THE EFFECTIVENESS OF RESOCIALIZATION GROUP TREATMENT WITH THE MILDLY AND MODERATELY CONFUSED INSTITUTIONALIZED ELDERLY

by

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A dissertation submitted to the faculty of The University of Utah in partial fulfillment of the requirements for the degree of Doctor of Philosophy

College of Nursing The University of Utah June 1986
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ABSTRACT

This experimental study compared the effectiveness of Resocialization and Attention Control small group treatments on the cognitive and social accessibility dimensions of a sample of mildly and moderately confused institutionalized elderly. Seventy-two nursing home residents (36 mildly and 36 moderately confused) from three nursing homes were randomly assigned to Resocialization, Attention Control and Control conditions. Subjects participated in a 6-week regime of treatment of one half hour of small group treatment twice a week. A 3x2x3 factorial design was utilized. The three factors included: type of treatment (Resocialization, Attention Control, Control); level of confusion (mild, moderate); and time periods (pretest, posttest 1, posttest 2). The categorical independent variable of confusion level was determined by the scores on the Short Portable Mental Status Questionnaire (SPMSQ). Change scores on the SPMSQ were compared across confusion levels and treatment conditions using the Multivariate Analysis of Variance (MANOVA). Change scores from the total member verbals from the first group to the last group were compared using the Analysis of Variance (ANOVA) and t-Test for Dependent Measures.

The main effect for treatment on the cognitive accessibility dimension as measured by the change scores of the SPMSQ was statistically significant ($p < .05$). When treatment means were compared
utilizing the Newman-Keuls statistic, only the Resocialization groups differed significantly from the Control groups. The effect of confusion level was not significant. Treatment gains on the cognitive accessibility dimension were lost by 1 month follow-up (posttest 2). Both Resocialization and Attention Control groups improved significantly (p<.05) but did not differ significantly on the social accessibility dimension as measured by the change in member verbals. The results of this study contribute to the development of an empirical base upon which to evaluate nursing interventions for the prevention and treatment of confusion in the institutionalized elderly.
Sometimes it is necessary
for one person to touch another person
in his lonely struggle
to enable the person to gain
the courage and strength to
act on his own.

Moustakas
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ACKNOWLEDGMENTS

I claim no credit for the development of the idea for using resocialization groups with the confused, institutionalized elderly. This research was developed from a question answered by a creative and talented researcher who not only led me to doctoral education but to work in gerontology. It is Dr. Mary Ivan, my competent mentor, that I must acknowledge for asking the original question about the effectiveness of resocialization. Without her earlier work and guidance this research could not have evolved.

This research belongs to a group of energetic and inquisitive students who pursued the data collection, sometimes against great odds, to make the project a success. To this group of nursing student leaders from the University of Colorado I will forever be grateful.

In addition to the group leaders this project was actively supported by the administrators and directors of nursing from Beth Israel Hospital Long Term Care Unit, St. Paul Nursing Center and the Cherry Creek Nursing Center.

This project could not have been completed without the support of Dr. Juanita Tate, Nancy Flinn Deitchman, Dr. Kathy Magilvy, and Dr. Rick Kroc. The research was partially funded by the Research Committee of the University of Colorado.

The beginning, continuance, and completion of the project depended in great part on the conscientious work of Mary Cogorno. Without the
superb efforts of this very special woman this project could not have been completed.

I, also, must acknowledge the guidance and support provided by my committee. Dr. Bonnie Clayton, my talented and very competent chairperson, Dr. Beth Cole, Dr. John Wolfer, Dr. Margaret Diamond and Dr. Carol Werner.

Perhaps most appropriately this research and the credit for its completion belong to my family. To my mother, mother-in-law and father-in-law who gave so unselfishly of their time and energy to care for my children so that I might proceed. To my husband without whose love and support our Ph.D. would never have occurred. To my children who can't remember when mommy wasn't a student. To all of these special people my love and thanks. Finally to my dad whose endless dream of having a doctor in the family brought me to doctoral education. Though you never reached old age to see the fulfillment of your wish, perhaps this project has made life a little better for those men and women who did.
CHAPTER I

INTRODUCTION

The care of the elderly in the United States is a major problem for health care providers and there is every indication that this problem will increase in the future. By the year 2000, it is estimated that there will be 30.6 million older Americans (Huyck & Hoyer, 1982). If the present demographic trend continues, by the year 2000 half of the population of the United States will be over 50 and a third will be over 65 (Ostfeld & Gibson, 1975). While health professionals have joined the public sector in emphasizing maintenance of optimal health and disease prevention, the reality of institutionalization for many ill or disabled individuals persists. Consequently, programs designed to improve the quality of life of aged residents of institutions continue to deserve attention.

Institutionalization refers to a specific transition in aging: relocation to a long term care facility such as a nursing home. It is estimated that one out of every four elderly will at some time in their lives enter such a facility (Kastenbaum & Candy, 1973). Approximately 5% of the elderly in the United States currently reside in nursing homes. The average age of the residents is 82 with approximately 20% over 90 years of age. The largest number of residents are women who are divorced, widowed or without living children (Tobin, 1980).
Kayser-Jones (1981) described the majority of long term institutionalized elderly as old, alone and neglected. "But for some of our institutionalized aged the greatest pain to be endured is that of the empty existence in an oppressive environment, surrounded by strangers, and deprived of friends, possessions and dignity" (p. 133). This empty existence often aggravates and perhaps may cause withdrawal, confusion and other symptoms of a restricted response to a sterile emotional environment.

Confusion and social isolation are two major presenting problems among the institutionalized elderly (Wolanin & Phillips, 1981). Wolanin (1981) commented that any discussion of confusion requires beginning with a definition; however, she noted there are "no neat, firm definitions of confusion that separate it from absolutely everything else" (p. 236). Wolanin and Phillips (1981) described confusion as a condition characterized by the client's disorientation to time and place, incongruent conceptual boundaries, paranormal awareness and inappropriate statements that indicate memory deficits.

Despite a conceptual lack of clarity, confusion has emerged as a nursing diagnosis indicating a need for intervention strategies. Because nurses are guardians of the environment in most nursing homes, they are in the best position to evaluate the confusional level of residents. In addition, nurses must also take the initiative to implement treatment strategies to optimize the potential of each resident for self-care. Ivan (1982) demonstrated that iatrogenically-induced cognitive and social inaccessibility can be treated by caregivers who were minimally trained. She found that with only one half hour of group treatment, twice a week, moderately and severely con-
fused residents improved on both dimensions of confusion.

With the pressures posed by increased numbers of institutionalized elderly, it is important for nurses to evaluate treatment models for the care of confused elderly patients. It is through rigorous, formal evaluation that programs effective in treating confusion in the elderly can be implemented, refined and expanded while programs proven to be ineffective can be deleted. Further, with empirical identification of which confused elderly populations actually benefit from specific intervention strategies, nurses will be more effective in implementing programs to treat cognitive and social inaccessibility in the confused institutionalized elderly.

One major treatment modality currently utilized to prevent and treat confusion in the elderly is resocialization. Resocialization is a formal group method which encourages interaction among members by introducing a focal stimulus or topic to facilitate reminiscence. Ivan (1982) found resocialization to be an effective nursing intervention in treating cognitive inaccessibility in both moderately and severely confused clients and in treating social inaccessibility in moderately confused clients. Ivan (1982) recommended further comparative as well as constructive research strategies on the efficacy of small groups in treating the confused, institutionalized elderly.

This study continues the line of investigation initiated by Ivan. A review of the literature indicated that there are no well-controlled studies available on the efficacy of resocialization with mildly confused clients nor is there evidence that resocialization is more effective than extra attention with residents at any confusional level. It was the purpose of this study to investigate the effective-
ness of resocialization group treatment for the mildly and moderately confused, institutionalized elderly.

Nursing is a profession which requires utilization of the most accurate knowledge for the care of clients. Ascertainment of the effectiveness of resocialization group treatment across levels of confusion has the potential to augment the clinical nursing knowledge base necessary for the delivery of high quality nursing care to the institutionalized, elderly individual.

Review of the Literature

Relevant literature was reviewed in five interrelated areas: theories of aging, cognition in the elderly, confusion, institutionalization and resocialization.

Theories of Aging

Social gerontological theory during the last three decades has concentrated on predicting adaptation or adjustment in old age operationalized in terms of various measures of well-being. The literature from the 1960s, 1970s was dominated by discussion of whether disengagement theory (Cumming & Henry, 1961) or activity theory (Havighurst, 1961; Maddox, 1968) could better explain successful adaptation to old age. Other theories have also been developed to explain normal aging: subculture theory (Rose, 1964), exchange theory (Dowd, 1975; Sussman, 1976) and labeling theory (Kuypers & Bengtson, 1973). To bring some clarity to divergent approaches to social gerontological theory, these theories will be reviewed briefly.

Cumming and Henry (1961) proposed disengagement theory as a
social-psychological bridge between personality theory and social theory. The authors described it as "common sense theory arising out of general observations" (p. 12). There are three key notions basic to disengagement theory: 1) the process of social and psychological withdrawal is modal for the aging population, 2) the withdrawal process is both intrinsic and inevitable, and 3) the disengagement process is not only a correlate of successful aging but also is probably a condition of it (Cumming & Henry, 1961). Within this theoretical framework, successful aging is viewed as the acceptance and desire to disengage from an active life.

Despite Cumming and Henry's statement that disengagement theory was provisional and not final, the theory has been regarded as a theory of normal aging and subsequently, has generated an impressive body of critical response.

Tallmer and Kutner (1970) stated that the population studied by Cumming and Henry represented an elite population who had achieved a high level of satisfaction throughout life so that their high morale represented a continuation of a life pattern rather than pleasure at disengagement. In contrast, Rose (1964) and Maddox (1968) suggested that the high degree of disengagement of the Cumming and Henry sample may have been indicative of a continuation of a life-long pattern of low social participation, reflecting a continued life style.

A second area of criticism of disengagement theory was the positive value that the authors placed on disengagement. Havighurst, Neugarten and Tobin (1968) documented empirically that engaged rather than disengaged elderly people were generally happier and had a greater level of expressed life satisfaction. They also documented
that life satisfaction can best be predicted by reviewing long-term styles of personal adaptation, interaction and the personality attributes of the individual. In related findings, Rose (1964) attributed disengagement to the current culturally forced status of the elderly in this country. In the context of social structure and social trends, Rose found disengagement theory a poor interpretation of fact.

Maddox (1965) questioned the generalizability of disengagement theory because of the high rate of selective attrition of Cumming and Henry's sample. He doubted the universality and inevitability of disengagement among the elderly and instead favored the idea of continuity of life style as an important variable in the process of optimum aging. In summary the theory of disengagement has been criticized on its biased subject selection, high attrition rate of subjects, lack of empirical validation, and cultural specificity.

In contrast to disengagement theory, activity theory described successful aging as requiring the maintenance of activities and attitudes of middle age (Gunter & Miller, 1977; Havighurst & Albrecht, 1953). Advocates of activity theory challenged the idea of disengagement as a desirable facet of development and instead viewed disengagement as an outcome of social isolation, institutionalization, physical disability and financial need. Activity theorists cautioned against labeling apathy, confusion and depression as normal disengagement.

Lemon, Bengtson and Peterson (1972) published an axiomatic statement on the activity theory of aging. Seven hypotheses were derived to define informal, formal and solitary activity and to show the
relationship of these kinds of activity to life satisfaction. Only informal activity was found to be positively correlated with life satisfaction. The Lemon, Bengtson and Peterson study (1972) was formally replicated by Longino and Kart (1982). The findings strongly supported the activity theory of aging. The authors found that informal activity contributed positively, strongly and frequently to life satisfaction among a sample of healthy elderly subjects. Formal activity, however, was found to be negatively correlated with life satisfaction. Solitary activity had virtually no effect. This study did indicate that part of activity theory does have predictive power.

The specific difference between disengagement and activity theories of aging is whether the negative association between aging and social interaction is voluntary and preceded by psychological disengagement or imposed unilaterally by the requirements of society. Advocates of the activity theory believe that disengagement is societally imposed and offer as support the positive correlation between higher levels of social interaction and life satisfaction (Maddox, 1968).

With the goal of expanding sociological theories of aging, Rose (1962) developed the aged subculture theory. This theory postulated that concentrated social interaction among older people leads to the development of aging group consciousness, changes in norms and values, and enhanced self-concept among older people.

In an attempt to expand traditional activity theory, McClelland (1982) integrated the concepts of activity theory with the aged subculture theory. McClelland found that self-concept was an important intervening variable between social activity and life satisfac-
tion. Further support for the aged subculture theory was provided by Longino, McClelland and Peterson (1980) who found that residents of eight retirement community settings showed qualitatively more positive social interaction, an enhanced positive self-concept and distinctive patterns of preference for interaction with and perception of the elderly, as compared to an age integrated control group.

