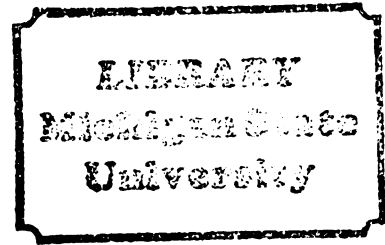




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IMPACT OF CONSULTATION AND TRAINING ON AREA
NURSING HOME STAFF: AN EVALUATION
APPROACH

By

Hilton T. Thomas

A DISSERTATION

Submitted to
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ABSTRACT

IMPACT OF CONSULTATION AND TRAINING ON AREA NURSING HOME STAFF: AN EVALUATION APPROACH

By

Hilton T. Thomas

The purpose of this study was twofold: first, to evaluate the impact of training and consultation on nursing home staff; second, to validate a subjective change methodology. The training was designed to help nursing home staff with problems associated with working with the elderly. The subjective change methodology was a less expensive, less complicated, more treatment specific method of evaluating the effects of such training.

The participants were employees of ten nursing homes in the Clinton-Eaton-Ingham County area. The nursing homes were randomly assigned to experimental and control groups. The nursing homes assigned to the experimental group received a seven-week training program. At the beginning and conclusion of the training program both groups were administered attitude and knowledge measures. The subjective change instrument was administered only to staff who had received treatment. The subjective change

instrument was administered only to staff who had received treatment. The subjective change items were designed to assess specific goals. The participants were asked to assess in retrospect their before- and after-training levels on the items. The supervisors of those staff trained were also asked to assess in retrospect the before and after training levels of their staffs.

Several problems such as loss of participants and inequality of groups on the pretest measures seriously hampered the efficacy of the design. To the extent possible, initial differences were corrected by analyses of covariance.

The outcome analysis of attitudes and knowledge did not demonstrate a treatment effect. The breakdown of the experimental design was discussed in detail. It was not possible to come to any reasonable conclusions about the effectiveness of the training.

Change that did occur on some measures was predicted significantly by the subjective change instrument. The supervisors ratings of change did not differ from their staff's ratings of change. Thus, the subjective change instrument may have future usefulness in evaluating this type of training. However, more study of the instrument's limitation is needed.

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INTRODUCTION

And that which should accompany old age, as honor,
love, obedience, troops of friends. . . .

Macbeth V, III

Old age, a time of reward for a life of toil and turmoil a time of rest, respect, and joy. Is this not the carrot that is dangled before the nose of millions of people and pulls them through times that might otherwise be discouraging? Fishing in Florida, the retirement center in Arizona, thirty and out, professor emeritus, vested pension rights, are just a few of the retirement dreams that people hope to experience as part of their golden years.

Old age and the dying process have received considerable attention in recent years. People have not begun to age only recently, so why has the aging process become such a focal area in the last few years? Why, now more than ever, do many state emphatically that not enough attention is paid to the concern of the elderly when more consideration is given? (cf. Riley, 1971; Stirner, 1977; Blank, 1979). These questions and many more like them have been topics of countless workshops, symposia, and studies.

The aged, themselves, have become more vocal, political, and strong in numbers, and they have provided the impetus for the search for answers to these questions. This is due, in part, to the fact that the elderly now comprise a larger percentage of the population than ever before. There are reported to be in excess of 22 million people in the United States who are 65 or older. Ten million are over 73; and a million over 85 years of age (Butler & Lewis, 1977). These numbers have increased significantly in this century due to medical and technological advances which have increased life spans. The average life expectancy has increased from 47 years of age to 71 years of age since 1900. In 1900 those over 65 composed 4% of the nation's population; today they represent 10% and are growing in numbers (Butler & Lewis, 1977). As the number of elderly has increased beyond society's capacity to deal with them, services have been found to be lacking. Blythe (1979) stated that today's generation of elderly are the first generation to live out their threescore and ten. The social space previously allocated for the elderly has become crowded and is constantly being encroached upon. Technology has advanced to a point where the average life span has increased, but further technology is needed to enhance the quality of life. Many of today's elderly are self-sufficient and functional, some nearly as functional as they have been for the last twenty years. Others find

themselves marginally impaired in sight, hearing, or perhaps some other organic functioning. Some of these individuals are able to carry on their daily needs and function with minimal support. Others experience organic and physical impairment to a degree that they are not able to meet their daily needs and require major support from others. In fact, the elderly are as diverse in their needs as are those under 65. There are characteristics that are associated with age, but physical functioning is by no means a perfect linear function of age. Individual differences is not a concept that dissipates at 65. A somewhat extreme, but illustrative, analogy might be the use of the information that one is a New Yorker or Californian in assessing one's physical or emotional state. Certain stereotypes, and, in some cases, truisms, exist about people who reside in these areas of the country; however, no competent health care professional would rely on these stereotypes as evidence in assessing one's physical or emotional state. As preposterous as this may sound, this is nearly what happens to the elderly when they encounter health care professionals. Whatever symptomology the elderly person may be exhibiting becomes colored significantly by age. Age specific phenomena are important in looking at the total picture of an individual, but should not be used at the cost of discounting or ignoring other information. The tendency for this

stereotyping is widespread, yet those health care professionals who see a large number of elderly people may have a greater likelihood to see "old" (Wolk & Wolk, 1971; Solomon & Vickers, 1979). On the other hand, there are professionals who encounter large numbers of elderly people, especially those who are sensitive to and/or trained in gerontological issues, who are more likely than anyone to discern true problems of the elderly (Wilkite & Johnson, 1976; Wolk & Wolk, 1971). That is to say: (1) familiarity can breed contempt, or (2) familiarity with sensitivity can lead to understanding. The difference in the above two outcomes is knowledge and attitudes. The difference in how elderly are treated depends on how well professionals are acquainted with gerontological issues and the attitudes they have about the aged. As stated above, professionals who see large numbers of elderly individuals without gerontological knowledge and positive attitudes can become contemptuous. One setting where a large proportion, if not all, patients are elderly, is in the nation's nursing homes.

Some of the problems facing the elderly who live in nursing homes are discussed below. Following this discussion, a program designed to remediate these problems is explained.

The problems considered are: deterioration, multiple losses, depression, and lack of training and poor attitudes of health care professionals.

Life in Nursing Homes

A large portion of the elderly will spend many of their twilight years in one of the nation's nursing homes. Nursing homes are used by 4% of the population 65 years of age or older (Riley & Foner, 1968). However, this statistic bears further interpretation. The chance or probability of one older person's residing in a nursing home is not 4%, although the utilization of nursing homes by the aged is 4%. The number of elderly residing in nursing homes at any given time is 4%, but a greater portion pass through nursing homes at some point before death. In a study which examined death certificates of those 65 or older in metropolitan Detroit, Kastenbaum and Candy (1973) found that 20% of these people died in nursing homes. Though only 4% of the elderly are found in nursing homes at any one time, as many as 20% of them may die there! These findings were supported by Ingram & Barry (1977) in a national study over a ten-year period. In another longitudinal study, Vincente, Wiley and Caraington (1979) estimated the risk of institutionalization before death. The records of individuals aged 55 and older who participated in a survey in 1965 and who

died by 1975 were examined for any stay in nursing homes. Of these people, 39% entered a nursing home or convalescent hospital at least once in this ten-year period. Those who remained in nursing homes or convalescent hospitals for six months or more represented 15% of the sample population.

The 4% figure (Kastenbaum & Candy, 1973) is not false if one is looking at the number of elderly in nursing homes at any one time. However, if one is predicting the probability of an elderly individual entering a nursing home, something as high as 39% might be a more realistic figure. These figures reflect the fact that a surprising number of elderly who had prepared to be elsewhere, find themselves in nursing homes. In light of the fact that many elderly will not live their golden years as they had planned but instead will enter one of the nation's nursing homes, what can be done to ease their disappointment? To make nursing home stay enjoyable might be somewhat ambitious and unrealistic. However, nursing homes need not be dreaded and seen only as wait stations for death.

What can be done to make these homes tolerable and acceptable, if not enjoyable? In general, the expressed quality of life needs of many of the elderly are not unlike those of younger members of the population. However, this is not true without exception. In a study by Flanagan (1978), different men and women were surveyed

at ages 30, 50, and 70 to ascertain what was important to their quality of life. Quality of life incidents were sorted into 15 categories which were further sorted into five groupings: (1) physical and material well being, (2) relations with other people, (3) social, community, and civic activities, (4) personal development and fulfillment, and (5) recreation. Individuals of 50 and 70 years of age reported more concern over government and public affairs than did 30 year olds. Men of thirty were more concerned with formal or informal learning than were 50 year old men, and both of these age groups expressed more interest in learning than 70 year old men. This relationship of age to concern with learning was true for women, but the differences were not quite as pronounced.

Work was viewed as important among 30 and 50 year olds, but not as much by 70 year olds. Close friends for 70 year old women were reported as more important than for men at that age or women and men at 30 and 50 years of age. Close relationships with a spouse or persons of the opposite sex are markedly lower for women at age 70 than for men at the same age or for women and men at age 30 and 50. Material comforts were reported to be less important at age 30 than for the other two age groups. Men of 30 years of age reported more interest in active recreation than any other group.

On the remainder of the 15 categories, there was not much difference across sex or age groups, including some surprising similarities. Having and raising children and relationships with parents and other relatives did not have an appreciable difference across age and sex groups. Understanding yourself which included religion and philosophy was not reported to vary with age. There appear to be some concerns that change in importance with age, but there are others that seem to be invariant throughout adult life.

Findings by Spaker (1979) corroborated some of those by Flanagan (1978). Spaker found that age was related to the degree of community involvement, with involvement increasing until age 72. The degree of community involvement was related to the number of friends a person had. The degree of life satisfaction was positively related to the amount of community involvement and to the amount and degree of satisfaction with friends. Life satisfaction did not appear to be significantly related to frequency of interaction or satisfaction with family. Once again, friendship appeared to be as important in late life as it was in earlier life.

Moss and Kurland (1979) concluded that family involvement among the mentally impaired aged had a positive effect on the patient's mental functioning. It should be noted that the family member involved in these observations

was the "significant relative." The specification of a significant relative who chose to visit more and/or was more concerned is not unlike a definition of friendships; and it involves more of a selection than simply being a relative. Therefore, an interested person, relative, or friend seemed to make a positive difference to the mentally impaired elderly person.

Weinberg (1974) described visiting in nursing homes as a ritual which may bring stress and discomfort to the parent and visiting child. The children may feel an obligation to visit that is motivated by guilt. The parent may feel as if he or she must not offend or embarrass the children during the visit. These feelings may be the reason that the research above (Flanagan, 1978; Spaker, 1979) did not conclude that residents perceived family visiting as important or satisfying.

Miller and Beer (1977) found that familial "friendships" were reported by residents to be the most meaningful. This further documents the point that when some active choice or selection is made by the resident or the visitor, the relationship is more highly regarded. That is, friends choose to be friends, relatives have little choice in being relatives and this may enhance feelings of obligation. However, when a family member chooses to be concerned and selects to have a relationship with an elderly patient that reaches beyond the scope of what

their blood ties mandate, this tends to be the most meaningful relationship. Further findings by Miller and Beer (1977) suggest that friends within the nursing home are useful substitutes for familial or outside friendships. Residents surveyed by Miller and Beer (1977) named staff and other residents as friends in two-thirds of the cases and volunteers as friends in half the cases. A sense of community apparently can be created within nursing homes. This sense of community within the nursing home is important for those residents who have been isolated from other communities.

Curry and Ratliff (1973) postulated that there would be a greater sense of community and more friendships in smaller nursing homes than in larger homes. Small nursing home residents reported having more friends within the home and had more contacts with their friends in the home. However, the general life satisfaction of residents did not appear to be directly related to their degree of isolation or number of nursing home friends. That is, general life satisfaction is probably a complex phenomenon with no simple relationship to current isolation.

Developing a sense of community in a nursing home, or in any place where one does not exist naturally, is not an easy task. People generally come together and work together for some purpose. Attempts to develop a central

theme or common cause for which people gather may look contrived and be resented if one is not skillful and careful.

The traditional means of stimulating social interaction in nursing homes is through an activities program. The nursing home activity program which generally includes various types of activity, music, art and recreational therapies, has as its major focus to create social interaction and develop relationships (Hill, 1961; Powell, 1974). One of the procedures for working with elderly patients who may also have biological and psychological deterioration is a process devised by McGavack (1965) for the physically ill and later used for those with psychological and physical illness (Salter & Salter, 1975). The process involves: (1) remotivation, (2) reassurance, (3) recreation, (4) rehabilitation, (5) creativity, (6) action, (7) reintegration, and (8) restoration. This procedure, when used by Salter and Salter (1975), induced psychological and physical improvements in 21 patients over a period of four months, motivation was increased from 14 to 76%. Music is also reported to have positive effects on socialization. Shapiro (1969) reported that music therapy stimulated discussion, relaxed people, reduced inhibition, and made the group more closely knit.

Reality orientation is a major part of the nursing home activity program, and it may be presented to staff

members in a classroom situation (Taulbee & Folsom, 1966) or as part of other activities (Folsom, 1968; Citrin & Dixon, 1977). Reality orientation is used with confused and/or disoriented residents to reduce confusion and promote autonomy.

The activity program, though very difficult to manage, is an important component in establishing a sense of community in a nursing home. The methods mentioned above and a few others are the only tools activity directors have in fighting the social isolation and losses of their residents. Individuals in nursing facilities are faced with multiple losses. Adjustment to these can be a monumental task, and some people never quite achieve this goal. Burnside (1973) listed and discussed seven major losses that typically befall the nursing home resident: (1) loss of mobility, (2) loss of health, (3) loss of loved ones, (4) loss of mental acuity, (5) loss of vision, (6) loss of home, and (7) loss of income Burnside (1973, pp. 157-159). Burnside suggested ways that nurses might help individuals cope with their losses. She observed that when patients lose control over so many of the major areas of their lives, they sometimes will increase control in other areas. In trying to gain control of their nursing home environment, patients sometimes will fight over control of small, seemingly trivial matters, such as seating in the cafeteria, time of the bath, and the like.

The physical and to some degree the psychological losses identified by Burnside (1973) and listed above are compounded by still another loss--the loss of neurological functioning. Brain substance and weight is lost in later years. Individuals at 75 years of age have about 92% of their age 30 brain weight. Brain cells die and do not reproduce themselves (Aker, Walsh & Beam, 1977). Narrowing or hardening of blood vessels can cause a reduction in response time of nerve impulses, along with other psychological problems (Leaf, 1973). Residents may not be able to respond to stimuli as quickly or in the same way as they once responded, or as a staff member might respond. Birren and Botwinick (1955) found slower response times in finger, jaw, and foot movements of the elderly. They suggested that slowness of reaction time might be attributed to latency of response in the central nervous system.

