Relationship of activity and morale levels to institutionalization among aging schizophrenics

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Relationship of activity and morale levels to institutionalization among aging schizophrenics

Vogel, Connie Higgins, Ph.D.
Iowa State University, 1987
Relationship of activity and morale levels to institutionalization among aging schizophrenics

by

Connie Higgins Vogel

A Dissertation Submitted to the Graduate Faculty in Partial Fulfillment of the Requirements for the Degree of DOCTOR OF PHILOSOPHY

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TABLE OF CONTENTS

ABSTRACT 1

INTRODUCTION 3
   Explanation of Dissertation Format 5
   Study Methodology 7
   Literature Review 11
   Theoretical Framework 40

SECTION I. MORALE AND ACTIVITY IN LATER LIFE: IMPACT OF INSTITUTIONALIZATION 46
   ABSTRACT 48
   MORALE AND ACTIVITY IN LATER LIFE: IMPACT OF INSTITUTIONALIZATION 50
      Theoretical Framework 50
      Methodology 54
      Discussion 60
      References Cited 66

SECTION II. QUALITY OF LIFE: COMPARISON OF FACTORS RELATING TO ACTIVITY AND MORALE LEVELS AMONG INSTITUTIONALIZED AND DEINSTITUTIONALIZED SCHIZOPHRENICS 69
   ABSTRACT 71
   QUALITY OF LIFE: COMPARISON OF FACTORS RELATING TO ACTIVITY AND MORALE LEVELS AMONG INSTITUTIONALIZED AND DEINSTITUTIONALIZED SCHIZOPHRENICS 72
      Research Methodology 75
Study Results
Discussion
References Cited

SECTION III. THE ROLE OF INSTITUTIONALIZATION AMONG NURSING HOME POPULATIONS

ABSTRACT

THE ROLE OF INSTITUTIONALIZATION AMONG NURSING HOME POPULATIONS

Theoretical Framework
Methodology
Discussion
References Cited

CONCLUSION

Limitations
Recommendations

LITERATURE CITED

APPENDIX A. CONSENT FORM AND TEST INSTRUMENTS

Information About Sheet
Data Sheet
Philadelphia Geriatric Center Morale Scale
Activity Inventory
Nurses' Observation Scale for Inpatient Evaluation

APPENDIX B. INFORMED CONSENT AND COGNITIVE FUNCTIONING

Cognitive Functioning
Issues of Informed Consent
The primary purpose of the research study was to clarify the role of institutionalization on levels of activity and morale among aging schizophrenics. Social breakdown theory provided the theoretical framework for the study. Four subgroups of elderly male veterans were the subjects. The subjects were healthy elderly, schizophrenics living in a community, and schizophrenics and non-mentally ill frail elderly residing in a nursing home. Data were collected using the Philadelphia Geriatric Center Morale Scale, Activity Inventory, and Nurses' Observation Scale for In-patient Evaluation.

Social breakdown theory would predict that years in the institution and the chronic nature of mental illness would result in lower morale and activity levels for older schizophrenics. In the study activity levels for the two institutionalized groups were similar. Older schizophrenics appear to have benefited from psychotropic medications and rehabilitation programs. They had significantly higher morale scores than the institutionalized frail elderly. The lower morale in the institutionalized frail elderly is explained by the major life changes experienced by them when entering an institution. The older schizophrenic was found
to be less neat, more irritable, and more psychotic than the frail elderly. With longer residence in the institution the frail elderly showed an increase in negative behaviors. A correlation between health status and morale was not found. Deinstitutionalized schizophrenics on measures of morale and activity were significantly higher than the institutionalized schizophrenics, but no different than the healthy elderly on those measures. In both the institutionalized and deinstitutionalized schizophrenics a negative correlation was demonstrated between number of children and morale level.

Recommendations are directed toward clinical application of findings for the institutionalized populations with some specific suggestions being made for programming for both institutionalized groups. Programming suggestions are aimed toward reducing the effects of social breakdown syndrome. Suggestions are made for future research on the well-being of schizophrenics.
INTRODUCTION

Mental health workers in institutions providing care to the chronically mentally ill observe a process in patients referred to as "burn-out". This process seen in chronic schizophrenia, is identified by a significant decrease in symptoms than were present at an earlier time for an individual patient, making the patient more compliant and generally easier to care for on a day to day basis. In many cases the change in symptoms is significant enough that care can be provided for the individual in a less restrictive setting than had been possible in the past. Observation of patient burn-out during years of psychiatric nursing and a concern for decisions made regarding care of the older mental patient have led to an interest in studying the processes of aging, schizophrenia, and institutionalization.

This research study has three purposes; the primary purpose is to clarify the role of institutionalization on levels of activity and morale among aging schizophrenics, the second purpose is to identify the levels of activity and morale among deinstitutionalized schizophrenics, and lastly guidelines for decision making regarding the needs of the older schizophrenic for health care are provided.
Studies to investigate the processes of aging, schizophrenia, and institutionalization have been few in number and often poorly controlled. This study will examine aging, institutionalization, and schizophrenia in detail with emphasis on identifying differences in activity and morale levels among institutionalized schizophrenics, deinstitutionalized schizophrenics, and non-mentally ill elderly.

Large numbers of aged schizophrenics with a history of having spent most of their adult lives in psychiatric institutions are currently residing in the community. These individuals have experienced changes in the utilization of psychiatric facilities brought about by the advent of tranquilizing drugs in the early fifties. The drugs resulted in better management of symptoms of mental illness and an increased emphasis in the mental health field on community care. Because of the advent of drugs and the emphasis on community care the decline in the resident population of psychiatric facilities has accelerated since the mid sixties, particularly for the sixty-five and older group (Hoff et al., 1983; Shore, 1983). Older schizophrenics who have become accustomed to life in an institution are now being returned to community settings with which they are no longer familiar. As a result, many mental health professionals
have begun to question the value of deinstitutionalization in improving the quality of life of the older schizophrenic. At the present time increased concern for cost containment in the provision of health care is placing heavier emphasis on careful decision making regarding the health needs of the older schizophrenic. Maintaining the optimum quality of life at the lowest possible cost of care is essential. A clear picture of the human impact of institutionalization and de-institutionalization would assist professionals and families in determining what living situations are most appropriate for the older schizophrenic.

Explanation of Dissertation Format

The format for this dissertation has been approved by the Graduate Faculty at Iowa State University. In this format, the research is presented in manuscript form suitable for publication in professional journals.

The dissertation consists of an introduction that outlines the research project and reviews pertinent literature. The body of the dissertation is composed of three sections, each section addressing a different aspect of the research. The first section of this dissertation utilizes social breakdown theory to discuss the differences in morale and activity levels among two institutionalized populations.
One institutionalized group is schizophrenic and the other group is non-mentally ill frail elderly. The manuscript is for the Journal of Gerontology. The second section focuses on the portion of the research conducted with institutionalized and non-institutionalized schizophrenics, discussing the quality of life experienced by the two groups of schizophrenics. Variables that are related to activity and morale in the schizophrenic populations are discussed. This article is prepared for the Schizophrenic Bulletin. The third section presents data on institutional adjustment of the schizophrenic and non-schizophrenic elderly and emphasizes practical application of findings. This article is written for the Journal of Gerontological Nursing.

The authorship for Sections I and III was shared with Dr. Joyce Mercier, co-major professor of the dissertation. The final section consists of a summary of the total research and recommendations for the application of findings with a few suggestions for future research.
Study Methodology

Methodology

The design of this study is quasi-experimental and provides information on levels of activity and morale for schizophrenics and non-schizophrenics, both in and out of institutions. Morale and activity levels among non-schizophrenic and schizophrenic groups residing in institutions are compared with levels among groups residing in the community. Data were collected on all four groups. Subjects all were male veterans, 55 years or older. The institutionalized populations were chosen from patients at Veteran's Administration Medical Centers (VAMCs). The non-mentally ill institutionalized group were residents of the Nursing Home Care Unit (NHCU) of the Grand Island, Nebraska VAMC. The institutionalized schizophrenic group was selected from residents of the NHCU of the Knoxville, Iowa VAMC. Deinstitutionalized schizophrenics were selected from the outpatient rolls of the Knoxville VAMC. The non-institutionalized community group was selected from a senior citizen group in Marion County, Iowa. All settings are rural, mid-western communities. The two VAMCs are comparable in size and structure. The total sample, inclusive of the four groups, was 103.
Group A - Male individuals with a primary diagnosis of schizophrenia, hospitalized in a psychiatric facility for at least six months.
Group B - Male individuals with a primary diagnosis of schizophrenia living in a community setting for at least six months following a period of hospitalization.
Group C - Male individuals without a primary psychiatric diagnosis, residing in an institution providing nursing care for at least six months.
Group D - Male individuals without a primary psychiatric diagnosis, who have not lived in an institution during their lifetime.

Groups C and D were screened during the selection process to eliminate individuals who had been diagnosed and treated for a psychiatric illness.

Informed consent was obtained from each participant and the permission of participating institutions was obtained. The standard Veteran's Administration format was used to obtain consent from V.A. inpatients and outpatients following guidelines established by the Veteran's Administration Research and Development Office (Appendix A). A review of literature discussing the ability of the schizophrenic to give informed consent is in Appendix B.
Data collection and analysis

Three instruments were used for data collection, the Revised Philadelphia Geriatric Morale Scale (PGCM), Activity Inventory, and the Nurses' Observation Scale for Inpatient Evaluation (NOSIE-30) (Appendix A). The instruments were selected because they have established reliability and validity with older, institutionalized subjects. In addition a personal data sheet was used to obtain demographic information about each subject. This sheet includes age, marital status, number of children, educational level, employment, current medications, and self-health rating.

The Philadelphia Geriatric Center Morale Scale (PGCM) was developed in 1972 by M. Powell Lawton for use with a geriatric population. The original instrument contained 22 items, all having a dichotomous response format. The revised version of the scale used in this study is a 17 item scale called the Revised Philadelphia Geriatric Center Morale Scale (Lawton, 1975). Lawton has found three-factors in tests with five groups of subjects: (1) agitation, (2) attitude toward one's own aging, and (3) Lonely dissatisfaction. Formal tests of validity yielded a correlation of .57 with the Life Satisfaction Rating Scale of Neugarten, Havighurst, and Tobin. Correlations of the revised PGCM
scale with nine other measures of psychological well being yielded correlations ranging from .47 to .79 (Sauer & Warland, 1982).

The Activity Inventory was developed in 1949 by R. S. Cavan, E. W. Burgess, R. J. Havighurst, and H. Goldhammer. It consists of 20 questions addressing topics such as leisure, religion, family, friends, financial status, and health. The Activity Inventory can be administered verbally or in written form and like the PGCM scale was administered in an interview in this study. In previous uses of the Activity Inventory scores have ranged from 5 to 43 with a mean of 25.5 and a standard deviation of 8.8. Split-half reliability was estimated at .66 (Graney, 1982).

The Nurses' Observation Scale for Inpatient Evaluation (NOSIE-30) (Honigfeld & Klett, 1965) was used in collecting data on groups A and G. The NOSIE-30 was used to collect data on the behavior of all institutionalized subjects. This instrument provides information useful in the placement and care of the older schizophrenic. It is a 30 item behavior scale with ratings based on the nurses' observation of immediate behavior of the patient in daily ward life and was designed for use with chronic, institutionalized
patients. The NOSIE-30 contains six factors; social competence, social interest, personal neatness, irritability, manifest psychosis, and retardation. Average rater reliabilities on the six factors were social competence (.89), social interest (.78), neatness (.83), irritability (.81), manifest psychosis (.73), and retardation (.74) (Honigfeld & Gillis, 1967).

All data collection for this research was completed by the investigator in an interview format. The personal data sheet, PGCM scale, and Activity Inventory were completed for all subjects. The NOSIE-30 was completed on all institutionalized subjects.

Data analysis consisted of analysis of variance comparing mean scores of each group of subjects on the PGCM scale and Activity Inventory. Multiple regression was used to identify those variables that accounted for the differences among the groups.

Literature Review

There is extensive literature relating to the schizophrenic process. The material reviewed here is that which is considered relevant to this research study. The discussion consists of four sections: the schizophrenic process,
outcome studies of schizophrenia, the impact of institutionalization, and the deinstitutionalization process.

The schizophrenic process

For almost a hundred years a psychosis called schizophrenia has been widely studied, still the illness continues to be baffling and poorly researched. Because of improved medical care, many schizophrenics today experience a stabilization of the psychotic process and will live to old age. The mortality rate of schizophrenics remains higher than that of an age matched general population, due to the more frequent occurrence of suicide at all stages of the disease process (Ciompi, 1980; Post, 1980).

The process of schizophrenia is not clear despite established criteria for diagnosis. The model most widely used in defining mental problems assumes disease can be classified on the basis of a common etiology. Use of this medical approach in describing behavior may be inappropriate since an act that appears deviant may be based on antecedents unknown to persons observing the act. Without an understanding of the antecedent factors a behavior may appear deviant and a label be placed on the act (Elsdorfer & Stotsky, 1977). There is disagreement about the continued use of the medical model in the diagnosis of mental illness.
(Szas, 1972), it nevertheless continues to be used in some variation throughout the world. In the United States the medical criteria for schizophrenia are the classification system developed by the American Psychiatric Association and published as the Diagnostic and Statistical Manual (DSM). Studies discussed in this section report on schizophrenia diagnosed under Volume II (DSM-II). Schizophrenia in the DSM-II (1968) is defined as:

A group of disorders manifested by characteristic disturbances of thinking, mood, and behavior. Disturbances in thinking are marked by alterations of concept formation which may lead to misinterpretations of reality and sometimes to delusions and hallucinations, which frequently appear psychologically self-protective. Corollary mood changes include ambivalent, constricted, and inappropriate emotional responsiveness with loss of empathy for others. Behavior may be withdrawn, regressive, and bizarre (American Psychiatric Association, 1968, p. 33).

Research on schizophrenia conducted in Europe follow the standards of classification developed by Eugene Bleuler in the early 1900s, somewhat modified at the University Psychiatric Clinic of Lausane, Switzerland. The concept, schizophrenia used in most European investigations is described as follows:

A case of schizophrenia was assumed whenever a personality disturbance of psychotic proportions existed which was marked by manifold and alternating combinations of so-called primary disorders of thought and emotions, autism, ambivalence, loss of contact, and
experiences of depersonalization. If so-called secondary symptoms were also present (such as delusions, hallucinations, or catatonic psychomotor disturbances) a paranoid, hebephrenic, or catatonic schizophrenia was diagnosed in accordance with the predominating symptom pattern present (Ciompi, 1980, p. 608).

The European classification system is more restrictive than the DSM II diagnostic criteria; therefore, research in Europe and the United States are not completely comparable and should be clearly distinguished. Despite this, European longitudinal studies of schizophrenics have contributed greatly to the current literature on the older schizophrenic. These investigations provide valuable information on the course of the disease for use in further research, treatment, and education.

Schizophrenics who survive to old age generally have been under long-term psychiatric care (Raskin, 1979). Since the cost of care is expensive, the majority of schizophrenics have been treated in government institutions. Government hospitals are large, regimented facilities and individuals treated in these hospitals usually exhibit characteristics of persons subjected to long-term institutional care (Pfeiffer, 1977).

Among older schizophrenics the effect on behavior of neuroleptic medications taken over a long period of time must also be considered. Modern psychotherapeutic drugs
have drastically changed the course of schizophrenia. It has become possible for many individuals to be treated and to remain outside of hospital settings. The beneficial effects are helpful, but it is true that many psychotropic drugs have been inappropriately used. There is little good scientific evidence regarding correct doses and long term effects of neuroleptic medication. The action mechanism of the drugs is unknown and the full effects can only be guessed (Hollister, 1983). Additionally, the effect of aging is not often taken into consideration.

The action profile of a drug is influenced by numerous factors, including the individual and the environment in which the individual lives (Von Praag, 1978). Patients who are aged schizophrenics may well have been exposed to high doses of neuroleptic medications in a controlling atmosphere. In a study of drug use among the older mentally ill in California, for example, Zawadski et al. (1978) found psychotropic drug use three times as high for the institutionalized as for the non-institutionalized. The effect of the combination of medication and institutional control on behavior and on the disease process itself cannot be easily predicted. At the very least the extensive use of neuroleptic medication should be recognized when looking at
age changes such as cognitive functioning and emotional responses.