Finding both disengagement and activity theory poorly supported empirically, Dowd (1975) proposed the exchange theory of normal aging and proceeded to use the theory to explain the genesis of other theories of aging. Exchange theory goes beyond the acceptance of decreased social interaction to explain the reasons behind interactional change. The basic assumption of the exchange theory is that interaction between individuals can be characterized as attempts to maximize both material and nonmaterial rewards and to reduce costs. Power is then derived from imbalances in social exchange. Dowd explained the basic problem of aging as a problem of decreasing power resources. Because power resources decline with increased age, older people are increasingly unable to enter into balanced exchange relations with other groups. This then may lead to withdrawal from the situation (disengagement theory), extension of power networks (activity theory), or emergence of status or coalition formation (aged subculture theory). What eventually occurs then is an imbalanced exchange ratio resulting in the elderly being forced to exchange compliance for sustenance resulting in decreased social interaction (Dowd, 1975).

Sussman (1976) applied exchange theory to the care of the elderly by family networks, describing the family network as essentially a
voluntary system with few legal or cultural constraints. The ties of
the members are based largely upon reciprocal exchanges, usually of
unequal value with some adherence to filial responsibility. Sussman
(1976) cited compliance and self-esteem as the cost to the elderly of
care by a family network.

Kuypers and Bengtson (1973) suggested that existing theories did
not adequately specify the mechanisms by which adaptive changes were
contingent upon social system change. In response to this criticism,
they developed the labeling theory of normal aging, proposing that "an
individual's sense of self, his ability to moderate between self and
society, and his orientation to personal mastery were functions of the
kinds of social labeling experienced in life" (p. 182). Hence, if an
elderly person was labeled by society as incompetent, the person would
assume that role.

Kuypers and Bengtson (1973) postulated that the elderly in Western
society were especially susceptible to social labeling because of
reorganizational changes that occur in later life. The four aspects
of the social system changes that promoted this vulnerability in the
aged were: loss of norms, shrinkage of roles, losses of reference
groups and a decrease in prestige (Kuypers & Bengtson, 1973). While
other models of aging attempted to define successful aging within the
range of adaptation to environmental change, the labeling theory
argued that in general, the aging process in our society assumes a
pathological quality due to the nature of the labels imposed by the
environment.

In criticizing the labeling model, Ivan (1982) wrote that although
the model reflected a complex interactive process mediated by social,
psychological and biological variables, its focus is on the evolution of social breakdown syndrome or SBS. Ivan protested, "Inasmuch as the labeling model is not a model of the normal aging process but rather of aging gone awry, it is fallacious to contend that all elderly are at risk for SBS" (Ivan, 1982). However, if the labeling model is expanded to encompass both positive as well as negative labels, it could facilitate adaptation to aging through identification with a more positive view of aging. Certainly the literature supports this more positive view.

Although these theories provide divergent explanations of aging, they are not mutually exclusive perspectives. Consideration of the differing viewpoints may provide an understanding of different aspects of the aging process and individualistic differences in aging. Although these theories lack empirical validation, they reflect the state of theory development in social gerontology at the present time.

These theories provide a framework within which to assess the confusion/participation level of clients within the nursing home. They further provide direction for developing intervention strategies.

Cognition in the Elderly

Arenberg (1973) described cognition as effectiveness in dealing with information by attaching meaning to stimuli (perception), registering, storing and retrieving information (learning and memory) as well as manipulating information to solve a problem. Since the brain's primary process is information processing, most neuropsychological indicators of brain impairment measure deterioration of cognitive functions such as attention, language, memory, neurospatial
ability and conceptualization (Albert, 1984).

Cognitive changes with age have concerned society for a long time. The link between decline in intellectual powers and inability to cope with environmental change is documented in the literature of most civilizations (Woods & Britton, 1985). With the development of intelligence tests, the model of inevitable intellectual decline with aging was initiated.

Recently the view of inevitable decline has been challenged. Methodological problems in studying cognition have confounded the results of many studies. One problem identified by researchers was to distinguish between changes which reflect the aging process (maturational process), from changes attributed to the culture and environment of the individual (cohort differences). Miller (1980) believed that cross sectional studies exaggerated the decline in cognitive function that occurred as a result of normal aging. He identified variables such as prenatal and postnatal care, adequacy of infant nutrition and adequacy of educational opportunities as alternative explanations for the differences between age groups found in memory. He further targeted factors in infant development as contributors to intelligence level in the aged.

Longitudinal studies reduce the cohort effect but do not control for historical events and maturation which could effect the changes. These studies are also often confounded by practice effects and subject mortality. While there is little doubt about age-related declines in cognition in normal elderly subjects, the nature of such changes has not been defined nor have factors related to the decline been identified. Two methods have been utilized to evaluate cognition
in the elderly, global intelligence tests and tasks derived from experimental psychology. Both methods suffer from the inadequacies described above but reflect the state of the knowledge.

Scores on intelligence tests are confounded by cultural and educational biases. Because the norms for most intelligence tests have been established for children and young adults, they are poor measures of the extent and subtlety of cognitive changes in the elderly (Woods & Britton, 1985). With these limitations in mind, a review of the literature revealed that age related decline is a feature of old age (over 70) and varies greatly among the different aspects of intellectual function.

Age decrements have been documented in the areas of reasoning and decision making, memory, spatial abilities, cognitive speed and sensory factors (Albert, 1984). Denney and Thissen (1983) advocated a multidimensional and multidirectional rather than normative and unidirectional view of adult cognitive development. In a study on determinants of elderly cognitive abilities, Denney and Thissen (1983) found that the nonverbal performance was significantly predicted by age while the verbal factor was significantly predicted by education, not age. The extent of age related decline in old age does not appear dramatic enough to affect seriously the adaptive ability of the majority of elderly according to Woods and Britton (1985). Siegler and Botwinick (1979) in summarizing the results of a study on aging conducted at Duke University concluded that there is a sizeable proportion of old people who decline very little as old age advances, or decline not at all, except perhaps in extreme old age.

A number of factors have been identified that have a specific,
adverse effect on an elderly person's performance on standardized tests, such as fatigue (Furry & Baltes, 1973), cautiousness (Okun, Siegler & George, 1978), test anxiety (Whitbourne, 1976), and negative evaluation of performance (Bandura, 1978).

Despite these difficulties, several models of intellectual change with aging have been proposed. Horn, Donaldson and Engstrom (1981) utilized Cattell's model of fluid and crystallized intelligence to explain the results of age related change. Within this framework, fluid intelligence represents the immediate adaptive ability of the individual to perceive relationships between objects and events, to reason and to abstract. Crystallized intelligence reflects the aggregated experiences of the individual. Accepting change in neither aspect as inevitable, Horn et al. (1981) suggested that fluid intelligence is more likely to decline with age through the adult years and crystallized intelligence is more likely to increase.

Labouvie-Vief (1980) doubted the causal relationship between certain tasks and the dichotomization of fluid and crystallized intelligence. Instead she viewed cognitive changes as representative of a pragmatic synthesis, culminating in a developmental level significant to the adaptation of the social collective as a whole. Each life stage, at best, achieves a temporary or local adaptation. Even biophysiological decrements, in this view, are not unambiguously maldaptive. Sensory and psychomotor losses may create a sensual abstraction that permits a transcendence of youthful egocentrism and a greater ease of suprapersonal issues and investment of one's self in culture's heritage (p. 24).

Labouvie-Vief (1980) identified rigidity, less risk taking, withholding of responses and slow response time as adaptive reactions
to these changes.

Similarly, Baltes and Willis (1982) described aging as "selective optimization" which is an attempt to focus on those aspects of behavior most important for the person's life situation. Test taking for the older adult becomes a low priority for the available energy. Baltes and Willis (1979) proposed a model for understanding the components contributing to intellectual changes in the aged adult. The three components were age-graded normative influences, history-graded normative influences, and critical life events. This model stressed the multifactorial nature of intellectual change with age.

Schaie (1977-1978) related intellectual changes to cognitive style, identifying the final stage in the process of development as reintegration. He attributed the decline documented in tests of intelligence to the inability of the tests to evaluate the final stage of intellectual development.

Clearly there is no definitive model that encompasses all of the findings regarding intellectual changes with aging. Because of the many confounds, the validity of the empirical findings is in question. Certainly, the most recent models present a more positive approach to cognitive changes than the earlier model of inevitable decline.

In relation to global changes in intellectual tasks, memory plays an increasingly important role as age advances. Although a number of studies have been published evaluating memory functions in the elderly, few studies have been successful in localizing areas of deficit. Research has supported the notion that some aspects of memory are more affected by age than others, specifically, utilization of mediators, organizational abilities, and processing depth.
A conceptualization of memory that has guided research is the trichotomous distinction between registration (encoding), retention (storage) and recall (retrieval). Registration or encoding refers to the initial establishment of a neural code of information, retention or storage refers to the preservation of information over time, and recall or retrieval refers to the recovery and use of information at the time of testing (Huyck & Hoyer, 1982).

One of the most generally accepted conclusions about memory is that encoding presents great problems to the older adult (Salthouse, 1982). A fairly consistent finding in research with older adults is that they utilize mediators much less frequently when memorizing than younger adults (Hulicka & Grossman, 1967). Several authors (Denney, 1974; Eysenck, 1974) concluded that older adults engage less frequently and perhaps less successfully in the types of organizational behavior that facilitates memory performance.

Considerable research has focused on the pacing aspect of encoding. Although the results of several studies (Arenberg, 1965; Kinsbourne, 1973; Smith, 1976) were contradictory, Salthouse (1982) believed that there was sufficient support for the idea that the less time allowed for stimulus encoding the greater were the age differences. In essence, older people need to self-pace their learning situations to produce optimal effects.

Because acquisition greatly affects storage, isolating the effects of storage from the effects of acquisition has been a problem. Hulicka and Rust (1964) determined that there were no age deficits in short term storage but that older individuals may suffer more than
their younger counterparts with storage at intervals greater than 24 hours.

Finally, a fairly recent interpretation of memory functioning focused on the depth of processing. A fundamental assumption of this idea was that stimuli that receive the deepest level of processing (semantic or conceptual rather than sensory or structural) would have the strongest memory representation. Several studies (Craik, 1977; Eysenck, 1974; Mason, 1979) found that older adults are apparently less capable of deep processing than younger adults. However, recent studies with recall measures and with recognition measures failed to support the earlier studies (Salthouse, 1982). Studies on incidental learning have also examined the depth of processing hypothesis. Although several studies (Hulicka, 1966; Perlmutter, 1978) failed to find age differences in incidental learning performance, another study (Erber, 1976) reported significant age differences with incidental learning.

Several areas of criticism of memory research have been identified. The majority of research on memory is concerned with meaningless verbal material with little or no generalizability to material or content found in natural learning environments. Critics favored a contextual approach to learning and memory. Studies examining contextually based memory have found either no age differences (Lachman, Lachman & Thronesbery, 1979) or age differences favoring older adults (Botwinick & Storandt, 1974; Perlmutter, 1978). Arenberg (1977), however, demonstrated that age related declines occurred with meaningful tasks as well as meaningless verbal material. The literature revealed no explanation for these discrepant
findings.

Certainly a great deal of work has been done in an attempt to document cognitive changes with aging. Both in the areas of global intellectual tests and experimental studies, the investigations have presented discrepant results. From these results, however, many theories have been developed. It remains to be determined which of these theories will withstand the test of empirical validation. As research begins to support cognitive stability rather than decline with aging, nursing needs to take advantage of the more positive labels that may be generated to institute interventions. Targets for intervention could include the maintenance of cognitive capacities and improvement in the quality of life for the institutionalized elderly. Nurses also need to act as advocates for the removal of stereotypic labels such as confusion and organic brain syndrome without empirical evidence to support diagnoses reflective of the cognitive changes assessed. Too often changes in cognition are labeled without the ascertainment of factors both physiologic and psychologic to assess the precursors of the change. The result of cognitive decline then is often institutionalization. Clearly, the most recent literature points to a more individualistic and positive view of cognition in the elderly. Despite this more optimistic approach to cognitive changes, the incidence of diagnoses of confusion in the institutionalized aged remain high.

Confusion

Among the institutionalized elderly a major presenting problem is confusion. The proportion of elderly in institutions who suffer from
some form of cognitive or affective impairment is estimated to be as high as 50-70% (Wolanin & Phillips, 1981). As documented in the National Nursing Home Survey (1977), the third and fourth most common diagnoses of people admitted to nursing homes were "senility" and "chronic brain syndrome."

Traditionally, morphological changes in the brain due to age have been regarded as an inevitable and natural process. These changes were previously believed to be the signal of a deteriorating course and linked causally to emotional, cognitive, and behavioral characteristics manifested by the elderly. Rothchild (1941), however, documented a poor correlation between pathological changes and clinical findings in the aged. These results have been further substantiated. Ernst, Beran, Safford and Kleinhauz (1978) proposed that morphological changes must be mediated by isolation to result in a functional disturbance. They further noted that isolation leading to sensory deprivation could produce morphological changes. Diamond (1978) supported these ideas by documenting the capacity of the aging brain in rats to change physically and to improve its functioning in response to environment. As Ernst, Beran, Safford and Kleinhauz (1978) said:

An acknowledgment of the interaction of the physiological, social, cognitive, emotional and behavioral factors and a stress on the importance of isolation, will bring us to recognize that it is possible to treat the aged who suffer from mental and cognitive disorders. (p. 469)

Because confusion is often the presenting symptom of this interaction between the complex system of physiological, social, cognitive, emotional and behavioral factors, operationalization of the term
confusion seems warranted.

