A MULTI-LEVEL ANALYSIS OF THE NURSING HOME ENVIRONMENT: STAFF ATTITUDES; RESIDENT INTEGRATION; RESIDENT MORALE

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PREFACE

This study is concerned with exploring the nursing home environment. The primary objective is to evaluate staff attitudes and resident social integration both on an external societal level and on an interpersonal situational level. Researchers in gerontology have increasingly asked the question as to whether nursing home staff members intrude themselves between residents, and if so what effect this might have on resident morale. This research attempts to shed light on that question.

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CHAPTER I

THE PROBLEM

Introduction

Increasingly, sociology has addressed itself to varying aspects of old age. The scientific study of this process has lead to the development of the discipline of gerontology.[1] The range of topics related to gerontological interests is quite diverse and has resulted in the division of the American Gerontological Society into subsections of biological sciences; psychological and social sciences; clinical medicine; and, social welfare. Each of these sections is involved with particular aspects of aging, and each has, to a certain extent, its own domain of study.

"Social gerontology," as first identified by Robert J. Havighurst, is oriented to the problems of older persons and their adaptation to the larger environment.[2] Such diverse studies as demographic aspects, economic problems, retirement, education, housing, and social adjustment are considered relevant areas of study.

A growing concern within social gerontology deals with the aspects of housing and institutionalization of the aged. This is particularly important since it is projected that 15 percent of the nation's population will be over the age of 65 by the turn of the

century and that older persons require twice as much medical care as young adults.[3] A population which has more than ten percent of its' populace over 65 years of age is considered to be an "aged nation.[4] In such an older population, it is estimated that at least 75 percent are suffering one chronic illness requiring some type of treatment often in an institutional environment.[5]

With such demographic changes in the age distribution in the United States and with an increasing proportion suffering some type of chronic illness, it becomes important to investigate that sector of the aged who appear to have suffered the greatest amount of environmental hazard: namely the institutionalized old person. In this respect, there is an increasing number and variety of services being provided for the older person, particularly in the form of the nursing home or extended health care center. In 1954, there were 6,500 such homes in the United States, while in 1968 there were 12,000 facilities providing care for people, most of whom were elderly.[6] In fact, seven percent of the aged population live in some type of institution. The male-female distribution (two percent male and five percent female) follows the general longevity pattern.[7]

Institutional Group Housing

While the comparative percentage of older persons living in an institutional environment may not be great, it may be assumed that the effect of certain negative stereotypes of the homes may have a disconcerting effect upon the whole sector of the aged living in the community. It is common for individuals to verbalize a number of negative comments about institutions being a place where people go

to die, dead-end places, and so on, indicating that avoidance behavior may be quite widespread among the older population. As a phenomenon in the society, the following describes the general situation of the homes:

> In 1960, about 45 percent of those 65 and over in such homes, were known to be receiving skilled nursing care; the remaining 55 percent were in homes offering mainly domiciliary care. Sixty-one percent were in private proprietary homes, 12 percent in county and city homes, and three percent in Federal and State homes.[8]

The degree to which individuals find satisfaction with their life in the nursing home is questionable.[9] Yet, for an increasing number of aged, the nursing home becomes their final and last residence. Assessment of the institutional process, and the particular adaptation of the person to the institution is a vital research question with social policy implications.

Theoretical Concerns

Within gerontological literature a number of theoretical models of successful aging are explicated. Among the most often articulated theories is the disengagement theory as originally proposed by Cumming and Henry.[10] It suggests that as an individual begins to withdraw from society, he surrenders some of his social roles.[11] According to Cumming and Henry this is an inevitable process. No one really disagrees with this observation. The proponents of disengagement do, however, state that:

> The society and the individual prepare IN ADVANCE for the ultimate disengagement of incurable, incapacitating disease and death by an INEVITABLE, GRADUAL, AND MUTUALLY SATISFYING PROCESS OF DISENGAGEMENT.[12]

This implies a structural-functional model of aging.[13] Successful aging requires the inevitable, self-perpetuating and mutually satisfying process of withdrawal for the society and the individual. Concomitant with the disengagement process comes a changing perception of the life space, a lessening of ego energy and an increase in the concern with self and self's activities.[14]