In the past most schizophrenics continued to live in psychiatric institutions as they aged and as a result their behavior was of little concern to families and caregivers. Today, however, older schizophrenics are much less likely to be in psychiatric facilities. This is part of an overall decline in the resident population of psychiatric hospitals since 1965, particularly for the 65 and older group (Goldman et al., 1983; Redick et al., 1973). Many of the older schizophrenics discharged from psychiatric hospitals have been placed in nursing homes, foster care homes, and out-patient facilities (Goldman et al., 1983). The older schizophrenic is reintroduced to a society that is unfamiliar. In some cases a satisfactory adjustment is made (Hyer et al., 1983); in other situations, however, the quality of life for the older schizophrenic is less than it was in the institution (Sweeney et al., 1982).

A number of factors affect the status of the older schizophrenic including length of time institutionalized, medications, family, and intellectual functioning. These factors may determine the individual's lifestyle and whether
the person remains institutionalized or returns to the community.

The reason factors other than the disease process affect the life of the older schizophrenic is because many normal life events are different for the schizophrenic. The onset of schizophrenia most often occurs in late teens or young adult years, from the time of puberty to the early 30s (Arieti, 1974). Because of the early onset many of the life events associated with normal adult life such as marriage, parenting, and retirement frequently are different for the schizophrenic. Life events that are largely biologically based occur, but those events experienced in a social sense such as marriage and employment, often do not.

Evidence for the lack of significant life events such as marriage is found in research studies. The schizophrenic population in Ciompi's study (1980) was generally not married and the majority was not employed. Wenger (1958) in a U.S. study of aging schizophrenic veterans, reported only 32% had been married. All had an unreliable work history and three-quarters of them were considered incapable of looking after their own finances.

Although many schizophrenics do not experience life events in the same sense as people who are not mentally ill,
there is evidence that within the framework of the mental hospital individuals do strive to maintain their integrity through reframing their life history. They, for example, have a preoccupation with the past in an ideal manner ("I worked in the hospital kitchen and Dr. X, the superintendent used to call me by my first name"), or pursue activities and continued engagement (A woman who despite near blindness and unsteady gait continues to do errands for other patients, as she had done for years) (Lawton, 1972). Individuals working in psychiatric hospitals frequently hear patients refer to themselves as being retired, when in reality they have never been employed outside of the hospital. This appears to be an attempt by the aging schizophrenic to construct a normal life event. The reframing of their life is an attempt to give meaning and purpose to their existence in the same manner that normal elderly review their life for substantiation of its validity (Lawton, 1972).

Outcome studies

Understanding of the long term results of the schizophrenic process is needed for social, as well as medical reasons. Social knowledge of likely outcomes can be used to predict needs of the older schizophrenic and provide infor-
mation for the development of adequate programs of care.

Johnstone et al. (1981), in a study done in England, compared cognitive deficits and psychiatric status in schizophrenic patients five to nine years after discharge with those of schizophrenic inpatients. Among both samples the deficits of chronic schizophrenia were an integral part of the disease process and not a result of treatment. This finding suggests that the impact of institutionalization had not produced substantial deficits since the results were the same in the hospitalized and outpatient groups.

In addition to studies of the effect of institutionalization on symptomatology, a number of studies attempt to examine the relationship between psychopathology and social adjustment. A five year follow-up of schizophrenics on standardized clinical and social assessments by Watt, Katz, and Shepherd (1983) reported a good outcome, defined as being symptom free or having only discrete attacks for half the sample. In addition to being relatively free of schizophrenic symptoms this sample displayed adequate adjustment in social situations. A similar result is that of Moller et al. (1982) in a five year follow-up of paranoid schizophrenics using sociodemographic data and clinical rating scales to determine outcome. They found marked
signs of psychopathology and disturbances in social adjustments in 44% of the schizophrenics studied.

Although older schizophrenics seldom are the topic of interest for researchers, studies that have been carried out with older schizophrenics generally demonstrate a decrease in the psychotic process with age. One study (Newmark & Hutchins, 1980), for example, showed no significant differences on MMPI scores between older (mean age 65) schizophrenics and non-schizophrenics. It is possible that the increase in paranoia and regression with age (Raskin, 1979) may account in part, for the similar performance of schizophrenics and non-schizophrenics in the Newmark and Hutchins (1980) study, but it is also likely that the reduction in psychotic symptoms frequently occurring in the older schizophrenic accounted at least in part, for the performance of that group.

Muller (1963), who has made the most complete study of aging and schizophrenia, reports two distinct patterns among patients. He found that in about half of the schizophrenics in his study there was a reduction of delusional content, while for the other half there essentially was no change in amount or intensity of delusions.
It appears that for many schizophrenics the change in symptomatology begins in the middle years. Several studies reported by Bridges et al. (1978) suggest that changes occur in psychosis during the middle years. Although poor outcomes for schizophrenics were reported in early studies (Arieti, 1974), more recent studies show decreases in hallucinations, paranoia, aggressiveness, and delusions (Bridges et al., 1978). Bridges et al. (1978) suggest that schizophrenics surviving to middle age experience symptomatic diminution, a phenomena frequently referred to by psychiatric staff as "burning out".

Understanding the "burn out" phenomena would be helped by parceling out the effect of institutionalization and aging on the schizophrenic process. Lawton (1972) investigated the change over time in the manifestations of schizophrenia that might be predicted to result from each or all of the processes of chronicity, institutionalization, and aging. In Lawton's study of schizophrenics who had been hospitalized 30 years or more, current behavior was compared to behavior at an earlier time as documented in patient records. Patients demonstrated less overt deviancy: specifically they were less active, less agitated, less
disorganized, and more conforming than hospital records indicated they had been 30 years earlier.

A study conducted by Wenger (1958) of aging veterans compared schizophrenics with an institutionalized mentally well group. Interviews and psychological tests were conducted on both groups. Very few (20%) reported hallucinations and paranoia, although all of the schizophrenics retained some of the manifestations of their illness such as a tendency toward introversion. Wenger controlled for institutionalization by using two institutionalized samples; however, without a discussion of medications used for the two groups it is difficult to determine how much of the noted changes were due to age and how much the changes were due to the disease process. It may be that the schizo-group was being maintained on large doses of psychotropic medications which could account for the decrease in agitation and disorganization rather than improvement due to reduction of psychosis with aging.

Some researchers have examined other factors in addition to age and institutionalization that might affect the outcome of schizophrenia. Engelhardt et al. (1982) followed a group of schizophrenics over a 15 year period. A history of hospitalization consistently emerged as a strong
predictor of future hospitalizations. Of those schizophrenics, studied one fifth had never been hospitalized, one fifth had only crisis admissions, and over half had experienced long term hospitalizations. The authors concluded that the most effective treatment for minimizing symptomatology and increasing the chance of a good outcome is a combination of medication and supportive psychotherapy. Support for this conclusion also emerged from a study by Lukoff et al. (1984) in which life events and family stress are identified as precipitators of schizophrenic episodes. It would appear that the factor most likely to predict exacerbation of schizophrenic symptoms other than previous hospitalizations is stressful events. Life event stress for a group of schizophrenics over a two year period was examined by Harder et al. (1981). Results showed high stress events were more likely to lead to a psychotic episode than a lifestyle without major stress.

In summary the outcome studies reported here are helpful in identifying outcomes over time and factors that may predict prognosis. Many schizophrenics experience a decrease in symptoms beginning in middle age. Some of the changes occurring in the older schizophrenic are affected by time spent in institution and long term treatment with
neuroleptic medications. Other factors that affect outcome are a history of hospitalization and life stresses.

The impact of institutionalization

The impact of institutionalization on the life of an individual is a controversial issue in health care, particularly in the field of mental health. Many older people are institutionalized for health related reasons, but most have not spent large portions of their adult lives in an institution. The chronic mental patient, however, has grown old in institutions. Some older mental patients are placed in less restrictive institutional settings; others have been returned to an unfamiliar life in the community (Stoneall, 1983).

Persons diagnosed as schizophrenic in the early 1900s spent many years in psychiatric hospitals that were primarily concerned with the safe custody of the patients at low public cost (Wing & Brown, 1970). In these hospitals, patients lost contact with the outside world, experienced enforced idleness, lost personal friends and possessions, received drug treatment, and lived in a restrictive ward atmosphere. The impact of institutional conditions on schizophrenia is a controversial issue in psychiatry.
There is evidence indicating that long term institutionalization does affect the prognosis. Wing and Brown (1970), for example, identify three factors that contribute to the reaction to long incarceration in an institution: the social pressures which are brought to bear, the susceptibility or resistance of the individual to those pressures and, the length of time over which the pressures act.

Today, schizophrenics spend less time in a psychiatric hospital, but the availability of positive social pressures such as education and rehabilitation experiences vary from institution to institution. Variation is also found in the susceptibility of the individual to institutional pressure. Some individuals continue to have family and friends to support them, providing an interest outside of the institutional environment.

The length of exposure to the institution is a variable that may affect prognosis (Wing & Brown, 1970). The older mental patient often has been institutionalized for 40 to 50 years. The result of many years of exposure to a monotonous, rigid routine is that individuals have little
experience in decision making. The environment of the mental hospital is one where compliance is rewarded and opposition may be punished. As symptoms of mental illness abate with age and treatment the individual learns that the easiest lifestyle is one that conforms with the rules and regulations of the institution (Wing & Brown, 1970).

Institutionalization can be defined as a syndrome, in the narrow sense of personal changes induced by prolonged residence in relatively closed communities (Wing & Brown, 1970). This is a syndrome that may apply to many different groups of people, not just the mentally ill or the aged.

Lengthy periods of hospitalizations in mental hospitals are especially difficult (Wing & Brown, 1970). Residents in these settings often exhibit a clinical poverty syndrome, expressed as social withdrawal, flatness of affect, and increased poverty of speech. As the stay becomes longer the desire of most residents to be discharged from the facility decreases. Such indifference about leaving lies at the very heart of institutionalization and occurs in most residents of total institutions.

A decline in positive features of behavior for schizophrenics with continued lengthy hospitalizations has been substantiated by Honigfeld and Gillis (1967). Their
study of male schizophrenic veterans found improvement over time in symptoms of schizophrenia such as paranoid thoughts, but other aspects of general behavior such as social competence, cooperation, interests, and neatness decreased. Honigfeld and Gillis (1967) conclude that the improvement in medical symptoms and the subsequent decline in social skills indicate that the changes noted are not a result of the schizophrenic process.

Similar changes in social skills have also been noted by Solon et al. (1977) in a study of role losses accompanying old age in the institutional setting. In the total institution characteristics of dependency such as inactivity, erosion of social roles, and status are aggravated. Solon and colleagues (1977) believe that creative efforts and opportunities can be developed to decrease the impact of institutionalization on the individual.

A number of studies examine factors that reduce the negative aspect of institutionalization such as social deterioration (Harel, 1981; Harel & Noelker, 1982; Solon et al., 1977). Several of these studies examine variables that contribute to high morale among the elderly in institutions. Factors contributing to high morale for elderly nursing home residents are: expectations congruent with
perceived events (Chang, 1978), ties with people and personal responsibility (Harel, 1981), and social interaction (Harel & Noelker, 1982). In contrast, Parmelee (1982) concludes that social control is related to self esteem and morale among aged nursing home residents. Fawcett et al. (1980) also sees control as an important factor in morale, emphasizing the relationship between high internal locus of control and life satisfaction for older nursing home residents. There is variation in the factors that contribute to high morale in the institutionalized older person, but there is also support for the idea that active involvement in the environment and increased social ties are means to improve outlook and behavior.

Research to identify interventions that reduce the impact of institutionalization on social skills, morale and activity has focused on programs within the institutions that strengthen existing skills and assist in the development of new ones. Increased opportunities for socialization were reported by Weinstock and Bennett (1978) as significant in reducing cognitive impairment among nursing home residents. Intensive remotivation techniques were used by Bovey (1971) for patients on a geriatric unit of a state mental hospital, resulting in measurable increases in their
self-concept. Similarly Cohen and Kraft (1968) noted improvement in cooperation, as well as decrements in bizarre behavior in geriatric mental patients receiving motivation therapy. Other opportunities for the institutionalized aged are provided through pet therapy, foster grandparent programs, and other activities aimed at maintaining social skills and intellectual functioning.

Activity, often emphasized in programs aimed at reducing the impact of institutionalization, is frequently cited as improving self-esteem and increasing morale among the institutionalized. Gutmann et al. (1973) studied geriatric mental patients on a ward that emphasized activities and identified those residents as showing a better adaptation to the environment than did their peers on a custodial ward. Activity therapy used by Beard et al. (1978) increased social competence among chronic institutionalized schizophrenics. Improvement in personal adjustment was associated with participation in activity programs for institutionalized veterans in a study by Kaiman et al. (1966). Minimal activity involvement was significant in reducing anxiety among those veterans who attended the programs regularly.
The impact of activity and involvement in programs on the institutionalized is an increase in feelings of self-worth and control (Gutmann et al., 1973; Beard et al., 1978). A number of studies (Chang, 1978; Noelker & Harel, 1978; Wolk & Telleen, 1976) indicate that feelings of satisfaction and self-control are related to the environment in which one lives. Other studies (Donaldson, 1984; Fawcett et al., 1980) show that in institutional environments where constraint and custodial care are the general policy, there is lower satisfaction and deterioration in both mental and physical functioning.

Although it is clear that with the use of effective therapeutic programs the institutionalized individual need not decline further, but instead can learn to control symptoms and improve functioning, the impact on society of providing such care is less clear. There is no question that the cost of quality care for the aged mental patient is high and perhaps one that society chooses not to bear.

Concern for the cost, both to the individual and to society led to a movement in the 1960s to move many older psychiatric patients from psychiatric hospitals into nursing homes, family care homes, and other community settings. This process referred to as deinstitutionalization, remains
controversial and only now is being re-examined. Deinstitutionalization may not always be in the best interest of the institutionalized older mental patient.

The deinstitutionalization process

A shift in the care of the mentally ill from the asylum to the community began over 30 years ago and continues to be a controversial issue in the 1980s (Mollica, 1983). All the evidence is not yet available on both the economic and human impact of the deinstitutionalization process, but the effect of the change in the pattern of psychiatric services on the older mental patients may be the most crucial aspect of the event.

Beginning in the early 1960s, caring for the mentally ill in the community rather than in large mental hospitals gained momentum. A number of factors were involved, including the improvement in medical care of the mentally ill that resulted, at least partially from the discovery of tranquilizing drugs. The improvement in care along with changing societal attitudes led to the decline of the "custodial era" (Wing, 1981). In 1955, the Joint Commission on Mental Illness and Health was formed to study the care of the mentally ill in the United States. Many mental health care providers, as well as patients and families,
were convinced that large public mental hospitals were 
outmoded and were, in fact, harmful to patients. The 
Commission suggested a new plan of community based programs 
to give communities the responsibility of caring for their 
own mentally ill. It was believed that this would provide 
better care and would eliminate some of the problems encoun-
tered with institutionalization. The plan became national 
policy with the Mental Retardation Facilities and Community 
Deinstitutionalization was not to be simply an emptying of 
the state mental hospitals, but was to be an attempt to 
develop a multi-modal, pluralistic system of community care. 
As a process, deinstitutionalization describes the ongoing 
change, readjustment and redefinition in function of all 
components of the mental health delivery system (Goldman 
et al., 1983).

In a plan of community care, the institution still 
plays a role, but the role is of shorter duration than in 
a system lacking adequate community care. Deinstitutional-
ization plans must include a picture of how the total system 
fits together and a mechanism for accountability. Other 
major topics that must be part of deinstitutionalization 
plans are attention to the legal and human rights of those
served, involvement of consumers in decision making, and an advocacy system (Paul et al., 1977).

The use of community care in treating the mentally ill is a complex process involving psychiatry, law and economics. It is now over 30 years since the advent of this movement: as in any venture as complex as this, there have been both successes and failures. A large amount of research has been conducted on community care of the mentally ill: unfortunately, much of the research has serious methodological flaws. If only numbers are considered, deinstitutionalization is a resounding success; state and federal mental hospitals previously housing two to three thousand patients now have a census of only a few hundred at any one time (Okin et al., 1983).