Wolanin (1981) wrote, "any discussion of confusion requires beginning with a definition, but there are no neat, firm definitions that separate it from absolutely everything else" (p. 236). Wolanin and Phillips (1981) identified the following as false assumptions that our society holds about confusion.

1. Confusion is an expected and inevitable outcome of the normal aging process.
2. Confusion arises from pathology involving circulation, oxygenation, and metabolism of the brain tissue, and this pathology completely explains its existence.
3. Since confusion arises from a syndrome of the brain (OBS), its effects are neither preventable nor reversible (p. 2).

Confusion may indeed be caused by hypoxia, metabolic problems, toxic or infectious agents, alteration in brain structure, or genetic problems. It may also, however, be induced environmentally by sensory overload or underload, social isolation or depression or other causes. Gerontological nurses (Burnside, 1976; Gunter & Miller, 1977) have challenged the assumption that confusion among the elderly is inevitable and irreversible. Ivan (1982) substantiated this idea by effectively treating iatrogenically-induced confusion in an elderly population.

Citrin and Dixon (1977) suggested that caregivers of the institutionalized aged reinforce confusion by treating patients as confused. Dolen and Bearison (1982) found that levels of social interaction were a more significant predictor of cognitive decline than age. Such studies demonstrate the importance of future exploration of the interactive process involving environmental stimulation and levels of confusion.
To evaluate confusion in the elderly client effectively, a baseline level of intellectual functioning is necessary. Although several authors (Eisdorfer, Busse & Cohen, 1959; Eisdorfer & Cohen, 1961) utilized the Wechsler Adult Intelligence Scale (WAIS) scores as estimates of intellectual functioning in the elderly, some skepticism was generated as to the interpretation of the meaning of the scores on a scale normed on a younger population. Jarvik, Kallman and Falek (1962) argued for a revision of the concept of intelligence in the aged to one with several distinguishable intellectual functions.

In response to the arguments, Fisher and Pierce (1967) derived two ability dimensions to measure impairment of intellectual functioning. The first of these, cognitive accessibility, measured the degree of alertness of the client and was descriptive of the aged person's general awareness of the environment (Fisher & Pierce, 1967). The second dimension, social accessibility, indicated the aged person's degree of social alertness and interpersonal skills (Fisher, 1973). Fisher (1973) proposed that the assessment of cognitive and social accessibility presented a more meaningful measurement of intellectual functioning.

In summary, the differential effect of aging and environment on confusion among the elderly is not known. In assessing elderly, institutionalized clients, it has been documented that both cognitive and social accessibility provided reliable measures through which intellectual functioning can be evaluated (Fisher & Pierce, 1967). If confusion is identified by loss of intellectual or cognitive function, cognitive and social accessibility would be useful measures for the assessment of confusion in the elderly. In conclusion, there is
growing evidence that the degree of presenting confusion in the elderly is, in part, an outcome of the interaction between the individual and the environment (Ivan, 1982; Ernst, Beran, Safford, & Kleinhaus, 1978).

**Institutionalization**

Most of the research describing the effects of institutionalization has been in the field of mental health. Moos (1974) proposed a social ecology model with three basic assumptions.

1. Human behavior cannot be understood apart from the environmental context in which it occurs;
2. Physical and social environment must be studied together since neither can be fully understood alone;
3. Social ecology has an explicit applied value orientation in that it gathers and utilizes knowledge for promoting maximally effective human functioning (p. 21).

Within this social ecological perspective, the environment is conceptualized in any of the following ways: as actively stressful; as a limiting, resisting or inhibiting force; as a selective force; as a releaser of man's capacities; or as imposing demands which stimulate and challenge the individual (Moos, 1976).

The primary concern within the social ecology model is the enhancement of the human environment to improve the quality of human life. Within this framework, health and illness are a function of the human-environment interaction and, therefore, society has an obligation to maximize the positive features of the interaction between the individual and the environment. These ideas support the contextual approach to cognition (Lachman, Lachman & Thronesbery, 1979), the labeling theory of normal aging (Kuypers & Bengtson, 1973),

Within nursing, Martha Rogers is a theorist who identified the significant interaction between man and the environment. She conceptualized the individual and environment as continuously exchanging matter and energy and humans as being inseparable from the environment. In her concept of complementarity, Rogers described the interaction process between human and environmental fields as continuous, mutual and simultaneous. Since human and environmental fields are inseparable, a change in one creates a change in the other.

Within this model, aging becomes a developmental process directed toward the diversity of field and pattern organization (Rogers, 1980). When chronic illness then interacts with the aging process, which is frequently the case with the elderly, the individual loses coordination with the changing environment. Because of the aged individual's inability to change the process of the illness, the environment must be modified to allow a more harmonious patterning with the individual. As purveyors of the environment within nursing homes, nurses are in an excellent position to modify the environment to promote optimal exchange between the environmental and human fields.

Rich (1968) described the need for an ecological analysis of the interaction process between humans and environment. He believed that once the relationship between the elderly and the environment could be described, modification of environment to elicit maximal function of the elderly could be established. Rich found that "changes in environment including diet, work programs, adequate health care and richer social contacts often lead to observable and measureable
changes in the elderly person's overall functioning" (p. 119).

Too often, however, these positive goals have not been achieved. A variety of terms, usually negative in connotation have been used to describe different sociopsychological effects of living in institutions, such as "mortification and curtailment of the self" (Goffman, 1961), "institutional dependency" (Strauss, 1951), and "psychological institutionalism" (Bettelheim & Sylvester, 1948).

Historically, theories of institutionalization have emerged within a mental health-mental illness context. The Program Area Committee on Mental Health of the American Public Health Association generated the term Social Breakdown Syndrome (SBS) to describe a "socially determined reaction pattern which is a type of mental malfunctioning occurring in many different chronic mental disorders" (Zusman, 1966, p. 385). SBS assumes a direct relationship between the environment of the mentally ill and the course of the illness.

In contrast, others prepared a more interactive approach indicating that SBS is not entirely attributable to institutionalization. Gruenberg (1967) and Zusman (1966) stated that SBS developed from the interaction between a susceptible person and a particular type of environment. Gruenberg described the following stages in the interaction process which lead to SBS: 1) psychologic precondition or susceptibility, a deficiency of self-concept; 2) dependence on external cues; 3) social labeling as incompetent and dangerous; 4) induction into the sick role; 5) learning the chronic sick role; 6) atrophy of work and social skills; and 7) identification with the sick. Gruenberg believed that strategies for treatment and prevention could be developed within each stage. Because SBS required only a suscept-
ible individual and a particular type of environment, SBS could be developed outside of the total institution in a situation such as an elderly person living alone.

Because admissions to long term care facilities have recently changed to encompass many admissions from acute care hospitals, residents are often admitted rather abruptly from the hospital to a facility with a population that is largely confused and frail. Under these circumstances the newly admitted individual may be more susceptible to progressive loss of cognitive functions.

Also behavior and affect at more manifest levels will be reinforced, including the more apparent adoption of the patient role, being increasingly preoccupied with bodily functions, a deepening of hopelessness, and a lessening of the capacity or willingness for self-care....(Tobin, 1980, p. 209).

As noted earlier, Kuypers and Bengtson (1973) applied Gruenberg and Zusman's concept of SBS to normal aging. It is during the second stage, dependence on external cues, that Kuypers and Bengtson described the elderly person's dependence on external cues in the context of labeling theory. In a society which evaluates the individual's worth by social utility, the elderly are described as unproductive and useless -- a negative stereotype which has been labeled "ageism."

Based upon labeling theory, Gruenberg's third stage occurred when the elderly individual was labeled as incompetent or more specifically, senile or confused. Kuypers and Bengtson (1973) observed that the elderly in our society are exposed to negative as well as poorly defined labels. From this exposure, the result for the elderly person is a generalized self-view of incompetence or senility. This patterned concept of self leads to induction into the sick role.
A more general perspective suggests that acceptance of the sick role is mediated by a factor that Bandura (1982) labels self-efficacy. Efficacy in dealing with the environment is not a fixed act involving knowledge of action alone; rather it involves a generative capability in which component cognitive, social and behavioral skills must be organized into a course of action. Initiation and regulation of transactions with the environment are governed in part by the judgment that the elderly person makes of his/her operative capabilities, that is his/her perceived self-efficacy. "Those who judge themselves inefficacious in coping with environmental demands dwell on the personal deficiencies and imagine potential difficulties more formidable than they really are" (Bandura, 1982, p. 123). If the environment is reinforcing dependence and confusion as acceptable behavior, it is no wonder that an elderly resident would obtain this image of his/her operative capabilities.

If institutionalization is an outcome of SBS, then it is during the final three stages that a constructive institutional environment could reverse the effect. Cross sectional studies that have compared institutionalized elderly to those living in communities have shown the institutionalized group to have an impaired level of adjustment, a reduced capacity for independent thought and action, depressive mood and low self-esteem (Lieberman, Prock & Tobin, 1968). For the in-firm elderly, entry into an institution is often synonymous with entry into a nursing home, frequently a custodial and authoritarian environment. A number of studies (Bennett, 1963; Kahana, 1973; Schultz, 1976) have documented that nursing homes often demand passivity from their clients and too frequently strip the elderly of environmental
control.

Ivan (1982) extended Kuypers and Bengtson's (1973) application of SBS to describe a model of abnormal aging. Figure 1 depicts this modification. In adapting the model from a schizophrenic population to an elderly population, Ivan (1982) described three factors that forestalled the SBS syndrome: history of mental health, positive self-concepts, and longevity. Ivan further identified factors that contribute to vulnerability as the environmental and physical insults incurred with aging.

As depicted in Figure 1, the internal and external coping mechanism of the elderly interact with and mediate the results of the insults. Ivan identified external coping resources as social support and more generally social integration. Ivan further defined internal coping strategies as "learned individual dispositions relevant to coping behavior" (p. 17). Internal and external coping strategies are described as interactive.

Ivan generated the following propositions from the model:

1) SBS is a process which can be initiated prior to entry into an institution. This finding is supported by the work of Lieberman et al. (1968).

2) The manifestations of SBS can be ameliorated by intervention strategies which alter the internal and external environments of the elderly.

3) Elderly persons who present less extreme forms of SBS will be more receptive to intervention strategies than those elderly who manifest symptoms of severe impairment.

4) With the withdrawal of SBS treatment strategies, there will be an exacerbation of the symptomatology of SBS.

5) Elderly persons who are not susceptible to SBS can sustain exposure to a noxious environment without presenting adverse effects.

6) Elderly persons who present the less extreme form of SBS are less stable than those who
Figure 1. Social breakdown syndrome: An interactive health-illness model of aging (Adapted from Ivan, 1982).
7) A shift in the variables which mediate the elderly person's vulnerability to SBS can result in the onset of precondition status.

Several intervention strategies have been described to combat SBS. Anderson's study (1967) indicated that self-esteem of the elderly could be increased as a result of meaningful social interaction. Lieberman, et al. (1968) identified that living in an institutional environment had both ameliorative as well as adverse effects. The authors found that the psychological effects usually associated with living in an institution were found in people awaiting institutionalization. These findings would support the need for intervention strategies prior to institutionalization.

Rodin and Langer (1977) documented the need of institutionalized residents for control and responsibility. In a two group comparison study, the authors found that a responsibility-induced group scored higher on measures of happiness, activity and orientation than a comparison group of residents who were encouraged to feel dependent. Schulz and Brenner (1977) presented a theoretical model that stressed the importance of control and predictability as mediators of relocation outcomes. The predictors of negative relocation outcomes were identified as: lack of choice of placement, lack of predictability of environment, and lack of environmental control. Schulz (1976) found that the predictability and control of positive events had a powerful positive impact upon the well-being of the institutionalized elderly.

Researchers have identified intervention strategies to alter the negative impact of environment on the elderly. Bengtson (1977) supported a social reconstruction model designed to increase the
competencies of the aged through social system input at specific points in the SBS cycle. Moos (1976) believed that the environmental devaluing of the elderly could best be ameliorated by a social, ecological approach. Henig (1981) labeled the environment as the regulator of senility and suggested that environmental stress such as malnutrition, dehydration, sensory deprivation, social isolation and depression be targeted and treated.

Research clearly identified environmental influences in patient outcomes. Theories in the areas of aging, cognition, confusion and institutionalization encompass the effects of environment on the institutionalized aged. As guardians of this environment in nursing homes, nurses are in a critical position not only to observe the effects of the environment on the functioning of the elderly, but to implement strategies for the treatment and prevention of SBS.

Resocialization

With the findings that the environment can positively or negatively impact the cognition and hence the confusion level of the elderly institutionalized resident, research has focused on the development and evaluation of treatment strategies that alter the institutional environment. Intervention models with institutionalized elderly often target group approaches, with clear justification in social theories and in economic realities. Resocialization group treatment is one such approach. Before specifically addressing the resocialization group treatment modality, a brief overview of group work with the aged will be presented. Burnside (1978) believed that group leaders who work with elderly clients must assume a more
directive and active approach in giving information, answering ques-
tions and sharing themselves with group members. Yalom (1970) wrote
that the curative factors in elder groups were not mediated by the
leaders but by the members who provided the qualities of acceptance,
support, and hope as well as experiences of universality, inter-
personal feedback, testing and learning.

