monitoring, and absenteeism. The findings are in Table II.

TABLE II  
ANALYSIS OF COVARIANCE: COMPARISON OF GROUPS  
ON DEPRESSION, SELF-MONITORING, SHORT-  
TERM MEMORY AND ABSENTEEISM\*

Source	df	MS	F
Depression			
covariates	1	606.15	11.47**
main effects	2	13.60	.25
Self-Monitoring			
covariates	1	307.40	35.35**
main effects	2	.96	.11
Short-Term Memory			
Digits Forward			
covariates	1	9.29	4.25**
main effects	2	4.44	2.03
Digits Backward			
covariates	1	16.41	8.16**
main effects	2	.73	.36
Total			
covariates	1	34.90	9.55**
main effects	2	.07	.01
Absenteeism			
covariates	1	23.53	44.53**
main effects	2	1.00	1.89

\*Pretest scores are covariates      \*\*p<.05

No statistically significant differences among the groups on any of the dependent variables were found. A 2X3 repeated measures analysis of variance was used to determine if in addition to the initial group differences (suggested by the significant covariate effects) there were interactions between group membership and time of testing. These findings appear in Table III.

TABLE III  
ANALYSIS OF VARIANCE IN DEPRESSION, SELF-MONITORING,  
SHORT-TERM MEMORY, AND ABSENTEEISM  
FOR NURSING GROUPS\*

Source	df	MS	F
Depression			
Between Subject	56	.....	.....
B (groups)	2	124.38	2.09
Error B	54	59.35	.....
Within Subjects	57	.....	.....
A (treatments)	1	244.07	7.99*
AB (interaction)	2	35.60	1.16
Error within	54	30.54	.....
Self-Monitoring			
Between Subject	56	.....	.....
B (groups)	2	46.28	1.79
Error B	54	25.81	.....
Within Subjects	57	.....	.....
A (treatments)	1	15.59	1.48
AB (interaction)	2	28.02	2.66
Error within	54	10.52	.....

\*p < .05

TABLE III--Continued

Source	df	MS	F
Short-Term Memory			
Digits Forward			
Between Subject	56	.....	.....
B (groups)	2	4.27	0.56
Error B	54	7.55	.....
Within Subjects	57	.....	.....
A (treatments)	1	1.40	.24
AB (interaction)	2	16.79	2.87
Error within	54	5.83	.....
Digits Backward			
Between Subject	56	.....	.....
B (groups)	2	.67	.19
Error B	54	3.40	.....
Within Subjects	57	.....	.....
A (treatments)	1	.12	.037
AB (interaction)	2	9.25	2.71
Error within	54	3.40	.....
Total			
Between Subjects	56	.....	.....
B (groups)	2	8.30	0.42
Error B	54	19.42	.....
Within Subjects	57	.....	.....
A (treatments)	1	2.38	.14
AB (interaction)	2	50.10	2.99*
Error within	54	16.72	.....
Absenteeism			
Between Subjects	56	.....	.....
B (groups)	2	4.57	1.85
Error B	54	2.46	.....
Within Subjects	57	.....	.....
A (treatments)	1	5.20	2.19
AB (interaction)	2	4.56	1.92
Error within	54	2.37	.....

\*p&lt;.05

The only variable in which groups differed according to time of testing was total short-term memory. Interestingly, all groups were significantly less depressed after the training.

The planned statistical comparisons of groups in terms of job turnover were not needed because there was no turnover among the groups during the period being considered.

Because of the possibility that the three groups would consciously differ in their beliefs about how successful they had been, or could be, in improving resident bladder control and in their causal attributions, the Bladder Control Survey was administered. Findings from the survey are reported in Table IV.

TABLE IV  
RESULTS OF THE BLADDER CONTROL SURVEY;  
2X3 ANOVA REPEATED MEASURES\*

Source	df	MS	F
Major Nursing Care Problem			
Between Subject	56	...	...
B (groups)	2	0.50	0.61
Error B	54	.82	...
Within Subjects	57	...	...
A (treatments)	1	1.71	2.21
AB (interaction)	2	.44	0.57
Error within	54	0.77	...

\*p<.05

TABLE IV--Continued

Source	df	MS	F
<b>Reduction on Incontinence</b>			
Between Subject	56	...	...
B (groups)	2	0.65	0.72
Error B	54	.90	...
Within Subjects	57	...	...
A (treatments)	1	6.53	7.84*
AB (interaction)	2	.64	.77
Error within	54	0.83	...
<b>Satisfaction with Success</b>			
Between Subject	56	...	...
B (groups)	2	2.08	1.43
Error B	54	1.44	...
Within Subjects	57	...	...
A (treatments)	1	1.27	.33
AB (interaction)	2	.80	0.55
Error within	54	1.35	...
<b>Nursing Skills</b>			
Between Subject	56	...	...
B (groups)	2	2.84	1.18
Error B	54	2.40	...
Within Subjects	57	...	...
A (treatments)	1	6.53	3.98*
AB (interactions)	2	6.79	4.13*
Error Within	54	1.64	...
<b>Luck</b>			
Between Subject	56	...	...
B (groups)	2	0.75	0.30
Error B	54	2.49	...
Within Subjects	57	...	...
A (treatments)	1	4.59	2.21
AB (interactions)	2	2.65	1.27
Error Within	54	2.07	...