Outcome studies of the impact of deinstitutionalization on mental patients give a mixed picture of results. Pasamanick et al. (1967) in one of the first outcome studies of community based care for schizophrenics concluded that this care was feasible and a better method of treatment than hospitalization. This study, however, did not include schizophrenics without families willing to take them home. The findings cannot be applied to the majority of schizophrenics in community care who do not have family support.
None of the 20 outcome studies reviewed by Braun et al. (1981) clearly showed a significant difference between care in an institution and community based psychiatric care for the chronic mental patient. They reported methodological problems in all of the studies that led to questionable results.

A recent study by Okin et al. (1983) examines the quality of life of former mental patients living in the community compared to patients that remained hospitalized. Although no significant change was found in the former patient's symptoms, several qualitative changes were considered important. The subjects had not required rehospitalization and preferred their new living situations. It should be noted, however, that these individuals were living in newly developed residential programs. Such an arrangement is a good living situation for the former mental patients, but one that does not exist in many communities.

In a paper appropriately titled "Deinstitutionalization: The data demythologized", Goldman et al. (1983) discuss the facts of deinstitutionalization. The facts, according to Goldman et al., are that the rate of inpatient care episodes has remained stable while outpatient care has expanded twelve-fold, that a majority of inpatient days of
care continue to take place in state and federal hospitals, and other institutional settings such as nursing homes. A shift has occurred in public places providing care, but the cost of the care is still paid for by the public sector.

In many cases, the nursing home has become the substitute for the custodial function of the mental hospital. Of the hard core mentally ill, some 1.7 million are institutionalized, with nursing homes providing care to half of that group (Goldman et al., 1981). Talbott (1981) states that a fourth of nursing home residents are mental patients.

Another aspect of the deinstitutionalization process is the large numbers of patients with severe mental illness and skill deficits associated with long term hospitalization being discharged into communities that are unprepared for them. Many chronic mental patients are sent to live alone in unsupervised facilities. Urban hotels in poor sections of cities have welcomed discharged mental patients and their welfare checks (Sweeney et al., 1982). Wing (1981) reports a similar finding, stating that many of these individuals are in the community but not of it. They make less use of community facilities than do hospitalized patients and have fewer amenities provided for them.
Caton and Goldstein (1984) reporting on chronic schizophrenia followed for one year after discharge from a mental facility reveal that half of the sample changed their living arrangements once, with a fourth moving twice or more. As a result of the study Caton and Goldstein discovered that although housing is a critical element in community care of the chronic mental patient, clinical staff have little control over natural community living arrangements. It was revealed that frequently housing placements were based only on what was available and the patient's financial resources, rather than on what might be most desirable for the patient.

A discharge planning study (Caton et al., 1984) based on the same subjects revealed that staff thought a different living environment was indicated in some of the cases. In most cases, however, they were unable to arrange alternatives because the patients were dependent on welfare funds for their housing and did not have sufficient income for better living arrangements. As a result of their low income many patients are discharged to transient situations or to the streets in urban areas (Hagar & Kincheloe, 1983).

An obvious question to ask is why the families of the deinstitutionalized mental patients don't provide assistance and, of course, some families do. Many families
simply lack the material and emotional resources to continue to provide for the patient on a long term basis (Caton & Goldstein, 1984; Mollica, 1983; Stoneall, 1983).

In the case of the older ex-patient, it may simply be that no close relatives have survived, or if there are any remaining relatives they are now too debilitated to provide care. The majority of older mental patients did not marry and do not have children to look after them as they age. The older mental patient is left dependent upon society to provide care.

Services are provided in a variety of ways for the deinstitutionalized mental patient with an emphasis on cost control in most situations. The current version of the National Plan for the Mentally Ill identifies the "nonsystems" that have developed to fill the gaps left by the decrease in use of large mental hospitals (Talbott, 1981). The plan recognizes that the single largest provider of services for the chronically mentally ill has become the nursing home. It might be assumed that the placement of the mentally ill in nursing homes provides them with the same supervised care they would receive in the mental hospital.
Care is not the same for the mental patient in nursing homes as in mental hospitals because nursing homes are frequently understaffed and are lacking professional staff such as psychologists, psychiatric social workers and, registered nurses. Studies also indicate the frequency that medication is used in nursing homes to control behavior (Donaldson, 1984; Zawadski et al., 1978).

The number of nursing home beds used by patients being discharged from mental hospitals is large and mostly financed by Medicaid and Medicare funding. By 1974 approximately 85,000 nursing home residents had been transferred directly from a mental hospital to a nursing home (Goldman et al., 1983). A large proportion of current nursing home residents would have been state and federal mental hospital patients before deinstitutionalization.

For the older mental patient who does not qualify for state or federal funding, the picture is even more bleak. These individuals tend to be socially isolated, unemployable, and are left in situations to compete with the other dependent poor for services. Mollica (1983) reports that certain groups of lower class patients, such as the elderly and the chronically schizophrenic, received primary care as outpatients at low levels of intervention. These
patients are reported to be less likely to be accepted into psychotherapy and more likely to be treated with drugs (Williams et al., 1980).

Because former mental patients lack supervision residing in independent living situations they frequently do not take medication as prescribed. Without supervised care or supportive psychotherapy, the individual rapidly becomes symptomatic. Problems arise when symptoms reappear and the individual's mental status disintegrates to a serious state before receiving attention. Then attention usually comes because the person's symptoms have become so severe that the behavior is noticed by law officers. Even then adequate treatment does not always occur immediately because of the nature of commitment laws that require the person be clearly dangerous to self or others before being court ordered to obtain treatment. Although the symptoms may be severe and treatment is needed to prevent further disintegration it maybe difficult to prove the person is dangerous. The complexity of this situation has been discussed by many authors (Mollica, 1983; Stoneall, 1983; Talbott, 1981; Wing, 1981), but continues to be a problem for the deinstitutionalized mentally ill and those who provide services to them.
Deinstitutionalization is a complex process as the literature indicates. New research demonstrates that the problems are great and outcomes not as positive as indicated by earlier research. Methodological difficulties with many studies have limited their usefulness.

The next section uses the preceding literature review for presenting a theoretical base for the research study. After discussing social breakdown theory, hypotheses for the study are outlined.

Theoretical Framework

Social breakdown syndrome

Today it is clear that there is a biochemical basis to schizophrenia. Well controlled research studies (Andreason, 1984; Henn and Nasrallah, 1982) have provided substantial data that are close to demonstrating the precise cause of this puzzling mental disorder. Treatment with modern medications has made progress in limiting the florid symptoms of schizophrenia, such as hallucinations, delusions, and paranoia. Other symptoms are less responsive to treatment, however, and many of the socially disabling characteristics of the disease are considered behavioral reactions to specific environments (Wing and Brown, 1970).
The literature reviewed in the preceding sections indicates that although many severe symptoms decrease with age and treatment, a number of symptoms such as apathy, social withdrawal, and irritability may remain (Ciompi, 1980; Muller, 1963). Other studies indicate some response from activity and therapies directed toward stimulating interest, leading to an increase in spontaneity and social functioning (Beard et al., 1978; Kaiman et al., 1966).

Schizophrenic individuals discharged from mental hospitals may simply become lost in society without specific programs to assist them. Many are shifted to other institutional settings where they again become quiet and complacent with only occasional flare-ups of predominant symptoms (Goldman et al., 1983). Still others with adequate mental health follow-up readjust to life outside of the institution and experience a higher level of functioning than they did in the institution (Okin et al., 1983).

Explanations for the effect of environment on behavior are not always clear. In the case of the mentally ill individual it has not been possible to demonstrate a cause and effect relationship between environmental influences and unusual behavior. It is, however, a phenomena with which mental health workers and others close to the
patient are aware. This observation has led some observers to infer that part of the syndrome thought to be inherent in the psychotic process should be identified as secondary (Gruenberg & Zusman, 1964).

The social breakdown theory was first conceptualized in the 1960s by the American Public Health Association. The theory has been broadened and defined by Gruenberg and Zusman (1964). The premise of the theory is that many mental disorders are frequently accompanied by personality distortions which are associated with destruction of the person's social relationships. These reactions follow one of three patterns: withdrawal, anger and hostility, and a combination of the two. The definition of social breakdown theory is:

A person removed from a familiar environment to another unknown social setting, particularly during a period of acute disturbance, is susceptible to influences that will change his behavior. He desperately searches for and responds to cues from the new environment indicating appropriate behavior in the strange situation. Thus, he tends to give up those social abilities which it is made clear to him he will no longer need. One who is isolated with males will no longer be concerned with making himself attractive to women. Without an occupation or a purpose, time becomes meaningless and he loses track of dates. The cues may be even more subtle; the presence of a locked door, indicating that he is expected to try to get away, or more obvious, the sight of other patients in hostile outbursts and bizarre behaviors (Gruenberg and Zusman, 1964, p. 707).
This phenomenon may occur in a variety of settings and is not just a consequence of the environment of mental hospitals. Patients in mental hospitals differ only in an increased likelihood of aberrant behavior in response to the institutional environment. The social breakdown syndrome is seen in other hospitalized patient groups as well as among schizophrenics (Gruenberg & Zusman, 1964).

Literature on the well-being of nursing home residents generally states that in active environments where residents have a choice regarding their placement, increased morale and social interaction is observed (Harel & Noelker, 1982; Chang 1978; Solon et al., 1977). In those institutions where programs may be absent, social withdrawal and irritability will occur. It is likely that signs of social breakdown syndrome reflected in lower levels of morale and activity would also be found.

Because of the time most older schizophrenics have spent in institutions and the accompanying "burn-out" phenomena (Bridges et al., 1978) it is expected that the schizophrenic institutionalized individual may show lower activity and morale levels than the non-schizophrenic institutionalized individual. It is also likely that both institutionalized groups will have lower morale and activity
levels than schizophrenics residing in the community. Because of the impact of the schizophrenic process, however, community schizophrenics will be expected to have lower levels of morale and activity than will healthy aged.

Hypotheses

Based on the literature review and using social breakdown theory as a conceptual framework the following hypotheses are proposed:

Chronicity of illness and institutionalization will result in lower morale and activity levels for institutionalized aged than for aged residing in the community.

a. Institutionalized chronically ill schizophrenics will demonstrate lower morale and activity levels than chronically ill institutionalized non-schizophrenics.

b. Non-institutionalized schizophrenics will demonstrate higher levels of morale and activity than institutionalized schizophrenics.
c. Non-ill, non-institutionalized community residents will demonstrate higher levels of morale and activity than non-institutionalized schizophrenics.

The next three sections report study data collected from four groups of aged individuals. Each section discusses a different aspect of the hypothesis focusing on study data and implications of the findings.
SECTION I. MORALE AND ACTIVITY IN LATER LIFE: IMPACT OF INSTITUTIONALIZATION
Morale and activity in later life: Impact of institutionalization

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ABSTRACT

The study reported here examines morale and activity levels among three subgroups of elderly veterans. Subjects were interviewed using the Philadelphia Geriatric Center Morale (PGCM) Scale, and the Activity Inventory. Social breakdown theory provides the theoretical framework for comparing morale and activity levels among institutionalized groups of schizophrenic and non-mentally ill elderly. The analysis of variance is used to analyze data. Results indicate that institutionalized non-mentally ill elderly had significantly lower morale levels than institutionalized schizophrenics. This result is explained by the effect of psychotropic medications and rehabilitation programs that have assisted chronic schizophrenics to adjust to the institutional life style. For the non-mentally ill elderly, adjustment to the institutional setting is more difficult because of the number of losses experienced in entering the institution. Although the non-mentally ill institutionalized group had a significantly lower self-health rating than the other sub-groups, health was not
correlated with morale as has been reported in previous studies. Among the community elderly studied, morale and activity were within the expected limits for normal elderly outside of an institution.

Key Words: morale, activity, schizophrenic, social breakdown, institutionalized.
MORALE AND ACTIVITY IN LATER LIFE:
IMPACT OF INSTITUTIONALIZATION

Many older people experience changes in social roles and status with advancing years. A number of factors affect the degree of change that occurs. Factors include, but are not limited to physical health, mental status, financial resources, and social supports. As age related changes occur, older people often experience loss of roles, status, and reference groups with accompanying feelings of decreased competence and self esteem (Kuypers & Bengston, 1973). In some individuals, changes are so great as to require the person to move to institutional care within a nursing home.

Theoretical Framework

A model used to explain feelings of decreased competence and self worth accompanying age related changes is social breakdown syndrome. This model was first conceptualized in a publication of the American Public Health Association (1961). It was used initially to explain the apathy, withdrawal, and loss of social abilities in institutionalized mental patients that were not explainable by their psychiatric diagnoses. It was extended by Gruenberg and Zusman (1964) to include similar behaviors in any institutional setting. Kuypers and Bengtson (1973) utilized
social breakdown syndrome to provide a model for aging that is focused on expected psychological consequences to certain noxious social reorganizations in later life.

Kuypers and Bengston (1973) suggested that three aspects of social system change: loss of normative guidance, shrinkage of roles, and lack of appropriate reference groups resulted in increased vulnerability to feelings of social incompetence in the older individual. The perceived decrease in social competence leads into the cycle of social breakdown. Social breakdown syndrome as it was originally conceived encompasses seven steps, which are as follows:

1) pre-condition of susceptibility
2) dependence on external labeling
3) social labeling as incompetent
4) induction into a sick or dependent role
5) learning skills appropriate to new role
6) atrophy of previous skills
7) identification and self labeling as "sick" or inadequate (Kuypers & Bengston, 1973, p. 187).

As the cycle proceeds and the individual is labeled by others as "old" or "sick", skills and behaviors conducive to the negative role are learned with concurrent atrophy of previous skills until the individual accepts the label of old or sick. A series of events are established leading to a generalized self view of incompetence, uselessness, and worthlessness. Finally there occurs the identification and self labeling as useless, sick and, inadequate (Kuypers & Bengston, 1973).

The major premise in social breakdown theory is that a person's worth as ascribed by others is a function of the demonstrated ability to perform in defined social roles
(Kuypers & Bengston, 1973). Gruenberg and Zusman (1964) in describing the application of social breakdown theory to institutionalized individuals state that these individuals lose interest in surroundings and detach themselves from activities and ordinary social obligations with a destruction of the person's social relationships.

The process of social breakdown theory in the elderly as described by Kuypers and Bengston (1973) is exaggerated in the institutional setting of the nursing home. In the institution the clues provided by the environment impart the message that inactivity and complacency are expected (Lawton, 1972). A number of studies (Harel, 1981; Harel & Noelker, 1982; Solon et al., 1977) document social deterioration in institutionalized aged as reflected in inactivity, lethargy, and decreased feelings of self worth. By contrast studies of individuals in institutions with programs designed to encourage activity as a means of increasing self esteem and morale report institutionalized individuals maintaining social functioning despite mental and physical illnesses (Beard et al. 1978; Fawcett et al., 1980).
Study rationale

Past research of the impact of institutionalization presents a confusing picture, particularly of the role of institutionalization regarding the aged mentally ill. In general, it is reported that some of the remaining symptoms of major mental illnesses are attributable to the effects of institutionalization (Wing, 1981).

None of the studies, however, have examined both non-institutionalized and institutionalized populations of mentally ill and non-mentally ill aged. The value in clarifying the relationship of institutionalization to behavior of the aged is in providing information that will assist in programming within institutions and assist with decision making regarding placement of the older mental patient. Institutional care is costly and particularly costly are institutions that do more than provide custodial care. Placement of older mental patients must be made with consideration for quality of care issues and cost factors. It is essential to have accurate data when making these decisions.

Clinical observations suggest that certain behaviors such as complacency and inactivity seen in the institutionalized mentally ill lead to the phenomena described by
psychiatric workers as "burn out" in the aged mental patient. In this study, it was hypothesized that the impact of institutionalization would be reflected in levels of morale and activity and a group of institutionalized mentally ill would be significantly less active and have lower morale than non-mentally ill elderly due to the long period of institutionalization experienced. It was further hypothesized that healthy community elderly would have higher levels of morale and activity than the schizophrenic and non-mentally ill institutionalized elderly.