Residents experiencing the symptoms listed above and other similar symptoms are regarded (sometimes correctly, sometimes not) as having organic brain syndrome. Organic brain syndromes are either reversible (acute) or chronic. Of the chronic organic brain syndromes, the two most common in the elderly are associated with senile brain disease or cerebral arteriosclerosis (Butler & Lewis, 1977). Organic brain syndrome has five clinical features:

(1) disturbance and impairment of memory, (2) impairment of intellectual functioning or comprehension, (3) impairment of judgment, (4) impairment of orientation, and (5) shallow or liable affect (Butler & Lewis, 1977, p. 76).

Memory or loss of memory is one of the paramount signs of organic brain syndrome and one of the chief causes of management problems in nursing homes. The inability to retrieve memories, which increases in later life, is generally how loss of memory is supposed to operate (Schonfield, 1965; Botwinick, 1973; Arenberg & Robertson-Tschalo, (1977)). However, McNulty and Caird (1966) suggested that loss of memory is a defect in the storage system and not the retrieval system. Perlmutter (1978) observed a relationship between poor health, the acceptance of "aging" roles and poor memory. Both the McNulty and Caird study and the Perlmutter studies observed an increase in memory loss with age, but raised interesting questions as to what constituted memory loss. The conceptualization of memory loss is important in developing strategies that might reverse or prevent further loss.

Many of the multiple losses experienced by some elderly, especially those entering nursing homes, are manifested through depression. Losses in the later stages of life are more devastating because, unlike earlier periods in a person's life, there are few gains to offset these losses (Busse & Pfeiffer, 1973). Another major

component of depression is the isolation discussed above. Jones (1972) reported that social isolation was a prevalent condition in nursing homes. Jones noted that 74% of patients interviewed in one nursing home reported not having conversations with male patients and 36% reported not having conversations with female patients. In a second nursing home these percentages were 43% and 46% respectively (Jones, 1972). Pfeiffer and Busse (1973) suggested one way of combating the multiple losses and social isolation of the elderly is through "symbolic giving." An example of this type of giving by the professional involved with the elderly patient would be talking in a conversational manner thus giving more value to the relationship. The major emphasis of the "symbolic giving" is the restoration of value, self-esteem, and interest, the lack of which is the hallmark of depression. One developmental way to conceptualize depression in later years is the by-product of the attempt to resolve the eighth and final stage of life; Integrity vs. Despair (Erikson, 1950). Acceptance of one's life and gaining a sense of meaning is the primary concern during these years. Of those individuals who are institutionalized in a nursing home with declining health, facing isolation and losses of: mobility, loved ones, mental acuity, vision, home and income (Burnside, 1973), many turn to despair.

The final resolution of the last stage is death. A major cause of depression in nursing homes for both patients and staff is death. Staff and patients who are constantly exposed to death are continually faced with issues of their own dying and death, as well as the dying and death of others. Deaths in nursing homes appear to be increasing. A 10.5% rise in nursing home deaths was reported between 1968 and 1972, and the proportion of deaths doubled between 1962 and 1972 (Ingram & Barry, 1977). During 1972, 2.8 deaths were reported for every 10 nursing home beds (Ingram & Barry, 1977). Nurses tend to develop distance between themselves and dying patients, and this withdrawal, of course, influences the care the dying patients receive (Quint, 1967). Nurses attempt to develop a "professional demeanor" (Quint, 1966) to protect themselves from becoming attached to dying patients and they display this manner when carrying out their duties to these patients. Professionals who must confront death on a daily basis develop such ways to insulate themselves from thoughts and feelings about their own deaths. The formation of these death attitudes go back to the individual's first encounter with death (Kubler-Ross & Worden, 1977).

In a survey of attendees of death and dying workshops (N = 5, 274, 62% of whom were nurses) Kubler-Ross and

Worden (1977) found that 47% of the respondents named the death of a grandparent as their first experience with death. Older respondents in the survey reported thinking more about death than younger respondents. Older respondents also reported having less difficulty working with dying patients than did younger respondents. Hoelter and Hoelter (1980) found in a survey of college undergraduates that experience with death was much more prevalent than experience with dying.

The experience or role a nurse has with a dying patient was suggested as determinant of the nurse's uneasiness about death (Stroller, 1980). Stroller suggested that the tasks or roles nurses played with dying patients accounted for some of their discomfort with death. The fear expressed by nurses concerning their own deaths did not appear to totally account for their discomfort with death. There appeared to be something lasting about experiencing another's death, and particularly in certain settings. Price and Bergen (1977) discuss the responsibility and stress expressed by nurses over dying patients. Lester, Getty, and Kneisl (1974) investigated the attitudes toward death among nursing faculty and students and found their fear of death and dying decreased with education. Therefore, it seems reasonable that nursing home staff could benefit from some structured consideration of the issues of death and dying.

Need for Gerontological Training

Campbell (1971) concludes from a study that used the Tuckman-Lorge questionnaire (Tuckman & Lorge, 1953) that stereotyped attitudes of the elderly existed among nursing staff. The registered nurses were least accepting of the stereotypical statements, yet they expressed less willingness to work with the elderly population than did either licensed practical nurses or nursing assistants. Individuals with more education and/or more experience working with elderly patients were not as willing to accept stereotyped attitudes about the elderly (Campbell, 1971). Hart, Freel, and Crowell (1976) also found that those nursing students who had expressed less stereotypical attitudes toward the elderly were less willing to work with this population. A series of experiences first with healthy aged and subsequently with ill aged did not cause a loss of interest in nursing students. The authors suggested that their approach would be useful in training nursing home staff to maintain supportive realistic attitudes toward residents. Taylor and Hained (1978) in their survey of attitudes of nurses toward old people reported findings that are difficult to explain. However, younger nurses as in the studies stated above had fewer negative stereotypes of old people; but nurses who had less experience with the elderly, either on the job or in

their neighborhoods, had fewer negative feelings about old people. It appears that more research is needed to determine the factors that cause care givers to the elderly (primarily nurses) to have somewhat negative attitudes toward their elderly patients. Subsequent training in professional schools and in-service programs is needed to counteract these attitudes.

The State of Gerontological Education

In the preceding section, some of the many problems associated with the care of the elderly in nursing homes have been presented. The task of understanding and remediating those problems rest with a generally overburdened, small, and underpaid staff.

While the professional nursing staff of the nursing homes are training, a study by Moses (1973) found that only 12 of the 150 nursing schools across the country offered specific courses on the care of the elderly. Moses believed that education can help to modify negative attitudes toward geriatric patients. In support of this notion, Putnam (1973) observed that nurses have various check points and skills for assessing physical functioning. She postulated and found that with training and guidelines, nurses could include psychosocial assessment within the framework of their usual workloads. She found that nurses could do an adequate job of psychosocial

assessment of elderly patients and recommended the institution of guidelines and in-service training to help nurses develop this skill. The majority of the staff of nursing homes, those who provide most of the care, are nurse's aides. In a study of 40 nursing homes in the greater Detroit area, Handshu (1973) found that 51% of the aides had not graduated from high school, and that 51% had had no formal training since beginning their jobs. Of those aides who had received training of some type, only approximately a dozen had been given training in problems of the aged.

The necessary geriatric training does not seem to take place before staff are employed in nursing homes. Surveys have shown that the supposedly most highly trained medical professionals, i.e., physicians, received poor training in geriatrics (Kraus, 1965; Freeman, 1971). A survey of the 110 schools listed in the Directory of American Medical Education (1975) yielded 96 responding institutions. Of the 96 respondents, 15.6% taught geriatrics as a separate subject, only 2.1% had required courses in geriatrics. Of the 81 schools that did not have geriatric courses, only 7.4% had plans to develop such programs (Akpom & Mayer, 1978). It appears, therefore, that not much geriatric training is provided now or planned for future integration into professional schools.

This training, if it is to occur, might have to be given at another level.

Reason for Community Mental Health Involvement

The need for gerontological training in the areas of social, personal, and emotional development of the elderly seems clear. The training of health care professionals in general appears to be deficient in its concentration on geriatric issues. The nurses aide staff is not as well trained as the professional nursing staff. The social, personal, and emotional issues involved are ones in which mental health professionals are expert. Mental health consultants and nursing home staff should be able to work together to merge their skills and thus better meet the psychological needs of nursing home patients.

York (1977) stated that mental illness in nursing homes is at least as prevalent as elsewhere in our society. York further contended that there are more mentally ill elderly people in nursing homes than in state hospitals. Indeed, many elderly patients of state mental hospitals that are discharged become residents of nursing homes. These mentally ill patients are the responsibility of the community mental health centers. The nursing homes who rarely have access to mental health professionals could use, and should have, their services (York, 1977).

The combination of mental health training and consultations with nursing home staff has shown to be successful (Daggert, Jones, Feider, & Clark, 1974; Finkel, 1980). The intervention of community mental health consultants is aimed at decreasing the incidence of psychiatric hospitalization of nursing home residents (York, 1977). Patterson and Gurion (1976) found lasting effects of a nursing home education project one year after its conclusion. Follow-up reports of participants yielded the following results. Thirty percent stated that the sessions helped them understand the psychological needs of their patients better and form better relationships with the patients. Twenty percent stated they used the ideas from the training sessions in their supervisory or in-service roles; 50% said that the training sessions led to professional relationships that helped them in their work. Fifty-seven percent attributed a higher degree of job satisfaction to the sessions.

The Tri-County Community Mental Health
Board-Nursing Home Project

The Clinton-Eaton-Ingham tri-county community mental health board-nursing home project (CMHB-NHP) had its beginnings in three occurrences:

1. The passage of the Nursing Home Reform Act
(P.A. 493, 1978) which requires nursing

homes-retirement centers and community mental health boards to enter into agreement.

2. The loss of funding and closing of the St. Lawrence Older Adult Services project which had previously provided training and consultation in Clinton-Eaton and Ingham Counties
3. Funds for training made available through an NIMH consultation and education grant (Kriauciunas, 1979)

The goals of this project were to:

1. Increase the skill of nursing home staff in dealing with emotional and behavioral problems of patients
2. Increase the use of group activity to compensate for patient losses in sensory functioning, physical functioning, ability to communicate and contact with their families
3. Encourage a patient care approach which (to the extent possible) keeps patients out of situations where the stress is beyond their tolerance levels (Oxer, 1981).

Services provided were:

1. In-service training for nursing home staff
2. Consultation with nursing and activity staff

3. Consultation-assessments and care planning
for certain residents, in conjunction with
nursing home staff
4. Consultation with certain family members,
in conjunction with nursing home staff

The primary purpose of the present study was to evaluate the impact of the in-service training of nursing home staff on specific attitudes and knowledge that are related to their dealings with the elderly residents who are in their care.

Seven-Week Training Program

Some of the literature discussed above-mentioned negative attitudes toward elderly patients; (Campbell, 1971; Hart et al., 1976; Taylor & Harned, 1978) negative attitudes toward death and dying; (Kubler-Ross & Worden, 1977; Hoelter & Hoelter, 1980; Stroller, 1980) need for knowledge about the general aging process; (Butler & Lewis, 1977; Blythe, 1979; Wolk & Wolk, 1971; Soloman & Vickers, 1979; Wilkite & Johnson, 1976) elderly entering nursing homes; (Kastenbaum & Candy, 1973; Ingram & Barry, 1977; Vincenti et al., 1979; Flanagan, 1978) communication with family and friends; (Moss & Kurland, 1979; Weinberg, 1974; Miller & Beer, 1977; Curry & Ratliff, 1973) activities, (Hill, 1961; Powell, 1974; McGavack, 1965; Salter & Salter, 1975) and mental health issues such as organic

brain syndrome and depression (Aker, Walsh & Beam, 1977; Leaf, 1973; Schonfield, 1965; Pfeiffer & Busse, 1973; Erikson, 1950).

After reviewing the above literature and the St. Lawrence Older Adult Services models (York, 1974; 1977), a seven-week training program was designed (Appendix G). The training program consisted of seven three-hour sessions in which one to one-and-a-half hours were used to deliver the training curriculum. For the remaining time the trainers/consultants were available for further explanation of techniques and consultation with staff about particular residents or other issues.

Impact of seven-week training program.--The training program (Appendix G) was devised to increase knowledge and alter attitudes in staff who received the training directly or indirectly. A treatment specific method to evaluate the impact of the treatment was developed to determine the effects of the program. Goal attainment scaling is used frequently in the mental health field to evaluate consultation and training projects (Kiresuk, 1975). For the present study a method based on the goal attainment scaling was devised. This is referred to herein as the "subjective change" (Appendix E) measure. The goals or areas of concern were identified by the evaluator a priori but no expected levels were set.

Specific items were written for each goal and the amount of change was measured by the participant's assessment, in retrospect, of their before and after training levels.

The "subjective change" methodology is one that is inexpensive, conceptually simple, and treatment specific. Ideal experimental designs are difficult, complex, and expensive to execute in most community mental health settings. Some mental health researchers advocate treatment specificity measures as a major part of evaluative research (Bigelow & Ciarlo, 1979; Strupp & Bergin, 1969). Bergin (1971) states "psychotherapy is such a heterogeneous collection of diverse and conflicting events that any attempt to definitively test its effects by virtue of classical pre-post control group designs is doomed to failure" (p. 253).

The "subjective change" methodology therefore could prove useful for evaluating the effects of consultation and training projects in community mental health settings. The subjective change method was used in conjunction with a more traditional pre-post control group design in evaluating the impact of the seven-week training program. The pre-post control group measures were (1) fear of death, (2) attitudes toward the mentally ill, (3) attitudes toward patients/nursing homes, (4) attitudes toward activities, (5) job satisfaction, and (6) knowledge. The subjective change instrument had both attitude and knowledge

items that were comparable to the pre-post measures, in order to correlate their results and validate the subjective change instrument.

Hypotheses

The primary goal of the present study was to deliver and evaluate a training program aimed at ameliorating some of the previously observed deficiencies of the nursing home staffs. The material reviewed up to this point suggests that such deficiencies lie in attitudes toward death and dying, knowledge of, and attitudes toward a host of psychosocial problems (e.g., depression, and knowledge of and attitudes toward persons experiencing various forms of organic brain dysfunction).

It was expected that the training delivered by the staff of the Tri-County Mental Health Board would result in improvements in these areas among the nursing home staffs. While specific hypotheses could be generated for each of the variables to be studied, they would all be of the same general form, i.e., "when compared to controls, staff who have received the training will exhibit better. . . ." For example, after treatment, experimental group staff should have more positive attitudes toward patients/nursing home than controls.

In addition, change is predicted to be greater on both knowledge and attitudes in those individuals who

score low on the pre-test. It was postulated that increased knowledge would be the basis for increased positive attitudes, so the training was aimed (primarily) at knowledge. Corrollaries of the hypothesis are (1) longevity in the nursing home system will be inversely related to treatment effects, (2) the aides (who are less educated) will be more susceptible to change than the nurses, and (3) the amount of previous training will be inversely related to change.