Yalom (1970) further delineated 12 curative factors in group work
from which Burnside (1978) adopted 7 most applicable to work with
elderly groups. These included: group cohesiveness, universality,
interpersonal learning (input and output), catharsis, identification
and instillation of hope.

Erikson (1963) defined the task of later years as the development
of wisdom and the maintaining of integrity. "Wisdom ... maintains and
conveys the integrity of experience, in spite of the decline of bodily
and mental functions. It responds to the need of the oncoming
generation for an integrated heritage and yet remains aware of the
relativity of all knowledge" (p. 133). Within the same philosophical
context, Linden (1953) described the emphasis of gerontological groups
as resocialization, promotion of tranquility, a chance for happiness
and a return to some self-sufficiency. The therapeutic intervention
assisted in a "resolution of depressive affect, increased alertness,
diminished confusion, improved orientation and replenishment of memory
hiati...." (p. 154).

Whether improvement of participants in elderly groups can be
attributed to the leaders or to the members, it is clear through a
review of the literature that small group treatment interventions with
institutionalized elderly clients have proven beneficial in improving
self-esteem, decreasing confusion and increasing social accessibility (Bovey, 1971; Ivan, 1982).

Resocialization developed as a hybrid of remotivation therapy and reminiscence therapy. Both resocialization and reminiscence therapy have been used in the treatment of elderly clients in nursing homes and other settings, while remotivation therapy has been utilized more specifically to treat psychiatric patients. Because of the incorporation of concepts of reminiscence and remotivation in the description of resocialization treatment, relevant literature in all three modalities is reviewed briefly.

Remotivation therapy has been defined as "a structured program of discussion, based on reality, using objective material to which the individual is encouraged to respond" (Dennis, 1976, p. 28). Pullinger (1960) identified remotivation as a five-step technique: 1) a climate of acceptance; 2) a bridge to the real world; 3) the world in which we live; 4) the work of the world; 5) the climate of appreciation. In essence, remotivation involves the introduction by a leader of a topic with props. The goal is to increase group interaction.

In a study on ambulatory psychiatric patients, Bovey (1971) found remotivation no more effective than extra attention on all outcome measures except self-concept. Dennis (1976) found that subjects involved in remotivation treatment were significantly more depressed and less satisfied with life than an extra attention group. The Dennis study (1976) suffered from a weak manipulation of the independent variable, a group nesting effect, and a confound of confusion not controlled for by subject selection (Ivan, 1982). It is clear from reviewing the literature that the effectiveness of remotivation has
A second treatment modality often described in the gerontological literature is reminiscence group therapy. King (1982) defined reminiscence as "the process of remembering one's past either verbally or internally" (p. 21). Schnase (1982) identified three functions of reminiscence: 1) to raise the status of older people by serving as guardians of a unique body of knowledge; 2) to establish ways of relating to other people by integrating the ways of the past; 3) to resolve, reorganize and reintegrate significant past victories and defeats.

Although much literature has documented the positive aspects of reminiscence as promoting successful adaptation to aging (Boylin, Gordon & Nehrke, 1976; Butler, 1963; Havighurst & Glasser, 1972; McMahon & Rhudick, 1964), there has also been documentation that reminiscence produced no effect on adaptation (Perrotta & Meacham, 1981). Analyzing these discrepant results, LoGerfo (1980) postulated three types of reminiscence: informative reminiscence, involving recollection for the pleasure of reliving and retelling; evaluative reminiscence, involving the reintegration of negative and positive aspects of the past; and obsessive reminiscence, resulting from grief, stress or guilt. LoGerfo determined that when differing types of reminiscence were tested differing results occurred. As with remotivation therapy, reminiscence therapy has not been carefully tested to determine which group of elderly respond positively to it.

A third group treatment modality described in gerontological nursing literature is resocialization (RS). RS treatment was described as a less structured version of remotivation therapy
focusing on sensory stimulation and reminiscence (Gray & Stevenson, 1980). Resocialization was designed to treat problems of confusion and lack of social dynamism by reinforcing small group participation and decreasing social isolation thereby altering the institutional environment for the group members. The goal is to encourage group member interaction by introducing a focal stimulus object or topic which inspires reminiscence (Gray & Stevenson, 1980; Kunkel, 1970; Voelkel, 1978). In a descriptive study, Brudno and Seltzer (1968) reported that after 8 months of RS treatment, 9 of 11 confused and disoriented elderly women demonstrated improvement in functional capacity.

With the objectives of achieving increased interaction among group members and improved mental alertness and orientation, Gray and Stevenson (1980) conducted resocialization groups with 17 aged, confused subjects. Subjects were grouped according to confusional levels as subjectively determined by the researchers. The three resulting groups (mildly, moderately, and severely confused) consisted of five to six members. Each group met once weekly for 15-50 minutes over a 4 month period. Every fourth meeting was audiotaped and hand recorded by nonparticipation observers. Tabulations were designated in three categories: 1) total verbals of group members; 2) member-to-member and member-to-group interactions; 3) member-to-leader interactions. All three groups were found to demonstrate significant improvement. Severely confused subjects registered the greatest improvement (Gray & Stevenson, 1980). In evaluating the results of this study, Ivan (1982) noted that although the results might be explained in terms of statistical regression, it could also be
explained by the subjective categorization of the subjects into confusional levels by the researchers.

In a study by Ivan (1982) a comparison was made of the efficacy of resocialization and reality orientation small group treatments on the cognitive and social accessibility dimensions of confusion in a population of moderately and severely confused institutionalized elderly. Eighty-eight nursing home residents (45 severely & 43 moderately confused) were randomly assigned to the reality orientation, resocialization and control conditions. Treatment subjects participated in a 6 week regime of reality orientation or resocialization with pairs of nursing students functioning as group leaders under faculty supervision. Control subjects received the standard treatment program provided by the nursing home. Scores on the Short Portable Mental Status Questionnaire and total number of member verbals occurring in the group sessions over time were used to compare subjects across confusion levels and treatment conditions.

The main effect of treatment on cognitive accessibility as measured by the Short Portable Mental Status Questionnaire was statistically significant. In addition, resocialization was found more effectively to target social accessibility in the moderately confused elderly than reality orientation. Moderately confused subjects were found to be significantly more responsive to treatment on both dimensions of confusion (cognitive and social accessibility) than severely confused subjects. The findings further indicated that the moderately confused controls registered significantly more decay than the severely confused controls. The findings also demonstrated that gain achieved in scores on the Short Portable Mental Status
Questionnaire by treated subjects was lost by the second posttest 1 month later.

There are definite strengths in the design of the Ivan study (1982). Regression toward the mean was controlled for by the inclusion of a control group as well as by the utilization of a second posttest in which the treated subjects became their own controls. The Rosenthal effect was controlled for by the faculty supervisor, students and subjects being blind to the placement of subjects by confusion level. Treatment manipulation was decisive and strong with the omnipresence of the faculty supervisor, weekly clinical conferences and tape recordings as manipulation checks.

There were several threats to the validity of the study. Demand characteristics posed a threat to the study as the leaders adjusted their expectations regarding subject behavior to what they assessed as subject ability. There was no control for the extra attention factor. Because of instrument limitations, a floor effect could have been a possible explanation for lack of further decay with severely confused clients. Finally, mortality was also a threat in this study.

This review of resocialization literature and literature on groups with the elderly has revealed several themes. First, a minimum length of 6 weeks was required before effects were measurable. Second, subject response to treatment was differential across levels of confusion. This differential effect was congruent with the propositions derived from the Social Breakdown Syndrome (SBS). Third, RS group treatment specifically targeted social accessibility. Fourth, verbal orientation behavior appeared a fairly sensitive index of change in accessibility in the institutionalized elderly. Finally, it
has been documented that once treatment is withdrawn, the gains are rapidly lost (Ivan, 1982).

There are as many theoretical explanations of the effectiveness of group interventions with the elderly as there are theorists. Associationists would address the positive reinforcement by the leaders of oriented types of behaviors and social interaction. This reinforcement is built into the structure of the resocialization treatment. Social learning theorists would attribute improvement to modeling by the members of the leader and more active members. Freidians might cite the resolution of earlier conflicts through the process of cathartic reminiscence. Neurophysiologists would identify the utilization of dormant neuronal pathways as the curative factor. Differentiation of the impact of each of these factors on the improvement of the elderly client in group treatment at this time is impossible. With the utilization of novice group leaders, improvement is probably accounted for by a combination of all of these factors.

It was the intent of the proposed study to expand the findings of the Ivan study (1982) and to explore the efficacy of the resocialization treatment modality on the institutionalized, mildly confused elderly. Results were compared with the already established efficacy of this method in the treatment of the moderately confused. With the exception of the poorly controlled Gray and Stevenson (1980) study, no research has focused on mildly confused elderly clients. If this population is identified early in the Social Breakdown Syndrome, the effects of treatment could prove beneficial in preventing greater confusion and deterioration in social competence.

In reviewing the literature in the areas of theories of aging,
cognition, confusion, institutionalization and resocialization, certain consistent themes emerged. There is theoretical as well as empirical support for implementing strategies for counteracting the negative effects of institutionalization. Clearly implicated in the emergence of confusion are factors such as physiologic as well as insults to self-concept, pessimistic expectations of cognitive decline and labeling as incompetent. Generally, institutionalization, meaning nursing home placement, occurs as a last resort and is often precipitated by or concurrent with physical and cognitive changes. This then may lead to changes in the clients perceived self-efficacy and hence, inception into or exacerbation of the SAS cycle. Group treatment has been shown to be an effective treatment strategy in significantly improving the cognitive and social accessibility dimensions of confusion in the institutionalized elderly. Nurses are in a unique position to assess accurately the confusion level of clients. They have been pioneers in the utilization of treatment interventions to prevent and treat confusion in institutionalized elderly individuals.

It was with these conclusions in mind that the following hypotheses were developed.

**Hypotheses**

The hypotheses were tested to determine the effectiveness of participation in resocialization and attention control groups on cognitive and social accessibility across differential levels of confusion in a population of institutionalized elderly:

I. The institutionalized elderly who receive either resocial-
ization or attention control group treatment will demonstrate significantly more improvement in cognitive accessibility as measured by the Short Portable Mental Status Exam (SPMSQ) than will the subjects receiving standard care (the control group).

II. The institutionalized elderly who receive resocialization (RS) treatment will demonstrate significantly more improvement in cognitive accessibility as measured by the SPMSQ than will the attention control subjects.

III. The mildly confused institutionalized elderly who receive RS treatment will demonstrate significantly more improvement in cognitive accessibility as measured by the SPMSQ than will the moderately confused subjects who receive the RS treatment.

IV. The mildly and moderately confused institutionalized elderly who receive RS treatment will demonstrate significantly more improvement in social accessibility as measured by quantity of member verbals during the group session than the attention control groups.

V. The mildly confused institutionalized elderly who receive RS treatment will demonstrate significantly more improvement in social accessibility as measured by quantity of member verbals during the group session than will moderately confused subjects.

Definitions
1. Institutionalized elderly: Persons 64 years old or older residing in a nursing home.

2. Mild confusion: Subject attainment of a score of 3-4 on the Short Portable Mental Status Exam (SPMSQ).

3. Moderate confusion: Subject attainment of a score of 5-7 on
4. Resocialization (RS) group treatment: A small group treatment program (four to five members) which encourages the group members to interact by introducing a focal stimulus object to stimulate reminiscence.

5. A regime of group treatment: Attendance at 8 or more of 12 treatment sessions scheduled two times a week for a 6 week period.

6. Attention control group: A small group treatment with planned activities.

7. Control group: A group receiving the standard care of the facility.

8. Social accessibility: The quantity of member verbals occurring during the group treatment sessions.

9. Cognitive accessibility: Subject's score on the SPMSQ.
A factorial 3x2x3 experimental design was utilized to test the five hypotheses (see Figure 2). The three factors included: group treatment modality (resocialization, attention control, control), level of confusion (mild, moderate) and the three time periods (pretest, posttest 1, posttest 2). The treatment interventions were repeated over three consecutive 6 week time periods utilizing three different nursing homes (A, B, C). Two groups from each treatment modality (resocialization, attention control and control) were to be scheduled in each nursing home. Because of the small number of subjects meeting the criteria for inclusion in the study from nursing home A, two resocialization and two control groups were utilized, but the two attention control groups were not provided in that nursing home. Because of the small number of subjects within each cell, the factor of nursing home was collapsed in the design and data analysis.

Change scores were generated from the data. Analysis was conducted utilizing these scores. Repeated measures were not utilized in the analysis.

Subjects

The sample consisted of 80 nursing home residents from a population pool of 554 in 3 nursing homes, designated as nursing homes A, B and C for purposes of the study. Subject selection was based
Figure 2. 3x2x3 factorial design
upon the following criteria: 1) mild confusion level, determined by scoring 3-4 errors, or moderate confusion level, determined by scoring 5-7 errors on the SPMSQ; 2) 63 years of age or older; 3) visual and hearing ability; 4) ability to speak English; 5) mobility, including wheelchair mobility; 6) willingness to participate; 7) no documentation of mental retardation; 8) no documentation of brain damage due to trauma; and 9) no documentation of Senile Dementia Alzheimer's Type.