Methodology

The study was quasi-experimental and used an interview format to collect data on demographics, activity, and morale. Demographic information included age, marital status, number of children, and education. Included with the personal data was a self health rating and a question on number and types of medications. These variables were selected because they have been reported as significant in affecting morale and activity in aged populations (Fawcett et al., 1980; Mancini & Quinn, 1981; Noelker & Harel, 1978).

Data regarding activity were collected using the Activity Inventory developed by R. S. Cavan, E. W. Burgess, R. J. Havighurst, and H. Goldhammer (Graney, 1982). Morale
levels were measured using the revised Philadelphia Geriatric Center Morale (PGCM) Scale (Lawton, 1972). Both have been previously used in studies of elderly subjects and have established reliability and validity with institutionalized groups (Graney, 1982; Lawton, 1972). The instruments were administered in an interview format.

Subjects

All subjects were male veterans between the ages of 55 and 75. Institutionalized subjects were chosen from the populations of two Veteran's Administration Nursing Home Care Units (VANHCU). The VANHCU's were similar in structure, philosophy, and staffing. Both are located in small Midwestern communities adjoining Veteran Administration Medical Centers (VAMC). The healthy elderly group was selected at a senior citizen center in the town where the schizophrenic group was institutionalized. All mentally ill participants were diagnosed as schizophrenic. The non-mentally ill institutionalized group included in the study were primarily victims of stroke, heart disease, and diabetes. Informed consent was obtained from all participants. Only subjects judged competent by their medical teams were included.
Table 1. presents demographic and health related variables for the subjects in this study.

Table 1. Demographic and health related variables for all groups

<table>
<thead>
<tr>
<th>Demographics</th>
<th>Group 1&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Group 2&lt;sup&gt;b&lt;/sup&gt;</th>
<th>Group 3&lt;sup&gt;c&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>67.17</td>
<td>68.40</td>
<td>64.80</td>
</tr>
<tr>
<td>Married</td>
<td>76.30%</td>
<td>40.20%</td>
<td>3.20%</td>
</tr>
<tr>
<td>Wid. or div.</td>
<td>23.50%</td>
<td>39.80%</td>
<td>4.20%</td>
</tr>
<tr>
<td>Single</td>
<td>0.0%</td>
<td>20.00%</td>
<td>54.80%</td>
</tr>
<tr>
<td>No. children</td>
<td>2.40</td>
<td>2.80</td>
<td>0.70**</td>
</tr>
<tr>
<td>Yrs. education</td>
<td>10.12</td>
<td>10.32</td>
<td>11.32*</td>
</tr>
<tr>
<td>Yrs. inst.</td>
<td>0.0</td>
<td>2.88</td>
<td>15.26***</td>
</tr>
<tr>
<td>Health</td>
<td>2.41</td>
<td>1.88</td>
<td>2.13</td>
</tr>
<tr>
<td>Medications</td>
<td>.82</td>
<td>3.12</td>
<td>2.48</td>
</tr>
</tbody>
</table>

<sup>a</sup>Healthy elderly living in the community, N=17.

<sup>b</sup>Non-mentally ill elderly living in an institution, N=25.

<sup>c</sup>Schizophrenic elderly living in an institution, N=31.

* p < .05.

** p < .01.

*** p < .001.
Data analysis

Analysis of variance (ANOVA) was used to determine the differences between groups on the demographic and health related variables, morale score obtained from the PGCM scale, and the activity score measured by the Activity Inventory. Correlations were obtained between morale and activity and the variables of age, years in the institution, education, marital status, number of children, self-health rating, and number of medications. Correlations were also computed between items on the PGCM scale and the demographic and health related variables, as well as between items on the activity inventory and the demographic and health related variables.

Results

Overall means for the Activity Inventory and PGCM scale are reported in Table 2 of all groups.
Table 2. Mean values on activity and morale levels for all groups

<table>
<thead>
<tr>
<th>Score</th>
<th>Group 1&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Group 2&lt;sup&gt;b&lt;/sup&gt;</th>
<th>Group 3&lt;sup&gt;c&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity</td>
<td>23.33***</td>
<td>9.04</td>
<td>10.93</td>
</tr>
<tr>
<td>Morale</td>
<td>13.53***</td>
<td>6.76</td>
<td>10.06</td>
</tr>
</tbody>
</table>

<sup>a</sup>Healthy elderly living in a community, N=17.
<sup>b</sup>Non-mentally ill elderly living in an institution, N=25.
<sup>c</sup>Schizophrenic elderly living in an institution, N=31.

*** p < .001.

On both the Activity Inventory and PGCM scale, the means of the healthy community elderly were similar to the means given by the test designers as being within normal limits. The normal mean for the Activity Inventory is 25.5 (Graney, 1982) and the healthy elderly in this study scored 23.3. The normal mean for the PGCM scale is reported at 13.3 (Sauer & Warland, 1982). In this study the healthy elderly scored 13.7. Morale and activity levels for the healthy elderly were significantly higher (p < .001) than for the institutionalized populations. The institutionalized non-mentally ill group scored 6.76 on the measure of morale, which was significantly (p < .05) lower than the
institutionalized schizophrenics' score of 10.06. As seen in Table 3, morale results for the institutionalized groups were the opposite of those predicted.

Table 3. Activity and morale score means for institutionalized groups

<table>
<thead>
<tr>
<th>Score</th>
<th>Group 2&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Group 3&lt;sup&gt;b&lt;/sup&gt;</th>
<th>F value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity</td>
<td>9.04</td>
<td>10.93</td>
<td>10.62</td>
</tr>
<tr>
<td>Morale</td>
<td>6.76&lt;sup&gt;*&lt;/sup&gt;</td>
<td>10.06</td>
<td>19.82</td>
</tr>
</tbody>
</table>

<sup>a</sup>Non-mentally ill elderly living in an institution, N=25.
<sup>b</sup>Schizophrenic elderly living in an institution, N=31.
<sup>*</sup>P < .05.

The institutionalized non-mentally ill group scored 6.76 on the measure of morale, which was significantly (p < .05) lower than the institutionalized schizophrenics' score of 10.06.

On the demographic and health related variables reported in Table 1 the only significant finding was that the community elderly reported themselves to be healthier than the institutionalized groups. There was no significant difference in self health rating or the number of medications between the two institutionalized populations.
None of the non-mentally ill institutionalized group was receiving neuroleptic medications. All of the schizophrenic group was receiving at least one neuroleptic medicine.

The institutionalized schizophrenics had been living in an institution for the longest (p < .001) period of time and were less likely to be married and have children (p < .05) than the institutionalized non-mentally ill group. Schizophrenics in the nursing home were significantly (p < .05) better educated than the non-mentally ill elderly in the nursing home.

Discussion

It was hypothesized that the length of institutionalization experienced by the elderly schizophrenic would result in lower activity and morale levels for the institutionalized schizophrenics than for any of the other groups. Actually no difference was found between the two institutionalized groups on measure of activity. The morale levels for the institutionalized groups were the opposite of that predicted. The institutionalized non-mentally ill had lower morale than the institutionalized schizophrenics.

Health is often reported as an important factor in explaining levels of morale among the aged (Mancini & Quinn, 1981), but in this study there was no significant difference
between the health ratings for the two institutionalized groups, nor was there a significant correlation between self-health rating and morale score for the institutionalized populations. It might be expected that the presence of family would be likely to result in higher morale (Noelker & Harel, 1978); however, the institutionalized group with the lowest morale, the non-mentally ill, was most likely to be married and to have children indicating that family was not a factor in increasing morale for this group. A similar finding was reported by Parmelee (1982).

At first glance it may appear that social breakdown theory proposed as the theoretical base for lower activity and morale among institutionalized groups is not substantiated. A closer look at the two populations living in nursing homes will clarify the impact of institutionalization. The schizophrenic population had spent many years in an institution (mean = 15.26), but they had also benefited from institutional changes over the past years. Increased emphasis on rehabilitation and improved medical management have lessened the negative effects of institutions for the aged mental patient (Johnstone et al., 1981; Shore, 1983). The non-mentally ill group in this study demonstrated an increase in negative behaviors, such as irritability
and social withdrawal over time (Vogel, 1987). It is possible that the lower morale level in the non-mentally ill group may be explained by the social system changes experienced by the non-mentally ill group within the institution and identified by Kuypers and Bengston (1973) as leading into the cycle of social breakdown syndrome. Examples of social changes experienced by this group include loss of independence and control over daily life activities, as well as social isolation from family and friends. The schizophrenic group has been able, over time, to adapt to institutional living (Bridges et al., 1978; Lawton, 1972) and, although not experiencing as high morale levels as their peers residing in the community have adjusted to their life within the nursing home whereas the non-mentally ill have not.

Correlations between specific items on the PGCM scale and variables of age, years in the institution, and self health rating present a picture of the non-mentally ill subject as facing a bleaker life as he ages than he may have expected. A significant (p < .05) negative correlation was present between age and the statement, "As I get older things are worse than I expected". Significant negative correlations (p < .05) were also found between years in the
institution and the statements, "I am afraid much of the time" and "I get mad more often than I used to". These results substantiate the premise of Gruenberg and Zusman (1964) that reactions to institutions characterized by social breakdown syndrome are reflected in patterns of withdrawal or anger or a combination of the two.

Data presented here did not substantiate the hypothesis that the institutionalized schizophrenic would demonstrate lower morale and activity levels than the non-mentally ill institutionalized subject. In fact, the non-mentally ill institutionalized persons demonstrated lower morale. As the non-mentally ill subject aged and spent more time in the institution he was more likely to feel that life was worse than expected, was frightened, and frequently angry.

These findings should not be generalized beyond a male veteran population, but do appear to have significance for this group in that the expected finding of low activity and morale in the schizophrenic group was not present. These data are important in making decisions regarding placement of older schizophrenics. Within the context of the institutional environment, the older schizophrenic has adapted and, despite long years in the institution, experiences higher morale than a group of non-mentally ill elderly
in a similar institution. Although the cost of maintaining the schizophrenic in such an environment is high, data indicating a relatively good adjustment in terms of morale should be weighed before changes are made in the placement for this group of mentally ill elderly. Although some older schizophrenics may do well in a community setting others would become ill and require more expensive hospital care to stabilize. The relatively high level of morale and adjustment within the institution can best be explained by changes in patterns of psychiatric care that have resulted in improved medical management and programming that encourages interest and involvement in reality oriented activities (Beard et al., 1978; Wing, 1981).

The identification of signs of social breakdown syndrome in the non-mentally ill elderly as reflected in low morale, fear, and anger indicate a need to carefully examine the life of the elderly in the nursing home. It is important to remember that many elderly in nursing homes may be capable of returning to live with families after a period of convalescence in a nursing home. It is imperative then that they do not suffer further deterioration as a result of being in an institution. Specific programs aimed at rehabilitation rather than custodial care are
needed to prevent the non-mentally ill elderly from slipping into the cycle of social breakdown syndrome. Kuypers and Bengston (1973) emphasize that the basis for social breakdown syndrome is the acceptance by the individual of the label of incompetence. Guidelines for breaking the cycle are found in ways that an individual defines competence. Two of the sources for defining competence are adaptative capacity and personal feelings of mastery and inner control (Kuypers & Bengston, 1973).

Adapative capacity can be strengthened by the effort of caregivers to facilitate acceptance of chronic illness and eliminate dehumanizing institutional treatment. Both adaptative capacity and personal feelings of mastery are enhanced in the environment where the individual is allowed choice and encouraged to make decisions (Chang, 1978). There is little that can be done to change the residual effects of most chronic illness experienced by the elderly, but within the nursing home setting a great deal can be done to encourage the view of the elderly resident that he is a competent individual (Vogel, in press).

Summary

Social breakdown syndrome is used as the theoretical framework to discuss results of a study of the impact of
institutionalization on morale and activity levels among three groups of elderly veterans. The groups included both mentally ill and healthy aged, as well as community and institutionalized individuals. It was hypothesized that the institutionalized schizophrenic would experience the lowest activity and morale levels. In fact, there was no difference between activity levels among the institutionalized schizophrenics and the non-mentally ill nursing home residents. Morale levels were significantly lower for the non-mentally ill than for the schizophrenics in the nursing home setting. The non-mentally ill elderly were found to feel life was getting worse with age and with more years in the institution to be more frightened and more angry. These findings indicate that signs of social breakdown syndrome are present in the non-mentally ill institutionalized elderly. It is suggested that the relatively good adjustment of the institutionalized schizophrenics should be carefully considered when decision are being made regarding the placement of the older schizophrenic.

References Cited


SECTION II. QUALITY OF LIFE: A COMPARISON OF FACTORS RELATING TO ACTIVITY AND MORALE LEVELS AMONG INSTITUTIONALIZED AND DEINSTITUTIONALIZED SCHIZOPHRENICS
Quality of life in schizophrenia: A comparison of factors relating to activity and morale among institutionalized and deinstitutionalized schizophrenics

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In this paper, the differences in activity and morale levels between institutionalized schizophrenics and schizophrenics residing in a community were studied. Fifty-eight male veterans were interviewed using the Philadelphia Geriatric Center Morale Scale and the Activity Inventory. Comparisons were made using analysis of variance and regressions. The community schizophrenics had significantly higher morale and activity levels than did schizophrenics in the institution. A surprising finding was the negative correlation between the number of children and morale levels for both groups of schizophrenics. It is speculated that the schizophrenics with children have become alienated from their children due to their illness and, this is a source of increasing sadness for them. A positive relationship was found between activity levels and education for both groups. This study substantiated other research in which it was reported that schizophrenics living in communities are well adjusted. The finding of the negative relationship between number of children and morale levels needs further research.
QUALITY OF LIFE: A COMPARISON OF FACTORS RELATING TO ACTIVITY AND MORALE LEVELS AMONG INSTITUTIONALIZED AND DEINSTITUTIONALIZED SCHIZOPHRENICS

With the advent of psychotropic medication and the social reform movement directed toward the mentally ill in the 1960s, major changes occurred in the care that is available for the severely mentally ill. Extensive discussions of deinstitutionalization continues and remains a controversial issue with the pendulum beginning to swing back toward the value of institutional care for the severely mentally ill (Goldman et al., 1983; Shore, 1983). Approximately 44% of individuals now residing in nursing homes are former mental patients (Goldman et al., 1983), indicating that in many cases the older mental patient has been re-institutionalized. Institutionalization in some nursing homes is actually more similar to care provided for the chronic mental patient in hospitals than the lay public may realize. In nursing homes as well as in hospitals, medication needs are stabilized and structured programs of activity and environmental modification reduce incidents of psychotic symptoms such as delusions and hallucinations (Beard et al., 1978). It is not at all clear if the quality of life experienced by the older schizophrenic outside of
an institution is superior to that of the schizophrenic residing in the nursing home (Malm et al., 1981).

It is clear, however, that changes in the schizophrenic process occurring with age, as well as improved psychiatric care have made it possible for many older schizophrenics to live in less restrictive settings and in some instances to be returned to community living. Living in the community becomes possible because of a decrease in the florid symptoms of schizophrenia with age (Bleuler, 1978; Ciompi, 1980). Although a reduction in symptoms does not occur for all older schizophrenics, many older mental patients, mostly schizophrenics have been discharged in large numbers from hospitals to other living situations.

The criteria for selecting a discharge setting have often been difficult to determine. In many situations, there are few clinical differences between those individuals who are reinstitutionalized in a nursing home setting and those who are discharged to a family care home or independent living (Hoff et al., 1983). In some studies, no significant socio-demographic or clinical differences are reported among patients living in various settings (Goldstein & Caton, 1983). Housing placements are often based on availability of housing and financial resources rather
than the appropriateness of the housing for the clinical condition (Caton & Goldstein, 1984).

In addition to concerns about housing appropriateness, questions frequently arise about the quality of life for the patient discharged from a psychiatric hospital (Malm et al., 1981; Okin et al., 1983). Now that the feasibility of discharging chronically mentally ill patients from hospitals is established (Engelhardt et al., 1982), it is time for an evaluation of the quality of life being experienced by the deinstitutionalized mental patient. Malm et al. (1981) maintain that "a wide range of factors in the material and social environment, together with subjective experience, contribute to the overall quality of life" (p. 478). A comprehensive view of the quality of life requires an assessment of subjective measures such as morale and objective measures of activities and interests.