An additional feature of this study was the evaluation of a subjective change measure. It was expected that change in knowledge and attitudes--as indexed by the subjective change instrument--would correlate with the more traditional measures of change afforded by the quasi-experimental design.

METHOD

Subjects

The participants in this study were employees of 10 nursing homes in Michigan's Clinton-Eaton-Ingham county area. These employees were registered nurses (RNs), licensed practical nurses (LPNs), nurses aids (aides), dietary staff, and housekeeping staff. All employees of the 10 homes were asked and encouraged to participate in the pre-, post- and follow-up tests. A subset of these employees were encouraged or selected to attend the training sessions, with greater emphasis placed on the attendance of the nursing staff (Rns, LPNs, and aides).

Employees were paid for their attendance by the nursing homes. The level of pay was their normal hourly rate. The pay scale has little variance across homes for similar jobs (i.e., the salary for an RN charge nurse was similar across homes, as was that of aides and other job categories).

The training level of the professional nursing staff (RNs and LPNs) as well as the ratio of nurses and aides to patients is regulated by state law. Therefore, staff makeup tended to be similar across sites. There were few instances where a nursing home exceeded the guidelines and

even fewer cases in which staff was substandard as such a condition would be a violation of state law (P.A. 493, 1978).

The 10 nursing homes included in the study were selected from a pool of 16 nursing homes in the tri-county area. These 10 homes were chosen because of their expressed willingness to participate in the project and because they met the requirements of a research design based on random assignment from matched pairs. The motivation for the nursing homes to participate was enhanced by a state law requiring that they have contact with a local mental health agency and by a National Institute for Mental Health grant which would help to provide the service without cost to the homes.

Of the 560 nursing home workers who participated in any part of this study, only 105 people (88 experimental and 17 control) completed both pretest and posttest measures.

Nursing Homes

The 10 nursing homes chosen for the study ranged in size from 35 beds to 257 beds. Six of the homes were in urban environments. The other four homes were in rural areas. Four of these homes provided only basic nursing care. The other six homes provided both basic and skilled nursing care.

The amount of time that staff members had worked in the nursing homes ranged from as little as one month to as much as 30 years with a mean of 45 months. The mean formal education of the nursing home workers was about 13 years. These data are presented in more detail in the next chapter.

Project Staff

There were four people on the project staff. Three of those people served as consultants and provided the training and consultation to the nursing home. The fourth person, the evaluator, accompanied the consultants to the nursing homes, explained the project, and was responsible for data collection. All four members of the staff were employees of the Tri-County Mental Health Board funded by the National Institute for Mental Health Consultation and Education Grant (Kriauciunas, 1979).

The original plan for the project called for only two consultants. The third consultant was brought into the project to consult with only one of the homes. All three consultants were masters level therapists employed by the Tri-County Mental Health Board.

Procedure

The 10 homes in the study were sorted into pairs that were comparable on as many of the following variables

as was possible: (1) size-capacity of the home, (2) number of previous training sessions, (3) number of previous case consultations, (4) urban vs. rural, (5) skilled vs. basic care, and (6) consultant providing the training. After matching, one home from each pair was assigned randomly to receive training during Phase I. Homes selected for Phase I training constituted the treatment group. The remaining homes--the remaining one from each pair--constituted a waiting list control group. Each nursing home was then visited by the evaluator and a consultant to explain the project and solicit participation. A seven-week training schedule was negotiated with the nursing home personnel which included three-hour sessions one day a week. Each instructional portion was one and one-half hours. The remaining one and one-half hour was used for questions or case consultations.

The training package (Appendix G) was outlined and discussed with the nursing home personnel during the visit of the evaluator and the consultant. The training outline was the same for all homes in the study.

Data Collection

Prior to the commencement of the Phase I training, attitude and knowledge measures were administered to both the treatment and control groups. The attitude and knowledge surveys were administered to nursing home staff

primarily through the in-service director of the nursing home, who in all cases was a nurse in a supervisory capacity. Support for the completion and collection of surveys was given by the nursing home administrators, directors of nursing, and social service designees. The evaluator, who took on the responsibility of gathering the data, made several visits to each of the homes. Collection of the pretest attitude and knowledge measure ended when the training in a nursing home began, or in the case of controls when training in its corresponding experimental group home had begun.

Nursing home staff who had received training were given a subjective change instrument at the conclusion of the final training session. Subjective change instruments for supervisors who had not been involved in training were distributed concurrently with the subjective change instruments for those trained. The in-service directors of the homes distributed the posttest attitudes and knowledge instruments to all nursing home staff. Completed instruments were to be returned to the in-service director of each home. The completion of the instruments by staff was voluntary, although the nursing homes had a contractual obligation to help with the evaluation procedures.

The compliance of staff with data collection was contingent on several factors which could not be

controlled by the evaluator. The in-service directors were nursing supervisors and therefore exerted some influence on nursing staff, but this was related to their rapport with their staffs, and was dependent on the degree of project support among the administrators of the various homes. In certain instances, the in-service director may have delegated part of the data collection responsibility to the social service designee who was not a nurse or supervisor and typically did not have as much influence with the staff.

Although the evaluator gave careful and persistent attention to all phases of data collection, the loose structure imposed on the project by many of the homes allowed a number of individuals to by-pass the procedures at each phase. Analyses of some of the attrition related biases are presented in the next chapter.

Design

The evaluation study design is presented (a lá Campbell & Stanley, 1963) in Figure 1. For the experimental group, the treatment occurred between measurement Waves I and II. The "waiting list" control group received the same treatment later. However, the serious loss of participants throughout the study precluded any reasonable analyses of the Wave III attitude and knowledge measures. With this design, it is possible to evaluate the treatment

in a true experiment by comparing both groups at Wave II.

	Measurement Waves				
	I		II		III
	Oa	T	Oab	t	Oa
Experimental					
Waiting List Control	Oa		Oa	T	Oab

Figure 1. Evaluation design for Nursing Home Project.

In Figure 1 those measurements subscripted with an "a" include attitude measures and knowledge items. Those with a "b" subscript included the subjective change instrument. As the subjective change items are treatment specific, they were given only after the treatment is implemented.

The capital "T" is considered treatment as described in Appendix G, the lowercase "t" was included to indicate that some contact with the consultants may have occurred in some of the control group homes during the experimental treatment period. In particular, emergency and information seeking calls were received from some control group homes. Ethical considerations would not allow an absolute no treatment control group; however, all efforts were made to keep these contacts to a minimum.

The appropriate unit of analysis for this design is at home level as initial assignment was at the home level. Given that there are many workers and too few homes, the analyses had to be performed at the individual worker level. This, of course, is not true random assignment. Consequently, analyses were performed to check for initial group equivalence on pretest measures. Statistical adjustments were made where necessary.

Nursing home staffs historically have large and rapid turnover. Therefore, there may have been differences between the staff who left and those who remained. Random assignment cannot always correct for this, nor does this design represent a true random assignment. In the next chapter, the first analysis explored whether the employees leaving and those remaining in control or experimental groups differed on the critical study measures.

Instruments

The design of the study required that participant response be linked across time. At the same time, confidentiality was promised to all participants. An acronym was devised and placed on the data collection face sheet (Appendix A) to help to identify individuals across time while preserving confidentiality. The face sheet also asked for the respondent's length of employment in the

current nursing home and the length of employment in all nursing homes, years of education, number of prior training sessions attended on the elderly, and, specifically, attendance at previous training sessions given by the current nursing home project or its predecessor, St. Lawrence Older Adult Services.

The face sheet accompanied an 87-item (Appendix B) attitude measure constructed from several different scales and a 22-item knowledge test (Appendix C) drawn from the subject material of the training sessions. A subjective change instrument (Appendix E) was administered at the conclusion of the training. A more detailed discussion of these instruments follows.

Attitude survey. The attitude survey consisted of several scales or parts of scales that were presented with a 5-point Likert Scale response format. The five points were (1) strongly agree, (2) agree, (3) neutral, (4) disagree, and (5) strongly disagree.

Thirteen of the 87 items were taken from Nunnally's (1961) Information Questionnaire which, originally consisted of 60 items. Nunnally believed these items were a measure of public opinion or attitudes toward mental health. Nunnally's 60-item instrument was a distillation of the results of a factor analysis of 240 items which revealed 10 orthogonal information factors.

Twenty of the 87 items were taken from the Collett-Lester Fear of Death Scale (Collett-Lester, 1974). The Collett-Lester scale is a 36-item instrument tapping four dimensions of fear of death: (1) death of self, (2) death of others, (3) dying of self, and (4) dying of others. Each dimension of this instrument has negatively and positively scored items. Five items were taken from each of the four dimensions for inclusion in the 87-item attitude measure. Several studies have been published by Lester and his associate using the scale (Collett & Lester, 1969; Lester, 1969, 1970a, 1970b, 1970c, 1971a, 1971b, 1973; Lester & Lester, 1970; Lester & Collett, 1970; Ford, Alexander, & Lester, 1971; Alexander & Lester, 1972; Lester, Getty, & Kneise, 1974).

The majority of the remaining items in the attitude survey were taken from a report of a previous study using the same population. The York attitude survey consisted of a 6-scale, 49-item instrument designed especially for nursing home staff and administered to five nursing homes in the tri-county area. The York scales are presented in greater detail below:

1. Activities--The scale contains 12 items and is intended to measure attitudes toward the use of activities for nursing home patients. Internal consistency was reported by York (1974) to be .78.

2. Staff Attitudes Toward Patient Care (Staff-Resident)--The scale contains nine items and assesses the opinion of the staff members regarding the care of the patients. The scale asked about one's own role, as well as those of co-workers in general. Internal consistency was reported at .62.

3. Intra-Staff Relationships (Staff-Staff Attitude)--This 7-item scale concerned the staff's perception of their interactions and their influence in impacting change in their work environment. Internal consistency was reported to be .61.

4. Attitudes Toward Elderly Patients--This 8-item scale was intended to measure staff's general attitude about elderly people (residents of their nursing home or otherwise). Internal consistency was .59.

5. Job Satisfaction--This 4-item scale was intended to measure participants' overall attitudes about their jobs, including feelings about the work load and their intentions about remaining on the job. Internal consistency was .57.

As job satisfaction was an important construct in the present study, five additional items, taken from a morale survey (Spates, 1980), were included to bolster the York scale.

6. Attitudes Toward the Nursing Home (Attitudes Toward Organization)--The 8-item scale concerned the staff

members' perceptions of policies and administration of the nursing homes.

Knowledge survey. A 22-item knowledge questionnaire (Appendix C) consisting of five true-false questions and 17 multiple choice questions was constructed from the information included in the training session.

Subjective change instrument. A 32-item adaptation of the subjective change instrument similar to the one constructed and used by the author in a Greater Lansing Urban League pilot study was developed from the information contained in the 7-week training session. Each question has a "before" and "now" component on which subjects are asked to rate their perceptions pre-post treatment differences. The range of choices number from 1 to 10, with 1 being no knowledge or ability and 10 being expert level. The respondents were asked to rate where they were "before" the training (in retrospect) and to rate where they are "now," after the training.

A second form of the subjective change instrument was constructed in which first person singular pronouns were changed to third person plural pronouns, otherwise, the questionnaire remained the same. This version was used by supervisors and support staff to rate staff who received training. The purpose of this second version was to assess whether the staffs' perceptions of change

has been translated into behavior that supervisors and/or support staff could observe.

Reduction of Measures

The 87-item attitude survey and the 22 knowledge item survey was factor analyzed after the pretest administration. Confirmatory factor analysis (Hunter & Gerbing, 1979) was used to partition the items into meaningful clusters (scales). Initial subscales were comprised by grouping items according to their scales of origin and combining items where it was conceptually plausible. In general, the internal consistencies of these initial scales were low. The confirmatory factor analysis was repeated several times before a satisfactory set of scales emerged. A combination of theoretical and empirical decisions resulted in new scales. To be included in the new subscales an item had to satisfy both the theoretical and the empirical criteria; no item was included if there was a high correlation but no conceptual fit with the subscale. The resultant attitude measure was a five subscale 48-item instrument (Appendix D). The knowledge survey was reduced to 17 items, although all 22 items appeared on the final instrument.

Attitude scales. The five attitudes were reduced as discussed below:

1. Fear of Death/Dying--The first subscale was an 11-item distilization of the four (Appendix D) Collett-Lester Fear of Death (1974) subscales into one Fear of Death/Dying measure with a coefficient alpha of .79. High scores were considered to be a measure of a greater fear of death.

2. Attitudes Toward the Mentally Ill--The 10 Nunnally (1961) scales were reduced into one 8-item Attitudes Toward the Mentally Ill measure (Appendix D) with a coefficient alpha of .71. High scores were considered a measure of more positive attitudes toward the mentally ill.

3. Attitudes Toward Patients/Nursing Homes--A composite of several scales, York's (1974) (Appendix D), Staff Attitudes Toward Patient Care (Staff-Resident), Attitudes Toward the Nursing Home (Attitudes Toward Organization) and Collett-Lester (1974) dying of others were combined to form a 6-item measure with a coefficient alpha of .66. High scores were considered a measure of more positive attitudes toward patients and/or nursing home.

4. Attitudes Toward Activities--The York (1974) activities subscale remained a subscale (Appendix D). Although some of the items were dropped, the four remaining items all originated from the York activities subscales and had a coefficient alpha of .71. High scores

were considered a measure of more positive attitudes toward activities.

5. Job Satisfaction--Items from the York (1934) job satisfaction, staff attitudes toward patient care (Appendix D) (staff-resident), intra-staff relationships (staff-staff attitude), attitude toward the nursing home (attitude toward organization) were combined with job satisfaction items from the Spates (1980) moral survey to form a 13-item job satisfaction instrument with a coefficient alpha of .81. High scores were considered a measure of more satisfaction with one's job.

Knowledge survey. Eighteen of the 22 items in the knowledge survey were found to be a single scale with a KR_{20} of .81.

Subjective change. The subjective change item scores were converted into now-before item differences. It was clear that one factor (subjective change full scale) accounted for most of the variance--Alpha = .97. However, the possibility that subjective change in either knowledge or attitudes would be more specifically associated with pre-post change on the other measures necessitated a further reduction of these data. A Subjective Change: Attitude measure (Items 22, 23, 24, 29, 30, 31, and 32, Appendix E; Alpha = .92) and a subjective change:knowledge measure (Items 1, 2, 3, 4, 13, 17, 18, 19, 20, and 21;

Alpha = .93) were also identified. The correlations between the attitude subset, the knowledge subset and the full scale were .88 and .95, respectively, with no corrections. The correlation between Subjective Change: Attitudes and Subjective Change: Knowledge was .74. In order to provide a reasonable test of the subjective change methodology, all three scales were retained in the analyses. However, the purpose in keeping the two subsets was to assure better specificity of any findings. It is important to note that each of these subjective change scales is the mean "now" minus "before" difference across the relevant items.