The general tenants of the original article were maintained by the authors, but were altered by each as criticisms to the theory developed. Henry[15] did allow for the possiblity of a reengagement process and a necessity of inclusion of data concerning variable life style patterns and subsequent responses to aging. Cumming suggested potential variations in the pattern of withdrawal.[16] In fact, she develops two polar types of the impinger and the selector which she defines as:

> The impinger is more an activist who 'tries out' his concept of himself in interaction with others; he uses their appropriate responses to confirm the correctness of his inferences about himself, the environment and his relationship to it. If the feedback from others suggest that he is incorrect, the impinger will try to bring others' responses into line with his own sense of appropriate relationship. Only if he fails repeatedly will he modify his concept of himself.
>
> The selector, however, tends to wait for others to affirm his assumptions about himself. From the ongoing flow of stimulation he selects those clues that confirm his relationship to the world. If they fail to come, he waits, and only reluctantly brings his concepts into line with the feedback he is getting.[17]

Between the polar types, mixed adaptation patterns exist for older people.

While it is recognized that persons do disengage from the society,[18] the total explanation of the process by disengagement theory

has been questioned.[19] Particularly, Bernard Kutner questions the validity of disengagement when he points out that the theory suffers three basic defects.

> They assume (1) the universality of a trend which may describe only a fraction of the aging population.... (2) the irreversibility of the decline of social competence, especially when health is a major intervening factor, and (3) that social aging is basically a decelerating, degenerating, linear process. We would suggest on the other hand, that aging be conceived of as a process of redifferentiation and reintegration. No assumptions of undirectional change need be made; indeed, reversible or irreversible tendencies may be demonstrated, rather than on aging; and a more nearly universal applicability will obtain.[20]

Part of Kutners' criticism may be interpreted as a regeneration of the activity model of successful aging. Often times, this particular model is offered as an alternative to the disengagement model, or vice versa, depending upon whether one selects a point in time as reference or various authors as the demarcation point.

Activity theory "advocates the fullest possible involvement with others."[21] While not identified with any one theorist, the activity model rests upon the implicit assumption that successful aging is aging with activity.[22] Thus, as the process of disengagement occurs, people must "reactivate" themselves by finding substitute activities with which to occupy themselves. It then becomes a process of retiring from the occupational role, and assuming other roles, such as hobbies in order to keep one's self busy.

Unfortunately, empirical research into the process of aging tends to substantiate both the activity and disengagement theories.[23]

Inconsistent findings generated by the two theories has lead to an increased amount of emphasis on a model of aging that had been

proposed in 1954 by Robert J. Havighurst. This is perceived as a middle of the road alternative between the two positions.[24] Successful aging is conceptualized as successful enactment of social roles which receive differential amounts of investments of time. Thus, as work roles decline, leisure time roles increase in importance and a degree of role flexibility is achieved. As Havighurst points out "To change roles easily and increase or reduce activity in a given role requires a personal quality which we shall call 'role flexiblity'."[25] "Flexibility" is a consequence of earlier life pattern adaptations which are cultivated in middle age and carried into later life stages. Thus,

> A deliberate plan of action during the middle years in which a variety of new roles are explored and a variety of new interests are developed presumably will lead to role flexibility and help the individual to make a successful transition from middle age to old age.[26]

As an individual progresses through the life cycle, the degree of flexibility is enhanced by developing a varied pattern of roles while rigidity may be the consequence of selecting and staying with one particular salient role.[27]

It then becomes plausible that "participation does not necessarily decline with age but rather follows closely the pattern set at an earlier stage in the aging process."[28] As long as a pattern is set and an individual is able to seek out that set of alternatives which best fits his needs, then he may be defined as a successful ager.