In this paper, the differences in activity levels and morale between schizophrenics institutionalized in a nursing home and schizophrenics residing in family care homes and independent living are evaluated. Additional comparisons are made between demographic and health related variables of age, years in the institution, marital status, number of children, education, self-health rating, and number of
medications as they relate to activity and morale scores. The demographic and health related variables were selected because of other studies (Malm et al., 1981; Okin et al., 1983) that have documented the relationship of these variables to measures of quality of life among deinstitutionalized schizophrenics.

Research Methodology

All individuals included in this study were male veterans age 55 or older with a primary diagnosis of schizophrenia. Each subject had long and often multiple hospitalizations for the treatment of schizophrenia. At the time of the study all subjects were receiving psychotropic medications. The setting for the study was a small, rural, Mid-western community which is the site of a Veteran's Administration Medical Center (VAMC). The medical center includes a 200 bed nursing home care unit (NHCU) along with a psychiatric hospital. Institutionalized subjects were residents of the NHCU while the deinstitutionalized subjects were on the out-patient rolls of the VAMC. De-institutionalized subjects resided in family care homes or were living independently.
The total number of subjects was 59 with 31 subjects in the institutionalized group and the remaining 28 as out patients. Little difference was noted in patient records regarding the clinical condition of those residing in the NHCU and those living in the community. This is consistent with the findings of Caton et al. (1984) who report no significant clinical differences among patients living in different types of settings. In this study, schizophrenics living in the NHCU were generally service connected for their psychiatric condition, which means that the onset of their illness had occurred while they were in military service. The service connected status gave them preference for admission to the NHCU.

Among the group residing in the community about one-half were living independently while the other one-half resided in family care homes. There were not any substantial clinical factors in the community schizophrenics that had determined placement. Placement had instead, been determined by the cost of the available housing or the preference of the subject for a particular living arrangement. For demographic and health related variables the significant differences between the deinstitutionalized and institutionalized groups was in years in the institution
and number of children. The currently institutionalized group had spent significantly ($p < .001$) more years in the institution. The deinstitutionalized schizophrenics had significantly more children ($p < .05$). Table 1 presents mean values for demographic and health related variables for both groups.

**Table 1.** Mean values of demographic and health related variables for groups of institutionalized and deinstitutionalized schizophrenics

<table>
<thead>
<tr>
<th>Variables</th>
<th>Group 1$^a$</th>
<th>Group 2$^b$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>64.80</td>
<td>63.40</td>
</tr>
<tr>
<td>No. children</td>
<td>0.71</td>
<td>1.17$^*$</td>
</tr>
<tr>
<td>Yrs. education</td>
<td>11.32</td>
<td>11.11</td>
</tr>
<tr>
<td>Yrs. institu.</td>
<td>15.26$^{***}$</td>
<td>11.50</td>
</tr>
<tr>
<td>Self health</td>
<td>2.13</td>
<td>2.50</td>
</tr>
<tr>
<td>No. meds.</td>
<td>2.48</td>
<td>2.64</td>
</tr>
</tbody>
</table>

$^a$Institutionalized schizophrenics, $N=31$.

$^b$Deinstitutionalized schizophrenics, $N=28$.

$^* p < .05$.

$^{***} p < .001$. 


**Method**

Two instruments were used to measure activity and morale levels in the sample, the Revised Philadelphia Geriatric Center Morale (PGCM) Scale (Lawton, 1975) and the Activity Inventory designed by Gavan, Burgess, Havighurst, and Goldhammer (Graney, 1982). These instruments were chosen for their established reliability and validity with older individuals. Variables being measured were morale, determined by the total morale score obtained on the PGCM scale and activity, measured by the overall activity score on the Activity Inventory. Demographic and health related data were obtained on a data sheet. Current medication information was collected on all subjects. The instruments were administered verbally by the investigator to eliminate any problems in comprehension or reading ability. Informed consent was obtained from all participants.

**Analysis**

Data were analyzed using Pearson's product moment correlation and analysis of variance. The correlations were determined on the relationship of demographic variables to the overall activity and morale score. Correlations between demographic and health related variables and the activity score measured by the Activity Inventory,
as well as the morale score determined by the PGCM scale were performed. Further correlations were performed between the demographic and health related variables and items on the PGCM scale and the Activity Inventory. This set was done because specific questions on the morale scale, such as, "I sometimes think life is not worth living," might be expected to be correlated with some of the demographic and health related variables. It was expected that some items in the Activity Inventory, such as attendance at religious services or items related to friends and family would be correlated with demographic and health related variables.

**Study Results**

The analysis of variance results on levels of activity and morale among the two groups of schizophrenics supported the original hypothesis. The deinstitutionalized group of schizophrenics had significantly more activity and higher morale than did the institutionalized schizophrenics. Mean scores and F values are reported in Table 2.
Table 2. ANOVA values on activity and morale for groups of deinstitutionalized and institutionalized schizophrenics

<table>
<thead>
<tr>
<th>Measure</th>
<th>Group 1 mean</th>
<th>Group 2 mean</th>
<th>F value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morale</td>
<td>10.06</td>
<td>13.14</td>
<td>18.56*</td>
</tr>
<tr>
<td>Activity</td>
<td>10.93</td>
<td>20.36</td>
<td>47.31**</td>
</tr>
</tbody>
</table>

^Institutionalized schizophrenics, N=31.
^Deinstitutionalized schizophrenics, N=28.
* p < .05.
** p < .01.

The correlation examined the relationship between selected demographic and health related variables and items that are part of the PGCM scale and Activity Inventory. Significant correlations between items on the PGCM scale and demographic and health related data for the institutionalized schizophrenics are presented in Table 3. Correlations between items on the Activity Inventory and demographic and health related variables for Group 1 are in Table 4.
Table 3. Relationships between PGCM scale items and selected demographic and health related variables for institutionalized schizophrenics

<table>
<thead>
<tr>
<th>PGCM Scale Question</th>
<th>Age Yrs. inst.</th>
<th>Child.</th>
<th>Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>I sometimes worry</td>
<td>-.48*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am afraid</td>
<td>-.39*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Take things hard</td>
<td>-.46*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Get better as I get older</td>
<td>.36*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Better than I thought</td>
<td>.40*</td>
<td>.33***</td>
<td></td>
</tr>
<tr>
<td>Satisfied</td>
<td>.46**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Morale</td>
<td>-.42*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* * * \( p < .05 \).
** ** \( p < .01 \).
*** *** \( p < .001 \).

Only the number of children was significantly correlated \( p < .05 \) with the overall morale score and this was a negative correlation \( r = -.42 \). Several other individual items were negatively correlated with the number of children at a significant level \( p < .05 \). These items were worry

...
(r=−.48), fear (r=−.39), and taking things hard (r=−.46). Health status was significantly (p < .05) correlated with items indicating life was better than expected with age.

Age correlated positively (r=.46) with satisfaction and may be a reflection of the diminution of psychotic symptoms with age that often occurs in schizophrenia (Ciompi, 1980). A reduction in hallucinations and delusions would be likely to contribute to increased feelings of satisfaction in the life of the schizophrenic.

Years in the institution correlated positively (r=.40) with the statement, "As I get older things are better than I thought they would be". The relationship appears to be a reflection of a decrease in pathology with advanced years. It may also be explained in part by changes in institutional care due to a trend toward the least restrictive settings and an emphasis on individual rights that have led to more humane atmospheres in institutions.

The Activity Inventory results also yielded some significant correlations among institutionalized schizophrenics as seen in Table 4.
Table 4. Relationships between Activity Inventory items and selected demographic and health related variables among institutionalized schizophrenics

<table>
<thead>
<tr>
<th>Activity items</th>
<th>Age</th>
<th>Yrs. Inst.</th>
<th>Ed.</th>
<th>Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading</td>
<td></td>
<td></td>
<td></td>
<td>.42**</td>
</tr>
<tr>
<td>Organizations</td>
<td>-.37*</td>
<td></td>
<td></td>
<td>.47*</td>
</tr>
<tr>
<td>Attend church</td>
<td></td>
<td></td>
<td>.38*</td>
<td></td>
</tr>
<tr>
<td>See friends</td>
<td></td>
<td></td>
<td>.66***</td>
<td></td>
</tr>
<tr>
<td>Physical ills</td>
<td></td>
<td></td>
<td>-.35*</td>
<td></td>
</tr>
<tr>
<td>Days in bed</td>
<td>.50**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activity score</td>
<td></td>
<td></td>
<td>.38*</td>
<td>.45**</td>
</tr>
</tbody>
</table>

*p < .05.

**p < .01.

***p < .001.

The overall activity score was significantly correlated with level of education (r=.38) and health (r=.45). Level of education was significantly related to several specific activities such as reading (r=.42), membership in organizations (r=.47), and attendance at religious services. Thus, despite institutionalization and long term illness, intellectual skills and interests do remain intact for the
institutionalized schizophrenic. Activity levels and interests were higher for schizophrenics with more education than for schizophrenics who had less education, and the interests were likely to carry through to old age for the well educated schizophrenic (Hall et al., 1972).

Health correlated strongly (p < .01) (r = .45) with activity level and with the item, "seeing friends as much or more than at age 50" (r = .66). The ability to see friends is important for the institutionalized schizophrenic because it is unlikely that they will have family members with whom to interact and because of the need of the older schizophrenic who is institutionalized to combat social isolation. Deinstitutionalized schizophrenics

Morale scores for the deinstitutionalized schizophrenics (group 2) were significantly correlated (p < .05) with health (r = .45), number of children (r = -.40), and number of medications (r = -.36).
Table 5. Relationship of PGCM scale items to selected demographic and health related variables among deinstitutionalized schizophrenics

<table>
<thead>
<tr>
<th>PGCM Scale Questions</th>
<th>No. of Age</th>
<th>No. of Child.</th>
<th>No. of Ed.</th>
<th>No. of Health</th>
<th>No. of Meds.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Worry</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Afraid</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upset easily</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.39**</td>
</tr>
<tr>
<td>Gets better as I get older</td>
<td>.33*</td>
<td>.48**</td>
<td>-.35*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Get older less useful</td>
<td>-.40*</td>
<td></td>
<td></td>
<td>.50**</td>
<td></td>
</tr>
<tr>
<td>Life is not worth living</td>
<td>-.39*</td>
<td>-.41*</td>
<td>-.37*</td>
<td>-.42*</td>
<td></td>
</tr>
<tr>
<td>Morale</td>
<td>-.40*</td>
<td></td>
<td>.45*</td>
<td>-.36*</td>
<td></td>
</tr>
</tbody>
</table>

* p < .05.
** p < .01.
*** p < .001.
Other studies have also observed a relationship between morale and health for the aged in the general population (Mancini & Quinn, 1981). In a group of schizophrenics a positive relationship between health and morale may also be interpreted as a sign of remission of schizophrenic symptoms. Another health related variable, number of medications, and morale score were negatively correlated (r=-.36). The negative correlation between number of medications and morale may seem puzzling unless it is recognized that psychotropic medications not only control psychotic symptoms but also dull responses and may contribute to a lack of enthusiasm for life (Bernstein, 1978).

As was observed in Group 1, a negative relationship was found between morale and number of children (r=-.40) in Group 2. This finding will be discussed further in the next section.

A clinically significant finding was the relationships between certain demographic and health related variables and the statement, "I sometimes feel that life is not worth living". Significant (p <.05) negative correlations existed between the statement, "I sometimes feel that life is not worth living" and the following four variables: age (-.39), number of children (r=-.41), education (r=-.37), and number
of medications \((r=-.36)\). This finding indicates that the older schizophrenic who has children, is educated, and is on medications is less likely to consider life as not worth living. An effort was made to determine statistically, by use of regression, which of the variables most influenced the feeling that life was not worth living. It was assumed that age would be an important factor since it is known that some symptoms of schizophrenia become less with age (Ciompi, 1980). The association of age on agreement with the statement that life is not worth living, however, cannot be differentiated statistically from the effects of the variables of education, number of children, and medications. When age is controlled for any of the other variables the coefficient of determination is no longer significantly different from zero.

Age was strongly \((p < .01)\) correlated with activity as measured by the Activity Inventory \((r=.38)\). The significant correlations between demographic and health related variables and activities for Group 2, schizophrenics living in the community, are reported in Table 6.
Table 6. Relationships of Activity Inventory items to selected demographic and health related variables among deinstitutionalized schizophrenics

<table>
<thead>
<tr>
<th>Activity Items</th>
<th>Age</th>
<th>Yrs inst.</th>
<th>Child.</th>
<th>Ed.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free time activity</td>
<td>.43*</td>
<td>.43*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organizations</td>
<td>.39*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meetings</td>
<td>.34*</td>
<td>.42*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attend church</td>
<td>.39*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T.V. or radio church</td>
<td>.41*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Live with family</td>
<td>.41*</td>
<td>.41*</td>
<td>.40*</td>
<td></td>
</tr>
<tr>
<td>See family often</td>
<td>.41*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>See friends often</td>
<td>.45*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Illness</td>
<td></td>
<td></td>
<td></td>
<td>-.37*</td>
</tr>
<tr>
<td>Enough money</td>
<td></td>
<td></td>
<td></td>
<td>.38*</td>
</tr>
</tbody>
</table>

* P < .05

Other demographic variables that were correlated with the activity score included years in the institution, number of children, and education. For Group 2, age was significantly (p < .05) correlated with a number of activities including use of free time (r = .43), number of organizations (r = .39), meetings attended (r = .34), and attendance at
religious services \( r = .39 \). The correlations reported here between activity and age indicate the older schizophrenic veteran in this study has adjusted to community living. This finding is in agreement with the research of Hyer et al. (1983) who studied schizophrenic veterans and discovered older veterans were better adjusted to community life than younger veterans. The ability to function in a normal manner as part of the community is probably related to the decrease in symptomatology that accompanies aging for many schizophrenics (Engelhardt et al., 1982).

In summary, the deinstitutionalized group of schizophrenics had significantly higher morale and greater levels of activity than did institutionalized schizophrenics. For both groups morale was negatively correlated with number of children. Among the institutionalized schizophrenics activity was positively correlated with education and health. There were no significant correlations between demographic and health related variables and activity score for the community schizophrenics.

Discussion

As anticipated the morale and activity levels of the deinstitutionalized schizophrenics were significantly higher than the institutionalized group, although the mean morale
score for both groups was within the average range for morale recommended by M. P. Lawton, who developed the scale (Sauer & Warland, 1982). The mean activity score for the deinstitutionalized group was also within the expected range for older adults (Graney, 1982).

Although the level of morale and activity for the group of schizophrenics living in the community was higher than for the institutionalized schizophrenic, it cannot be assumed that the community based schizophrenics experienced a better quality of life than the institutionalized schizophrenics. Several items on the quality of life checklist for mental patients (Malm et al., 1981) are addressed in this study: use of leisure time, recreational interests, religion, and relationships. Some studies (Caton & Goldstein, 1984; Sweeney et al., 1982) have reported that schizophrenics living in the community are a disenfranchised group experiencing a low life quality. The results of this study are different. In general, the older schizophrenic living in the community has high morale, is involved in a variety of recreational and leisure time activities, and is a participant in religious services. The difference in this group and schizophrenics residing in communities reported on in other studies may be related to the rural setting which,
unlike urban areas (Sweeney et al., 1982), provides a more protective environment for the mentally ill, due to the lower crime rate and opportunities for adequate housing. Another factor may be the veteran status of the subjects which insured a certain level of medical care without cost and, for many, some income from a government provided pension. The medical care contributed to controlling the schizophrenic illness and the income provided enough money for an adequate standard of living in a rural community.

The negative correlation between the number of children and morale for both groups of schizophrenics appears to be a unique clinical finding. Any explanation is speculative without further investigation, but considering the effect of the schizophrenic process on normal life events, there is a possible rationale. Among the total group of schizophrenics 56% had been married, but of those married 61% were now divorced. Being divorced and socially isolated as a result of their illness (Mollica, 1983), subjects may have become alienated from their children. Most studies of outcomes of schizophrenia have examined the effect of marital status, but have not studied the effect of children on the outcome of the illness. Only one study (Malm et al., 1981) considered the relationship of children to the quality of life for
schizophrenics. For most subjects in the study by Malm et al. (1981) children were not relevant. It is possible that for the schizophrenic who has children, but no longer has contact with them, the lack of the relationship has become a source of lower morale.