RESULTS

Incomplete Data

The sample size deviated considerably from the pre-treatment number in both treatment and waiting list control groups. A number of individual subjects were lost as was one entire nursing home. These cases cannot be included in the outcome analyses. In fact, the staff of the one home that dropped out of the study did provide some pretest data. However, as there were no posttest data on any measures from this home, an a priori decision was made not to include their pretest data in any analyses. In some of the remaining homes, there were too few participants for a meaningful analysis at the home level. All data were analyzed at the individual level, though home level analysis would have been more appropriate for a true experiment. As randomization was at the home level and not at the individual level, an analysis was performed to test for initial group differences.

Attrition Analysis

The experimental and control groups were tested for differences in attrition across groups on the pretest measures. A two-way ANOVA group (experimental vs.

control) by attrition (lost vs. kept) was executed to determine whether people who were lost from the study were different from those who remained.

If participants who are lost were characteristically different from those kept there would be a threat to external validity (Jurs & Glass, 1971). Any results would then be limited in the degree they were generalizable to other populations. The external validity problem is illustrated by the main effect of attrition in the two-way ANOVA.

If participants who were lost in one group were characteristically different from those lost in the other group, there would be a threat to internal validity (Jurs & Glass, 1971). A selection bias could then exist, which could suppress any true results, or show false positive results. The internal validity problem is illustrated by the interaction effect of group (experimental vs. control) and attrition in the two-way ANOVA.

Attrition was defined as having a pretest score and not having a posttest score. Individuals who had both a pretest and a posttest score were not considered attrited. These definitions of attrition status held for both experimental and control groups.

A series of two-by-two ANOVAs, group (experimental vs. control) by attrition (lost vs. kept) were conducted

on each of the pretest measures. Table 1 contains the results of these analyses.

The main effect of attrition on the fear of death subscale did not reach significance, but there was significance on the interaction of group by attrition status ($p < .05$). An exploration of the group means indicates that the individuals in the control group who were kept in the study had more fear of death/dying than those lost in either group, or those kept in the experimental group.

The main effect of attrition was not significant on the attitudes toward the mentally ill subscale, nor was there significance on the group by attrition status interaction.

There was a main effect of attrition on the attitudes toward patients/nursing home measure ($p < .03$). An examination of the means revealed an interesting and baffling finding -- those who remained in the study had less positive attitudes toward patient/nursing homes than those who left. The group by attrition status interaction was also significant ($p < .025$). The means of the group indicated that those control (participants) who remained in the study had less positive attitudes toward patients/nursing homes than the other three groups.

Table 1. Summary of Attrition Analysis

	Attrition Status					Group by Attrition Status							
						Experimental				Control			
	Kept	Lost		F	p<	Kept	Lost	Kept	Lost	Kept	Lost	F	p<
	$\bar{X}$	$\bar{X}$				$\bar{X}$	N	$\bar{X}$	N	$\bar{X}$	N		
Fear of Death	2.99	3.00		.42	n.s.	2.95	(88)	3.00	(165)	3.15	(17)	4.19	.05
Attitudes Toward the Mentally Ill	3.05	3.00		1.08	n.s.	3.06	(87)	2.99	(170)	3.01	(17)	.37	n.s.
Attitudes Toward Patients/Nursing Home	2.10	2.18		4.73	.03	2.13	(88)	2.17	(167)	1.92	(17)	5.2	.03
Attitudes Toward Activities	2.83	2.88		.9	n.s.	2.89	(88)	2.92	(170)	2.51	(17)	1.53	n.s.
Job Satisfaction	2.63	2.67		.92	n.s.	2.62	(88)	2.65	(168)	2.64	(17)	.25	n.s.
Knowledge	14.05	13.23		4.64	.04	14.05	(88)	13.3	(164)	14.06	(16)	.046	n.s.

The main effect of attrition status on the activities measure was not significant nor was the group by attrition status interaction.

There was no main effect of attrition status on the job satisfaction subscale, nor was there a group by attrition status interaction.

The main effect of attrition was found to be significant ($p < .04$) on the knowledge scale. Examining the means, those who were lost did not appear as knowledgeable as those who remained. This limits the generalizability of any treatment related findings on this measure. The group by attrition interaction on knowledge was not significant.

Initial Equivalence

Initial equivalence by experimental and control groups on all pretest measures would counteract to some extent the faults in the design given problems encountered in randomization. Random assignment was at the home level, but due to the small number of homes, the data were analyzed at the individual level. Even if it were possible to perform the analysis at the home level, there could be differences in the composition of different nursing home staffs on critical measures. Attempts were made to match these homes, but with the small number of homes, the matching fell well short of perfection.

Attrition of both nursing homes and staff of nursing homes also added to the deterioration of the random assignment. Multiple design problems presented above necessitated a check on group equivalence. Even without these problems, it was proper to check the pretest measures for group differences.

All participants in control and experimental groups (with the exception of one home noted above) who completed the pretest measures were included in these analyses.

A one-way ANOVA (experimental group vs. control group) was executed on each of the pretest measures. The results of these analyses are presented in Table 2. Three of the attitude measures (attitudes toward mental illness, activities and job satisfaction) and the knowledge scales were not found to be significantly different between groups. The groups differed on the fear of death measure ($p < .04$). The individuals assigned to the control group had significantly more fear of death than those assigned to the experimental group.

A between group difference was found also on the attitudes toward patients/nursing homes measure ($p < .02$). Individuals assigned to the control group were found to have less positive attitudes toward patients/nursing homes than those assigned to the experimental group.

Thus, for two of the measures, biases appear to exist which could alter the outcomes in the absence of

Table 2. Summary of Initial Equivalence Analyses

Variable	Experimental		Control		F	P<
	$\bar{X}$	N	$\bar{X}$	N		
Fear of Death	2.95	(88)	3.15	(17)	4.60	.04
Attitudes Toward Mental Illness	3.06	(87)	3.01	(17)	.17	NS
Attitudes Toward Patients/Nurs- ing Homes	2.13	(88)	1.92	(17)	6.23	.02
Activities	2.89	(88)	2.51	(17)	3.90	NS
Job Satisfaction	2.62	(88)	2.64	(17)	.04	NS
Knowledge	14.05	(88)	14.06	(16)	0	NS

appropriate corrections. The randomization which should have insured equivalence was only at the home level, so the individual assignment for treatment or control was not random. Any benefit of randomization probably dissipated with the attrition of participants. Randomization is a tool to aid in equivalence, but cannot insure it. Other procedures to correct for inequality must be employed when randomization fails.

Initial equivalence of homes. Six nursing homes were included in analysis of equivalence of homes. Three homes were not included in these comparison by homes due to the small number of respondents in these homes. However, participants in these three homes were included in other analyses. Two statistics were used to compare home means. The comparison was made for all six (five attitude, one knowledge) measures. The statistics used were the Newman-Kuels tests following a one-way ANOVA on each measure. The results of these analyses are shown in Table 3.

The ANOVA indicated significant differences among nursing homes on fear of death ($p < .001$) and attitudes toward activities ($p < .003$). The Newman Kuels test was employed to further investigate the differences found in these ANOVAs.

Table 3. Summary of Initial Equivalence Analysis of Home*

Home	N	Fear of Death	Attitudes Toward the Mentally Ill	Attitudes Toward Patients/Nursing Home	Attitudes Toward Activities	Job Satisfaction	Knowledge
3	23	3.08ab	3.08a	2.14a	2.68a	2.61a	14.57a
5	10	3.07ab	3.14a	2.24a	2.63a	2.62a	14.30a
6	23	2.87a	3.10a	2.04a	2.76a	2.52a	13.83a
8	22	2.81a	2.95a	2.18a	3.02ab	2.67a	13.46a
9	9	3.04ab	3.00a	2.10a	3.53b	2.75a	14.33a
10	11	3.36b	3.16a	1.95a	2.34a	2.69a	15.10a
Over- all F		5.28	.55	1.34	3.92	1.32	.67
P <		.001	N.S.	N.S.	.003	N.S.	N.S.

*Within each column, means that do not share a common subscript are different $p < .05$.

Comparison on the fear of death subscale indicate that home 10 was high on fear of death and significantly higher than homes six and eight ($p < .05$). Homes three, five, and nine were in the relative middle range of fear of death and as such were comparable to home 10 as well as homes six and eight.

On the attitudes toward activities, home nine was significantly higher or had significantly more positive attitudes toward activities than homes three, five, six, and 10 ($p < .05$). Home eight was in the relative middle range of attitudes toward activities and as such was comparable to home nine as well as homes three, five, six, and 10.

Initial equivalence on demographics. An investigation was undertaken to determine whether experimental and control participants differed in: (1) the amount of time employed in the present nursing home, (2) the amount of time employed in all nursing homes, (3) education, and (4) age. A one-way ANOVA was performed to investigate difference in control and experimental groups on the above demographics. No significant differences were found between groups on any of the demographics. The results of these analyses may be found in Table 4.

Table 5 contains a cross tabulation of experimental and control participants by whether or not they had

Table 4.--Summary of Initial Equivalence on Demographics

Variable	Experimental		Control		F	P
	$\bar{X}$	N	$\bar{X}$	N		
Time in this N. Home	46.19	(88)	43.00	(17)	.06	N.S.
Time in All N. Home	58.05	(87)	52.94	(17)	.11	N.S.
Highest Grade Completed	12.7	(88)	13.65	(17)	2.91	N.S.
Age	33.95	(85)	32.59	(17)	.14	N.S.

Table 5.--Initial Equivalence of Previous Training

	No Previous Training	Previous Training
Experimental	67.5% (56)	32.5% (27)
Control	56.3% (9)	43.8% (7)

$$\chi^2 = .39, df = 1$$

p = N.S.

received previous training similar to that offered during the course of the project.

No significant difference was observed between experimental and control groups which had received prior training and those which had received no training. For this analysis, previous training was defined as having any training by Tri-County Community Mental Health or St. Lawrence. No previous training was defined as having no training sessions by Tri-County Community Mental Health or St. Lawrence. This dicotomy, training or no training, was decided upon because there was great variance within individuals as to the number of previous sessions they reported having had attended, across time. That is, there were logical inconsistencies in these data. For example, a person might have reported five previous sessions at pretest and only two sessions at posttest. Zero session, however, remained somewhat constant across time.

The reports of number of previous training sessions attended other than tri-County Community Mental Health or St. Lawrence, had many inconsistencies regardless of transformation. Therefore, these data were discarded.

Primary Outcome Analyses

Attitudes and Knowledge

Outcome analyses included data from all subjects in experimental and control groups who completed both pretest

and posttest attitude and knowledge measures. The unit of analysis as stated earlier was the individual worker.

An Analysis of Covariance (ANCOVA) strategy was chosen because of previously discussed group nonequivalence problems. Problems with initial nonequivalence of groups at both the home and individual level require adjustment in order for the outcome to be a valid reflection of the treatment. Consequently, each pretest measure was used as a covariate in the analysis of the corresponding posttest measure. In addition, as presented by Reichardt (1979) the covariate by treatment interaction was included in the model to adjust for between group differences in pre-post regression prior to assessing the treatment effect.

The outcome analysis, which is presented in Table 6, failed to yield significant difference on any of the six subscales. There does not appear to be change in the experimental group which is significantly different from the control group though overall there seemed to be positive change in both groups on a few of the measures.

The sampling problems discussed above suggested that the ANCOVA strategy was best suited for the data analysis. However, to see if change would have been noticeable if the corrections had not been made, a repeated measure ANOVA on all six measures was also

Table 6. Summary of Outcome Analyses with Covariates

Variable	Experimental		Control		F	P<
	$\bar{X}^*$	(N)	$\bar{X}^*$	(N)		
Fear of Death	2.99	(88)	2.97	(17)	.09	N.S.
Attitudes Toward the Mentally Ill	3.10	(87)	3.02	(17)	.95	N.S.
Attitudes Toward Patients/Nurs- ing Home	2.24	(88)	2.24	(17)	.00	N.S.
Attitude Toward Activities	2.68	(88)	2.56	(17)	.42	N.S.
Job Satisfaction	2.60	(88)	2.60	(17)	.00	N.S.
Knowledge	14.65	(88)	14.30	(16)	.33	N.S.

*Means are covariate adjusted.

performed. The results of these analyses are not presented. However, the expected group by time interaction also failed to reach significance in these parallel analyses. It appears that significant change in the experimental group did not surface even without the adjustment for pre-existing differences.

The experimental group composition was examined more closely. Individuals were considered in the experimental group if they worked in a home that received treatment whether they received no, a little, a lot or unknown treatment, as indexed by the number of sessions they reported attending. It was decided to look closer at these subgroups as the true target of the evaluation was the "effect" of treatment and not that of group assignment. The participants who did not answer the question of the number of current training sessions were eliminated from the following analysis. The new groups were (1) control group, which was unchanged; (2) experimental group members who received no treatment; (3) experimental group members who received some or a little of the training; (4) experimental group members who received most or all of the training. Those experimental group members who reported not to have attended any training sessions were entered into the experimental "no treatment" group. The "little training" group were those

experimental group members who reported attending four or fewer, but at least one session. The "most or all" training group were those experimental group members who reported attending five or more out of seven sessions. Prior to training it had been decided to award certificates to staff who attended five or more sessions. Table 7 contains the counts for each of these groups along with a summary of the results of these analyses.

The ANCOVA strategy was again used to correct for the pretest differences. The ANCOVA was performed on all six measures with the new four group composition. The analysis of change differences in the new groups did not uncover any significant differences. The high treatment group was not significantly different than the other three groups.

Subjective Change

Subjective change of those trained. Individuals included in the analysis of staff's subjective change were those 57 people who returned pre- and post-attitude and knowledge instruments, as well as a subjective change instrument. Individuals who did not receive treatment would not have completed a subjective change instrument, so this was a one-group analysis. The individuals' subjective change reports were compared with themselves, or rather with their pre-post changes in attitudes and

1

Table 7. Summary of Outcome Analyses by Amount of Treatment with Covariates

Variable	Control		Experimental No. Treatment		Experimental Low Tx		Experimental High Tx		F	p<
	$\bar{X}$	N	$\bar{X}$	N	$\bar{X}$	N	$\bar{X}$	N		
Fear of Death	2.96	(17)	2.95	(27)	2.97	(23)	3.02	(36)	.40	n.s.
Attitudes Toward the Mentally Ill	3.01	(17)	3.16	(27)	3.13	(23)	3.05	(35)	.98	n.s.
Attitudes Toward Patients/Nursing Homes	2.24	(17)	2.32	(27)	2.22	(23)	2.19	(36)	.82	n.s.
Attitudes Toward Activities	2.60	(17)	2.75	(27)	2.56	(23)	2.63	(36)	.47	n.s.
Job Satisfaction	2.60	(17)	2.62	(27)	2.56	(23)	2.61	(36)	.28	n.s.
Knowledge	14.33	(16)	14.28	(27)	14.18	(23)	15.23	(36)	1.43	n.s.

knowledge. The primary concern of these analyses was to investigate the predictive power of the subjective change concept.