While role flexibility may be an acceptable alternative, there are critics of the middle of the road type theory. Bultena suggests that role flexibility by itself may not be enough to explain satisfactory aging but that:

> ...the continuation of a relatively high level of satisfaction into old age is for many a function of two things: (1) a cultural orientation that individuals must make the best of their situations, and (2) a salient alteration in self-identity with aging in which new reference groups now become operative for the individual.[29]

The former suggestion reflects what the author feels is an important cultural value of adaptation. The latter suggests a reference point to whom the older individual compares himself and as a consequence of favorable or unfavorable comparison, develops his or her particular outlook. Thus, if a person compares himself with a person he defines as old and is not able to compare himself favorably, he will define himself as old and act accordingly.

This may suggest a fifth aspect of successful aging, that is the degree to which an individual is able to achieve a degree of flexibility, not in terms of roles, but in terms of social relationships. Bourg suggests that researchers' attention ought to be focused on the social relations of the older person and bases this on the assumption that:

> The maintenance and development of social relations are more primary and more lasting in influence for aging persons than the social roles they may have held at earlier ages.[30]

The author contends that there are various functions which are supplied by the relationships themselves which tend to integrate people with other people. The five functions are (1) intimacy; (2) social integration; (3) opportunity for nurturance; (4) reassurance of worth; and (5) assistance.[31]

Of particular interest is Bourg's specification of social relations as a fundamental attribute of social self. In a societal network where each individual spends most of his time within a framework

of one type of relationship or another, it may be anticipated that there would be an intimate correspondence between self concept and those interpersonal relationships. As Brown points out:

> During recent years increasing emphasis has been placed on the assumption that the nature of interpersonal relations is a crucial determinant of the onset of mental illness, of the specific character of psychiatric symptoms, and of the extent of psychopathology. Moreover, this assumption has led to the view that social relations in the hospital setting itself will affect the course of the patients' illness and recovery.[32]

This position is supported by Gorden and Vinacke.

> Upon entering an institution we may suppose that processes of adaptation take place which may be reflected in changed feelings of dependency. Associated with such changes, there may also be affects of self concept.[33]

The importance of an established relationship with other persons in order to ameliorate the dependency process appears to be well documented.[34] It may also be assumed that throughout the life span of the individual, he moves from one relationship to another making shifts in interpersonal relations, sentiments and attachments. While many of the friendship relations are among peer groups, other ties such as family, occupational and recreational groups play an important part in the life of the individual. This process of making shifts in interpersonal relations is conceived of as being a normal, functional part of everyday living. However, a question of the behavioral resources to facilitate adaptability of older persons in terms of social relations may be raised. Roscow indicates that:

> As the most meaningful people in the lives of older people disappear, the social integration of the old person is undermined, and the risk of alienation, isolation, and demoralization is increased.[35]

There is a great deal of literature in social gerontology relating to the positive effects of social integration upon the aging person's morale level and self concept.[36] As the older person's social universe becomes increasingly constricted, it is contingent upon that individual to replace the meaningful contacts in order to maintain a degree of equilibrium. As Blau points out: "[research] strongly indicates that extensive association with friends becomes an important mechanism of adjustment in old age following either widowhood or retirement."[37] Yet, "It is certainly axiomatic among gerontologists that older people have more difficulty in making friends than when they were younger."[38]

A vicious cycle may evolve. An older person needs strong interpersonal attachments to maintain equilibrium, yet finds himself less and less capable of establishing those types of relations with the individuals who surround him.

Tallmer and Kutner suggest that the relationship between environmental stresses and lessened engagement is not a linear function, but rather that as stresses such as illness, widowhood, or retirement accrue beyond a certain point (more than two), no further decrease in general adaptation is noted.[39] This would relate to the Bultena[40] proposition noted earlier: a certain degree of resignation may be reached beyond which additional stresses do not result in an additive decrement.

Social Integration

What then does the function of integration have upon the morale and self concept of the older person, particularly for those in the

nursing home? The difficulty of answering that particular question is related to the various interpretations of what social integration actually is.

Roscow contends that social integration as a conceptual framework may have two different referents. "The first is that of the total SOCIAL SYSTEM." while, "...the second perspective is that of the INDIVIDUAL member."[41] The mechanism by which there is an integration of individuals into the larger system are the social values, formal and informal group membership, and social roles.