Each subgroup of 15 mildly or moderately confused patients was randomly assigned for each 6 week period by the throw of the dice to the resocialization, attention control or control group. Each group began with five assigned residents. The actual number of participants in the groups varied from two to five due to illness or refusal of members to attend.

Variables such as age, length of institutionalization, gender, number of diagnoses, number of medications, and pretreatment SPMSQ scores were compared to identify significant group differences in the means of these variables (see Table 1).

Prospective subjects were identified by the nurses on each unit who met the criteria for inclusion in the study. Based upon nursing recommendation, approximately 100 subjects at each home or a total of 300 prospective subjects were given the SPMSQ by the coinvestigator. All subjects scoring 3-7 on the SPMSQ and meeting all other criteria were randomly assigned to one of the three groups: resocialization, attention control, and control. Alternates were identified in each subgroup (mild or moderate) in case of consent refusal.

The mean age of the subjects in the total sample was 82.5 years. The age range was from 64 to 98 years. The mean number of months
Table 1. Demographic characteristics of the subjects.

<table>
<thead>
<tr>
<th>Groups</th>
<th>Mean Age (years)</th>
<th>Mean Months Institutionalized</th>
<th>Mean Pretreatment SPMSQ Score</th>
<th>Gender %</th>
<th>Mean # of Diagnosis</th>
<th>Mean # of Prescribed Medications</th>
<th>% with Diagnosis of Confusion</th>
<th>Years of Education (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RS Mild N = 15</td>
<td>$\bar{x} = 79.7$</td>
<td>$\bar{x} = 20.5$</td>
<td>$\bar{x} = 3.4$</td>
<td>31</td>
<td>61</td>
<td>$\bar{x} = 4.0$</td>
<td>$\bar{x} = 1.9$</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>sd $= +9.1$</td>
<td>sd $= +22$</td>
<td>sd $= +.5$</td>
<td></td>
<td></td>
<td>sd $= +1.9$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AC Mild N = 7</td>
<td>$\bar{x} = 82$</td>
<td>$\bar{x} = 15.3$</td>
<td>$\bar{x} = 3.39$</td>
<td>14</td>
<td>86</td>
<td>$\bar{x} = 4.6$</td>
<td>$\bar{x} = +1.1$</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td>sd $= +7.2$</td>
<td>sd $= +13.5$</td>
<td>sd $= +.5$</td>
<td></td>
<td></td>
<td>sd $= +2.9$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control Mild N = 15</td>
<td>$\bar{x} = 85$</td>
<td>$\bar{x} = 22$</td>
<td>$\bar{x} = 3.4$</td>
<td>19</td>
<td>81</td>
<td>$\bar{x} = 5.3$</td>
<td>$\bar{x} = +3.5$</td>
<td>13</td>
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<tr>
<td></td>
<td>sd $= +6.9$</td>
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<td>sd $= +.5$</td>
<td></td>
<td></td>
<td>sd $= +2.4$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RS Mod N = 9</td>
<td>$\bar{x} = 80.4$</td>
<td>$\bar{x} = 34.4$</td>
<td>$\bar{x} = 6.6$</td>
<td>18</td>
<td>82</td>
<td>$\bar{x} = 4.7$</td>
<td>$\bar{x} = +1.7$</td>
<td>46</td>
</tr>
<tr>
<td></td>
<td>sd $= +8.4$</td>
<td>sd $= +26.7$</td>
<td>sd $= +.5$</td>
<td></td>
<td></td>
<td>sd $= +2.8$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AC Mod N = 9</td>
<td>$\bar{x} = 82.7$</td>
<td>$\bar{x} = 24.2$</td>
<td>$\bar{x} = 6.0$</td>
<td>18</td>
<td>82</td>
<td>$\bar{x} = 5.0$</td>
<td>$\bar{x} = +3.0$</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>sd $= +8.9$</td>
<td>sd $= +31.4$</td>
<td>sd $= +.78$</td>
<td></td>
<td></td>
<td>sd $= +2.77$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control Mod N = 17</td>
<td>$\bar{x} = 84.0$</td>
<td>$\bar{x} = 22$</td>
<td>$\bar{x} = 5.8$</td>
<td>15</td>
<td>85</td>
<td>$\bar{x} = 4.6$</td>
<td>$\bar{x} = +1.8$</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>sd $= +5.0$</td>
<td>sd $= +22.5$</td>
<td>sd $= +.88$</td>
<td></td>
<td></td>
<td>sd $= +1.8$</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total N = 72
institutionalized was 23 months with a standard deviation of 23. Eighty percent of the sample were women, 20% were men. All of the subjects were Caucasian. The mean number of diagnoses per subject was 4.6 with a standard deviation of 2.4. The mean number of prescribed medications per subject was 4.6 with a standard deviation of 2.4. Thirty-two percent of the subjects had diagnoses indicative of confusion (confusion, OBS, CBS, senile dementia or dementia). Table 1 displays the demographic characteristics of the sample by group.

**Settings**

The research took place in three privately-owned skilled rehabilitation nursing homes in Denver, Colorado, identified as A, B, and C for the study. The care in these facilities was supervised by a professional staff of registered nurses and licensed practical nurses. Most of the care was delivered by aides among whom the turnover rate was high. Nursing home A had 144 beds, nursing home B had 260 beds, and nursing home C had 150 beds.

Recreational therapists were employed at each facility and at least two major social activities were scheduled each day. These tended to be large group activities, including current events, sing-alongs and bingo.

Nursing homes A and B accepted Medicaid payments while nursing home C accepted only private payment. This clearly impacted the socioeconomic status of the residents; however, information on socioeconomic status was not obtained.
Group Leaders

Two leaders were assigned to each group. This ensured the continuity of the group and followed Burnside's (1976, 1978) recommendation for the management of groups with aged clients. The group leaders were junior students in a baccalaureate nursing program, with no prior group leadership experience. Eight leaders were utilized in the first 6 week time period. Subsequently, 12 leaders were utilized in the next two time periods. The leaders were randomly paired by a role of the dice and then randomly assigned to the treatment groups by roll of the dice. The leaders led and co-led their assigned groups on a rotating basis. Leadership of the first group session was determined by a flip of the coin.

The group leadership served as part of the students' required clinical experience in the fundamental nursing and psychiatric nursing courses. The student leaders were invited to participate in the research but were given the option of an alternative clinical experience if they declined to participate. The groups leaders were blind to the directional nature of the hypotheses. They were also blind as to the placement of subjects in the treatment groups by level of confusion. Training of the groups leaders was done by the investigator, a Master's prepared, psychiatric nurse with previous teaching and group supervisory experience (see Appendices A and C for training protocols).

Instrument

The Pfeiffer Short Portable Mental Status Questionnaire (SPMSQ) was used to measure the subject's cognitive accessibility (Pfeiffer,
1975). The SPMSQ has a possible range of zero to ten. A subject's score is computed by totaling the number of incorrect responses. The SPMSQ is an easily administered tool with established test-retest reliability ($r = .82$) and predictive validity ($r = .92$) (Pfeiffer, 1975).

The SPMSQ was administered by the coinvestigator, a registered nurse who remained blind to the experimental conditions. A single rater was used to minimize the source of variance. The SPMSQ was utilized for the initial screening of participants and was also an outcome measure at the termination of the 6 week group treatment. The SPMSQ was given again at 1 month follow-up. All administrations of the test were done during the hours of 9 a.m. - 11:30 a.m. The SPMSQ required approximately 10 minutes to administer.

In an attempt to minimize test anxiety, a warm-up interaction of friendly conversation of a few minutes was conducted by the co-investigator. During testing, some of the subjects recognized their memory deficits and would compensate by challenging the co-investigator with answers such as "You figure it out" or "You're a student, you tell me the answer." Other subjects simply had given up and typically answered "I don't know." On posttest, few subjects recalled the pretesting interview; therefore, sensitization effects of the repeated testings were minimal and equivalent across all treatment conditions.

**Content Analysis**

Every fourth meeting of the group was audiotaped. The taping protocol involved three steps. The investigator 1) arranged and
tested the tape recorders prior to the group meetings; 2) the co-leaders started the recorder with the onset of the session; and 3) shortly after the beginning of the session, the investigator checked the operation of the tape recordings (Ivan, 1982).

The sixty-four 30 minute tapes of sessions 1, 4, 8 and 12 were coded for quantity and direction of verbals. A verbal was operationally defined as a completed sentence or phrase followed by a pause or interruption. The coding categories were: 1) member-to-leader; 2) leader-to-member; 3) leader-to-group; 4) member-to-group or member (Ivan, 1982). Ivan developed these categories from a previous study conducted by Gray and Stevenson (1980). Although the content analysis tool has been utilized in two previous studies, there are no data available on validity. Ivan found it to have an interrater reliability of 99.3%.

The content analysis data were treated as descriptive data for the purposes of analyses. In coding the tapes, the investigator and co-investigator functioned as a single coding instrument, one person identifying the verbals from the tape and the other recording them. The quantity of verbals in each category for each taping was adjusted for time (precisely 30 minutes).

Procedure

The treatment groups met two times a week for 30 minutes over a 6 week period. The rooms in which the groups met were private, enclosed settings, free from distraction (Burnside, 1976, 1978). The groups were randomly assigned to rooms by toss of a coin. The groups met at the same hour in all time blocks and only the days for the
group sessions changed.

The resocialization groups were structured around topics of the leaders' choosing. The topics stimulated the senses through utilization of props and promoted patient reminiscence. Snacks were provided which were congruent with the chosen topic. The patients were encouraged to handle the "props" of the topic in addition to being encouraged to reminisce. The topics and props were approved by the investigator prior to each group. For instance, one week the topic was school days. The leaders brought slates and pencils for the members and shared apples as the refreshment (see Appendix B for list of topics). The tape recording of every fourth meeting served as a further manipulation check of the independent variable.

Subjects assigned to the attention control group met with the leaders in a structured 30 minute session and snacks were provided. The topics of these groups were chosen by the leaders to focus on the here and now, that is, on topics related to current living circumstances or activities, for example bingo (see Appendix C for list of topics and protocol). The attention control groups included refreshments in order to equalize the effect of food. Neither the staff of the nursing home nor the coleaders were aware of which subjects were assigned to the experimental or the attention control groups.

The control group received the normal care given by the facility. These people were known only to the investigator because they were randomly assigned from the list given to the coinvestigator by the respective nursing staffs. They were contacted only for administration of the SPMSQ at designated intervals.
Prior to leading the groups, the leaders received 45 minutes of instruction on group leadership techniques. The leaders conducting the resocialization groups were trained separately from the attention control group leaders. All leaders were told that two treatment modalities were to be utilized and were asked not to discuss their groups with anyone other than their coleader. During the 6 week period of the treatment process, each student leader and coleader dyad received 20 minutes of weekly supervision from the investigator who was blind to the composition (mild or moderately confused) of the group. Individual debriefing sessions occurred for all data collectors.

Training and Supervision of Group Leaders

The investigator, who had group leadership expertise and teaching experience, conducted the training session and supervised the students who participated as group leaders. The supervision of the group leaders involved the investigator's presence in the facilities during the groups. Monitoring of the groups functioned as a manipulation check of the independent variable. The taping of the sessions served as an additional manipulation check.

The leaders' manipulation of the treatment conditions was further checked by a weekly postconference conducted by the investigator. Each leader and coleader pair were seen in conference independently to avoid compensatory rivalry or contamination between treatment conditions. The conferences focused on group principles and the selection of topics and props for subsequent sessions. Absent members, who were usually too ill to attend, were visited at the end
of the group session by the leaders to maintain contact and encourage further participation. Anyone who failed to attend at least 8 of the 12 sessions was not included in the analysis of the sample.

**Ethical Considerations**

The investigator met with all subjects to contract for involvement in the group sessions. The group leaders also met with each individual in a similar manner to review the contract. The contract included the following information set forth by Burnside (1976):

1. the days the group would meet
2. the length of each group session
3. where the group would meet
4. how many individuals would be in the group
5. the purpose of the group
6. the structure of the group
7. the issue of confidentiality.

The administrator and the nursing director of each nursing home approved the research project. The research proposal was processed through the Human Subject's Committee of the University of Colorado as well as the Internal Review Board of the University of Utah (see Appendix D for Informed Consent Form).

As stated to the Human Subject Committee, subjects in the control group received their normal treatment. The group sessions were an additional treatment and did not jeopardize the normal care of the control subjects. Subjects were encouraged but in no way coerced into attending group sessions.
CHAPTER III

RESULTS

Prior to the first administration of the Short Portable Mental Status Questionnaire (SPMSQ) (Pfeiffer, 1975) posttest, one moderate control subject died and one mild control subject was hospitalized. Prior to the second administration of the SPMSQ posttest one moderate control subject died, one mild resocialization subject was discharged, two mild control subjects were hospitalized and two moderate attention control subjects were hospitalized. As a function of subject mortality, the pretest, posttest, posttest data analysis was performed on a total of 72 cases.

A multivariate analysis of variance (MANOVA) was used to analyze the data. The factors of type of group treatment and confusion level were analyzed using change score from pretest (A) to the first posttest (B) to determine the main effect. Interactive effects were determined by again utilizing change score of specific treatment with specific confusion level. As stated previously the factor of nursing home was collapsed because of insufficient number of subjects in each cell. Because of the unequal cell frequencies of this research, the independent variables are not truly orthogonal or independent (Winer, 1971). MANOVA is now able to handle such analyses without the elimination of subjects.