Two methods of validating the subjective change instrument were employed. The first method was rather straight forward and involved simply subtracting the pre-test scores from the posttest scores to obtain an estimate of the amount of change on each of the attitude and knowledge measures. The amount of change or difference scores for each measure were then correlated with the three subjective change measures. As discussed previously, the three subjective change measures were the mean "now" minus "before" differences on the full-scale (32 items), subjective change:attitudes (7 items, reflecting a perceived change in opinion); and subjective change: knowledge (10 items reflecting a perceived gain--or loss --in information as a result of the treatment.

Pearson correlations (presented in Table 8) indicated that the subjective change:knowledge scale was the best predictor of pre-post difference. The subjective change full scale appeared to have some predictive power, but this may have been due to its overlap with knowledge. That is, subjective change full scale contains both of the other subscales. There were no significant correlations with subjective change attitudes. Thus, the

Table 8. Summary of Correlations of Subjective Change Scores and Attitudes and Knowledge Difference Scores

Variable	Subjective Change Attitudes		Subjective Change Knowledge		Subjective Change Full Scale [†]	
	r	N	r	N	r	N
Fear of Death	.14	(54)	.18	(55)	.16	(55)
Attitudes Toward the Mentally Ill	.02	(53)	.02	(54)	.02	(54)
Attitudes Toward Patients/Nursing Homes	.14	(54)	.24*	(55)	.23*	(55)
Attitudes Toward Activities	.09	(54)	.25*	(55)	.22	(55)
Job Satisfaction	.14	(54)	.44***	(55)	.35**	(55)
Knowledge	-.09	(54)	.21	(55)	.16	(55)

*p < .05

**p < .01

***p < .001

[†]Subjective Change Full Scale contains Subjective Change Attitudes and Subjective Change Knowledge as well as other less specific items.

predictive power of the full scale may be accounted for by subjective change:knowledge. The subjective change:knowledge subscale was significantly correlated with attitudes toward patients/nursing home, attitudes toward activities and job satisfaction. The full scale subjective change instrument was significantly correlated with attitudes toward patients/nursing homes and job satisfaction. The subjective change instrument, especially its knowledge portion, appear to be reasonably valid in that it measured change in the same way that three of the more traditional attitude measures did; that is, to the degree there was any change.

A second way of conceptualizing change is to look at the residual of the posttest score after controlling for the pretest score. Each pretest score was partialled out and anything left in the posttest score was either change or error. These results are contained in Table 9. This method revealed results somewhat similar to those obtained with the difference score method with the exception that the residual method was somewhat more conservative. The subjective change:knowledge still appeared to be accounting for the predictive power of the full scale. The subjective change knowledge is significantly correlated with attitudes toward patients/nursing homes and job satisfaction residuals as it was using the

Table 9. Summary of Partial Correlations of Subjective Change and Attitude and Knowledge Scores Residuals

Variable	Subjective Change Attitudes		Subjective Change Knowledge		Subjective Change Full Scale [†]	
	r	N	r	N	r	N
Fear of Death	-.17	(50)	-.02	(50)	-.01	(50)
Attitudes Toward the Mentally Ill	-.13	(50)	-.17	(50)	-.17	(50)
Attitudes Toward Patients/Nursing Home	.08	(50)	.30*	(50)	.26*	(50)
Attitudes Toward Activities	-.04	(50)	.19	(50)	.16	(50)
Job Satisfaction	-.06	(50)	.30*	(50)	.21	(50)
Knowledge	-.20	(50)	.16	(50)	.10	(50)

*p < .05

[†]Subjective Change:Full Scale contains Subjective Change:Attitudes and Subjective Change:Knowledge as well as 15 other items.

difference method. The correlation of subjective change knowledge and attitudes toward activities did not reach significance as it did in the difference method, but it was "marginally" significant ($p < .09$). The subjective change full scale was significantly correlated with attitudes toward patients/nursing home resident as with the difference method. The job satisfaction partial correlation did not reach significance as it did in the previous method, but was marginal ($p < .07$). Both methods validate to a degree the predictive power of the subjective change instrument, especially the knowledge subscale to account for a significant portion of the change that did occur.

Subjective change as reported by supervisors.

Supervisors who completed the supervisor subjective change instrument (which was the supervisors' perceptions of changes in their staffs) were included in this investigation. The change perceived by the number of supervisors responding in a home were averaged and the means were compared to the confidence intervals of the subjective change instruments of the staff in that home. The supervisor means were compared to the confidence intervals of the staff's subjective change attitudes, subjective change knowledge and subjective change full scale by home. Results of these analyses are contained in Table 10.

Table 10. Comparison of Supervisors Subjective Change Mean Scores to Staff Subjective Change Confidence Intervals

Home	Subjective Change Attitudes		Subjective Change Knowledge		Subjective Change Full Scale	
	Confidence Interval	N	Confidence Interval	N	Confidence Interval	N
3 Staff	.34-1.28	(24)	1.38-2.37	(24)	1.3-2.26	(24)
3 Supervisors	1.23	(5)	2.09	(5)	1.92	(5)
4 Staff	(-) 1.65-2.67	(6)	(-) 3.78-3.47	(6)	(-) 2.84-3.06	(6)
4 Supervisors	- .19	(7)	- .06	(7)	.01	(7)
5 Staff	.93-1.89	(44)	1.70-2.60	(46)	1.69-2.55	(45)
5 Supervisors	1.01	(5)	1.41*	(5)	1.33	(5)
6 Staff	(-) 1.06-4.27	(4)	1.25-3.07	(4)	.23-3.58	(4)
6 Supervisors	3.14	(1)	2.64	(1)	2.81	(1)
7 Staff	.04-3.07	(9)	.59-3.06	(9)	.50-3.09	(9)
7 Supervisors	.50	(2)	.39*	(2)	.52	(2)
8 Staff	.37-2.33	(12)	1.52-3.34	(12)	1.51-3.21	(12)
8 Supervisors	1.91	(3)	2.25	(4)	2.23	(4)
9 Staff	.16-2.13	(17)	.81-2.46	(15)	.89-2.58	(16)
9 Supervisors	- .05*	(3)	.88	(3)	.78*	(3)

*Supervisor mean not in 95% confidence interval for staff.

The supervisor means of homes three, four, six, and eight were within the 95% confidence interval on all three scales. Supervisor means of homes seven and five were within the staff 95% confidence intervals on subjective change attitudes, and full scale but not subjective change knowledge. The supervisor mean for home nine was within the 95% confidence level of staff's subjective change knowledge. Only home two did not have sufficient data to be included in this analysis.

In summary, with some exceptions, the level of change reported by supervisors was in agreement with the average perceptions of the staffs.

DISCUSSION

The purpose of this study was twofold: first, to evaluate the impact of training and consultation given to nursing home staff; secondly, to validate a subjective change methodology. The training was designed to help nursing home staff deal with the problems associated with working with the elderly. The impact of this training was evaluated by obtaining pretest and posttest scores of selected attitudes and knowledge on experimental and control groups. The utility of the subjective change methodology was tested using the experimental group members who had received training.

Several problems in the form of lost participants and inequality of groups seriously hampered the efficacy of the design. To the extent possible, the initial differences were corrected by analyses of covariance.

The outcome analyses did not demonstrate a treatment effect. However, the change that did occur was predicted by the subjective change instrument. The subjective change instrument may have future usefulness in evaluating

this type of study, however, much more study of the instrument's limitations are needed.

Incomplete Data

Well over half of the subjects were lost between pretest and posttest. A number of factors could be operating which caused this to happen. First, many respondents were observed speaking of having completed the survey once and did not want to or see the need to do so again. In spite of explanations, there appeared to be a lack of understanding for the need of repeated measures on the same people.

Some respondents seemed to feel that they would answer the questions the same way as they did before, so there was no need to respond again. Others felt that since they had participated in the pretest, they had done their fair share and someone else should participate in the posttest. Still others believed that only one response was desired and that the posttest had been given to them mistakenly. Another set of staff in the experimental group thought the posttest was only to be completed if they had been involved in the training sessions. These misconceptions were resistant to change.

A second reason for noncompliance was turnover, both among staff and supervisors. The high turnover in staff was anticipated as this problem was discussed by York

(1974). The high amount of turnover in the top three management positions (administrator, director of nurses, and inservice director) was not anticipated. Therefore, the people who had responded to the pretest in some cases were no longer employed by the nursing homes at the time of the posttest. However, the greatest amount of variability of success across homes probably was attributable to the different individuals responsible for facilitating data collection in each of the homes. In some cases this person was different from pretest to posttest. The new person may not have had time to establish the necessary rapport with the staff in order to influence them to participate in the evaluation project. The new persons may not have been as committed or had as good an understanding of the project as his/her predecessor.

A third reason for noncompliance might have been labor/management problems. Three of the homes in the study were owned by the same corporation. This corporation was acquired by a larger corporation during the course of the study. The administrative and policy changes that accompanied the acquisition of the three nursing homes were not popular with the staff. A fourth nursing home was undergoing union organizing efforts which in its initial stages was somewhat anti-management.

A fourth reason given was displeasure with some aspect of the training program. Some respondents chose to

handle this discomfort through noncompliance, rather than expressing this displeasure via the survey.

Attrition Bias

In looking at the differences across variables of those group members who were attrited and those who remained, some interesting points emerge. The most baffling is why those that remained in the study had less positive attitudes on, of all things, attitudes toward patients/nursing home. The interaction indicated that the control group members who remained appeared to be accounting for most of this variance. Why would those who felt least positive about the nursing home or patients in the nursing home remain in the project? It may be that they saw the project as a way to improve the situation that caused them to feel negative. This explanation does not account for the interaction. However, the controls were promised, and after the study did receive, the training program. Consequently, both groups who remained (experimental and control) may have viewed the training program as a way of changing the situation which made them feel less positive toward patients/nursing homes or perhaps they viewed the training as an opportunity to release the frustration or dislike they felt toward the patients/nursing home.

The control group members who remained had more fear of death than the other three groups. It is interesting to observe that this group (controls remaining) also were those who had less positive feelings toward patients/nursing homes. It is plausible that their fear of death could be interacting with their attitudes toward patients/nursing homes. If one is fearful of death, then working in a place where so much death occurs (Ingram & Barry, 1977), might influence one's attitude about that place and its patients. This assertion must be viewed somewhat cautiously however, as the correlation between the two scales (fear of death and attitudes toward patients/nursing homes) was not statistically significant.

Those who remained in the study were more knowledgeable than those who left. The supposition that those who had more knowledge were interested in gaining additional knowledge is not untenable.

Initial Equivalence

The finding of the initial equivalence analysis suggests that individuals assigned to the control group had more fear of death and had less positive attitudes toward patients/nursing homes.

These results cast doubt on the internal validity of the study, and seriously constrain the interpretation of the outcome analysis.

Initial equivalence on demographics. No significant differences were observed between groups on any of the demographics investigated. Thus, it would be hard to argue that the initial group attitude differences resulted from differences in time employed in nursing homes, education, age, or previous training.

Initial equivalence of homes. On both the fear of death and attitudes toward activities measures there was one home that was significantly (a different home in each case) different than two or four others respectively. Otherwise, the homes appeared not to differ on all measures.

Primary Outcome Analysis

Attitudes and Knowledge

The experimental group members did not differ significantly from control group members at the posttest on any of the six measures adjusted by pretest scores. The analysis of covariance strategy was applied to correct for differences between groups (experimental and control). The repeated measures analysis of variance also did not yield significant differences between groups. No treatment effects emerged in any analysis.

The experimental group composition was reviewed and stratified by high treatment, low treatment, and no

treatment. Analysis of covariance on this four group non-experimental design showed no group differences. If any treatment related differences did occur, one would expect to see them in this analysis.

Subjective change. The components of subjective change instrument significantly correlated with change in some attitude and knowledge measures. The subjective change knowledge subset of the subjective change instrument appeared to account for the bulk of this relationship. The subjective change instrument has the flexibility to be adapted to the service being provided and therefore be more specific to the targeted treatment effect. The subjective change knowledge subset of items were more treatment specific than were the other subjective change items. The intended effect of the treatment on attitudes was to be through education or increased knowledge.

A behavioral, observation component was built into the subjective change methodology. In most instances, whatever change was reported by the staff in a given home did not differ from that observed by supervisors.

These two sets of results in combination suggest that when change occurred, a portion of it was reflected in the subjective change score of the staff members and that these reported changes may have been observable.

Implications of Findings

As previously stated, the purposes of this study were: first to evaluate the effectiveness of the nursing home staff training program of Tri-County Community Mental Health Board-Nursing Home project; and second, to validate a method for assessing change as it occurs during community mental health training consultation projects.

There was no evidence of treatment induced change. Obvious reasons for this fall into three categories: (1) problems that occurred in the execution of this particular study, one of which was the deterioration of the design; (2) the need for a different evaluation paradigm for this type of project, if the problems faced in this study are more common than unusual; (3) a weak or inappropriate treatment.

One might argue that the conditions under which this study took place were not unlike those that might be expected in any setting for which such a treatment would be considered. Those biases that were evident should have operated in favor of the treatment, to show positive effects even if these effects were artifactual. However, such a conclusion does not seem warranted. Enough problems were encountered in this study to have concealed any effects that may have occurred. The difficulties brought about by the loss of homes and individuals within homes,

inequality of groups and homes, staff and management turnover, and misconceptions about the program in general could all have reduced the evidence of any real change. The loss of homes, particularly for the control groups, complicated the inequality picture to the degree that it became difficult to make any comparisons.

The design problems that occurred in this research may be common, as suggested by Bergin (1971) and Strupp and Bergin (1969). Even ignoring the design issue, the money, expertise, and other resources needed for a reasonable experimental program evaluation are not always available in community mental health settings. In either case, a valid alternative methodology would be valuable. The subjective change findings of the present study may afford the beginnings of an answer to this problem.

Implications for Further Research

The subjective change methodology appeared to have predicted change in this study to the degree that change occurred. The supervisors did not differ from their staffs in rating of change within the staff. It appears possible that there is some validity in the retrospective ratings. It also appears possible that some change in the staff's behavior occurred at a level which their supervisors could observe. In fact, it could be that the intervention resulted in noticeable beneficial change, but

the deterioration of the research design obscured the experimental comparisons. In addition, it is interesting to note that the traditional-change-related variance in the overall subjective change instrument was accounted for primarily by the more treatment-specific knowledge items.