\*p&lt;.05



TABLE IV--Continued

Source	df	MS	F
Nursing Effort			
Between Subject	56	...	...
B (groups)	2	1.29	0.55
Error B	54	2.32	...
Within Subjects	57	...	...
A (treatments)	1	8.67	5.58*
AB (interactions)	2	3.47	2.23
Error within	54	1.55	...
Difficulty of Task			
Between Subject	56	...	...
B (groups)	2	4.92	2.07
Error B	54	2.37	...
Within Subjects	57	...	...
A (treatments)	1	10.13	4.48*
AB (interactions)	2	6.99	3.09*
Error within	54	2.25	...

\*p&lt;.05

The nature of the nurses' responses is clarified by the mean scores and standard deviations, as seen in Table V. In general, no significant differences were found for any of the dependent variables among the groups.

Urinary incontinence was viewed as a major nursing care problem by all groups. Expressed opinions were slightly stronger in favor of it being a major problem at time two.

TABLE V  
 GROUP MEANS AND STANDARD DEVIATIONS FROM BLADDER CONTROL SURVEY AT TIMES ONE AND TWO

Dependent Variable	Success Group						Failure Group						Control Group					
	T <sub>1</sub>			T <sub>2</sub>			T <sub>1</sub>			T <sub>2</sub>			T <sub>1</sub>			T <sub>2</sub>		
	N	SD	M	N	SD	M	N	SD	M	N	SD	M	N	SD	M	N	SD	M
Major Nursing Care Problem	1.84	1.14	1.60	1.60	0.50	1.79	0.97	1.65	0.81	1.55	0.70	1.46	0.51	1.55	0.70	1.46	0.51	1.55
Reduction of Incontinence	2.38	1.12	1.86	1.86	.51	2.04	.80	1.80	.52	2.52	.87	2.00	.65	2.52	.87	2.00	.65	2.52
Satisfaction with Success	2.23	1.16	1.46	1.46	.51	2.16	1.04	2.25	1.16	2.23	1.03	2.66	1.04	2.23	1.03	2.66	1.04	2.23
Nursing Skills	2.00	1.80	2.38	2.38	1.44	2.73	1.51	1.78	1.03	1.83	1.38	1.42	.85	1.83	1.38	1.42	.85	1.83
Luck	3.15	1.28	3.30	3.30	1.25	2.91	1.24	3.16	1.24	3.00	.97	2.64	1.27	3.00	.97	2.64	1.27	3.00
Nursing Effort	2.33	1.72	2.50	2.50	1.62	2.12	1.48	1.36	.49	2.00	1.57	1.46	.83	2.00	1.57	1.46	.83	2.00
Difficulty of Task	3.00	1.70	3.23	3.23	1.36	2.60	1.55	1.77	1.11	2.55	1.46	1.92	0.99	2.55	1.46	1.92	0.99	2.55

All groups of nurses expressed more confidence, at time two, that they could reduce urinary incontinence among residents. The failure group agreed most with the statement; the success group agreed least.

The success group expressed greater satisfaction, from time one until time two, with achieved resident bladder control. Both the failure and control groups reduced slightly their levels of satisfaction with their success at resident bladder control.

Differences were observed from time one to time two across all groups in their beliefs that skills, effort, and difficulty of task all played a role in achieving bladder control. The difference was that at time two all groups were more certain that skills, effort, and difficulty of tasks affected the outcomes.

The success and failure groups were less convinced at time two that luck was an important concern. The control group was more positive at time two that luck made a difference in results.

Table VI reports data from the non biased observers. For all categories of observation, inter-rater reliability was high. While the two raters reported on the same residents, time one and time two residents differed. By not matching observation data with nursing data, a substantial sample increase was realized.

TABLE VI  
CONTINGENCY TABLE FOR OBSERVATIONS OF NURSING CARE IN BOTH HOMES\*

Observation Category	Success and Failure Group			Control Group		
	Time One	Time Two	$\chi^2$	Time One	Time Two	$\chi^2$
Resident Activity (88, 77)**						
Planned	5	2	2.87	6	4	0.86
Alert, converses	30	32		36	34	
Not oriented	20	31		23	27	
Resident Nurse interactions (70, 63)						
Work together	3	6	1.5	7	1	.97
Nurse does tasks	11	8		11	4	
Nurse to nurse	0	0		1	0	
Call Lights (86, 93)						
Answered in five minutes	39	50	.31	36	35	.01
Answered in 10-30 minutes	0	0		0	0	
Not available	9	15		29	30	
Fluids (82, 82)						
Available, resident drinks	33	42	28.83*	47	51	.7
Out of reach	4	14		14	11	
Ret in room	13	4		4	3	
Urine Control (84, 90)						
Wet, odor	4	4	.04	14	9	1.24
Dry, no odor	51	61		51	56	

\*p < .05

\*\*Numbers in parentheses indicate percentage of agreement between observers at times one and two, respectively.