In contrast to Roscow, Blau tends to consider integration only in terms of a group, i.e. a number of people distinguished by social bonds that unite the members into a more or less cohesive social structure. Thus,

> A person is considered to be integrated in a group if the other members find him sufficiently attractive to associate with him freely, and accept him in their midst as one of them.[42]

Here there is a greater amount of concentration upon a more micro-level of conceptualization. Integration functions specifically on the group level.

Jacobs also conceives of social integration in this manner and adds the dimension of external objects in the form of targets for hostility and conflict which may be found within the nursing home environment.[43]

Feldman tends to view integration as "the regularity and coordination of behavior among the members of a group."[44] Integration distributes itself along three dimensions: (1) normative integration or norm concensus, (2) functional integration or performance of

functional imperatives, and (3) interpersonal integration or how well members like each other.

> If one uses this [a typology of integration] premise as a criterion of types of integration, three varieties suggest themselves: integration among cultural standards, integration between cultural standards and the behavior of persons, and integration among persons.[45]

While these four authors differ in the overall perspective of social integration, two general principles emerge. First, there tends to be an understanding that the world external to the current setting in which one finds himself may have a degree of effect upon his integration. Second, and more specifically, one cannot speak of an integrated individual without considering his social group or immediate social relationship in which he finds himself.

Social integration may thus exist along the dimensions of integration with the general society in the form of an active interest in the ongoing of that society and on the level of interpersonal integration based upon a reciprocal linkage of group members with one another. Thus, the individual who maintains a degree of contact with the society at large or has an intimate association with others, or both, may be typed as an integrated person. Those who do not have this relationship may be typed as non-integrated individuals.

Integration: Institutionalization

There has, in recent years, been an increase in social gerontological attempts to assess a variety of aspects of an individual's environment. These attempts have utilized a variety of perspectives including physical, social and psychological.[46] There has also been an increasing interest in the general literature relating to the global effects of

institutionalization. Some have referred to this phenomenon as environmental press,[47] total institutions,[48] and institutional dependency.[49] While differing nuances of meaning exist, the general thrust of these writings is the negative effect of the institutional environment upon the individual and the imposition of the institutional values.

Since older persons are increasingly vulnerable to the environment and since those individuals who enter nursing homes may particularly possess poor behavioral resources,[50] it is important to assess both the institution as represented by its' functional staff and its' effect as represented by its' residents.[51] Lowenthal and Haven conclude that the variables of socio-economic status and health are important.[52] Tobin feels that the loss of familial-type supports results in an individual attempting to replace the lost social system.[53] Roscow[54] and Bultena and Marshall[55] contend that as the age concentration of the local environment increases, the degree of integration and level of morale increases.

On this latter point, however, there appears to be a divergence of opinion in the literature. Jacobs, on the one hand, states:

> As women formed cliques which engaged in 'underground' and open conflict activities with the staff and regimes of the institution, they appeared less depressed, withdrawn, and isolated.[56]

This is supported by Dick and Friedsam,[57] by Oberleder,[58] by Arth,[59] and by Tec and Granick.[60]

Tallmer and Kutner, however, suggest an interesting alternative in that "... the interaction index alone, which has to do with time spent with others during the day, does show a significant negative

correlation," and suggest that "It does not necessarily imply that any interaction would be regarded favorably, but that kinds of interaction available were not considered desirable."[61] This they feel is not a rejection of a social integration model, but that other aspects should be considered. This perspective is supported by Schooler[62] and by Friedman.[63]

Since there is a conspicuous lack of consensus regarding this issue in the literature, it may be indicated that further work needs to be done assessing a myriad of institutional factors and their relation to social integration and its' subsequent effect upon self-concept and morale.

One such area, alluded to earlier, is the need to assess the effect of the functional staff upon the integrative process. Schwartz and Proppe,[64] for instance, discuss the tendency to build nursing homes which are dominated by both the nursing station and the medical facility as if to remind the aged person of his vulnerability. Gottesman[65] feels that the expectations of the staff and the staff evaluations of the residents may be seen to exert an important influence on the self-concept of the residents. This general perspective is given tacit support by Gelfand,[66] Guion,[67] and Jacob.[68] Glaser and Strauss state:

> A corollary of this familial clustering is that the nursing personnel can remain at a relatively great emotional distance from, and spend relatively little time with, the patient. The enormously high patient-to-personnel ratio increases the probability of great distance and little contact. Although American nurses [compared to Japanese] are sometimes criticized for a propensity to anchor themselves to the nurses station, they do spend more time with fewer patients, including those who are dying unaware.[69]

While this is suggested in a cross-cultural context, the importance of the staff and the staff's time and attitudes as related to resident morale is a central feature of the institutional milieu.