More investigations with this methodology are needed before it can be asserted that it is predicting change. If it is found to be a reasonable predictor, the parameters of its predictive power should be specified. It may be useful for evaluating training programs only or its utility may be restricted to populations similar to that of the nursing home staff as that was the scope of its use in this study.

APPENDICES

APPENDIX A

FACE SHEET

FACE SHEET

We would like to thank you in advance for participating in the Tri-County Community Mental Health Nursing Home Project. In answering the attached form, we would like you to circle your answer directly on the sheet.

Information gained from this survey is confidential and the individual results of any one person will not be disclosed. To insure this confidentiality, we ask that you DO NOT PUT YOUR NAME ON THE SURVEY. We would like to be able to identify the data but not the person, so we are asking for the following information so we might identify the data.

1. First letter of your last name ____
(Use Z if unknown)
2. First letter of your father's first name ____
(Use Z if unknown)
3. First letter of your mother's first name ____
(Use Z if unknown)
4. Your birth date ____
(Use 9s if unknown)
5. Length of time you have worked in this nursing home ____
(If you have worked here several other times,
include this time also)
6. Total length of time you have worked in all nursing
homes _____
7. Highest grade completed ____
8. Title of current position ____
9. Number of previous training sessions you have attended
involving emotional problems of older people ____
10. Number of training sessions involving emotional prob-
lems of older people you have attended conducted by
Tri-County Community Mental Health or St. Lawrence
Older Adult Services _____

11. Number of current Tri-County Community Mental Health Center sessions you have attended (circle one)

0 1 2 3 4 5 6 7

12. Did you fill out the longer Nursing Home Survey of Tri-County Community Mental Health? _____

APPENDIX B

NURSING HOME SURVEY--ATTITUDES I



			Please Circle One				
			Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
L	1.	I would avoid death at all costs.	1	2	3	4	5
N	2.	The mentally ill pay little attention to their personal appearance.	1	2	3	4	5
S	3.	My job really lets me use my skills and abilities.	1	2	3	4	5
	4.	The male residents here don't need as many activities as the women.	1	2	3	4	5
Y	5.	The activities here are geared toward the physically able patient.	1	2	3	4	5
Y	6.	Activities help older people increase their feelings of self-worth.	1	2	3	4	5
S	7.	My job interferes with my leisure activities.	1	2	3	4	5
S	8.	I get irritated or annoyed.	1	2	3	4	5
N	9.	Older people have fewer emotional problems than younger people.	1	2	3	4	5
L	10.	I would experience a great loss if someone close to me died.	1	2	3	4	5
L	11.	I would not feel anxious in the presence of someone I knew was dying.	1	2	3	4	5
L	12.	I am disturbed by the physical degeneration involved in a slow death.	1	2	3	4	5
N	13.	Emotional problems do little damage to the individual.	1	2	3	4	5
N	14.	Mental disorder is not a hopeless condition.	1	2	3	4	5
N	15.	Mental disorder is usually brought on by physical causes.	1	2	3	4	5
S	16.	My job is rewarding.	1	2	3	4	5
S	17.	People here take a personal interest in each other.	1	2	3	4	5
Y	18.	The activities here are mentally challenging to the residents.	1	2	3	4	5

			Please Circle One				
			Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Y	19.	The residents here don't get enough visitors.	1	2	3	4	5
Y	20.	We need more inservice training.	1	2	3	4	5
Y	21.	It is difficult to convince the staff here to try new things.	1	2	3	4	5
Y	22.	I have adequate supervision in my work.	1	2	3	4	5
Y	23.	Old people get so cantankerous that they can't talk to anyone.	1	2	3	4	5
Y	24.	Many of the people here have mental disorders.	1	2	3	4	5
Y	25.	My present position is a temporary sort of employment until I find something better.	1	2	3	4	5
Y	26.	Frequently I get so discouraged over the work situation I think about quitting.	1	2	3	4	5
N	27.	There is not much that can be done for a person who develops a mental disorder.	1	2	3	4	5
N	28.	Mental health is largely a matter of trying hard to control the emotions.	1	2	3	4	5
Y	29.	My major concern is for the physical health of my patients.	1	2	3	4	5
Y	30.	It's easy for patients to find a place to be by themselves when they wish.	1	2	3	4	5
Y	31.	Volunteers should be an important part of the program here.	1	2	3	4	5
L	32.	I would not mind visiting a senile friend.	1	2	3	4	5
L	33.	The pain involved in dying frightens me.	1	2	3	4	5
L	34.	I am disturbed by the shortness of life.	1	2	3	4	5
L	35.	I would not mind having to identify the corpse of someone I knew.	1	2	3	4	5
L	36.	I do not think of dead people as having an existence of some kind.	1	2	3	4	5
L	37.	I would feel uneasy if someone talked to me about the approaching death of a common friend.	1	2	3	4	5

		Please Circle One				
		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Y	38. The residents here need more physical challenging activities.	1	2	3	4	5
N	39. You can tell a person who is mentally ill from his appearance.	1	2	3	4	5
N	40. People who become mentally ill have little will power.	1	2	3	4	5
N	41. When a person is recovering from a mental illness, it is best not to discuss the treatment he has had.	1	2	3	4	5
Y	42. The alert people here should be separated from the more confused or disturbed people.	1	2	3	4	5
Y	43. The nursing home is not the appropriate place for many of the people who are here.	1	2	3	4	5
Y	44. The most healthy people should be separated from the sicker patients.	1	2	3	4	5
Y	45. There is a wide range of activities available to the residents here.	1	2	3	4	5
Y	46. Old age is better now than it was years ago.	1	2	3	4	5
Y	47. Old people think about their physical problems most of the time.	1	2	3	4	5
Y	48. Old people will complain about the foot no matter what you give them.	1	2	3	4	5
Y	49. I feel overworked.	1	2	3	4	5
Y	50. I have the feeling here of being part of a team.	1	2	3	4	5
L	51. Not knowing what it feels like to be dead does not bother me.	1	2	3	4	5
L	52. If I had a fatal disease, I would like to be told.	1	2	3	4	5
L	53. The idea of never thinking or experiencing again after I die does not bother me.	1	2	3	4	5

		Please Circle One				
		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Y	54. Residents should help in the planning of activities.	1	2	3	4	5
Y	55. The activity program here is varied enough to meet the needs of all the different types of patients here.	1	2	3	4	5
Y	56. Staff doesn't tell the patient enough about their personal affairs.	1	2	3	4	5
Y	57. I know the families and visitors of many of the patients here.	1	2	3	4	5
Y	58. Medication is the most useful way to deal with upset patients.	1	2	3	4	5
Y	59. In our staff meetings we discuss the individual patient's psychological and emotional needs.	1	2	3	4	5
Y	60. I never have contact with staff who work on the other floors or wards.	1	2	3	4	5
L	61. I am not disturbed by death being the end of life as I know it.	1	2	3	4	5
L	62. I would feel anxious if someone who was dying talked to me about it.	1	2	3	4	5
L	63. The intellectual degeneration of old age disturbs me.	1	2	3	4	5
L	64. I could not accept the finality of the death of a friend.	1	2	3	4	5
L	65. It would upset me to have to see someone who was dead.	1	2	3	4	5
Y	66. The patients here have no motivation to do anything.	1	2	3	4	5
Y	67. The home is the end of the road for most people who come here.	1	2	3	4	5
Y	68. I feel that this nursing home is good enough that I would be comfortable placing a relative here.	1	2	3	4	5
Y	69. Many of the skills I use in dealing with children are useful in dealing with the old people here.	1	2	3	4	5

		Please Circle One				
		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Y	70. The nursing staff here should be an important part of the activity program.	1	2	3	4	5
Y	71. The confused residents don't need to spend as much time in activities as the alert ones.	1	2	3	4	5
Y	72. Talking to residents is as important as physical care.	1	2	3	4	5
Y	73. It is best to leave dying patients alone.	1	2	3	4	5
Y	74. The staff here can deal with dying patients appropriately.	1	2	3	4	5
Y	75. The people who work here feel a commitment to work with the elderly.	1	2	3	4	5
Y	76. Because of staff friction you have to be careful what you say and how you act.	1	2	3	4	5
L	77. If I knew a friend was dying, I would not know what to say to him/her.	1	2	3	4	5
L	78. I am disturbed by the thought that my abilities will be limited while I lie dying.	1	2	3	4	5
Y	79. The patients here are afraid of death.	1	2	3	4	5
Y	80. Activities help older people release anger and frustrations.	1	2	3	4	5
Y	81. I spend most of my time with the patients either bathing, feeding, or dressing them.	1	2	3	4	5
Y	82. The residents here could learn to do more things for themselves.	1	2	3	4	5
Y	83. In our staff meetings we discuss patient treatment or medical matters.	1	2	3	4	5
N	84. Most of the time psychiatrists have difficulty in telling whether or not a patient's mental disorder is curable.	1	2	3	4	5

		Please Circle One				
		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
N	85. Physical exhaustion does not lead to a nervous breakdown.	1	2	3	4	5
N	86. Physical rest will not prevent a mental disorder.	1	2	3	4	5
Y	87. The activities here encourage social interactions among the residents.	1	2	3	4	5

Note: Y = York Scales

N = Nunnally Scales

L = Lester Scales

S = Spates Scales

APPENDIX C

NURSING HOME SURVEY--KNOWLEDGE

(Please Circle One)

1. The majority of people have lost all sexual desires by age:
 - A. 65
 - B. 77
 - C. Not at all
 - D. 100
2. When a person enters a nursing home depressed, depression is most likely caused by:
 - A. A physical disorder
 - B. Physical abuse
 - C. A drug overdose
 - D. He/she has to face life losses
3. When a person has Organic Brain Syndrome, communications is facilitated by:
 - A. Giving several different directions at one time
 - B. Using hand gestures
 - C. Focusing on the person's actions
 - D. All of the above
4. The essential part of validation therapy is:
 - A. Telling them what day it is
 - B. Telling them what you think they want to hear
 - C. Listening and responding to the person's feelings
 - D. Both A and B
5. The only effective way to treat depression is with medication:
 - A. True
 - B. False
6. In order to deal with our own anger and frustration, it is important to:
 - A. Keep feelings in
 - B. Express feelings only after working hours
 - C. Evaluate the interaction between ourselves and the older adults
 - D. All of the above
7. Symptoms of depression may include:
 - A. Weight loss
 - B. Withdrawal
 - C. Sleep disturbance
 - D. All of the above

8. Confusion can be caused by:
 - A. Side effects of medication
 - B. Infection
 - C. Malnutrition and dehydration
 - D. All of the above
9. When someone is dying it helps to:
 - A. Take their lead in how much to discuss with them
 - B. Provide no information about their condition
 - C. Keep telling them they are getting better
 - D. Avoid any sad feelings mentioned
10. Symptoms of burnout may include:
 - A. Headaches
 - B. Depression
 - C. Don't care attitude
 - D. All of the above
11. Organic Brain Syndrome is caused by a personality disorder:
 - A. True
 - B. False
12. Validation therapy can only be used by:
 - A. Anyone who has received training in validation therapy
 - B. Physicians
 - C. Psychiatrists
 - D. Psychologists, psychiatrists and social workers
13. Workers in human care services are less likely to develop burnout.
 - A. True
 - B. False
14. Help for avoiding burnout include:
 - A. Keeping feelings to yourself
 - B. Hobbies and outside interests
 - C. Take problems home with you
 - D. All of the above
15. It helps to understand our own feelings about our inevitable death when helping dying people.
 - A. True
 - B. False
16. Essentials of good communication include:
 - A. Preventing the person from crying
 - B. Holding the person's hand
 - C. Good eye contact
 - D. All of the above

17.

18.

19.

20.

21.

22

17. In talking to confused older adults it helps to know about:
 - A. Their medical history
 - B. Their past accomplishments
 - C. Their present aspirations
 - D. All of the above
18. For the dying patient a nursing home can provide:
 - A. Freedom from pain
 - B. Support the family
 - C. Socialization
 - D. All of the above
19. The majority of people over age 80 that have a great number of social contacts live:
 - A. With their children
 - B. In high rise apartment buildings
 - C. In nursing homes
 - D. In own home
20. An ingredient not found in validation therapy is:
 - A. Exploring free associations
 - B. Asking "why" questions
 - C. Appropriate touching of the person
 - D. Linking past to present
21. The major emotional problem in nursing homes is:
 - A. Organic Brain Syndrome
 - B. Anxiety
 - C. Depression
 - D. Personality disorder
22. People with Organic Brain Syndrome have less ability to remember facts and reason logically.
 - A. True
 - B. False

APPENDIX D

NURSING HOME SURVEY--ATTITUDES II

		Please Circle One				
		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
2	1. The mentally ill pay little attention to their personal appearance.	1	2	3	4	5
5	2. My job really lets me use my skills and abilities.	1	2	3	4	5
R	3. Activities help older people increase their feelings of self-worth.	1	2	3	4	5
R	4. My job interferes with my leisure activities.	1	2	3	4	5
2	5. Older people have fewer emotional problems than younger people.	1	2	3	4	5
R	6. I am disturbed by the physical degeneration involved in a slow death.	1	2	3	4	5
2	7. Emotional problems do little damage to the individual.	1	2	3	4	5
5	8. My job is rewarding.	1	2	3	4	5
5	9. People here take a personal interest in each other.	1	2	3	4	5
4	10. The activities here are mentally challenging to the residents.	1	2	3	4	5
5	11. It is difficult to convince the staff here to try new things.	1	2	3	4	5
5	12. I have adequate supervision in my work.	1	2	3	4	5
5	13. My present position is a temporary sort of employment until I find something better.	1	2	3	4	5
5	14. Frequently I get so discouraged over the work situation I think about quitting.	1	2	3	4	5
2	15. There is not much that can be done for a person who develops a mental disorder.	1	2	3	4	5
2	16. Mental health is largely a matter of trying hard to control the emotions.	1	2	3	4	5

		Please Circle One				
		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
3	17. Volunteers should be an important part of the program here.	1	2	3	4	5
3	18. I would not mind visiting a senile friend.	1	2	3	4	5
1	19. The pain involved in dying frightens me.	1	2	3	4	5
1	20. I am disturbed by the shortness of life.	1	2	3	4	5
1	21. I would feel uneasy if someone talked to me about the approaching death of a common friend.	1	2	3	4	5
2	22. You can tell a person who is mentally ill from his appearance.	1	2	3	4	5
2	23. People who become mentally ill have little will power.	1	2	3	4	5
2	24. When a person is recovering from a mental illness, it is best not to discuss the treatment that he has had.	1	2	3	4	5
	25. The nursing home is not the appropriate place for many of the people who are here.	1	2	3	4	5
4	26. There is a wide range of activities available to the residents here.	1	2	3	4	5
5	27. I feel overworked.	1	2	3	4	5
5	28. I have the feeling here of being part of a team.	1	2	3	4	5
1	29. Not knowing what it feels like to be dead does not bother me.	1	2	3	4	5
1	30. The idea of never thinking or experiencing again after I die does not bother me.	1	2	3	4	5
3	31. Residents should help in the planning of activities.	1	2	3	4	5
4	32. The activity program here is varied enough to meet the needs of all the different types of patients here.	1	2	3	4	5