Of the five observation categories, only one reflected a change in nursing care from time one until time two. The nurses who had participated in the short-term training made more fluids available in residents' rooms at time two than at time one. Encouraging fluids was emphasized during the training program.

Question four sought evidence for the effects of training and success or failure by nursing personnel upon urinary incontinence among residents. According to the chi-square test, groups of residents did not differ in levels of incontinence at times one and two (See Table VII).

TABLE VII  
CHI-SQUARE ANALYSIS OF RESIDENT LEVELS  
OF CONTINENCE/INCONTINENCE  
AT TIMES ONE AND TWO\*

Category	Success Group		Failure Group		Control Group	
	Time One	Time Two	Time One	Time Two	Time One	Time Two
Continent	9	12	12	16	3	4
Incontinent	10	7	17	13	24	23
	$X^2 = 1.42$		$X^2 = .58$		$X^2 = .16$	

\* $X^2(p < .05) = 3.84$

All three groups demonstrated an increased proportion of continent to incontinent residents from time one until time two. The largest percentage of increase was seen in the success group (sixteen per cent).

The failure and control groups increased their proportion of continent residents by fourteen and six per cent, respectively.

Further analysis of the continence/incontinence data was accomplished using the Cochran Q test (1). Findings are presented in Table VIII. Data presented refer to numbers of residents demonstrating changes in either direction.

TABLE VIII  
COCHRAN Q ANALYSIS OF CHANGES IN LEVELS  
OF CONTINENCE/INCONTINENCE  
AMONG RESIDENT GROUPS\*

Group	Incontinence/ Continenence	Continenence/ Incontinence	Q
Success	5	2	2.67
Failure	3	1	
Control	1	0	

\* $Q(p < .05) = 5.99$

In computing the Q statistic, data were dichotomized according to the direction of change in continence. A change from incontinence to continence was given the value one (1). A change in the reverse direction received a zero (0) value. No values were assigned for residents making no change in either direction.

Group sizes were not initially equivalent. In order to achieve equal sized groups, as required by the Cochran Q procedure, the appropriate numbers of residents were randomly selected out from the failure and control groups. Thus, following the randomization procedure, each group had twenty-one members.

Findings of the Cochran Q test are consistent with those of the chi-square test. Both analyses fail to demonstrate significant differences among the groups from time one until time two.

Any significant difference in levels of continence/incontinence between the success and failure groups is not readily apparent. Sixty-three per cent of the success group and fifty-five per cent of the failure group were continent at time two. Differences between the combined success and failure groups and the control group are more evident. Only fifteen per cent of the control group was continent at time two. This distinction between the

groups draws attention to short-term training as a notable independent variable.

Secondary analysis of the relationship between residents' group membership and urinary incontinence was accomplished by using the Physical Self Maintenance scores. The Physical Self Maintenance Scale measures residents' levels of independence in toileting, feeding, dressing, grooming, physical ambulation, and bathing activities. Conceivably, if nursing care with regard to bladder control improves, then a comparable effect can be anticipated in other areas of functioning.

Table IX shows the mean scores and standard deviations for residents in the success, failure, and control groups. Any mean score can range from one to five. A rating of one indicates the highest possible level of self-maintenance. A score of five depicts total dependency.

For all six categories of self-maintenance, groups ranked in the same order. The success group reported the greatest degree of self-maintenance. The failure group ranked second and the control group last.



TABLE IX  
 GROUP MEANS, STANDARD DEVIATIONS FOR SIX RESIDENT FUNCTIONS AT TIMES ONE AND TWO

Dependent Variable	Success Group						Failure Group						Control Group						
	T <sub>1</sub>			T <sub>2</sub>			T <sub>1</sub>			T <sub>2</sub>			T <sub>1</sub>			T <sub>2</sub>			
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	
Toileting	2.11	2.17	3.13	1.58	2.92	2.19	3.19	1.81	4.29	1.57	4.05	1.85	2.19	3.19	1.81	4.29	1.57	4.05	1.85
Feeding	1.27	1.61	2.44	1.50	2.19	1.93	2.69	1.66	3.56	1.80	3.43	1.84	2.19	2.69	1.66	3.56	1.80	3.43	1.84
Dressing	2.11	2.12	3.19	1.47	2.57	2.01	3.36	1.53	4.02	1.60	3.86	1.79	2.57	3.36	1.53	4.02	1.60	3.86	1.79
Grooming	2.19	2.10	3.33	1.17	2.73	1.95	3.30	1.43	3.91	1.58	3.64	1.73	2.73	3.30	1.43	3.91	1.58	3.64	1.73
Physical Ambulation	1.88	1.87	3.22	1.22	2.53	1.88	3.30	1.59	4.10	1.64	3.86	1.84	2.53	3.30	1.59	4.10	1.64	3.86	1.84
Bathing	2.13	2.08	3.11	1.34	2.71	1.96	3.28	1.48	3.89	1.48	3.67	1.71	2.71	3.28	1.48	3.89	1.48	3.67	1.71

The three groups were compared on each measure of self-maintenance using a 3X2 analysis of variance with repeated measures. As Table X reflects, groups differed significantly in each category.