Because of its descriptive nature, the content analysis portion
was analyzed using a \( t \)-test for dependent measures and ANOVA.

**Reliability**

Interrater reliability for the SPMSQ was computed utilizing the percentage of agreement per items rated. One hundred items were rated: the overall interrater reliability was computed at 92%. Percentage of agreement was computed in each category of the content analysis data from the initial tabulation and then five tapes were recoded. Leader-to-member reliability was computed at 96%, member-to-leader 94%, leader-to-group 97%, and member-to-member or group 81%.

**Preliminary Analyses of the SPMSQ**

Because there were no significant differences between group means, the group mean square (MS) estimates of error variance were pooled with the error term to form a pooled error term based on more degrees of freedom (Winer, 1971).

An analysis of covariance was performed on the variables length of institutionalization, years of education, age, nursing home, number of diagnoses and number of medications. These variables were found not to be contributing significantly to the observed effects (see Table 2). A test for heterogeneity was not performed. The covariates were maintained within the analyses as a more conservative estimate of the observed effect of treatment.

In the following presentation of the results, the outcome measure for Hypotheses I through III was the SPMSQ. The SPMSQ pretest is delineated as Test A, the posttest at the completion of treatment Test B, and the one month follow-up as Test C. Hypotheses I through III address change scores from pretest A to posttest B. Hypotheses IV and
Table 2. Analysis of variance and covariance of short portable mental status questionnaire (SPMSQ) change scores from pretest A to posttest B.

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Sum of Squares</th>
<th>DF</th>
<th>Mean Square</th>
<th>F</th>
<th>Significance of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Covariates</td>
<td>12.577</td>
<td>7</td>
<td>1.797</td>
<td>1.030</td>
<td>.420</td>
</tr>
<tr>
<td>Length</td>
<td>.292</td>
<td>1</td>
<td>.292</td>
<td>.167</td>
<td>.684</td>
</tr>
<tr>
<td>Ed</td>
<td>5.379</td>
<td>1</td>
<td>5.379</td>
<td>3.083</td>
<td>.084</td>
</tr>
<tr>
<td>Age</td>
<td>1.286</td>
<td>1</td>
<td>1.286</td>
<td>.737</td>
<td>.394</td>
</tr>
<tr>
<td>Gender</td>
<td>.547</td>
<td>1</td>
<td>.547</td>
<td>.314</td>
<td>.578</td>
</tr>
<tr>
<td>NH</td>
<td>.651</td>
<td>1</td>
<td>.651</td>
<td>.373</td>
<td>.544</td>
</tr>
<tr>
<td>NDIAG</td>
<td>3.475</td>
<td>1</td>
<td>3.475</td>
<td>1.992</td>
<td>.163</td>
</tr>
<tr>
<td>NMEDS</td>
<td>1.189</td>
<td>1</td>
<td>1.189</td>
<td>.682</td>
<td>.412</td>
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<td>Main Effects</td>
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<td>3</td>
<td>5.591</td>
<td>3.205</td>
<td>.029</td>
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<tr>
<td>Treat</td>
<td>16.379</td>
<td>2</td>
<td>8.189</td>
<td>4.694</td>
<td>.013</td>
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<tr>
<td>Confusion</td>
<td>1.949</td>
<td>1</td>
<td>1.949</td>
<td>1.117</td>
<td>.295</td>
</tr>
<tr>
<td>2-Way Interactions</td>
<td>1,326</td>
<td>2</td>
<td>.663</td>
<td>.380</td>
<td>.685</td>
</tr>
<tr>
<td>Treat - Confusion</td>
<td>1,326</td>
<td>2</td>
<td>.663</td>
<td>.380</td>
<td>.685</td>
</tr>
<tr>
<td>Explained</td>
<td>30.675</td>
<td>12</td>
<td>2.556</td>
<td>1.465</td>
<td>.163</td>
</tr>
<tr>
<td>Residual</td>
<td>106.419</td>
<td>61</td>
<td>1.745</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>137.095</td>
<td>73</td>
<td>1.878</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Hypothesis I

There is a significant main effect for treatment on the change scores of the SPMSQ outcome measure from pretest A to posttest B, $F=4.694, p<.05$ (see Table 2). The mean change for the resocialization groups was .92, which was significantly different by the Newman-Keuls test from both the attention control groups 0.0 and the control groups -.15 (see Figure 3).

Hypothesis II

As hypothesized, resocialization treatment was found to be significantly more effective than the attention control treatment when the Newman-Keuls statistic was utilized to compare the mean change scores from pretest A to posttest B (see Table 3). The effect of treatment, therefore, can be attributed to the treatment modality and not simply to the extra attention effect of treatment.

Hypothesis III

Hypothesis III predicted that mildly confused subjects who receive resocialization treatment would demonstrate significantly more improvement in cognitive accessibility as measured by the A-B change score of the SPMSQ than would the moderately confused subjects. A simple main effects test failed to support this hypothesis, $F<1, p>.05$ (see Table 2). The change, in fact, occurred in the opposite direction with the moderate RS group achieving a mean change score of 1.22 and the mild RS group demonstrating a mean change score
Figure 3. SPMSQ mean change from pretest A to posttest B as a function of type of treatment.
Table 3. The short portable mental status questionnaire pretest A and posttest B mean change scores.

<table>
<thead>
<tr>
<th>Experimental Conditions</th>
<th>Confusion Levels</th>
<th>Treatment Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mild</td>
<td>Moderate</td>
</tr>
<tr>
<td>RS</td>
<td>.73</td>
<td>1.22</td>
</tr>
<tr>
<td>AC</td>
<td>-.29</td>
<td>.20</td>
</tr>
<tr>
<td>Control</td>
<td>.00</td>
<td>-.28</td>
</tr>
</tbody>
</table>

Note: *Means with different subscripts differ significantly (p<.05) by the Newman-Keuls procedure.
of .73 (see Figure 4).

**Additional Findings**

When the groups were tested one month after the termination of the groups (posttest C), the effect of treatment was not maintained and there were no significant differences between the groups at that time, \( F=.492, p>.05 \) (see Table 4). The resocialization groups lost .54 points while the attention control and control groups gained .06 and .02 points, respectively (see Figure 5). Although these are not large gains, the loss by the resocialization groups in light of the gains is worthy of consideration.

When the scores from pretest A were compared to posttest C, no significant differences for either treatment or confusion level were identified between the groups (see Table 4). The decrease in confusion level immediately after treatment and the subsequent increase on one month posttesting was documented in the work of Ivan (1982) as well. Figures 6 and 7 illustrate the SPMSQ mean change score from pretest A to posttests B and C by confusion level. Figure 8 illustrates the SPMSQ mean change from pretest A to posttests B and C as a function of confusion level.

**Content Analysis Data**

The content analysis data serve two purposes: the measurement of the social accessibility dimension and the demonstration that the manipulation of the treatments was effective. Before discussing the findings, the limitations in drawing inferences from this data must be noted. There is much variability within each treatment condition for each of the group sessions. The evidence for heterogeneity of
Figure 4. SPMSQ mean change from pretest A to posttest B simple main effect for confusion level with resocialization treatment.
Table 4. Analysis of variance of short portable mental status questionnaire (SPMSQ) change scores from pretest A to posttest C.

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Sum of Squares</th>
<th>DF</th>
<th>Mean Square</th>
<th>F</th>
<th>Significance of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Effects</td>
<td>13.639</td>
<td>3</td>
<td>4.546</td>
<td>1.851</td>
<td>.148</td>
</tr>
<tr>
<td>Treat</td>
<td>2.419</td>
<td>2</td>
<td>1.210</td>
<td>.492</td>
<td>.614</td>
</tr>
<tr>
<td>Confusion</td>
<td>8.992</td>
<td>1</td>
<td>8.992</td>
<td>3.660</td>
<td>.061</td>
</tr>
<tr>
<td>2-Way Interactions</td>
<td>8.015</td>
<td>2</td>
<td>4.007</td>
<td>1.631</td>
<td>.204</td>
</tr>
<tr>
<td>Treat - Confusion</td>
<td>8.015</td>
<td>2</td>
<td>4.007</td>
<td>1.631</td>
<td>.204</td>
</tr>
<tr>
<td>Explained</td>
<td>38.548</td>
<td>12</td>
<td>3.212</td>
<td>1.308</td>
<td>.239</td>
</tr>
<tr>
<td>Residual</td>
<td>144.952</td>
<td>59</td>
<td>2.457</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>183.500</td>
<td>71</td>
<td>2.585</td>
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</tr>
</tbody>
</table>
Figure 5. SPMSQ mean change from pretest A for posttests B and C as a function of type of treatment.
Figure 6. SPMSQ mean change from pretest A for posttests B and C for mild confusion level as a function of treatment.
Figure 7. SPMSQ mean change from pretest A for posttests B and C for moderate confusion level as a function of treatment.
Figure 8. SPMSQ mean change from pretest A for posttests B and C as a function of confusion level.
variance together with the small number of data sets (total $n=14$, for each group $n=4$) suggests that the content analysis is best treated as descriptive data. Although the original design described an $n$ of 16, two groups were eliminated from analysis because of technical problems with the tapes.

**Hypothesis IV**

The main effect for treatment on the social accessibility dimension of confusion as measured by the total member verbals was not statistically supported, $F=.16$, $p>.05$ (see Table 5).

When the change score from the first to the last session was calculated on the total member verbals (member-to-member and member-to-leader verbals combined) the means for the resocialization and attention control groups did not differ significantly on the ANOVA. Figure 9 illustrates the difference over the four time intervals (Time 1, 4, 8, and 12) in total member verbals as a function of treatment. When a dependent $t$-test was performed on the change scores from Time 1 to Time 4, both groups (resocialization and attention control) increased significantly on the social accessibility dimension of confusion (see Table 6).

**Hypothesis V**

When the simple main effect for confusion on the social accessibility dimension was analyzed, as measured by the total member verbals, the results on the ANOVA were nonsignificant, $F=.278$, $p>.05$ (see Table 7). There was no support for the hypothesis that the mildly confused institutionalized elderly who received RS treatment would demonstrate significantly more improvement in social
Table 5. Analysis of variance of mean total member verbals (member-to-member and member-to-leader verbals combined) change score time 1 to time 4.

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>df</th>
<th>ss</th>
<th>ms</th>
<th>f</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between</td>
<td>1</td>
<td>9,559</td>
<td>9,559</td>
<td>.16*</td>
</tr>
<tr>
<td>Within</td>
<td>12</td>
<td>695,477</td>
<td>57,957</td>
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</table>

Note: *p > .05
Figure 9. Change in total member verbals over time as a function of treatment
Table 6. \emph{t}-tests for dependent measures of mean changes for member verbals time 1 to time 4.

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>t</th>
<th>df</th>
<th>2-tail p</th>
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</thead>
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<tr>
<td>Resocialization</td>
<td>216</td>
<td>2.9189</td>
<td>8</td>
<td>p&lt;.02</td>
</tr>
<tr>
<td>Attention Control</td>
<td>270</td>
<td>6.08</td>
<td>8</td>
<td>p&lt;.01</td>
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</table>
Table 7. Analysis of variance of mean total member verbals (member-to-member and member-to-leader verbals combined) change score time 1 to time 4 mild and moderate confusion groups.

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>df</th>
<th>ss</th>
<th>ms</th>
<th>f</th>
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</thead>
<tbody>
<tr>
<td>Between</td>
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<td>Within</td>
<td>7</td>
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<td>44,288</td>
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</tr>
<tr>
<td>Total</td>
<td>8</td>
<td>363,301</td>
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</table>

Note: *p > .05
accessibility than the moderately confused group. Indeed the mean increase in verbals for the moderate group $\bar{x} = 269$ was slightly higher than the mild group $\bar{x} = 201$. Figure 10 illustrates the change in mean number of verbals over time as a function of confusion level. Figure 11 demonstrates the change in member verbals over time as a function of treatment and confusion level.
Figure 10. Change in total member verbs over time as a function of confusion level.
Figure 11. Change in total member verbals over time as a function of treatment-confusion
CHAPTER IV

DISCUSSION AND CONCLUSIONS

Discussion

The present study supports the effectiveness of small group treatment on the cognitive and social accessibility dimensions of confusion in the institutionalized elderly. It specifically supports the efficacy of resocialization treatment on the cognitive accessibility dimension. The findings also demonstrate that the gain on the cognitive accessibility dimension by the treated subjects is lost within one month after treatment is terminated. The study did not identify a significant improvement difference on the social accessibility dimension of confusion between the resocialization and attention control groups. The findings did not support the hypotheses that level of confusion would be differentially responsive to treatment.

Main Effect for Treatment

Resocialization group treatment received statistical support for effectively targeting the cognitive and social accessibility dimensions of confusion in the institutionalized elderly. When the Newman-Keuls procedure was utilized to compare mean change scores from pretest A to posttest B, it demonstrated that not only did subjects treated with resocialization improve significantly more than those subjects treated with extra attention but that the mean of the
subjects treated with extra attention was not significantly different from the control group. Although both treatments clearly impact the institutional environment of the subjects, they are designed to do so in very different ways. Resocialization was created to decrease confusion by focusing on the "then-there" and reinforce interaction among group members by active participation on the part of the leaders. Although previous research (Rodin & Langer, 1977) has supported the idea that the type of intervention with elderly is nonsignificant, this research clearly supports the superiority of resocialization over extra attention on the cognitive accessibility dimension of confusion in the institutionalized elderly for short term treatment.