Summary

The results indicate that male schizophrenic veteran out-patients score higher than a sample of institutionalized schizophrenics on morale and activity, a finding that is substantiated in other studies (Engelhardt et al., 1982; Okin et al., 1983). It is important to note that the in-patient schizophrenics scored within the normal limits on the morale score. Amelioration of the schizophrenic process with age may be a factor in the high level of the morale score.

Of clinical value is the finding of a significant negative relationship between morale and number of children for all subjects. The impact on schizophrenics of being a parent has not been explored in studies of outcomes among schizophrenics. Further investigation into this aspect of the schizophrenic's social supports would be helpful to those involved in providing care to schizophrenics.
The high level of involvement in activities and morale level found among the community group of schizophrenics contrasted with findings of studies of older community schizophrenics in urban areas. It would be valuable to repeat the study in an urban area to control for the impact of the rural setting and medical care provided by the Veteran's Administration.

Among the group of institutionalized schizophrenics, it is important to observe that no correlation was found between years in the institution, activity, and morale scores. For the group of schizophrenics the morale and activity level of those spending more time in the institution was not significantly affected by length of time spent in the institution. Institutionalized schizophrenics with more education and better health reported higher morale than did those with less education and who felt less healthy. In terms of planning for the institutionalized schizophrenic, emphasis needs to be placed on programs that utilize the educational background of the schizophrenic and maintain general health, such as those that emphasize involvement with other age groups (Solon et al., 1977) or interests (Beard et al., 1978).
Research that examines factors contributing to quality of life issues such as activities, social supports, and satisfaction with life should be encouraged. Based on the findings reported here, investigation into the role of children in the life of the older schizophrenic is indicated. There is also a need to explore the difference in the life of schizophrenics residing in rural and urban communities.

References Cited


SECTION III. THE ROLE OF INSTITUTIONALIZATION AMONG NURSING HOME POPULATIONS
The role of institutionalization among nursing home populations

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ABSTRACT

The study reported here utilizes Lewin's (1951) concept of person-environment congruence to examine the adjustment of two sub-groups of elderly male veterans to a nursing home environment. One group are non-mentally ill frail elderly and the other group are schizophrenics with a long history of institutionalization. The NOSIE-30 is used to measure behaviors in the nursing home environment. It is hypothesized that the frail elderly would score lower because of less person-environment congruence. The schizophrenic group, however, scored lower in overall patient assets than did the frail elderly group. Correlations demonstrated that for the frail elderly negative behaviors increased when more time was spent in the institution. Recommendations are made for programing to prevent regression for both groups within the nursing home environment.
THE ROLE OF INSTITUTIONALIZATION AMONG NURSING HOME POPULATIONS

Although there are an increasing number of older people in our population only a small percentage live in institutions. Nevertheless the demands for care for that institutionalized group are extensive. These demands are particularly great for the services of nursing personnel working in institutions because the availability of other professional staff such as psychologists, social workers, and activity therapists is either limited or non-existent.

Nursing has been very active in developing programs for care of the institutionalized aged (Burnside, 1980; Vogel, 1982). The need for nursing interventions to provide quality care for older Americans in institutions will continue as the number of elderly needing such services increases. To be able to provide quality nursing care to the aged in nursing homes requires a knowledge of what the older person is experiencing in the nursing home and how the person is affected by these experiences at this stage of life.

The research reported in this paper seeks to identify the positive and negative factors associated with institutionalization among the two populations of elderly most
often found in nursing homes, the frail elderly and the mentally ill and to determine predictors of behavior within the nursing home environment. It is hypothesized that the frail elderly will display a greater negative impact of institutionalization than will the mentally ill group. The basis for this hypothesis is found in previous research among schizophrenics (Bridges et al., 1978; Lawton, 1972) that has discovered an adjustment process within the schizophrenic lifestyle that allows the individual to adapt to institutional living over a period of time.

Theoretical Framework

Controversy exists regarding the effect of institutionalization on the aged. Some (Fawcett et al., 1980; Wolk & Tellen, 1976) have argued that institutionalization negatively affects older adults, resulting in low satisfaction, boredom, and feelings of loss of control. Other studies (Harel & Noelker, 1982; Smith & Bengston, 1979) have found positive consequences of institutionalization in improved family relationships, social integration, and higher morale.

It has also been argued (Noelker & Harel, 1978) that congruence between the person and the environment is a factor in adjustment to institutional living. The concept of
person–environment congruence is based on the theoretical work of Kurt Lewin (1951). Lewin argued that behavior depends upon the state of the person and the environment, to understand or predict behavior, the person and environment are considered together as the life space (Lewin, 1951). Lewin emphasizes that to understand behavior in the context of life space, social and physical conditions must be seen as factors which limit the variety of life spaces available. The social aspect is at least as important as the physical aspect and general characteristics of the environment such as atmosphere and amount of freedom must be taken into account when evaluating behavior in the context of life space. Utilizing Lewin's framework, it is proposed in this study that the mentally ill older person who has spent many years in a confining institutional environment (Wing, 1981) will feel more congruent with the nursing home environment and will demonstrate a more positive adjustment than will the frail elderly. Experience prior to nursing home confinement such as life with family, work, and social activities as a prominent part of their life space differentiate the frail elderly from the mentally ill.
Frail elderly

Many elderly reside in nursing homes because they are no longer able to live independently or with their families. They are in poorer health than elderly living in an independent setting (Wolk & Telleen, 1976) and often have less financial support, as well as fewer social supports (Donaldson, 1984). An increase in loss of function and social deterioration is associated with entrance into a nursing home and increasing age (Donaldson, 1984). Individual change when it occurs among nursing home elderly is usually in the direction of further deterioration increasing the needs for a higher skill level of nursing care (Donaldson, 1984). Information on nursing home occupancy and the turnover rate in nursing homes suggests that one of five elderly persons will spend some time in a nursing home during their lifetimes (Chang, 1978). It may be anticipated as the number of elderly in the population increases the frail elderly may require more nursing home care.

The mentally ill

A major change that has occurred in the population of aged residing in nursing homes is the influx of individuals who have spent many years in psychiatric institutions. With the onset of the deinstitutionalization movement, the large
psychiatric hospitals discharged individuals who had no families and were unable to live independently. Because of the limited number of other resources such as family care homes or halfway houses, many of these individuals were placed in nursing homes. The National Plan for the Mentally Ill (Talbott, 1981) states that of the 1.3 million nursing home residents, 31% suffer from organic mental syndrome while 27% have primary mental illness such as schizophrenia.

These two groups, the frail elderly and the mentally ill are now a substantial number of the nursing home residents in this country. For nurses providing care in nursing homes the identification of the predominant characteristics of members of these groups will facilitate provision of quality nursing care.

Methodology

The study reported here is part of a larger project undertaken to examine differences between aged institutionalized schizophrenics and other groups of aged individuals. The focus in this paper is on two groups of institutionalized aged, the mentally ill and the frail elderly. The mentally ill are a group of schizophrenic male veterans. The two groups were studied for differences in observable behavior within the institutional environment. The two
groups were compared on measures of positive behaviors, such as competence, neatness, and interests. They were also compared on measures of negative behaviors, such as irritability, psychosis, and social retardation.

Sample

All subjects were male veterans institutionalized in Veteran's Administration Nursing Home Care Units (NHCU) who were between the ages of 55 and 75 (N=56). Subjects in Group A (N=31) were diagnosed as schizophrenic and had spent a minimum of one year in the nursing home setting. All had multiple hospitalizations in psychiatric hospitals. Group B (N=25) consisted of males who had resided in a nursing home for at least one year and were diagnosed as having one or more medical conditions including stroke, diabetes, arthritis, and heart disease. None of the subjects in Group B were diagnosed as having either a functional or organic mental illness. All subjects were rated as competent by their physicians. Informed consent was obtained from all participants in both groups. The two groups were housed in Veteran's Administration Medical Centers in rural communities. The nursing home units were similar in physical
structure, staffing, and philosophy of care. Socio-demographic and health information for the two groups are presented in Table 1.

Table 1. Selected socio-demographic characteristics of frail elderly and schizophrenic elderly in VA nursing homes

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Group A</th>
<th>Group B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>64.8</td>
<td>68.4</td>
</tr>
<tr>
<td>Married</td>
<td>3.2%</td>
<td>40.2%</td>
</tr>
<tr>
<td>Wid. or div.</td>
<td>42.9%</td>
<td>39.8%</td>
</tr>
<tr>
<td>Single</td>
<td>54.8%</td>
<td>20.0%</td>
</tr>
<tr>
<td>No. Children</td>
<td>.71</td>
<td>2.8**</td>
</tr>
<tr>
<td>Yrs. Educ.</td>
<td>11.32</td>
<td>10.32</td>
</tr>
<tr>
<td>Yrs. Inst.</td>
<td>15.26***</td>
<td>2.88</td>
</tr>
<tr>
<td>Health rating</td>
<td>2.13</td>
<td>1.88</td>
</tr>
<tr>
<td>Medications</td>
<td>2.48</td>
<td>3.12**</td>
</tr>
</tbody>
</table>

**a**Institutionalized schizophrenics, N=31.

**b**Institutionalized non-mentally ill elderly, N=25.

** p < .01.

*** p < .001.
The two groups were similar on age and educational level. The frail elderly were more likely to be married and have children. They had spent significantly less time in an institution ($F=30.25 \ p < .001$), had significantly poorer health ($F=3.91 \ p < .05$), and took significantly more medications ($F=6.81 \ p < .01$). Schizophrenic subjects were all receiving at least one psychotropic medication. None of the frail elderly were receiving anti-psychotic or anti-depressant medications.

**Method**

The Nurses' Observation Scale for Inpatient Evaluation (NOSIE-30) (Honigfeldt & Klett, 1965) was used as the measurement tool. This 30 item scale was completed by ward nurses based on a three day observation period. Discrete items of observable behavior were rated for frequency of occurrence yielding six factor scores for each subject. Positive factors measured by the NOSIE include social competence, defined as the ability to follow hospital routine; social interests or responsiveness to social environment; and personal neatness. Negative factors measured by the NOSIE are irritability, social retardation, and manifest psychosis, defined as bizarre behavior and overt signs of hallucinatory experiences. A composite score, total patient
assets, is computed from the positive and negative scores. Data were analyzed using an ANOVA to compare the two groups on the NOSIE-30 factors. Correlations were determined for subjects on the relationship of factor scores to demographic variables. Multiple regressions were completed to identify the extent to which age, years in the institution, self-health rating, and number of medications predicted factor scores. The demographic and health related variables were selected because previous studies (Chang, 1978; Donaldson, 1984) have indicated a relationship between the variables and institutional behavior.

**Data results**

The results of the analysis of variance on the total patient assets score did not support the original hypothesis that the frail elderly would show a greater negative impact of institutionalization than the mentally ill group. The total patient assets score was significantly higher ($F=9.58 \ p<.01$) for the frail elderly group than for the mentally ill, which means the frail elderly maintained more total assets than the mentally ill group. In addition, the total negative score was significantly higher ($F=22.71 \ p<.001$) for the mentally ill group than for the frail elderly group. ANOVA results for the two groups are reported in Table 2.
Table 2. ANOVA for NOSIE-30 comparing schizophrenics and non-mentally ill institutionalized aged

<table>
<thead>
<tr>
<th>NOSIE-30 factors</th>
<th>Group A&lt;sup&gt;a&lt;/sup&gt; mean</th>
<th>Group B&lt;sup&gt;b&lt;/sup&gt; mean</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competence</td>
<td>24.65</td>
<td>25.70</td>
<td></td>
</tr>
<tr>
<td>Interests</td>
<td>21.74</td>
<td>23.41</td>
<td></td>
</tr>
<tr>
<td>Neatness</td>
<td>19.03</td>
<td>24.46&lt;sup&gt;**&lt;/sup&gt;</td>
<td>8.35</td>
</tr>
<tr>
<td>Total positive</td>
<td>65.74</td>
<td>73.48&lt;sup&gt;**&lt;/sup&gt;</td>
<td>9.58</td>
</tr>
<tr>
<td>Irritability</td>
<td>12.32&lt;sup&gt;***&lt;/sup&gt;</td>
<td>7.19</td>
<td>9.28</td>
</tr>
<tr>
<td>Psychosis</td>
<td>10.26&lt;sup&gt;***&lt;/sup&gt;</td>
<td>1.70</td>
<td>49.23</td>
</tr>
<tr>
<td>Retardation</td>
<td>7.26</td>
<td>10.81&lt;sup&gt;**&lt;/sup&gt;</td>
<td>12.21</td>
</tr>
<tr>
<td>Total negative</td>
<td>30.16&lt;sup&gt;**&lt;/sup&gt;</td>
<td>19.70</td>
<td>22.71</td>
</tr>
<tr>
<td>Total assets</td>
<td>132.16</td>
<td>148.67&lt;sup&gt;**&lt;/sup&gt;</td>
<td>9.58</td>
</tr>
</tbody>
</table>

<sup>a</sup>Institutionalized schizophrenics, N=31.

<sup>b</sup>Institutionalized non-mentally ill elderly, N=25.

<sup>**</sup><i>p</i> < .01.

<sup>***</sup><i>p</i> < .001.
The overall positive score was significantly higher for the frail elderly than for the mentally ill group. This was accounted for by the significantly higher personal neatness score for the frail elderly group. There was no significant difference between the two groups on measures of social competence and interests.

The overall negative score was significantly higher for the schizophrenic group due primarily to the much greater (F=49.23 p <.001) difference on the psychosis factor. It is worthwhile to note, however, that on the factor of social retardation the frail elderly group was significantly more withdrawn than the mentally ill group (F=12.21 p <.01).

The data were next examined for each group to identify correlations for the demographic data and factor scores on the NOSIE-30. Significant correlations were further analyzed through multivariate regression to isolate predictors of factor scores.

Among the mentally ill group only one significant correlation was found between demographic variables and factor scores; years of education and interests (r=.409 p <.01). Important for the mentally ill group was the lack of significant correlation between years in the institution and factor scores on the NOSIE-30, or between years in the
institution and total patient assets. The results indicate that institutionalization for the mentally ill group did not correlate with social competence, interests, or neatness. Neither did the negative factors of irritability, psychosis, or social withdrawal show a significant relationship with years in the institution.

Correlations for the frail elderly group were found in two important areas, health and years institutionalized. Significant correlations for the frail elderly group are shown in Table 3.

Table 3. Significant relationships between NOSIE-30 scores and socio-demographic and health characteristics for the frail elderly.

<table>
<thead>
<tr>
<th>NOSIE-30 factors</th>
<th>Yrs. institution</th>
<th>Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interests</td>
<td></td>
<td>0.45*</td>
</tr>
<tr>
<td>Neatness</td>
<td>-0.49**</td>
<td></td>
</tr>
<tr>
<td>Psychosis</td>
<td>0.36*</td>
<td></td>
</tr>
<tr>
<td>Retardation</td>
<td></td>
<td>-0.48*</td>
</tr>
<tr>
<td>Negative score</td>
<td>0.43*</td>
<td></td>
</tr>
<tr>
<td>Patient assets</td>
<td>-0.41*</td>
<td></td>
</tr>
</tbody>
</table>

* p <.05.
** p <.01.
Personal neatness was significantly and negatively correlated with time spent in the institution. Total patient assets were also negatively correlated with time in the institution. Health was positively correlated with interests and negatively correlated with social retardation.

Multivariate analysis was conducted on variables that were significantly correlated. Twenty-four percent of the variance in psychosis was explained by the number of years institutionalized and health status (F=3.44 p < .05). When the self health rating is held constant, a significant relationship emerges between the overall negative score and the time spent in the institution (F=4.41 p < .05). Health and years in the institution explained 29% of the variance in the overall score on the NOSIE-30.