TABLE X  
ANALYSIS OF VARIANCE OF SIX RESIDENT FUNCTIONS  
IN THREE GROUPS AT TWO TIMES\*

Source	df	MS	F
<b>Toileting</b>			
Between Subject	124	...	...
B (groups)	2	51.88	13.81*
Error B	122	3.75	...
Within Subjects	125	...	...
A (treatments)	1	7.49	2.16
AB (interaction)	2	8.28	2.38
Error within	122	3.46	...
<b>Feeding</b>			
Between Subject	124	...	...
B (groups)	2	55.95	13.92*
Error B	122	4.01	...
Within Subjects	125	...	...
A (treatments)	1	15.84	7.69*
AB (interaction)	2	8.58	4.17*
Error within	122	2.05	...
<b>Dressing</b>			
Between Subject	124	...	...
B (groups)	2	36.79	10.24*
Error B	122	3.59	...
Within Subjects	125	...	...
A (treatments)	1	19.73	7.27*
AB (interaction)	2	8.58	3.16*
Error within	122	2.71	...

\*p<.05

TABLE X--Continued

Source	df	MS	F
<b>Grooming</b>			
Between Subject	124	...	...
B (groups)	2	22.82	7.27*
Error B	122	3.13	...
Within Subjects	125	...	...
A (treatments)	1	14.11	5.39*
AB (interaction)	2	10.19	3.89*
Error within	122	2.61	...
<b>Physical Ambulation</b>			
Between Subject	124	...	...
B (groups)	2	44.75	13.87*
Error B	122	3.22	...
Within Subjects	125	...	...
A (treatments)	1	23.34	9.12*
AB (interaction)	2	12.92	5.05*
Error within	122	2.55	...
<b>Bathing</b>			
Between Subject	124	...	...
B (groups)	2	28.33	9.55*
Error B	122	2.96	...
Within Subjects	125	...	...
A (treatments)	1	11.99	4.19*
AB (interaction)	2	7.42	2.59*
Error within	122	2.86	...

\*p&lt;.05

Residents also differed significantly across groups at times one and two in all aspects of self-maintenance except toileting. Likewise, significant interactions between group membership and time of testing were reported in all but the toileting category.

Further analysis, using Tukey's Honestly Significant Difference Multiple Range Test, made clear that differences were not between groups one and two but between the two groups exposed to training and the control group (See Table XI).

TABLE XI

TUKEY'S HONESTLY SIGNIFICANT DIFFERENCES RANGE TEST  
OF PHYSICAL SELF-MAINTENANCE MEANS  
OF THE THREE RESIDENT GROUPS\*

Means	Success Group	Failure Group	Control Group
Toileting			
One    2.62	...	0.43	1.55*
Two    3.05	...	...	1.11*
Three  4.17	...	...	...
Feeding			
One    1.86	...	0.58	1.63*
Two    2.44	...	...	1.05*
Three  3.50	...	...	...
Dressing			
One    2.65	...	0.31	1.29*
Two    2.97	...	...	.97*
Three  3.94	...	...	...
Grooming			
One    2.76	...	0.25	1.01*
Two    3.01	...	...	.76*
Three  3.78	...	...	...

\* $p < .05$

TABLE XI--Continued

Means	Success Group	Failure Group	Control Group
Physical Ambulation			
One 2.55	...	0.36	1.43*
Two 2.92	...	...	1.06*
Three 3.98	...	...	...
Bathing			
One 2.62	...	0.37	1.15*
Two 3.00	...	...	.78*
Three 3.78	...	...	...

\*p&lt;.05

As stated earlier, mean scores on all measures of physical self-maintenance increased sequentially from Groups One, Two, and Three. This pattern indicated a greater degree of physical competence on the part of residents cared for by the successful nursing staff members.

The formal findings as discussed above supported the general impressions of the researcher at the training sessions and of the non biased observers. Nursing staff were very quiet during the first session with the exception of comments such as: "What's this all about?", or "I wonder what we'll be told to do?", or "I don't have time to stay; I've got to pick up my kids." At session

two, participants volunteered examples of how residents were responding. The largest amount of input was from individuals experiencing success with particular residents.

At time one, the two paid observers reported similar levels of activity on the part of both nursing staffs. At time two, the observers described noticeable differences between the nursing home staffs in terms of openness to them and in their levels of involvement with residents. Staff who had participated in the training were more open and involved.