		Please Circle One				
		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
5	33. In our staff meetings we discuss the individual patient's psychological and emotional needs.	1	2	3	4	5
1	34. I am not disturbed by death being the end of life as I know it.	1	2	3	4	5
1	35. I would feel anxious if someone who was dying talked to me about it.	1	2	3	4	5
R	36. The intellectual degeneration of old age disturbs me.	1	2	3	4	5
1	37. I could not accept the finality of the death of a friend.	1	2	3	4	5
1	38. It would upset me to have to see someone who was dead.	1	2	3	4	5
	39. I feel that this nursing home is good enough that I would be comfortable placing a relative here.	1	2	3	4	5
3	40. The nursing staff here should be an important part of the activity program.	1	2	3	4	5
3	41. The confused residents don't need to spend as much time in activities as the alert ones.	1	2	3	4	5
3	42. Talking to residents is as important as physical care.	1	2	3	4	5
5	43. The staff here can deal with dying patients appropriately.	1	2	3	4	5
5	44. The people who work here feel a commitment to work with the elderly.	1	2	3	4	5
5	45. Because of staff friction you have to be careful what you say and how you act.	1	2	3	4	5
1	46. If I knew a friend was dying, I would not know what to say to him/her.	1	2	3	4	5

		Please Circle One				
		Disagree Agree	Agree	Neutral	Disagree Strongly	Disagree
1	47. I am disturbed by the thought that my abilities will be limited while I lie dying.	1	2	3	4	5
4	48. The activities here encourage social interactions among the residents.	1	2	3	4	5

Note: 1 = Fear of death
 2 = Attitudes toward the mentally ill
 3 = Attitudes toward patients/nursing home
 4 = Attitudes toward activities
 5 = Job satisfaction
 6 = Knowledge
 7 = Residual

APPENDIX E

STAFF SUBJECTIVE CHANGE

SURVEY

Please respond by circling the following questions as you assess your ability/attitude both before the workshop and now. You are to answer the "Before" assessments as to what you now think they were before the workshops, the "Now" assessments are your current abilities or attitudes.

			Not At All					Somewhat					Very Well					Very Comfortable				
			1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10
K 1.	How well could/can you recognize someone with an organic brain syndrome?	Before the Workshop	1	2	3	4	5	6	7	8	9	10										
		Now	1	2	3	4	5	6	7	8	9	10										
K 2.	How well did/do you understand the normal aging process?	Before	1	2	3	4	5	6	7	8	9	10										
		Now	1	2	3	4	5	6	7	8	9	10										
K 3.	How well could/can you identify the multiple losses of a person entering a nursing home?	Before	1	2	3	4	5	6	7	8	9	10										
		Now	1	2	3	4	5	6	7	8	9	10										
K 4.	How well could/can you recognize someone with depression?	Before	1	2	3	4	5	6	7	8	9	10										
		Now	1	2	3	4	5	6	7	8	9	10										
5.	How well did/do you listen to the issues of the residents?	Before	1	2	3	4	5	6	7	8	9	10										
		Now	1	2	3	4	5	6	7	8	9	10										
6.	How well could/can you communicate with hostile-aggressive residents?	Before	1	2	3	4	5	6	7	8	9	10										
		Now	1	2	3	4	5	6	7	8	9	10										
7.	How well could/can you communicate with the residents family?	Before	1	2	3	4	5	6	7	8	9	10										
		Now	1	2	3	4	5	6	7	8	9	10										
8.	How well could/can you design or use activities to reduce depression in residents?	Before	1	2	3	4	5	6	7	8	9	10										
		Now	1	2	3	4	5	6	7	8	9	10										
9.	How well could/can you design or use activities to increase self-confidence in residents?	Before	1	2	3	4	5	6	7	8	9	10										
		Now	1	2	3	4	5	6	7	8	9	10										

			Not At All				Somewhat				Very Well Very comfortable Very much			
10.	How well did/do you understand Reality Orientation?	Before	1	2	3	4	5	6	7	8	9	10		
		Now	1	2	3	4	5	6	7	8	9	10		
11.	How well did/do you understand Validation Therapy?	Before	1	2	3	4	5	6	7	8	9	10		
		Now	1	2	3	4	5	6	7	8	9	10		
12.	How well could/can you communication with a resident with sensory loss?	Before	1	2	3	4	4	6	7	8	9	10		
		Now	1	2	3	4	5	6	7	8	9	10		
K 13.	Did/do you know when not to use Reality Orientation?	Before	1	2	3	4	5	6	7	8	9	10		
		Now	1	2	3	4	5	6	7	8	9	10		
14.	How well could/can you use the techniques of Validation Therapy?	Before	1	2	3	4	5	6	7	8	9	10		
		Now	1	2	3	4	5	6	7	8	9	10		
15.	Did/do you feel Reality Orientation is useful?	Before	1	2	3	4	5	6	7	8	9	10		
		Now	1	2	3	4	5	6	7	8	9	10		
16.	Did/do you feel Validation Therapy is useful?	Before	1	2	3	4	5	6	7	8	9	10		
		Now	1	2	3	4	5	6	7	8	9	10		
K 17.	How well could/can you distinguish the difference between reactive and endogenous depression?	Before	1	2	3	4	5	6	7	8	9	10		
		Now	1	2	3	4	5	6	7	8	9	10		
K 18.	How well could/can you distinguish acute from chronic organic brain syndrome?	Before	1	2	3	4	5	6	7	8	9	10		
		Now	1	2	3	4	5	6	7	8	9	10		
K 19.	How well could/can you distinguish depression from organic brain syndrome in a resident?	Before	1	2	3	4	5	6	7	8	9	10		
		After	1	2	3	4	5	6	7	8	9	10		
K 20.	How well did/do you understand the features of organic brain syndrome?	Before	1	2	3	4	5	6	7	8	9	10		
		After	1	2	3	4	5	6	7	8	9	10		
K 21.	How well could/can you distinguish a withdrawn from a depressed resident?	Before	1	2	3	4	5	6	7	8	9	10		
		After	1	2	3	4	5	6	7	8	9	10		

			Not At All					Somewhat					Very Well Very Comfortable Very Much				
			1	2	3	4	5	6	7	8	9	10					
A 22.	How well did/do you accept the eventual death of yourself?	Before	1	2	3	4	5	6	7	8	9	10					
		Now	1	2	3	4	5	6	7	8	9	10					
A 23.	How comfortable were/are you with dying residents?	Before	1	2	3	4	5	6	7	8	9	10					
		Now	1	2	3	4	5	6	7	8	9	10					
A 24.	How comfortable were/are you communicating with the family of dying residents?	Before	1	2	3	4	5	6	7	8	9	10					
		Now	1	2	3	4	5	6	7	8	9	10					
25.	Did/do you recognize things that cause stress on your job?	Before	1	2	3	4	5	6	7	8	9	10					
		Now	1	2	3	4	5	6	7	8	9	10					
26.	How well could/can you recognize the signs of stress in your body?	Before	1	2	3	4	5	6	7	8	9	10					
		Now	1	2	3	4	5	6	7	8	9	10					
27.	How well could/can you use various techniques to reduce stress on your job?	Before	1	2	3	4	5	6	7	8	9	10					
		Now	1	2	3	4	5	6	7	8	9	10					
28.	How well could/can you use various techniques to reduce stress in your personal life?	Before	1	2	3	4	5	6	7	8	9	10					
		Now	1	2	3	4	5	6	7	8	9	10					
A 29.	How much did/do you value your coworkers' opinion of you?	Before	1	2	3	4	5	6	7	8	9	10					
		Now	1	2	3	4	5	6	7	8	9	10					
A 30.	How accepting of you were/are your co-workers?	Before	1	2	3	4	5	6	7	8	9	10					
		Now	1	2	3	4	5	6	7	8	9	10					
A 31.	How much did/do you feel supported by your co-workers	Before	1	2	3	4	5	6	7	8	9	10					
		Now	1	2	3	4	5	6	7	8	9	10					
A 32.	How much unity do you feel between your co-workers?	Before	1	2	3	4	5	6	7	8	9	10					
		Now	1	2	3	4	5	6	7	8	9	10					

Note: K = knowledge

A = Attitudes

APPENDIX F

SUPERVISORS SUBJECTIVE CHANGE

SURVEY

Please respond by circling the following questions as you assess "the staff's" ability/attitude both before the workshop and now. You are to answer the "Before" assessments as to what you think they were before the workshops, the "Now" assessments are their current abilities or attitudes. "The staff" refers to the part of the over-all staff who attended the training workshops. Staff members may vary. Please answer on the observations of the majority of the staff which you have observed.

			Not At All					Somewhat					Very Well				
			1					2					3				
			4					5					6				
			7					8					9				
			10														
K 1.	How well could/can the staff recognize someone with an organic brain syndrome?	Before the Workshop Now	1	2	3	4	5	6	7	8	9	10					
K 2.	How well did/does the staff understand the normal aging process?	Before	1	2	3	4	5	6	7	8	9	10					
		After	1	2	3	4	5	6	7	8	9	10					
K 3.	How well could/can the staff identify the multiple losses of a person entering a nursing home?	Before	1	2	3	4	5	6	7	8	9	10					
		Now	1	2	3	4	5	6	7	8	9	10					
K 4.	How well could/can the staff recognize someone with depression?	Before	1	2	3	4	5	6	7	8	9	10					
		Now	1	2	3	4	5	6	7	8	9	10					
5.	How well did/does the staff listen to the issues of the residents?	Before	1	2	3	4	5	6	7	8	9	10					
		Now	1	2	3	4	5	6	7	8	9	10					
6.	How well could/can the staff communicate with hostile-aggressive residents?	Before	1	2	3	4	5	6	7	8	9	10					
		Now	1	2	3	4	5	6	7	8	9	10					
7.	How well could/can the staff communicate with the residents family?	Before	1	2	3	4	5	6	7	8	9	10					
		Now	1	2	3	4	5	6	7	8	9	10					
8.	How well could/can the staff design or use activities to reduce depression in residents?	Before	1	2	3	4	5	6	7	8	9	10					
		Now	1	2	3	4	5	6	7	8	9	10					

		Not At All					Somewhat					Very Well Very Comfortable Very Much				
9.	How well could/can the staff design or use activities to increase self-confidence in residents?	Before	1	2	3	4	5	6	7	8	9	10				
		Now	1	2	3	4	5	6	7	8	9	10				
10.	How well did/does the staff understand Reality Orientation?	Before	1	2	3	4	5	6	7	8	9	10				
		Now	1	2	3	4	5	6	7	8	9	10				
11.	How well did/does the staff understand Validation Therapy?	Before	1	2	3	4	5	6	7	8	9	10				
		Now	1	2	3	4	5	6	7	8	9	10				
12.	How well could/can the staff communicate with a resident with sensory loss?	Before	1	2	3	4	5	6	7	8	9	10				
		Now	1	2	3	4	5	6	7	8	9	10				
K 13.	Did/does the staff know when not to use Reality Orientation?	Before	1	2	3	4	5	6	7	8	9	10				
		Now	1	2	3	4	5	6	7	8	9	10				
14.	How well could/can the staff use the techniques of Validation Therapy?	Before	1	2	3	4	5	6	7	8	9	10				
		Now	1	2	3	4	5	6	7	8	9	10				
15.	Did/does the staff feel Reality Orientation is useful?	Before	1	2	3	4	5	6	7	8	9	10				
		Now	1	2	3	4	5	6	7	8	9	10				
16.	Did/does the staff feel Validation Therapy is useful?	Before	1	2	3	4	5	6	7	8	9	10				
		Now	1	2	3	4	5	6	7	8	9	10				
K 17.	How well could/can the staff distinguish the difference between reactive and endogenous depression?	Before	1	2	3	4	5	6	7	8	9	10				
		Now	1	2	3	4	5	6	7	8	9	10				
K 18.	How well could/can the staff distinguish acute from chronic organic brain syndrome?	Before	1	2	3	4	5	6	7	8	9	10				
		Now	1	2	3	4	5	6	7	8	9	10				

		Not At All					Somewhat					Very Well Very Comfortable Very Much				
K 19.	How well could/can the staff distinguish depression from organic brain syndrome in a resident?	Before	1	2	3	4	5	6	7	8	9	10				
		Now	1	2	3	4	5	6	7	8	9	10				
K 20.	How well did/does the staff understand the features of organic brain syndrome?	Before	1	2	3	4	5	6	7	8	9	10				
		Now	1	2	3	4	5	6	7	8	9	10				
K 21.	How well could/can the staff distinguish a withdrawn from a depressed resident?	Before	1	2	3	4	5	6	7	8	9	10				
		Now	1	2	3	4	5	6	7	8	9	10				
A 22.	How well did/does the staff accept the eventual death of themselves?	Before	1	2	3	4	5	6	7	8	9	10				
		Now	1	2	3	4	5	6	7	8	9	10				
A 23.	How comfortable were/is the staff with dying residents?	Before	1	2	3	4	5	6	7	8	9	10				
		Now	1	2	3	4	5	6	7	8	9	10				
24.	How comfortable were/is the staff communicating with the family of dying residents?	Before	1	2	3	4	5	6	7	8	9	10				
		Now	1	2	3	4	5	6	7	8	9	10				
25.	Did/does the staff recognize things that cause stress on their jobs?	Before	1	2	3	4	5	6	7	8	9	10				
		Now	1	2	3	4	5	6	7	8	9	10				
26.	How well could/can the staff recognize the signs of stress in their bodies?	Before	1	2	3	4	5	6	7	8	9	10				
		Now	1	2	3	4	5	6	7	8	9	10				
27.	How well could/can the staff use various techniques to reduce stress on their jobs?	Before	1	2	3	4	5	6	7	8	9	10				
		Now	1	2	3	4	5	6	7	8	9	10				
28.	How well could/can the staff use various techniques to reduce stress in their personal lives?	Before	1	2	3	4	5	6	7	8	9	10				
		Now	1	2	3	4	5	6	7	8	9	10				

		Not At All					Somewhat					Very Well Very Comfortable Very Much				
A 29. How much did/does the staff value co-workers opinion of themselves?	Before	1	2	3	4	5	6	7	8	9	10					
	Now	1	2	3	4	5	6	7	8	9	10					
A 30. How accepting of the staff were/are their co-workers?	Before	1	2	3	4	5	6	7	8	9	10					
	Now	1	2	3	4	5	6	7	8	9	10					
A 31. How much did/does the staff feel supported by their co-workers?	Before	1	2	3	4	5	6	7	8	9	10					
	Now	1	2	3	4	5	6	7	8	9	10					
A 32. How much unity does the staff feel between their co-workers?	Before	1	2	3	4	5	6	7	8	9	10					
	Now	1	2	3	4	5	6	7	8	9	10					

APPENDIX G

NURSING HOME TRAINING OUTLINE

SESSION I

Overview

1. Normal aging process
2. Losses in aging
3. Resident adjustment to the nursing home.
4. Major mental health problems in nursing homes
 - a. depression
 - b. organic brain syndrome
5. Family responses to aged relative
6. Questions from staff to be covered during upcoming sessions.