To accept the hypothesis that there was indeed a significant difference between treatment modalities on the cognitive accessibility dimension outcome measure, certain design criteria must be met: the manipulations were strong, there was no experimenter bias, the outcome measures were reliable and valid, and the therapist characteristics did not bias the results (Ivan, 1982).

The treatment manipulations were strong and decisive. The continual presence of the investigator at the facility, the weekly clinical conferences and the taping of every fourth session served as manipulation checks. Although it was difficult for the leaders of the attention control groups to stop reminiscence by the members, the tapes indicated that the leaders consistently refocused the groups on the here and now.

Because the investigator was also the clinical supervisor, the question of bias in the supervisory process could be raised. The investigator did not administer any of the pretests or posttests. The
investigator's presence strengthened the manipulation of the independent variable in that she had previously supervised research which utilized the resocialization treatment modality.

The Short Portable Mental Status Examination (Pfeiffer, 1975) has well-established reliability and validity and was utilized because of its brevity and ease of administration with an elderly population and for replication.

A discussion of the manipulation of the independent variable also involves therapist characteristics. All of the leaders were novice group leaders. Variables which appeared equivalent across treatment conditions were warmth, genuine caring and empathic abilities.

Strong manipulation of the independent variable characterized by frequent manipulation checks, equivalent therapist characteristics and a reliable and valid tool provide support for the hypothesis that the institutionalized elderly who receive resocialization treatment demonstrate significantly more improvement in cognitive accessibility than the attention control group.

In analyzing these results, it is important to identify how the SBS model explains the outcomes relative to the specific treatments utilized. The overall treatment effect can be interpreted as the intervention strategies effectively altering the interaction between a susceptible person and the institutional environment. The effectiveness of treatment supports SBS theory, that the manifestations of SBS can be ameliorated by intervention strategies which alter the external environment. The model also receives support when the gain in cognitive accessibility achieved by the treated subjects is lost within 1 month as documented by the second posttest. The SBS
model suggests that with the withdrawal of treatment interventions, there will be an exacerbation of the symptoms of SBS as a result of the resumption of the interaction between a vulnerable organism and a noxious environment.

The SBS model, however, fails to identify how intervention strategies effect change and specifically differential change. Resocialization was developed as a modality specifically to target reminiscence and sensory stimulation toward the goal of decreasing confusion and increasing group interaction. The attention control group was designed to focus on the here and now through group participation in an activity or project. Clearly the leader expectations, interaction versus participation, were very different yet the results indicated that both groups significantly increased interaction. The resocialization treatment provided a structure in which the leaders could encourage self-disclosure particularly in the form Butler (1963) identified as life review. By looking at the differential effectiveness within a social learning model, improvement may have occurred through change in perception of self-efficacy.

Bandura (1982) believes that people often do not perform up to their potential because of self-referent thoughts that mediate the relationship between knowledge and action. This idea supports the recent more positive views about the cognitive decline in aging being more attributable to environment than to physiology. If, as labeling theory postulates, institutionalized elderly are given the message that they are incompetent, senile and/or confused, as documented by the high percentage of elderly carrying the diagnosis of confusion, dementia and OBS, the elderly's perceived self-efficacy in initiating
and regulating transactions with the environment is clearly impacted. Judging themselves inefficacious in coping with environmental demands, the elderly residents dwell on their personal deficiencies and imagine difficulties more formidable than they are. Their perceived inefficacy then leads to stress and impaired performance by diverting attention from how best to proceed to concern over failure. This then may account for the difficulty elderly encounter with testing attributed to cautiousness (Okun, Siegler, & George, 1978), test anxiety (Whitbourne, 1976), and negative evaluation of performance (Bandura, 1978).

What resocialization treatment, then, may impact is the concept of self-efficacy. Student group leaders enter the institutional setting with high expectations for group improvement in confusion and energy to change the environment of the nursing home to promote change. They are unaware of the labels or diagnoses carried by the individual members of the group and are blind to the level of confusion. The residents quickly identify this change in expectation and hence respond in a different manner.

In the social learning model, judgments of self-efficacy are based upon four principal sources of information: enactive attainments, vicarious experiences of observing performance of others, verbal persuasion, and physiological states. Because the groups are established as experiences with success, i.e., reinforcement for interaction and reminiscence, success leads to increased perceived self-efficacy. Since the group structure is small (generally 4-5 people) and homogeneous in composition (all at the same confusion level), competent modeling among group members leads to positive
vicarious experiences with self-efficacy. The honest verbal persuasion of the students in encouraging the subjects to attend the group meetings and in expressing their genuine interest in learning about the subject's previous accomplishments and lives, encourages the further development of a sense of personal efficacy for the subject. Because the groups are structured in quiet, calm environments with familiar topics, the elderly can share with each other and develop trust. The confidentiality of the groups is discussed and in several groups, discussion of the inadequacies of the nursing homes ensued. Some groups became a place where people could share their concerns about the environment without fear of repercussion.

By the administration of the posttest B, the self-efficacy of the subjects had changed so that knowledge previously acquired (remote memory) and awareness of environmental cues (recent memory) became more accessible to the subjects.

Another finding that the SBS model does not address is the failure of the data to support the hypothesis that resocialization group treatment would more effectively target the social accessibility dimension of confusion than the attention control group. As documented by Ivan (1982), the verbal outcome measure is of uncertain validity. It is a group, not an individual measure, and it excludes nonverbal communication. It was utilized in this study primarily for replication. Certainly a measure of self-concept or engagement would better identify individual outcomes from the treatment modalities on the dimension of social accessibility. Although resocialization specifically reinforces group interaction, the data support that the extra attention group also effectively targeted the social accessi-
bility dimension of confusion in the institutionalized elderly.

Perhaps, rather than the increase in social accessibility being attributed to the type of treatment, the structure of the groups (small and homogeneous) provided an atmosphere in which interaction could increase. The leaders of all the groups came with energy and enthusiasm which had to impact significantly the energy level of the environment. If, as Rogers (1970) described, complementarity then leads to change, the increase in the energy level of the environment would directly impact the interaction within the groups. Both treatments impacted the self-efficacy of the subjects by changing the expectations of the environment from the client being a passive recipient of care to being an active participant in care. The leaders were blind to the diagnoses of the subjects indicating confusion, Organic Brain Syndrome or Dementia and to the placement of subjects by confusion level. Among all levels of confusion and types of treatment member verbals increased.

In summary, the data from this research clearly support the effectiveness of small group treatment on the social accessibility dimension of confusion with the mildly and moderately confused institutionalized elderly.

Main Effect for Confusion

The main effect for confusion was not statistically significant for either the cognitive or social accessibility dimension of confusion. If, as hypothesized by the SBS model, the mildly confused subjects are in the early stages of the SBS syndrome then intervention with this group should have been significantly more effective than
with the moderately confused group. SBS predicts that the group that is newly engaged in the SBS cycle would either experience a corrective environment or would further regress. Both mild and moderate groups show improvement but this improvement is not significantly different statistically.

On the cognitive accessibility outcome measure the moderate resocialization groups attain a change score of 1.22 on a 10 point scale. When this change score is combined with decay in the moderate control group, the resocialization groups score combined with the prevented loss is 1.50 on a 10 point scale. Although this is not as great a gain as documented by Ivan (1982), it does represent a 15% gain with resocialization treatment in this study. When compared with the attention control group, the resocialization groups score approximately 1 point higher or 10% greater improvement. It must be assumed, therefore, that with random assignment the resocialization group subjects would have incurred the same rate of decay as the control subjects had treatment with resocialization not been instituted.

When the change scores of the mildly confused resocialization groups (.73) and the control subjects (0.0) are analyzed, the magnitude of effect remains at .73. This almost three quarter point change on a 10 point scale has minimal clinical significance, however the finding is qualified by a possible ceiling effect occurring with the instrument. The SPMSQ instrument because of its 0-10 range is not sensitive to improvement beyond no errors. Clearly the moderate subjects have a greater range within which to register improvement. The change score for the mild attention control groups indicates a slight decay (-.29) with this treatment modality. If, as hypothesized
in the SBS model, the mild group is in an earlier stage of the SBS cycle, a corrective environment should have evidenced more improvement with this group and certainly regression with the control group. Because there are no definitive measures to indicate when subjects enter the SBS cycle, perhaps the mild subjects have not entered the cycle. This then would account for the 100% greater magnitude of effect of resocialization with the moderate group as compared to the mild group.

When the change scores are analyzed from pretest A to posttest C (one month follow-up), both the mildly and moderately confused groups experience regression. For the mild group the loss was .40. Both the mild control and the attention control groups register gains of .60 and .43, respectively, during this time period. For the moderate resocialization group the regression is even greater, -.78 loss. The attention control groups registered a .5 loss while the control group lost approximately .2. Clearly the withdrawal of treatment creates a serious regression in both the mild and moderate resocialization groups.

Although the treatment was effective for the mild group, it had minimal clinical significance when compared to the scores of the control group. This improvement was clearly lost after termination of the groups. Treatment for the mild group must actually be viewed critically in light of the improvement of both the control and attention control groups at one month follow-up, scoring almost as well as the resocialization group did with treatment.

The design controlled for the confound of experimenter expectancies on the main effect for confusion by maintaining the blindness of
the leaders, subjects and nursing staffs to the placement of subjects in groups by confusion level. Although informed consent had been obtained from the subjects about the participation in the research, few subjects identified the groups as research but rather referred to them as the nursing students' groups or meetings. In termination interviews with the leaders, the leaders' blindness to the placement of subjects by level of confusion was confirmed.

**Theories of Aging**

In examining the results of this study within the framework generated from the selected theories of aging, several interesting ideas can be generated. The reluctance of some of the residents to participate in the groups could be indicative of a life long pattern of disengagement or social isolations (Cummings & Henry, 1961). For this group of people the norm of the nursing home for large group participation may increase negativism and social withdrawal. As Longino and Kart (1982) documented, formal activity (large group participation) may be negatively correlated with life satisfaction. For another group of previously active people, becoming involved in groups within the environment could increase their satisfaction with institutional life. These residents would clearly benefit from small group participation. The elderly enter institutions with many varied life patterns. It is important for nurses to assess long-term styles of personal adaptation and interaction for patients entering nursing homes to develop individual plans of care for the residents. With these data, creative strategies could be developed to increase social accessibility or to maintain disengagement.
This study supports the idea that self-concept is an important intervening variable between social activity and life satisfaction. Self-efficacy certainly contributes to self-concept. It is well-documented that interventions in the milieu certainly impact the self-concept of residents. It would be important in future studies to examine the relationship between self-concept and self-efficacy as it pertains to small group treatment. Further, researchers need to identify specifically how resocialization affects self-efficacy, hence, self-concept.

Dowd's exchange theory (1975) was evident in the resident's perception of the organizational structure of nursing homes. Many elderly in the group discussions expressed the feeling that they had exchanged compliance in being a "good patient" for care. Subjects discussed the powerlessness of being institutionalized and the fear of repercussion if their critique of the care was made known. In this study, some of the groups functioned as a subculture (Rose, 1962) for discussing group concerns about the care in the home.

In evaluating the selected theoretical positions discussed in the review of literature, it is clear that social gerontological theory provides a framework within which to analyze the findings. Disengagement and activity theories address social participation as it effects life satisfaction while exchange theory, aged subculture theory and labeling theory describe satisfaction within the context of relationship to family, culture or institution.

Cognition

The effectiveness of the small group treatment on the cognitive and social ability dimensions of confusion supports the more positive
view of cognitive decline in the elderly as not inevitable and irreversible but treatable. Of all of the covariates, education had the most impact on the pretest scores of the subjects. This tendency for education to impact pretest scores would support the idea that cohort differences significantly affect cognitive function in aging. The SPMSQ was composed of meaningful material relevant to the lives of the subjects and hence was not biased by the utilization of meaningless verbal material. Because recent and remote memory as well as concentration are important factors in the assessment of memory in the elderly, their inclusion in the SPMSQ appears both relevant and essential to an accurate assessment of cognitive accessibility. Clearly, the impact of a positive and stimulating environment has been shown through this study to impact memory and concentration in the mildly and moderately confused institutionalized elderly.

Confusion

The results of this study support the work of Citrin and Dixon (1977) that confusion may be a result of an unstimulating environment and of reinforcement by caregivers of confusion in the elderly. When nurses on the different units of the nursing homes were asked for a list of their mildly and moderately confused elderly, they often inaccurately assessed the confusion level of the residents. Statements such as "he's too confused" or "she's perfectly alert" would often describe subjects included in the study. The coinvestigator learned to test everyone on the units who met the other criteria for inclusion in the study as the nurses' assessment of confusion status was often inaccurate. As documented by Ivan (1982) and again by the
results of this study, iatrogenically-induced confusion in an institutionalized population of elderly clients can be effectively treated by resocialization group treatment.