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## CHAPTER V

### SUMMARY, FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

None of the four research questions were supported by the data analysis. Urinary incontinence was not significantly decreased among the residents cared for by the nursing staff members who had participated in the short-term training. Nor were significant differences found among the groups of nursing staff in terms of depression, self-monitoring, short-term memory, or absenteeism and personnel turnover. Supplementary analysis of nursing staffs' attributions for success or failure suggests some reasons for the findings.

Question one addressed the effect of training and success or failure upon depression among the nursing staffs. No significant effects were obtained. In fact, all groups were categorized by low depression levels at both times one and two. This is contrary to Seligman and colleagues' (1) reformulated model which suggests that the failure group's responses would have paralleled those of depressed individuals not having had the experimenter-induced helplessness experience. What actually occurred was more similar to the facilitation



effect described by Wortman and Dintzer (7). That is, the failure group's short-term memory was improved while its depression level declined. Also refuted was the reformulated model's prediction that the failure group would have lowered expectations about future successes. In this study, all three groups expressed greater confidence at time two that they could reduce urinary incontinence among residents in the future.

Assessment of the Bladder Control Survey data indicates that the groups differed in the reasons given and the accuracy of their predictions about future successes with resident bladder control. The success group was less certain at time two about the effect of nursing skill, effort and difficulty of the task. Both the failure and control groups were more certain that nursing skill, effort, and the task difficulty played important roles in accomplishing resident bladder control. These findings are consistent with those of Alloy and Abramson (2) who found that nondepressed persons who had been exposed to uncontrollable noises showed a heightened sense of control in circumstances which were noncontingent but associated with success. In the same study, nondepressed subjects who were exposed to controllable noises later judged control accurately. Depressed subjects, regardless of previous

noise experiences, accurately judged their levels of control.

In the present study, the failure and control groups' expectations for future successes would thus be interpreted as illusions of control; the success group's expressed uncertainty could represent an accurate recognition of the complexity of the problem.

Having accomplished their goals, the success group expressed greater satisfaction with their performance than did the other two groups. However, the differences were not significant. It seems that effecting changes in residents' status requires multiple concurrent inputs. While an illusion of control might be sufficient to begin certain projects, it is likely that it would not sustain the efforts necessary to see the projects through to completion. A more accurate appraisal of the requirements and expectations could encourage persistence through various types of resistance. Possibly it was this ingredient of realistic judgment about control that allowed the success group to expect more from the residents and from the environment. Thus, rather than having to be omnipotent, the success group entered into a more assertive, interactive process with residents and the environment. The failure and control groups, feeling the frustration

of thinking they should be more in control than they were, probably vacillated between dominance and dependence.

Where the illusion of control exists, it can catalyze behaviors or "innoculate" against depression. However, as long as the control is an illusion, it cannot produce lasting changes. Either the person will experience actual, repeated failures and become inactive or situations will be perceived as "too risky" and the individual, out of a fear of failure, will remain passive. The model for success then would be for individuals to appropriately evaluate their influence over given responses or outcomes. By openly monitoring their own behaviors, individuals have an objective basis for self-reinforcement, self-reward, and future responses.

Rozensky, Kravitz, and Unger (5) examined the relationship between Rehm's self-control model of depression and learned helplessness. They found that a learned helplessness experience increased the negative self-reinforcement behaviors of nondepressed subjects. Following the same type of learned helplessness experience, very mildly depressed subjects slightly increased their positive self-reinforcements and markedly decreased their negative self-reinforcements. Thus, a relationship between levels of depression and the ability to self confront seems

plausible. Conversely, the failure and control groups may inwardly have been confronting themselves negatively but have been projecting competence and confidence outwardly. The individuals would be experiencing a dissonance between their real selves and who they thought they should be. While they were outwardly saying, "I can do it; I really can," they were inwardly saying, "Oh, what am I saying, not me." These possibilities raise questions about the relationships among fear, "self-talk," confidence, overt-covert dichotomies, and learned helplessness. The Seligman model which describes learned helplessness as a type of depression is apparently inadequate to encompass the human dynamics that occur in the midst of failure or success.

The second research question asked if self-monitoring and short-term memory would increase significantly more in nurses who attained their goals of resident bladder control as opposed to nurses who failed or a control group of nurses. The three groups were not differentiated statistically by their scores. However, self-monitoring increased in the success group and decreased in the other groups. All three groups improved their short-term memory scores.

In view of the earlier comments about self-confrontation versus an illusion of control, it is possible that the success group possessed greater cue accuracy with

regard to their accomplishments and that both the failure and control groups were striving to protect their self-images by limiting feedback about failure and by substituting success at simple digit memory exercises.

Post-training differences among groups in terms of absenteeism and personnel turnover were addressed by question three. Although the success group reduced its level of absenteeism while the other two groups increased their levels, the differences were insignificant when the covariates were considered. All three homes reported a zero personnel turnover rate. This is comparable to rates of 40 to 60 per cent which are reported throughout the industry (6). The highest rates of turnover tend to occur among employees with less than one year of tenure. In the present study, the groups' length of employment ranged from 2.9 years in the success group to 3.1 years in the failure group and 3.4 years in the control group which may account in part for the apparent labor stability.