This is given additional support by Kahana and Coe:

> The general environment of the institution which the resident enters and its new social system may be viewed as that social context affecting his self-concept. The significant others in this new environment are increasingly represented by the various professionals and staff of the institution. Expectations of staff regarding resident behavior and staff evaluations of residents may therefore be expected to exert an important influence on self-concepts of residents.[70]

> One may speculate that fitting in with expectations of staff and the institutional organization the aged see themselves in ways most salient to their present circumstances. They may feel that they have no intrinsic worth and begin to view themselves merely in terms of their interpersonal behavior in the institution.[71]

It may then be considered that the professionals and staff who are in extended contact with the residents may greatly influence the level of social integration which an individual is able to achieve. Thus, a staff which displays a basic attitude reflecting concern for other things than individuals per se, such as efficiency of the institution, monetary rewards, self expression, may consciously or unconsciously intrude between an individual and his or her effective social integration. By preventing residents from forming those types of relationships that they consider meaningful, the staff may have fewer problems since it is easier to deal with an individual than a network of individuals.

This position has been suggested by Jacobs[72] and implied by Tobin.[73] Also, since a basic property of group formation and maintenance is the perceiving of others as being relevant to goal

attainment,[74] it can be argued that attempting to satisfy each goal of a resident, or at least espousing a feeling of being much more capable of deciding than he, may result in a lack of integration and subsequent lowered morale.[75]

Research Propositions and Variable Specifications

In order to systematically present the research propositions, it is first necessary to specify what is meant by each of the conceptualized areas. These are:

Staff: In this case, staff is to refer to the functional members of the nursing home who are not directly involved with the larger administration of the home, nor whose primary work role lies outside of the nursing home, nor individuals who do not come into direct contact with patients. Included in this definition are the professionally trained nurses (both R.N.'s and L.P.N.'s), nurses' aides, custodians and other supportive individuals which the home needs for its continued service to nursing home residents. Excluded from this group will be the administrative head, his assistant, the bookkeeper and other members whose principle duty is to facilitate the staff, rather than directly provide a service to the patient. Also, excluded from this group would be other auxiliary members of the institution such as physicians, ministers, and social workers.

Institutional Efficiency: This variable is conceived as being an attitude expressed by an individual of an orientation towards instrumentality of the institution as opposed to humanitarianism.[76] The efficiency oriented individual is conceived to vary with the

professional degree, but does not necessarily have to hold a professional degree. He is conceived as a person who considers himself as being the "expert", "the boss", the most capable of making decisions within the institution. While this is not considered to be a completely homogeneous phenomenon within a particular nursing home, it is believed that a great amount of heterogeneity will occur between nursing homes as institutions. As Kutner states:

> The hospital is generally designed to advance the health and well-being of its clients. Due to its bureaucratic structure, its overriding need for efficient administration, its deployment of manpower in three shifts, and its regulation of patient life, there remains little that can be initiated by patients that could lead to meaningful or significant increments of social competence.[77]

Social Integration: Conceived as a two dimensional phenomenon, social integration may be thought to exist on the level of degree of attachment of the individual with the larger social system external to the nursing home, and on intimate relationship with the social system operant within the home itself. Such external factors as reading a newspaper, going for a ride, having contacts maintained outside the home are evidences of an external social integration.[78] Having friends or a confidant[79] within the home provides an intimate integrative experience. Thus, an individual who has external contacts and/or has intimate contacts within the institution may be conceived as being more socially integrated than an individual who has neither.