SESSION II

REACHING THE RESIDENT

- A. Communication techniques
 1. Listening skills
 2. Communication helps
 - a. with hostile-aggressive resident
 - b. with depressed, withdrawn resident
 - c. with resident with sensory loss
 - d. with resident's family
 - e. with each other
- B. The use of activity Therapy
 1. In reducing depression
 2. Increasing self-confidence
 3. Maintaining or improving physical abilities
- C. Patient to patient communication.

SESSION III

Validation Therapy

1. Rationale for use
2. Discussion of techniques
3. Movie--Looking for Yesterday--Naomi Feil describes and demonstrates Validation therapy.
4. Discussion of the film

SESSION IV

Validation Therapy and Reality Orientation

- A. Validation therapy
 1. Role play of techniques
 2. Further discussion of use with confused resident
- B. Reality therapy
 1. Techniques
 2. Guidelines of when and when not to use

SESSION V

Depression and Organic Brain Syndrome

1. Distinguishing depression from confusion
2. Types of depression and causes
 - a. reactive depression
 - b. endogenous depression
3. Helping depressed person
 - a. focusing on feelings
 - b. role of activity therapy
4. Distinguishing acute from chronic O.B.S.
5. Features of O.B.S.
6. Staff reactions to resident with depression and O.B.S.

SESSION VI

Death and Dying

1. Staff feelings about death for themselves
2. Staff feelings about death of patients
3. Working with the dying patient and family
4. The stress of working in a setting where many people die
5. Film, Peege
6. Discussion of film

SESSION VII

Burn Out

1. Causes of nursing home stress
2. Film, Burn Out
3. Physical and emotional responses to stress
4. Stress management techniques
 - a. listen to your body
 - b. build a support group
 - c. break routines
 - d. list priorities
 - e. decompression routines

LIST OF REFERENCES

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- Aker, J., Walsh, A., & Beam, J. Mental capacity--medical and legal aspects of the aging. New York: McGraw-Hill Book Company, 1977.
- Akpom, C. A., & Mayer, S. A survey of geriatric education in U.S. medical schools. Journal of Medical Education, 1978, 53, 66-67.
- Alexander, M., & Lester, D. Fear of death in parachute jumper. Percept.Mot. Skills, 1972, 34, 338.
- Arenberg, D., & Robertson-Tehalo, E. A. Learning and aging. In J. E. Birren & K. W. Schaie (Eds.), The handbook of the psychology of aging. New York: Van Nostrand Reinhold, 1977.
- Bergin, A. E. The evaluation of therapeutic outcomes. In A. E. Bergin & S. L. Garfield (Eds.), Handbook of psychotherapy and behavior change. New York: John Wiley, 1971.
- Bigelow, D. A., & Ciarlo, J. A. The impact of therapeutic effectiveness data on community mental health center management. In H. C. Schulberg & F. Baker (Eds.), Program evaluation in the health fields--Volume II. New York: Human Science Press, 1979.
- Birren, J. E., & Botwinick, J. Age differences in finger, jaw, and foot reaction time to auditory stimuli. Journal of Gerontology, 1955, 10, 429-432.
- Blackman, D. K., Howe, M., Pinkston, E. M. Increasing participation in social interaction of the institutionalized elderly. The Gerontologist, 1976, 16, 69-76.
- Blank, M. L. A perspective on de-institutionalization of older patients and a proposal for community based services. Journal of Gerontological Social Work, 1978, 1, 135-145.

- Blythe, R. The view in winter. New York: Harcourt Brace Jovanovich, 1979.
- Botwinick, J. Aging and behavior. New York: Springer, 1973.
- Burnshide, I. Multiple losses in the aged; implications for nursing care. The Gerontologist, 1973, 13, 157-162.
- Busse, E., & Pfeiffer, E. Mental illness in later life. Washington, D.C.: American Psychiatric Association, 1973.
- Butler, R., & Lewis, M. Aging and mental health. St. Louis: Mosby Company, 1977.
- Campbell, D. T. Considering the case against experimental evaluations of social innovations. Administrative Science Quarterly, 1970, 15, 110-113.
- Campbell, D., & Stanley, J. Experimental and quasi-experimental designs for research. Chicago: Rand McNally, 1966.
- Campbell, M. E. Study of the attitudes of nursing personnel toward the geriatric patient. Nursing Research, 1971, 20, 147-151.
- Chemis, C. Is there job satisfaction in community mental health? Community Mental Health Journal, 1978, 14, 309-318.
- Citrin, R. S., & Dixon, D. N. Reality orientation: A milieu therapy used in an institution for the aged. The Gerontologist, 1977, 17, 39-43.
- Collett, L., & Lester, D. The fear of death and the fear of dying. Journal of Psychology, 1969, 72, 179-181.
- Collett, L., & Lester, D. The Collett-Lester fear of death scale: a manual. Unpublished manuscript, Richard Stockton State College, 1974.
- Cronbach, L., & Furby, L. How should we measure "change" --or should we? Psychological Bulletin, 1970, 74, 68-80.
- Curry, T., & Ratliff, B. The effects of nursing home size on resident isolation and life satisfaction. The Gerontologist, 1973, 13, 295-298.

- Daggett, D., Jones, M., Feicler, L., & Clarke, R. Mental health consultation improves care of the aged in community facilities. Hospital and Community Psychiatry, 1974, 25, 170-172.
- DeGeyndt, W. Five approaches for assessing quality of care. Hospital Administration, 1970, 15, 21-41.
- Erikson, E. H. Childhood and society. New York: Norton, 1950.
- Finkel, S. Psychiatric consultation in a community agency serving the elderly. Hospital & Community Psychiatry, 1980, 31, 551-554.
- Flanagan, J. C. A research approach to improving our quality of life. American Psychologist, 1978, 33, 138-147.
- Folsom, J. C. Reality orientation for the elderly mental patient. Journal of Geriatric Psychiatry, 1968, 1, 291-307.
- Ford, R., Alexander, M., & Lester, D. Fear of death in a high stress occupation. Psychological Reports, 1971, 29, 502.
- Freeman, J. T. A survey of geriatric education: Catalogues of United States medical schools. Journal of the American Geriatric Society, 1971, 19, 746-762.
- Handschu, S. Profile of the nurse's aide. The Gerontologist, 1973, 13, 315-317.
- Hart, L. K., Freel, M. I., & Crowell, C. M. Changing attitudes toward the aged and interest in caring for the aged. Journal of Gerontological Nursing, 1976, 2, 10-16.
- Hill, B. Here's what recreation can do for geriatric patients. Geriatrics, 1961, 11, 197.
- Hoelter, J. W., & Hoelter, J. A. On the interrelationships among exposure to death and dying, fear of death, and anxiety. Omega, 1980-81, 11, 241-254.
- Hunter, J. E., & Gerbing, B. W. Unidimensional measurement and confirmatory factor analysis, occasional paper number 20. Institute for Research on Teaching, Michigan State University, 1979.

- Ingram, D. K., & Barry, J. R. National statistics on deaths in nursing homes. The Gerontologist, 1977, 17, 303-308.
- Jones, D. Social isolation, interaction and conflict in two nursing homes. The Gerontologist, 1972, 12, 230-234.
- Jurs, S., & Glass, G. The effect of experimental mortality on the internal and external validity of the randomized experiment. Journal of Experimental Education, 1971, 40, 62-66.
- Kastenbaum, R., & Candy, S. The four percent fallacy. Aging and Human Development, 1973, 4, 15-21.
- Kiresuk, T. Goal attainment scoring and quantification of values. In M. Guttentag, T. Kiresuk, M. Oglesby, J. Cahn (Eds.), The evaluation of training in mental health. New York: Behavioral Publications Inc., 1975.
- Krauss, T. C. The role of geriatrics and gerontology in medical education. Journal of the American Geriatric Society, 1965, 12, 699-707.
- Kriauciunas, R. Application for consultation and education grant. Lansing, Michigan, June 1979.
- Kubler-Ross, E., & Worden, J. W. Attitudes and experiences of death workshop attendees. Omega, 1977-78, 8, 91-106.
- Leaf, A. Getting old. Scientific American, 1973, 229, 45-52.
- Lester, D. Fear of death and nightmare experiences. Psychological Report, 1969, 25, 437-438.
- Lester, D. Correlates of "animism" in adults. Psychological Reports, 1970a, 27, 806.
- Lester, D. Relation of fear of death in subjects to fear of death in their parents. Psychological Reports, 1970b, 20, 541-543.
- Lester, D. Religious behavior and the fear of death. Omega, 1970c, 1, 181-188.

- Lester, D., & Collett, L. Fear of death and self-deal discrepancy. Archives of Found. Thanatol., 1970, 2, 130.
- Lester, D. Attitudes toward death in a non-disturbed population. Psychological reports, 1971, 29, 386.
- Lester, D. Attitudes toward death held by staff of a suicide prevention center. Psychological Reports, 1971, 28, 650.
- Lester, D. Studies in death attitudes: Part Two. Psychological Reports, 1973, 30, 440.
- Lester, D., Getty, C., & Kneisl, C. Attitudes of nursing students and nursing faculty toward death. Nursing Research, 1974, 23, 50-53.
- MacDonald, M. L. Environmental programming for the socially isolated aging. The Gerontologist, 1978, 18, 350-354.
- McGavack, T. Remocreation--restoration of the chronically ill. Journal of American Geriatrics Society, 1965, 13, 967-972.
- McNulty, J. A., & Caird, W. Memory loss with age: Retrieval or storage? Psychological Reports, 1966, 19, 229-230.
- Miller, D. B., & Beer, S. Patterns of friendship among patients in a nursing home setting. The Gerontologist, 1977, 17, 269-275.
- Moos, M., & Kurland, P. Family visiting with institutionalized mentally impaired aged. Journal of Gerontological Social Work, 1979, 1, 271-278.
- Moses, D. Psychosocial care of the aged: how nurses are going to learn about it. In Psychological needs of the aged: Selected paper. The Ethel Percy Andrus Gerontology Center, University of Southern California, 1973, 81-82.
- Nunnally, J. Popular conception of mental health. New York: Holt, Rinehart & Winston, Inc., 1961.
- Oxer, E. Application for continuation of a consultation and education grant by Community Mental Health Board; Clinton-Eaton-Ingham. Lansing, Michigan, June 1981.

- Perlmutter, M. What is memory aging the aging of?
Developmental Psychology, 1978, 14, 330-345.
- Pfeiffer, E., & Busse, E. W. Mental disorders in later life--affective disorders; paranoid, neurotic, and situational reactions. In E. W. Busse & E. Pfeiffer (Eds.), Mental illness in later life. Washington, D.C.: American Psychiatric Association, 1973.
- Powell, R. R. Psychological effects of exercise therapy upon institutionalized geriatric mental patients. Journal of Gerontology, 1974, 29, 156-161.
- Price, T. R., & Bergen, B. J. The relationship to death as a source of stress for nurses on a coronary unit. Omega, 1977, 8, 229-238.
- Putnam, P. Nurse awareness and psychosocial function in the aged. The Gerontologist, 1973, 13, 163-166.
- Quint, J. Awareness of death and the nurse's composure. Nursing Research, 1966, 15, 39-55.
- Quint, J. The nurse and the dying patient. New York: Macmillan Publishing Co., 1967.
- Reichardt, C. The statistical analysis of data from non-equivalent group designs. In T. D. Cook and D. T. Campbell, Quasi-experimentation. Chicago: Rand McNally, 1979.
- Riley, M. W. Social gerontology and the age stratification of society. Gerontologist, 1971, 11, 79-87.
- Riley, M. W., & Foner, A. Aging and Society, Vol. 1: An inventory of research findings. New York: Russell Sage Foundations, 1968.
- Salter, C. L., & Salter, C. A. Effects of an individualized activity program on elderly patients. The Gerontologist, 1975, 15, 404-406.
- Schonfield, D. Memory change with age. Nature, 1965, 208, 918.
- Shapiro, A. A pilot program in music therapy with residents of a home for the aged. Gerontologist, 9, 1969, 128-133.

- Solomon, K., & Vickers, R. Attitudes of health workers toward old people. Journal of the American Geriatrics Society, 1979, 27, 186-191.
- Spaker, P. Family, friendship, and community interaction as related to life satisfaction of the elderly. Journal of Gerontological Social Work, 1979, 1, 279-292.
- Spates, C. R. Moral survey. Lansing, Mi.: Michigan State Department of Mental Health, 1980.
- Stirner, F. W. Area agency on aging program monitoring and evaluation. The Gerontologist, 1977, 17, 114-120.
- Stoller, E. The impact of death-related fear on attitudes of nurses in a hospital setting. Omega, 1980, 11, 85-96.
- Strupp, H. H., & Bergin, A. E. Some empirical and conceptual bases for coordinated research in psychotherapy: A critical review of issues, trends, and evidence." International Journal of Psychiatry, 1969, 7, 18-19.
- Taulbee, L., & Folsom, J. Reality orientation for geriatric patients. Hospital & Community Psychiatry, 1966, 18, 23-25.
- Vincente, L., Wiley, J., & Caraington, R. A. The risk of institutionalization before death. The Gerontologist, 1979, 19, 361-367.
- Weinberg, J. What do I say to my mother when I have nothing to say? Geriatrics, 1974, 29, 155-159.
- Wetzler, M., & Feil, N. Validation therapy with dis-oriented aged who use fantasy: A manual. Cleveland: Edward Feil Productions, 1978.
- Wilkite, M. J., & Johnson, D. M. Changes in nursing students stereotypic attitudes toward old people. Nursing Research, 1976, 25, 430-432.
- Wolk, R. K., & Wolk, R. B. Professional worker's attitudes toward the aged. Journal of the American Geriatrics Society, 1971, 19, 624-639.

York, J. St. Lawrence nursing home attitude survey.
Unpublished manuscript, 1974.

York, J. Community mental health center and nursing
homes. Guidelines for cooperative programs. Unpub-
lished manuscript, St. Lawrence Hospital, 1977.