Even though the rate of absenteeism was very low, it cannot be construed to mean that job satisfaction and productivity are high. Factors such as the economy, fear of losing their jobs, negative incentives for missing work, or peer pressure could all be important variables. Essentially, research suggests that generalizations or

assumptions about absenteeism, satisfaction, and productivity are not justified (3).

Research question four explored what impact nurse participation in a short-term training program would have upon urinary incontinence among residents. The chi-square test revealed no significant differences among the three resident groups after the training. Supplementary findings, using the Physical Self-Maintenance Scale, suggested a significant difference in levels of self-care among the three groups of residents. Residents cared for by the two groups attending the training were more independent than the control group in their toileting, feeding, dressing, grooming, ambulating, and bathing. These data from the Self-Maintenance Scale support the use of short-term training programs as a part of the strategy for improving the quality of care in nursing homes.

The supplementary findings among residents, even in the absence of significant changes among the nursing groups, is consistent with the research on the relationship among satisfaction, leadership style, and productivity (4). Changes in satisfaction, turnover, and absenteeism do not always precede productivity increases. In fact, some researchers propose that increases in productivity (such as increased resident self-maintenance) lead to

improvements in employees' attitudes toward their jobs, including punctuality and tenure. In order for performance to influence employees' perspectives, feedback must occur. According to this view, unless employees find that their improved performance is recognized and rewarded in some fashion, they will become dissatisfied and less productive.

### Conclusions

Based on this study, questions are raised about the utility of the learned helplessness model as an analogue for depression. Other models and other behavioral concepts such as control, frustration, anxiety, fear, and confidence may offer equally valid explanations of the depression phenomenon.

Although positive resident outcomes were observed, short-term performance increments may not persist.

Conclusions about nursing staff members' low levels of depression and maintained cognitive abilities following a failure experience are unclear. It is likely that the individuals' perceived amounts of control are relevant. Similarly, the extent to which the persons draw their identity from the environment may influence their willingness to confront self with responsible or apathetic behaviors. If individuals have disassociated themselves from the circumstances, any specifically negative happenings will not affect them personally. Thus, no significant

relationships would be observed between performance failures and personal cognitive or affective behaviors.

According to the resident data, short-term training can change performance.

#### Recommendations

In view of the discussion about accuracy of perceived control and learned helplessness, research is needed which examines the relationship between actual levels of contingency-noncontingency, subjective judgments of control, expectations about future performance, and subsequent performance.

Studies which test for retention of effects are necessary for training to warrant major investments of capital and human resources.

Research is needed which analyzes subjects' hypothetical and personal commitment to specific resident care goals. Likewise, studies are needed which determine the extent to which individual employees obtain their identities from their jobs.

Finally, efforts are required to determine the nature of relationships among perceived control, willingness to receive feedback from self and others, actual successes and failures in practice, and behavioral concepts such as depression, anger, fear, anxiety, and confidence.



In the present study, absenteeism and personnel turnover were much lower than the industry norms. Considering the high costs of rescheduling daily work or of replacing employees and the interruptions in continuity of care, it behooves nursing homes to explore what factors are related to low turnover and absenteeism. Studies are also needed which question the relationships among absenteeism, turnover, employee satisfaction, and quality of care.

Replications of this study with larger, randomly selected samples are needed to investigate the possibilities raised by the direction of changes in urinary incontinence and by the physical self-maintenance data. Also, studies following the same design but focusing on other resident care problems are needed.

This study integrated a short-term training program that was taught without direct coordination with management. It is important that other projects be conducted which investigate the relationships among staff training, human resource management, and both employee and resident responses. Designs which include follow-up measures of retention of effects are important and needed.

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## APPENDICES

BECK INVENTORY

Name \_\_\_\_\_ Date \_\_\_\_\_

On this questionnaire are groups of statements. Please read each group of statements carefully. Then pick out the one statement in each group which best describes the way you have been feeling the PAST WEEK, INCLUDING TODAY! Circle the number beside the statement you picked. If several statements in the group seem to apply equally well, circle each one. Be sure to read all the statements in each group before making your choice.

- 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 anymore.
  - 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 weaknesses 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 anymore than usual.
  - 1 I cry more now 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 that there are permanent changes in my appearance that make me look unattractive.  
 3 I believe that I look ugly.
- 15 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.
- 16 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.
- 17 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.
- 18 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.
- 19 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 \_\_\_\_\_
- 20 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.
- 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.

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## SNYDER SELF-MONITORING SCALE

The statements concern your personal reactions to a number of different situations. No two statements are exactly alike, so consider each statement carefully before answering. If a statement is TRUE or MOSTLY TRUE for you, mark the space under T. If a statement is FALSE or NOT USUALLY TRUE as applied to you, mark the space under F. It is important that you answer as frankly and honestly as you can.