Discussion

The reported data do not support the original hypothesis that the frail elderly would score lower on total patient assets than the mentally ill group. There are, however, several points worth noting. The correlation for the mentally ill group between years in the institution and observable behaviors as measured on the NOSIE-30 was not significant. This is important in light of a study using an earlier version of the NOSIE among an institutionalized
schizophrenic population that reported continued institutionalization was significantly correlated with negative behaviors (Honigfeld & Gillis, 1967).

The many changes that have occurred in psychiatric care over the past twenty years offer an explanation for the difference in the impact of length of institutional stay on behavior. A major effort has been made in the direction of rehabilitative programs, improved medication management, and therapeutic activities (Johnstone et al., 1981; Shore, 1983). The impact of this effort has been to lessen the negative effects found in the mental hospitals of twenty years ago (Wing, 1981).

It is also notable that no correlation existed between age and negative behavior characteristics as measured on the NOSIE-30. The failure to demonstrate a correlation between age and negative behaviors for the schizophrenic is well substantiated in other studies (Chaikelson & Schwartzman, 1983; Honigfeld & Gillis, 1967) and reflects the findings of many researchers that schizophrenics generally demonstrate a reduction in symptoms over time (Bleuler, 1978; Ciompi, 1980).
In contrast to the mentally ill group, there were correlations for the frail elderly between years in the institution and several behavior factors. The decline in neatness and increase in overall negative behaviors were expected and are substantiated in the theoretical framework. The older individual who experiences an incapacitating illness is placed in an institution where congruence between the environment and the person is absent. The individual who used to be in charge of his own life is in a dependent position in an unfamiliar situation. The relationship of health and negative behaviors can be explained in this context. Lewin (1951) emphasizes the importance of both physical and social conditions for understanding behavior as an aspect of person-environment congruence. Consequently in the frail elderly group, institutionalization and declining health are both predictors of negative behaviors.

Recommendations

Data from the study provide some guidelines for caregivers in nursing homes. The mentally ill patients currently being discharged from psychiatric hospitals have benefited from an increased emphasis on rehabilitation programs. They are less psychotic and better able to make social adjustments than they may have been at a younger age (Post,
115

1980). As reported here they do not appear to be more impaired by time spent in the institution and in fact, are not significantly different than their peers in the frail elderly group in terms of social competence and interests. Neatness is a problem with the mentally ill group and a structured program that emphasizes personal hygiene and manners may be helpful in improving this problem. Group activities called the "gentleman's club" or "social club" may be used to encourage cleanliness and appropriate behavior in social situations.

The mentally ill resident has become accustomed in the psychiatric hospital to a structured program that clearly delineates expectations for behavior and provides activities to occupy the individual. Structured programs assist in limiting anxiety and reducing psychotic symptoms (Vogel, in press). Continuation of structured activities such as occupational therapy, exercise programs, and socialization groups in the nursing home setting will help control psychotic symptoms. For the chronic mental patient, placement in a nursing home is a reinstutionalization process and it is necessary that anti-psychotic drug therapy, as well as intensive intervention in activities of daily living be
maintained to prevent more serious chronic impairment (Shore, 1983). The frail elderly appear to fare less well in nursing homes according to these data. Poor health and increasing years in the institution contribute to a decrease in neatness and an increase in bizarre behaviors and social withdrawal. This is particularly noteworthy because this patient group may be expected to have generally functioned well prior to their illness and the life changes that required nursing home care. A variety of studies document the need for congruence with the environment and a sense of control in facilitating adjustment of the institutionalized aged (Chang, 1978; Marel, 1981; Parmalee, 1982).

Efforts within the institution to increase personal control and congruence with the institutional environment should be emphasized as a means to support positive behaviors and reduce deterioration exhibited as social withdrawal and psychotic behaviors. Opportunities for the frail elderly to make decisions regarding their care should be encouraged. Examples of this may be diet choices, use of personal clothing, and selection of activities (Vogel, in press). Other efforts to support independence may help the
older person feel more control and comfort in the environment. Maintaining independence is of importance to the frail elderly who are experiencing health constraints. Without a serious attempt on the part of nursing home staff to reduce dependence social withdrawal is a likely consequence. An environment adapted to the physically impaired will assist the frail elderly to function more autonomously without drawing attention to limitations. Examples of adaptations include cut-out signs marking bathrooms, furniture adapted to wheelchairs, and reality boards (Vogel, in press).

Some of the same programs identified as reducing negative behaviors in the mentally ill group will also be of value for the frail elderly. Structured programs emphasizing activities and interactions with others are helpful in sparking interests and maintaining self esteem. Socialization between residents in an informal fashion can also help in facilitating adaptation to the institutional environment and should be encouraged by using dining rooms and lounges as gathering places.

Some of the decline in the frail elderly attributed to advancing age and disease pathology is unavoidable, but that
portion of decline related to the process of institutionalization is an area where nursing can intervene with measures that enhance pre-existing adaptive skills and improve functioning in the nursing home setting.

Summary

The results of study data did not support the original hypothesis that the frail elderly would display a greater negative impact of institutionalization than the elderly mentally ill. It did, however, shed some light on the positive and negative aspects of life in an institution for the two groups of aged most often found in nursing homes. The study partially supports the theoretical framework of behavior as a function of the relationship between the person and the environment (Lewin, 1951) and reaffirms the need for emphasis on psychosocial dimensions of care.

Continued study of nursing home populations with attention to the relationship of institutionalization on behavior for sub-groups of the aged requiring institutional care is recommended. The impact of institutionalization on nursing home residents is an aspect of life for many of our aged and as such it is too important to be guessed at. Systematic research will assist in providing valuable information to the clinician directing care for the older person.
References Cited


CONCLUSION

The primary purpose of the research was to clarify the role of institutionalization on levels of activity and morale among aging schizophrenics. A second purpose was to identify levels of activity and morale among deinstitutionalized schizophrenics. Lastly the data were utilized to suggest guidelines for decision making regarding the care of older schizophrenics and frail elderly. Social breakdown theory (Gruenberg & Zusman, 1964) was the theoretical framework for the study.

Four groups of elderly were studied. The groups were healthy elderly, elderly schizophrenics residing in the community, schizophrenics residing in a nursing home setting, and non-mentally ill frail elderly residing in a nursing home. It was hypothesized that chronic illness and institutionalization would result in lower morale and activity for institutionalized aged than for community aged. Sub-hypotheses were: 1) Institutionalized schizophrenics will demonstrate lower activity and morale than chronically ill institutionalized non-schizophrenics. 2) Institutionalized schizophrenics will demonstrate lower morale and activity levels than non-institutionalized schizophrenics. 3) Non-institutionalized schizophrenics residing in a
community will have lower levels of morale and activity than healthy community elderly.

Data were collected using three instruments. The Philadelphia Geriatric Center Morale (PGCM) scale was used to measure the level of morale for all groups. The instrument was appropriate for this population because it had been developed for use with an institutionalized population (Lawton, 1972). Previous use by Lawton (1972) of the PGCM scale with older schizophrenics has established the instrument as a valid measurement of morale with this group.

The Activity Inventory had also been developed for use with older individuals and had reliability and validity established with institutionalized groups (Graney, 1982). The Activity Inventory covered a variety of items, including time spent with family and friends, organizations, sports, religious interests, homecare, entertainment, and finances. The PGCM scale and the Activity Inventory were administered in an interview after informed consent was obtained.

The third purpose of the study was to obtain data that would be useful in suggesting guidelines for care of the institutionalized elderly. The instrument used for this purpose was the Nurse's Observation Scale for In-patient Evaluation (NOSIE-30). Records of the ward nurse's observations
of institutionalized subjects were used for data collection. This tool was developed initially to measure behavior of institutionalized schizophrenics (Honigfeld and Klett, 1965) and has been used to measure behavior in both schizophrenic and non-schizophrenic institutionalized subjects (Honigfeld & Gillis, 1967).

The results of the study did not substantiate all the hypotheses. Institutionalized schizophrenics demonstrated significantly lower levels of activity and morale than schizophrenics living in the community. There was no significant difference between healthy elderly and schizophrenics living in the community on measures of morale and activity. In comparing the institutionalized sub-groups there was not a significant difference on activity levels for the two groups. On the morale measure, however, results were the opposite of that predicted. Non-mentally ill institutional elderly had significantly lower morale than did the institutionalized schizophrenics.

Social breakdown theory (Gruenberg & Zusman, 1964) would predict that the years in the institution and the chronic nature of mental illness would result in lower morale and activities for the schizophrenics. Older schizophrenics, however, have benefited from psychotropic medi-
cations (Huber et al., 1980; Watt et al., 1983) and rehabilitative programs (Beard et al., 1978; Gutmann et al., 1973; Wing, 1981). The results of these benefits can be seen in the subjects in this study and in a similar fashion in those studied by Lawton (1972), who have adjusted to life within the institution. In this study, the non-mentally ill elderly, although institutionalized for a shorter period of time than the schizophrenics experienced lower morale than did schizophrenics. The non-mentally ill elderly perceived themselves to be in poorer health than any of the other subjects. There was, however, no significant correlation between morale level and self health rating for the non-mentally ill elderly. In terms of social breakdown theory, an explanation for the lower morale level among the non-mentally ill institutionalized group is found in the impact of institutionalization on this group. Entering an institution results in role losses and social support losses at a time of physical change that combine to create feelings of worthlessness and despair in the patient. Gruenberg and Zusman (1964) state that removal of a person from a familiar social setting to an unknown one during an acute disturbance creates a vulnerability to patterns of withdrawal that are reflected here, as low morale.
A third purpose of the study was to provide suggestions for care of the institutionalized elderly. The NOSIE-30 was used to obtain data about the behavior of institutionalized sub-groups that can be used to suggest guidelines for care. The older schizophrenic was less neat, more irritable, and more psychotic than the non-mentally ill elderly. On measures of social competence and interests, however, there was no significant difference between the two groups. The non-mentally ill group was significantly more withdrawn than the schizophrenic group. The longer the non-mentally ill elderly were institutionalized the more decline occurred in total patient assets. It would appear that the non-mentally ill would benefit from institutional programs to utilize remaining skills, maintain activity, and reduce social withdrawal.

Limitations

Limitations to this study must be recognized and care taken not to generalize results beyond the boundaries of the study. Specific limitations are: 1) Subjects are all male military veterans, thus limiting the generalization of findings to this group. 2) Based on clinical records the schizophrenics living in the nursing home units appeared to have residual symptoms of schizophrenia similar to those
present in the schizophrenics residing in the community. They had been placed on the nursing home unit rather than in some other supervised setting primarily due to the service connected status of their illness. It is not clear how different this group might be from schizophrenics in other nursing home settings. 3) The rural community is also a limitation, particularly in the case of the deinstitutionalized schizophrenics. Adjustment among deinstitutionalized schizophrenics is not reported to be as good in urban areas (Caton & Goldstein, 1984) as in rural settings. 4) The total sample size of 103 is a limitation since statistical significance would be strengthened with a larger sample. 5) A limitation was imposed by the decision to accept only subjects who were considered competent to give consent. In both institutionalized groups, this decision resulted in the most severely incapacitated individuals being left out of the sample. Although it would not be realistic to attempt to collect data on a subjective concept such as morale from individuals who were not capable of competent thought processes, study findings can only be applied to competent institutionalized subjects.
Recommendations

Recommendations based on the research conducted are in two areas: replication of the study and applications of the results. Suggestions for care of the institutionalized elderly are made based on the research findings.

Research recommendations

In this study, good outcomes for the schizophrenic were observed. Schizophrenics in the community setting demonstrated no significant difference from healthy community elderly on measures of morale and activity. It is important to know if this finding is replicable because of the number of other studies (Caton & Goldstein, 1984; Caton et al., 1984; Sweeney, 1982) that report a poor quality of life and low level of activity for schizophrenics living in urban communities. Another consideration when evaluating the findings of this study regarding the deinstitutionalized group is the outpatient care that they were receiving. A replication of the study with a non-veteran population would help determine if the level of outpatient care being received by this group may have had a significant impact on their adjustment to the community. A number of studies have indicated that deinstitutionalized schizophrenics often do not receive the level of care that they need (Engelhardt
et al., 1982; Mollica, 1983) and that is a factor in the poor adjustment sometimes reported for the deinstitutionalized schizophrenic.

A finding among the schizophrenic portion of subjects in this study that is of considerable clinical interest is the negative correlation reported for both institutionalized and deinstitutionalized schizophrenics between number of children and morale level. Some speculation can be made about the rationale for this correlation, but it is necessary to attempt to repeat the finding and evaluate it in more detail. A useful beginning would be a study including only schizophrenic subjects of various ages with children. Such a study should include subjects living in homes with their families, as well as subjects separated from their families. The purpose of the study would be to determine if the negative relationship was replicable and if the relationship was different for those schizophrenic subjects living with their families than for those subjects who did not live with their family.

The discovery that the non-mentally ill elderly residing in the nursing home demonstrated lower morale than the group of aged schizophrenics living in a nursing home setting requires replication. A future study should include a
non-veteran population to eliminate the effect of medical care provided without cost by the Veteran's Administration. A non-veteran population would also include females and a wider variety of educational and social backgrounds that might affect the outcome of the study.

It would also be useful to follow up on the subjects reported on in this study. Changes in morale and activity levels over time could be measured and would add to information on the effects of institutionalization on activity and morale levels for nursing home residents.

**Application of findings**

As stated earlier, application of findings from this research study must be limited to the group studied: aging veterans. This group, however, constitutes about one/fifth of the elderly in the United States (Veteran's Administration Statistical Office, 1985). Therefore, application of findings to the veteran population is valuable to society because of the extent of services provided to this group and the costs involved in provision of services.

The results of this study as applied to the deinstitutionalized schizophrenic support the value of continued use of psychotropic medication and out patient follow-up. Subjects in this group were receiving nearly the same number of
medications as the institutionalized group and appeared to have benefited from the medication because all had been able to maintain themselves outside of the hospital for at least one year. The finding that this group was as active as, and experiencing as high morale as healthy community elderly supports the value of continued medical care for those older schizophrenics living in community setting. This finding also indicates the need to make out patient services easily accessible to the schizophrenic. The group studied here was living in the same community where a Veteran's Administration Medical Center was located, thus making services available without travel or cost. Efforts to provide out patient services through satellite clinics to those schizophrenics not living in such close proximity to a medical center would have benefits in helping to maintain the schizophrenic individual in the community and avoid costly hospitalization.

The institutionalized schizophrenic in this study fared better than might have been anticipated. On measures of activity, there was no significant difference from the non-mentally ill institutionalized group while on the measure of morale the schizophrenic group was significantly higher than the non-mentally ill institutionalized elderly. It is also
interesting to note as an anecdotal sidelight that while inter­viewing the institutionalized schizophrenics several com­mented on how happy they were in their present situation. As one 72 year old paranoid schizophrenic stated, "Why would I not be happy. I have enough money, good food to eat, I can go for walks, and there are pretty girls to watch."

The NOSIE-30 revealed that on two positive factors, in­terests and social competence the schizophrenic group was no different than the non-mentally ill group. On the third pos­itive factor however, personal neatness, the schizophrenic group was much lower than the non-mentally ill elderly. This factor may be accounted for by the physical needs of the non-mentally ill group that required assistance of nurs­ing staff to meet personal care needs. The schizophrenics were more likely to be physically capable of meeting their own personal hygiene requirements, but appear to be less likely to do so. This is an important area of concern, be­cause the tendency to be poorly groomed will also cause the schizophrenic to be less acceptable to others and reduce the opportunities for interactions that may decrease some of the negative effects of the schizophrenic process. Certainly a clinical recommendation is for emphasis on interventions that will improve personal care among this group.
The general happiness of the institutionalized schizophrenic discussed in anecdotal information and the finding that the schizophrenic group scored higher on measures of morale than the non-mentally ill institutionalized group indicates that older schizophrenic veterans who are currently institutionalized in nursing home care units are content there and are leading a quality of life that should be considered when placement decisions are being made.