Institutionalization

The results of the analysis of covariance that length of institutionalization did not significantly effect pretest scores on the SPMSQ supported the work of Lieberman (1969) that indicated that the effects of institutionalization predated entry into an institution. The findings also support the SBS proposition that SBS is related to the subject's susceptibility, hence may predate or postdate entry into the institution.

Social Validity

In evaluating the effectiveness of any clinical nursing research, the investigator must determine not only the statistical significance of the results but the social validity of the research as well. In this research, the social context involves the subjects, their families, the nursing home staffs, the student leaders and the school of nursing.

The majority of subjects in all three nursing homes thoroughly enjoyed the groups as documented by the tapings and the enthusiasm that they showed for attending the groups. The days that the students were at the nursing homes were special and some of the residents marked these days on their calendars. Although many residents could not differentiate one day from another, "every day here is the same, see how mixed up I am, don't get old," some subjects would wait outside their rooms or in the group rooms for the student leaders to
arrive. "You come and get me, if I forget, I want to be there."

Several residents who the nurses indicated never left their rooms eagerly participated in the student groups. One resident explained to the student leader that she was not interested in other groups in the home, just the students' meeting.

Some residents were very cautious about attending the first few meetings. The students received comments like "At first I didn't think that we should do it, but we have a good time." Other residents eagerly participated from the start. "I enjoyed everything from the first visit."

Comments at the termination of the groups vividly expressed the subjects feelings about the groups. "I feel more alive than I have in years." "It was something to look forward to." "How will we get along without you?"

Several subjects either for health reasons or disinterest discontinued group attendance after the first two meetings. These people were not included in the data analysis. These people were replaced randomly from a pool of pretested subjects. Perhaps this group represented the individuals who were content with disengagement. Careful screening and self-selection is an important process in determining subjects for whom group participation is beneficial. Although subjects were encouraged to continue attendance at group, no coercive measures were utilized to maintain attendance.

Although the literature has documented that nursing home residents are frequently without living children (Tobin, 1980), within the three homes utilized for this research there was a high rate of family involvement. An abbreviated research proposal was presented at a
family council meeting in one of the nursing homes and approved unanimously with great enthusiasm by the families of the residents. In another home, a family member rescheduled her visits so that her sister could attend group. A husband of one of the subjects stopped a student leader and expressed appreciation to her for the inclusion of his wife in her group.

The three directors of the nursing homes and directors of nursing at the facilities were very supportive of the research. The research was actively supported by the recreational therapists of all three facilities as well. The nursing staffs, usually composed of LPN's and aides, showed mixed feelings about the research. Some would consistently have the subjects ready to go to group. Others found the groups an imposition. On one unit where the groups were held in the nurses' break room, the nursing staff was openly hostile toward the leaders and despite administrative support, the group held in this room had to be relocated. On the whole, the RN staff seemed receptive to the research while the LPNs and aides presented the most resistance.

The nursing students' perception of the experience solicited anonymously was very positive. One student wrote "I didn't gauge our success as much by the client verbalizations, as by their smiles, facial expressions and childlike enthusiasm. Thanks for allowing me to share in this experience." Another student stated "I know that it was a good experience because it will be hard to leave." Students' perception of the elderly changed also. "Before, I was somewhat afraid of them and very ignorant about their worth. Since this experience, I have gained insight about the elderly and how much they
can offer." "It was like having a conversation with a history book." Not all of the responses were positive. Two students expressed that they would never work in geriatrics. Many students had feelings about termination. "I feel like we entered their lives and are now abandoning them." In summarizing his feelings about the experience, one student quoted from Red Skelton, "If I've been able to bring a smile to your face or allowed you to feel a moment's pleasure, then my efforts have not been without meaning."

The school of nursing from which the nursing student leaders were utilized was extremely supportive of the research. Financial assistance was provided for the project through a research grant. From participation in the research project, enough interest was generated in the field of gerontology for a group of students to petition and receive an elective course offering in gerontology for the next year.

Generalizability to Other Clinical Settings

The introduction of energetic nursing students into any environment impacts the quality of the environment. Additionally, the nurses in the nursing homes other than the administrative leaders had little knowledge of and no direct participation in this research program. The treatment groups involved in this research differed significantly from the other groups in the facilities. The student client ratios were small, generally 1:3. The leaders received frequent feedback on their performance from the investigator. The students were not a continual part of the environment and hence not directly affected by financial problems of the institution, staffing problems or politics. The student leaders were young, enthusiastic
and highly motivated. Clearly, the results of this study cannot be generalized to staff-led groups within institutions. Whether the effectiveness of resocialization could be demonstrated in groups led by nursing home staffs is an hypothesis worthy of testing. Certainly, in two separate studies (Ivan, 1982) and this study, the effectiveness of resocialization has been demonstrated.

**Conclusions**

This research supports the treatment of environmentally-induced confusion in the institutionalized elderly. It also demonstrates that improvement on the cognitive accessibility dimension of confusion cannot be attributed solely to the effect of extra attention. The results support hypotheses derived from the social breakdown syndrome model, labeling confusion as environmentally induced in a vulnerable person and treatable with a corrective institutional environment. In the absence of a corrective environment, the institutional environment prevails and the subjects regress when the corrective environment is withdrawn. Social learning theory provides an explanation for the effectiveness of resocialization group treatment with the institutionalized elderly. Because of the predicted increase in numbers of institutionalized elderly in the future and the high incidence of diagnoses indicating confusion in this population, the evaluation of treatment interventions targeting this vulnerable group of institutionalized elderly should be a research priority for psychogeriatric nurses. By building upon and retesting the generalizability of previous research, an empirically based treatment approach for confusion in the elderly can be identified.
Implications for Further Research

Clearly, the effectiveness of resocialization small group treatment with the confused, institutionalized elderly has been established. Resocialization has also emerged as effective beyond the effect of extra attention on the cognitive accessibility dimension of confusion. Social learning theory specifically self-efficacy has been utilized to explain the effectiveness of this treatment modality. Outcome measures sensitive to the measurement of change in efficacy need to be utilized to test the usefulness of this model in explaining change in cognitive accessibility from resocialization. Because self-efficacy, labeling theory and SBS contain such similar ideas, further research in this area could provide vital links in identifying the factors contributing to confusion and its treatment.

With the development of a variety of intervention strategies to combat SBS in the institutionalized elderly, researchers must determine the specific effect of treatment. Only by the identification of how resocialization targets cognitive accessibility can a definitive approach to the treatment of confusion be developed. The mechanism by which resocialization positively effects the perceived self-efficacy of the group members must be determined. Through the utilization of scales devised to evaluate self-efficacy, depression and self-concept a clearer delineation of the specific effect of resocialization could be ascertained. With the latest research supporting a more individualistic and positive approach to cognition in the elderly, it is important for nurses to document improvement in cognitive accessibility through group treatment as a means of
preventing institutionalization or improving the self-care capabilities of residents within institutions.

Further testing of the social breakdown syndrome model needs to be conducted, specifically, what criteria distinguish those subjects who present with less extreme forms of SBS. Clearly, this research did not support the superiority of resocialization with the mildly confused elderly as more receptive to intervention.

The limitations of the SPMSQ (Pfeiffer, 1975) as a gross measure of cognition accessibility are evident. The utilization of a more precise instrument for mental status in further investigations would lead to clearer identification of the areas of cognition that are specifically targeted by resocialization.

Outcome measures for the social accessibility dimension of confusion need to be developed to ascertain individual change scores reflecting self-concept and engagement. Inclusion of a nonverbal measure and videotaping rather than audiotaping would increase the accuracy of the measurement of the social accessibility dimension. Staff assessment of the subjects prior to and after intervention would increase the social validity of the research.

Finally, subject mortality must be anticipated when dealing with research with an infirm elderly population. This factor must be built into the design of the research to insure adequate sample sizes.

Implications for Nursing

As life expectancy and control of disease continue to increase so too does the reality that our society will be dealing with the problems of a larger elderly population. This population has for
years been written off by the medical profession as chronic and has fallen within the domain of nursing either in the community or within institutions. With the recent allocation of funds for gerontological research who is in a better position to evaluate the needs of the elderly than nurses? With these ideas in mind, nurses need to write grants to focus investigation on the maximization of the elderly self-care capabilities both in the community and within institutions. If vulnerability for social breakdown syndrome (SBS) is indeed a product of psychological and physiological insults these should be identified early and treated to insure optimum utilization of the patient's capabilities. Education for early signs of cognitive changes needs to be done with both the patient and the family. The myths of inevitable cognitive decline must to be dispelled. Physicians need to be educated on the aversive effect of labeling patients as confused, OBS or senile without documentation of discernable cognitive changes. Nurses need to encourage the physicians to order tests to determine possible physiologic bases for the changes and institute appropriate treatment.

In the realm of nursing education, nursing students need positive experiences with gerontologic clients. Currently many schools of nursing utilize nursing homes for the students' first clinical experience. The high anxiety level and the low knowledge level of the student at that time make this experience a nightmare. What this then leads to is the student's ongoing dislike of gerontology (J. Tate personal communication, November 10, 1985). Work in nursing homes can be a very positive experience as documented by the students' comments about the research. Supervision by an instructor who is interested in
gerontology is essential so that the wisdom and capabilities of the elderly can be identified, not just the limitations. Nursing curricula should reflect more gerontologic content as a majority acute care beds are now filled with elderly patients. It appears that this trend will continue.

Nurses working within institutions need to be educated on the environmental impact of labels and nursing expectations in patient's perception of self-efficacy. Certainly maintaining the institutionalized elderly at the highest level of functioning with accurate assessment of confusion level and intervention to increase the self-efficacy of the patient must be viewed as an essential function for nurses. Unlike other professions, nursing has developed a body of knowledge that unifies individualistic and environmental assessment in the development of a plan of care that deals with the optimization of client capabilities. As guardians of the environment within nursing homes, nurses are in a unique position to evaluate and implement programs necessary for the realization of the potential of each resident.

Further research needs to be developed from previous studies so that a body of nursing knowledge about aging can be accumulated and the results replicated and implemented.

The results of research must be returned to practice settings. Publication is one method of disseminating research but often these publications are read only by academicians and not by clinical nurses responsible for the daily care of elderly residents. The outcome of these studies needs to be presented at the institutions from which the research was generated and in a language understandable to RNS, LPNs
and aides. Further inservices at these institutions need to be developed to encourage the implementation of the research.

Researchers, educators and practitioners need to work together to develop strategies to enable the elderly to gain the knowledge, courage and strength to maximize their potential for self-care for as long as possible.
APPENDIX A

RESOCIALIZATION TRAINING PROTOCOL
A. Historical Development of RS

B. Definition of RS: A technique of group work which implements a structured program of discussion or focal stimulus object to encourage participants to reminisce.

C. Rationale for RS
   1. Review and refine life experience
   2. Increase self-esteem
   3. Increase affiliation with historical reference group; increase feelings of belonging.
   4. Stimulate senses.

D. Steps in RS Groups
   1. Welcome and introduction
   2. Topic for discussion and encouragement of reminiscing
   3. Encourage handling of props
   4. Sharing of refreshments
   5. Closure

E. Utilization of Topics

F. Assigned Readings


(Adapted from Ivan, 1982)
APPENDIX B

TOPICS FOR RESOCIALIZATION
Groups for One Time Block

Picnics
Parades
Farms
Hats
Ice cream-making
Occupations
School days
Cars
Seasons
Musical instruments
Music boxes
Animals
Bread-baking
Holidays
Presidents
Birthdays
Families
APPENDIX C

PROTOCOL AND TOPIC LIST FOR ATTENTION CONTROL
Group Leaders' Training

I. Ideas for Group

Humor - Belly Laugh (2)
Movement - Exercise (2)
Poetry (2)
Current Events (2)
Sing-Along (2)
Arts and Crafts Project (2)

II. Encourage Discussion of Here and Now

III. Discourage Reminiscence
APPENDIX D

INFORMED CONSENT
The Effectiveness of Resocialization Groups With Elderly Patients Residing in Nursing Homes

You are being asked to participate in a study on what happens in group meetings here at your home. The group meetings are led by Colorado University nursing students. You will meet for 30 minutes on Monday and Wednesday mornings for six weeks. We want to know if talking about fishing, birthdays and bread making helps you remember more and helps you talk more to others. Before beginning in the group you will be asked 10 questions about yourself, like your name and the date. Confidentiality will be maintained. The risks and discomforts of participating in the group are minimal. You might become saddened by remembering past events of your life or become more aware of your memory loss.

The study is of no benefit to you. The project is not funded.

I would be happy to answer any questions about the study or the results at any time. You may stop attending the group at any time.

In the event that participation in this research directly results in physical injury to you, medical treatment will be available, but as of this time there is no compensation available for any such injury. Further information about this treatment may be obtained by calling Susan McCrone at 394-8651.

Susan McCrone, R.N., M.S.
Lecturer
University of Colorado
Principal Investigator

I have read the above and understand the discomforts, inconveniences, and risks of this study. I agree to the participation of __________. I understand that if I (he/she) refuse(s) to participate or withdraw(s) at any time, my (his/her) treatment will not be affected in any way. (Initial the first page of Consent Form if there are two or more pages used.)

Signed: __________________________

WITNESSES:

_________________________  ___________________________
Physician                   Registered Nurse

SM: bk
10/19/84
REFERENCES