	T	F
1. I find it hard to imitate the behavior of other people.	-	-
2. My behavior is usually an expression of my true inner feelings, attitudes and beliefs.	-	-
3. At parties and social gatherings, I do not attempt to do or say things that others will like.	-	-
4. I can only argue for ideas which I already believe.	-	-
5. I can make impromptu speeches even on topics about which I have almost no information.	-	-
6. I guess I put on a show to impress or entertain people.	-	-
7. When I am uncertain how to act in a social situation, I look to the behavior of others for cues.	-	-
8. I would probably make a good actor.	-	-
9. I rarely need the advice of my friends to choose movie, books or music.	-	-
10. I sometimes appear to others to be experiencing deeper emotions than I actually am.	-	-
11. I laugh more when I watch a comedy with others than when alone.	-	-
12. In a group of people, I am rarely the center of attention.	-	-
13. In different situations and with different people, I often act like very different persons.	-	-
14. I am not particularly good at making other people like me.	-	-
15. Even if I am not enjoying myself, I often pretend to be having a good time.	-	-
16. I'm not always the person I appear to be.	-	-
17. I would not change my opinions (or the way I do things) in order to please someone else or win their favor.	-	-
18. I have considered being an entertainer.	-	-
19. In order to get along and be liked, I tend to be what people expect me to be rather than anything else.	-	-
20. I have never been good at games like charades or improvisational acting.	-	-
21. I have trouble changing my behavior to suit different people and different situations.	-	-
22. At a party I let others keep the jokes and stories going.	-	-
23. I feel a bit awkward in company and do not show up quite so well as I should.	-	-
24. I can look anyone in the eye and tell a lie with a straight face (if for a right end).	-	-
25. I may deceive people by being friendly when I really dislike them.	-	-

**DIGIT SPAN**

The following tests, Digits Forward and Digits Backward, are administered separately. For both, say the digits at the rate of one per second, not grouped. Let the pitch of voice drop with the last digit of each series. The series denotes the number of digits in an item.

**DIGITS FORWARD**

**DIRECTIONS** Start with the Trial I of Series 3 for all subjects. Begin by saying I am going to say some numbers. Listen carefully, and when I am through say them right after me. In any series, if the subject repeats Trial I correctly, proceed to the next higher series. If the subject fails Trial I, give Trial II of the same series, then proceed to the next series if he passes. The second trial of a series is given only if the first trial is failed.

**DISCONTINUE** After failure on both trials of a given series.

**SCORING** The score is the number of digits in the longest series repeated without error in Trial I or II.

Maximum score: 9

SERIES	TRIAL I	TRIAL II
(3)	5-8-2	6-9-4
(4)	6-4-3-9	7-2-8-6
(5)	4-2-7-3-1	7-5-8-3-6
(6)	6-1-9-4-7-3	3-9-2-4-8-7
(7)	5-9-1-7-4-2-8	4-1-7-9-3-8-6
(8)	5-8-1-9-2-6-4-7	3-8-2-9-5-1-7-4
(9)	2-7-5-8-6-2-5-8-4	7-1-3-9-4-2-5-6-8

**DIGITS BACKWARD**

**DIRECTIONS** Introduce this test by saying Now I am going to say some more numbers, but this time when I stop I want you to say them backwards. For example, if I say "7-1-9" what would you say?

If the subject responds correctly, say Here are some others and proceed with the test beginning with Trial I of the 3-digit Series.

If the subject does not reply correctly or fails to understand, give the right answer and another example, saying Remember you are to say them backward: 3-4-8. If the subject succeeds this time, proceed with the test using Trial I of the 3-digit Series. However, if he fails the second example, proceed with the test by giving Trial I of the 2-digit Series. If a subject passes an example but fails both trials of the 3-digit Series, go back and give the 2-digit Series, then discontinue the test.

**DISCONTINUE** After failure on both trials of a given series.

**SCORING** The score is the number of digits in the longest series repeated backwards without error in Trial I or II.

Maximum score: 8

SERIES	TRIAL I	TRIAL II
(2)	2-4	5-8
(3)	6-2-9	4-1-5
(4)	3-2-7-9	4-9-6-8
(5)	1-5-2-8-6	6-1-8-4-3
(6)	5-3-9-4-1-8	7-2-4-8-5-6
(7)	8-1-2-9-3-6-5	4-7-3-9-1-2-8
(8)	9-4-3-7-6-2-5-8	7-2-8-1-9-6-5-3

**TOTAL SCORE FOR THE DIGIT SPAN TEST** Sum of scores on Digits Forward and Digits Backward.

Maximum score: 17

from:

Wechsler, David. Manual for the Wechsler Adult Intelligence Scale. N.Y.: The Psychological Corporation, 1955.

Resident name: \_\_\_\_\_

Code Number \_\_\_\_\_

Please put a check (✓) next to the one (1) phrase that best describes the residents behavior in each category. Make sure you check (✓) one and only one phrase per category; and that each category has received or check. Thank you for your cooperation.