Applications of findings to the non-mentally ill elderly are important because it would appear from the results of this study that this group was dissatisfied with their life and with more time spent in the nursing home were becoming more incapacitated. Additionally, health did not correlate with morale for this group. Anecdotal sidelights add to the credibility of the statistical data. Only three veterans approached refused to participate in the study. All veterans appeared to enjoy the opportunity to converse with someone and in fact made the process of interviewing much longer than anticipated by the investigator, due to the frequent reminiscing of the subjects. Several expressed feelings of sadness and strong feelings of being useless because of their being confined to a nursing home.
Efforts to prevent further deterioration among this group need to be directed toward psychosocial interventions. All were making good progress regarding their physical illnesses, but were in need of assistance to deal with the chronic nature of their illness and to facilitate adaptation to their current lifestyle. Active programs utilizing group therapies would be helpful. The number of veterans who engaged in reminiscing during the interview would indicate that life review therapy would be useful for this group to assist them to recall past accomplishments and gain a perspective on their current situation. Consultant services from professionals trained in psychosocial interventions should be utilized to assist nursing staff in developing programs and therapies that would meet the psychosocial needs of this group. It is certainly possible that the value of these interventions would extend to improvement in physical conditions as well as improved morale and a decrease in negative behaviors.

In summary, recommendations from this research study are primarily directed toward clinical application of findings for the institutionalized populations. The most important result was the discovery that morale levels were lower in the non-mentally ill institutionalized population
than for the institutionalized schizophrenic group. The finding that morale levels for the non-mentally ill group were not correlated with health adds credence to the recommendation for psycho-social interventions to improve adjustment to the institution for this group of elderly.

The finding that institutionalized schizophrenics are relatively happy in their setting is particularly important because of the frequent push to move schizophrenics into less and less restrictive settings on the grounds that this is always to their benefit. In many cases, this will be true, as for the deinstitutionalized schizophrenics in this study. However, it is also true that access to medications and supportive care is needed for deinstitutionalization to be really beneficial. Careful planning needs to be given to the placement of the older schizophrenic and an evaluation of the possible placement settings is essential for determining the best living situation for the aging schizophrenic.

Research involving schizophrenic subjects is difficult. Explaining the study, obtaining consent and collecting data among this population is complicated, but it is necessary to have accurate information about psycho-social aspects of the disease. Biochemical research aimed at finding the cause of this devastating illness is imperative, however,
there are many people currently with schizophrenia that need assistance with their day to day existence. Cost of care and quality of life are the major issues that need to be considered for the schizophrenic and a compromise must be reached. Further research efforts need to focus on both biochemical areas of study and psychosocial areas to best serve the individual with schizophrenia and society.
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APPENDIX A.

CONSENT FORM AND TEST INSTRUMENTS
Information About "A Study of the Relationship of Activity and Morale Levels to Institutionalization among Aging Schizophrenics"

The purpose of this study is to learn if people who have lived much of their lives in psychiatric hospitals feel differently about themselves and have different activities than those people who have lived in other institutions or from those people who have lived part or most of their lives in communities. I will be talking with you and asking you some questions about yourself and the things you like to do. If you are now in the nursing home the nurse on your ward will also make some observations about your behavior, such as activity on the ward. All information is confidential and your name will not be used in any reports of this study.

You do not have to participate in this study if you don't want to. If you decide to volunteer to participate in this study and later decide that you would rather not participate, you may stop at any time. A decision not to participate in the study will not in anyway affect your right to receive health care or any other benefits to which you are entitled from the Veteran's Administration. If you have any questions regarding your rights and research studies contact the VA District Legal Counsel at 862-4090.

Do you have any questions now? If you do have questions later, contact Connie Vogel at 342-3101 ext. 6448 or at 673-9626.

I, __________________________ certify that the above written material was discussed and fully explained to me by Connie Vogel on this date.

__________________________________________
Date Signature

I, __________________________ certify that I was present during the oral presentation of the above written summary when it was given to the above subject.

__________________________________________
Date Signature
Data Sheet

Age_______ Marital Status ____married ____single
____divorced ____widower

Number of children_________ Education level_________
(no. of yrs.)

Type of work done______________________________

Still working_________________________

Self-health rating ______excellent ______good ______fair
_______poor

Current medications______________________________________________
Philadelphia Geriatric Center Morale Scale

Astrik * indicates correct response.

1. Little things bother me more this year. (yes * - no)
2. I sometimes worry so much that I can't sleep. (yes - no *)
3. I am afraid of a lot of things. (yes - no *)
4. I get mad more than I used to. (yes - no *)
5. I take things hard. (yes - no *)
6. I get upset easily. (yes - no *)
7. Things keep getting worse as I get older. (yes - no *)
8. I have as much pep as I had last year. (yes * - no)
9. As you get older you are less useful. (yes - no *)
10. As I get older, things are better/worse than I thought they would be. (better * - worse)
11. I am as happy now as when I was younger. (yes * - no)
12. How much do you feel lonely? (not much * - a lot)
13. I see enough of my friends and relatives. (yes * - no)
14. I sometimes feel that life isn't worth living. (yes - no *)
15. Life is hard for me much of the time. (yes - no *)
16. How satisfied are you today? (satisfied * - dissatisfied)
17. I have a lot to be sad about. (yes - no *)
Activity Inventory

1. What do you do in your free time?
   - Work in and around the house
   - Work in garden or yard
   - Farm work
   - Attend movies
   - Watch T.V.
   - Attend clubs, lodges or other meetings
   - Sew, crochet or knit
   - Read
   - Just sit and think
   - Other (what)

   (4 points for 4 or more, 2 points for 3 or more, 1 point for 2 or more, 0 for 1 or none).

2. List the hobbies or favorite pastimes that you now have.

   (2 points for 2 or more, 1 point for 1, 0 for none).

3. How much time each day do you spend reading?
   - Never read
   - A few minutes
   - An hour or more
   - Most of the day

4. To how many organization do you now belong?
   - None
   - One
   - Two
   - Three
   - Four or more

5. How many meetings do you attend each month?
   - None
   - Less than one per month
   - One a week
   - More than one a week

6. How often do you attend religious services?
   - Never
   - Less than once a month
   - One a week
   - More than once a week
7. Do you listen to church services on radio or T.V.?
   Never_____ Once in a while_____ Once a week_____ More than once a week_____  
   (0) (1) (2) (2)

8. How often do you read religious material?
   Never_____ Once in a while_____ Once a week_____  
   (0) (1) (2)
   Every day_____ (3)

9. With whom are you living?
   With spouse_____ (2) With relatives_____ (1)
   With spouse and children_____ (2) With friends_____ (1)
   With children alone_____ (1) Alone_____ (0)
   With parents_____ (1)  

10. How often do you see some of your family or close relatives?
    Less than once a year_____ (0) Every day_____ (2)
    About once a month_____ (1) Have none_____ (0)
    Once a week_____ (2)

11. If you have family, do you feel they neglect you?
    Yes, completely_____ (0) A little_____ (1) No_____ (2)

12. Do you see your friends more or less often now than when you were 55 years old?
    Less_____ (0) Same_____ (1) More_____ (2)

13. Do you often see or hear from children or young people who are friends or family?
    Less than once a year_____ (0) Everyday_____ (2)
    A few times a year_____ (0) Never_____ (0)
    Once or twice a month_____ (1)
    About once a week_____ (1)

14. What are your serious physical problems?
    Poor sight_____ Blind_____ Hard of hearing_____ Deaf_____ Crippled_____ General stiffness_____ Heart trouble_____ Stomach trouble_____ High blood pressure_____ No physical problems_____ Other_____  
    (No physical problems (4) One item (7) two items or more (0))
15. Below is a list of difficulties people sometimes have check those that apply to you.

- Short of breath at night
- Difficulty urinating
- Short of breath after exercise
- Constipation
- Heartburn
- Aching joints
- Swelling of feet
- Gas pains
- Feeling tired
- Headaches
- Nervous breakdown
- Difficulty urinating.
- Constipation
- Aching joints
- Swelling of feet
- Gas pains
- Feeling tired
- Headaches
- Nervous breakdown
- No difficulties

(No difficulties (2) One item (1) Two items or more (2))

16. How many days did you spend in bed last year?
- All the time (0)
- A month or more (0)
- Two to four weeks (0)
- A few days (1)
- None (2)

17. Which of the following often trouble you?

- Sleeplessness
- Nervousness
- Bad dreams
- Dislike noise
- Food doesn't taste good
- Worry about health
- Tire too easily
- Forgetfulness
- Feel blue
- None of these

(None of these (2) One item (1) Two items or more (0))

18. Are you working now?
- Yes, full time (5)
- Yes, part time (2)
- No (0)

19. Are you taking care of your home?
- No (0)
- Do a little or help someone else (2)
- Do everything myself (5)

20. What things have you had to do since the age of 55 due to lowered income?
- Gave up clubs
- Bought cheaper clothes
- Moved to cheaper home
- Stopped taking vacations
- Stopped going to church
- Gave up auto
- Bought cheaper foods
- Have not had to do any
- Can't keep home repaired

(4 points gave up nothing, 2 points gave up one item, 0 points gave up more than one item)
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These consist of pages:

Appendix A, pages 154-155 (Nurses' Observation Scale for In-patient Evaluation)
APPENDIX B.
INFORMED CONSENT AND COGNITIVE FUNCTIONING

Research conducted on human subjects requires obtaining informed consents from individuals who are participating in the research. Informed consent is commonly considered to mean that subjects are provided with adequate and understandable information regarding therapeutic and experimental procedures and insuring subject's competent understanding of the information (Davidhizar & Wehlage, 1984). Providing information may be relatively easy. Insuring competency is more difficult especially in the case of the schizophrenic where cognitive functioning may be questionable. This is an issue in obtaining consent for research studies and in insuring informed consent for medical treatment. Because of concerns about informed consent, as well as the interest in studying cognitive functioning as a means of increasing understanding of the schizophrenic process, a number of authors have explored cognitive functioning and information processing in schizophrenics. Cognitive abilities are an important aspect of informed consent among schizophrenic subjects; therefore, the work in this area is reviewed here.
Cognitive Functioning

Information processing and speed of processing in schizophrenics have been examined in detail. In three experiments conducted to evaluate two stages of information processing and iconic storage in chronic schizophrenics a slowing of information processing was detected. (Saccuzzo & Braff, 1981). A follow-up study comparing paranoid schizophrenics to a group of depressed people found the paranoid schizophrenics were more impaired on input factors and speed of processing than the depressed group (Braff & Saccuzzo, 1981). Work by Taylor and Abrams (1984) expanded on the studies of Saccuzzo and Braff. Taylor and Abrams (1984) hypothesized that schizophrenics evidenced cognitive impairment of the dominant hemisphere, whereas those with affective illness are impaired in the non-dominant hemisphere. The hypothesis was not supported and no significant difference was demonstrated between the schizophrenic subjects and the affectively ill group. Although schizophrenic subjects showed some cognitive impairment the evidence indicates the problem occurs in a slowing of information processing. Allowing sufficient time to problem solve would help in reducing the effect of the deficit.
The ability to abstract is an important area in evaluating the comprehension of information by schizophrenics. There are conflicting results among the numerous studies of abstraction in schizophrenic thinking (Fishkin & Bourne, 1981; Place & Gilmore, 1980). Fishkin et al. (1977) studied problem solving involving abstract thought in schizophrenia among a Veteran's Administration hospital population and identified schizophrenics as capable of transferring information from problem to problem when the problems were conceptually similar. When the problems involved mastery of a difficult subject, however, Fishkin and Bourne (1981) identified a performance deficit at higher levels of abstraction. Place and Gilmore (1980) examined perceptual organization in schizophrenia and suggested two clinical implications: 1) demonstration of schizophrenia perception as a failure to attend only to relevant information when irrelevant information is also present and 2) demonstration that this deficit occurs early in the processing system. Their findings offer some explanation of the difficulty schizophrenics have with complex abstraction. As the level of abstraction becomes more difficult the ability to sort out relevant information interferes more and more with the process and the ability to understand is diminished.
There is some degree of cognitive impairment occurring in schizophrenia, but there is indication that the extent of the impairment may vary with the type of schizophrenia. Paranoid schizophrenics show more intact concept capacity, more developed personality integration, and better differentiated perceptual fields than do other types of schizophrenia (Magaro, 1981). Pishkin and Bourne (1981) caution that their findings apply to chronic undifferentiated schizophrenics and may not apply to schizophrenics in general. Paranoid schizophrenics performed better on rule based problems than did non-paranoid schizophrenics in a study by Simpson et al. (1979). The literature in this area is generally in agreement that schizophrenics often perform poorly on cognitive tasks, however, it is difficult to assess the significance of cognitive defects due to the heterogeneous nature of the disorder, confounding effects of treatment, and differences in performance among types of schizophrenics.

Changes in cognitive deficits with age when the schizophrenic disturbance and treatment continues over a span of time have been researched. It might be expected that the older, hospitalized, chronic schizophrenic would be more
cognitively impaired than the younger schizophrenic; however, a different picture is presented by clinical research. Bleuler (1978) in a twenty year follow-up of 1,178 schizophrenics treated in Germany, suggests that cognitive functioning will moderate at a relatively stable level. He reports that the disorder, not only stabilized after five years but tended to ameliorate subsequently. Bleuler's statements are in agreement with other clinical researchers who have conducted longitudinal studies of large numbers of schizophrenic subjects (Hall et al., 1972; Huber et al., 1980; Lawton, 1972; Muller, 1963).

Ghalkilson and Schwartzman (1983) studied 21 hospitalized male veteran schizophrenics in their late sixties, as well as a group in their early forties. They indicate older subjects were no more impaired than their younger counterparts; moreover, negative age effects were more pronounced in a sample of normal older adults than among the schizophrenics. The authors concluded that the study supported Bleuler's statement of stabilization and amelioration of disruptive functioning in the long term schizophrenic. Although it certainly must be recognized that some cognitive impairment occurs in schizophrenia, the problem does not become more severe in the older schizophrenic. Based on the
literature reviewed, the older schizophrenic is capable of understanding well enough to give an informed consent.

**Issues of Informed Consent**

Informed consent is of concern to anyone working with a schizophrenic population. Although there has not been much discussion of informed consent for research studies involving schizophrenic subjects, attention has been given to the issue in obtaining consent for treatment from schizophrenic patients. The basic question is not the same as for research subjects, but the factors involved in determining an informed consent are.

Linden and Chaskel (1981) studied 85 schizophrenics receiving neuroleptic medications at an outpatient clinic. The majority of patients were able to comprehend the information given them and could make treatment choices. Different results were found by McEvoy et al. (1981). They report that only 27% of 45 inpatient schizophrenics interviewed were able to understand medications were needed to treat schizophrenia. It may be that the competency question in such a severely ill group is one of not having insight into the nature of schizophrenia, rather than one of not having the cognitive ability to understand. It is reasonable to expect that among chronically ill schizophrenics
under treatment, insight regarding the need for treatment would be higher. There is an ethical dilemma arising in the situation where consent is obtained only after goals of treatment have been reached (Turnquist, 1983). This is a complex situation that requires thought be given to obtaining a balance between individual autonomy and the effects of treatment.

Another aspect of informed consent among institutionalized subjects is raised by Reich (1978) who states that by being total institutions, mental hospitals and nursing homes have determined the behavior of residents by their institutional structure and expectations. Residents are dependent upon the institution for care and may feel that they have no choice when informed consent is requested. Such conditions require that extra precautions are needed to protect the rights of institutionalized subjects to an informed and free choice.

The above issues are summarized by Davidhizar and Wehlage (1984) who suggest that four issues must be considered to insure adequate legal and competency standards for informed consent with schizophrenic subjects. These four factors are; a) evidence of a choice, b) factual understanding of the choices, c) rational manipulation of information, and
d) appreciation of the nature of the situation. The conceptualization of these standards furnishes a stringent guideline for assessing the competency of subjects. In utilizing these standards to assess the subject's competency, consideration must be given to the ability of the subject to communicate a choice, cognitive understanding of the facts needed to make a choice, ability to use information received in making a decision, and insight into the situation.

Schizophrenics have been a rather neglected group in research efforts. Because of the difficulties in determining competency and insuring an informed consent the older, institutionalized patient has not been a likely research subject. Researchers must carefully evaluate the issues involved in obtaining informed consent from schizophrenics, but they should not be so concerned that research needed to improve the quality of life for this disenfranchised group is avoided.