Category 1 (Toilet)

- \_\_\_\_\_ 1. Cares for self at toilet completely; no incontinence.
- \_\_\_\_\_ 2. Needs to be reminded, or needs help in cleaning self, or has rare (weekly at most) accidents.
- \_\_\_\_\_ 3. Soiling or wetting while asleep, more than once a week.
- \_\_\_\_\_ 4. Soiling or wetting while awake, more than once a week.
- \_\_\_\_\_ 5. No control of bowels or bladder.

Category 2 (Feeding)

- \_\_\_\_\_ 1. Eats without assistance.
- \_\_\_\_\_ 2. Eats with minor assistance at meal times, with help in preparing food or with help in cleaning up after meals.
- \_\_\_\_\_ 3. Feeds self with moderate assistance and is untidy.
- \_\_\_\_\_ 4. Requires extensive assistance for all meals.
- \_\_\_\_\_ 5. Does not feed self at all and resists efforts of others to feed him.

Category 3 ( Dressing)

- \_\_\_\_\_ 1. Dresses, undresses and selects clothes from own wardrobe.
- \_\_\_\_\_ 2. Dresses and undresses self, with minor assistance.
- \_\_\_\_\_ 3. Needs moderate assistance in dressing or selection of clothes.
- \_\_\_\_\_ 4. Needs major assistance in dressing but cooperates with efforts of others to help.
- \_\_\_\_\_ 5. Completely unable to dress self and resists efforts of others to help.

Physical Self-Maintenance Scale



Category 4 (Grooming, Ex: neatness, hair, nails, bands, face, clothing)

- \_\_\_ 1. Always neatly dressed and well-groomed, without assistance.
- \_\_\_ 2. Groom self adequately, with occasional minor assistance, e.g. in shaving.
- \_\_\_ 3. Needs moderates and regular assistance or supervision in grooming.
- \_\_\_ 4. Needs total growing care, but can remain well groomed after help from others.
- \_\_\_ 5. Actively negates all efforts of others to maintain grooming.

Category 5 (Physical Ambulation)

- \_\_\_ 1. Goes about grounds or city without assistance.
- \_\_\_ 2. Ambulates within residence or about one block distant without assistance.
- \_\_\_ 3. Ambulates with assistance, e.g., another person; railing; cane; walker; wheelchair.
- \_\_\_ 4. Sits unsupported in chair or wheelchair, but cannot propel self without help.
- \_\_\_ 5. Bedridden more than half the time.

Category 6 (Bathing)

- \_\_\_ 1. Bathes self (tub, shower, sponge bath) without help.
- \_\_\_ 2. Bathes self, with help getting in and out of tub.
- \_\_\_ 3. Washes face and hands only, but cannot bathe rest of body.
- \_\_\_ 4. Does not wash self but is cooperative with those who bathe him (her).
- \_\_\_ 5. Does not try to wash self, and resists efforts to keep him (her) clean.

## BLADDER CONTROL SURVEY

Below are several items about bladder control. Please read each item carefully. For each item, check the responses which best describes your feelings.

1. I think bladder control is a major nursing care problem.
  - strongly agree
  - agree
  - no opinion
  - disagree
  - strongly disagree
  
2. I think that I can reduce incontinence in my group of residents.
  - strongly agree
  - agree
  - no opinion
  - disagree
  - strongly disagree
  
3. I am satisfied with my degree of success in helping residents control their urine output.
  - strongly agree
  - agree
  - no opinion
  - disagree
  - strongly disagree

Below are listed four items which may or may not affect bladder control. Use the 4 point scale to indicate which items you think affect bladder control.

	strongly effects	effects	no opinion	probably no effects
Nursing Skills				
Luck				
Nursing Effort				
Difficulty of Task				

I have worked in a nursing home:
 

- less than six months
- between six months and one year
- between one and three years
- more than three years.

Name \_\_\_\_\_

Resident Activity	Planned activity	Alert, converses	Not oriented	Resident Activity	Planned activity	Alert, converses	Not oriented
Resident-nurse Interactions	Work together on resident's problem	Nurse does tasks	Nurse talks to other nurses	Resident-Nurse Interactions	Work together on resident's problem	Nurse does tasks	Nurse talks to other nurses
Call lights	Answered within 5 minutes	Answered between 10 & 30 minutes	Answered after 30 minutes	Call lights	Answered within 5 minutes	Answered between 10 & 30 minutes	Answered after 30 minutes
Fluids	Available, resident drinks	In room, out of reach	Not available	Fluids	Available, resident drinks	In room, out of reach	Not available
Urine Control	Clothing, linens wet, Urine odor		Appears dry, clean, no odor	Urine Control	Clothing, linens wet, Urine odor	Appears dry, clean, no odor	

Comments:

Resident's Name: \_\_\_\_\_

Resident's Name: \_\_\_\_\_

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