Morale: Morale has been defined as the extent to which the individual's needs are satisfied and the extent to which the individual perceives that satisfaction as stemming from his total situation. While a number of authors define it differently, the above

definition of morale will be used.[80] A person, responding in terms of overall satisfaction with his life situation, will be identified as having high morale. Dissatisfaction with present conditions will be the index of low morale.

This concept would be considered to be related to the general views that older people have about themselves.[81] While this construct is not conceived as being a static phenomenon,[82] it is generally held that an institutionalized aged person would have less positive feelings concerning self-worth[83] and a decreased feeling of power, as well as lower morale.[84]

Research Propositions

From the above discussion, the following research propositions may be stated:

(1) The degree of social integration of the nursing home residents is inversely related to the amount of institutional efficiency espoused by members of the staff.

(2) The level of morale of the nursing home residents is directly related to the degree of social integration which the resident has achieved.

Summary

Within social gerontological literature, concern with the problems of adjustment faced by nursing home residents has increased. The literature suggests that processes of institutional dependence are dependent upon particular institutional aspects.

One such aspect which has been mentioned, though not directly researched, is the effect of the staff upon the dependency process. While other aspects are important, it would appear that those whose primary responsibility is to work directly with the residents would have a great deal of effect upon the way the individual adapts to his present life situation.

It is also suggested in the literature that social integration has an ameliorative effect upon negative evaluations of self and lowered self concept. This exploratory research will therefore investigate the effect of staff upon the social integration and subsequent morale of the resident.

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CHAPTER II

METHODS AND PROCEDURES

Research Setting

Since the principle concern of the present study was the investigation of the effect of the nursing home's staff upon the morale, social integration and self concept of the residents of an institutional environment, it was necessary to compare polar type institutions. That is data was obtained from a sample of homes that would allow the greatest degree of divergence in terms of characteristics.

To that end, the original research design was to take a random sample of all nursing homes in the Payne, Noble, Pawnee, and Logan counties of North Central Oklahoma. An interview was arranged with the chief administrator in order to obtain his assistance and to have the administrator complete a short-form of the staff questionnaire. In this manner the researcher felt the likelihood of obtaining three highly diverse homes would be enhanced. Unfortunately, in the summer of 1971 two events took place which forced the adoption of alternate methods. First, in June of 1971, President Nixon addressed the nation and identified aging as a primary area of concern, both for the society in general and his administration in particular. He expressed concern for the housing of the aged and encouraged an evaluation of the nursing home enterprise. Second, the General

Accounting Office (G.A.O.) was then assigned the task of investigating those homes in Oklahoma (one of a number of states) that were receiving medicade benefits for its residents. The investigation was to be conducted through the State Department of Social and Rehabilitative Services.

As a consequence of these two factors paralleling the beginning of the research in August of 1971 a degree of resistance was encountered. Administrators were reluctant to offer their homes as a resource. Of the original sample of ten nursing homes contacted, three did not respond to the original inquiry, three refused to allow the researcher to investigate their homes, and four indicated a willingness to participate in the research project.

Of the four homes, an availability sample of three was obtained. The three were selected primarily because they differed in surface characteristics.

The first home, designated as Alpha, was a privately owned and operated institution. The proprietary home was administered by a female head with the assistance of an older son. The institution was located in a rural community of approximately ten thousand population. The home had been constructed in the early 1960's. Being a fifty-bed home, which at the time of the research has a 48 person occupancy, the facility was constructed in an "L" shape with one larger and one smaller wing. At the point of the "L" was the nurses station, the administrator's office, the dining facilities, and the resident lounge. Most of the activities of the home centered in this location.

The majority of the clientele of the home were receiving financial assistance from the state. While the home did not have special health care facilities, such as an oxygen unit or special dietary facilities, it was allowed to dispense drugs and provide medical care under the physicians' direction. According to state classification, the home was considered a skilled nursing care facility.

The second home, designated as Beta, was a corporation owned and operated home. The corporation consisted of five individuals located in the community. The administrator was hired to represent the owners. The institution was located in a community of approximately 40,000 population. The community also serves a large multi-university with extended influence over the community.

The institution had been constructed in the middle 1960's. It was originally part of a national nursing home corporation which had experienced financial difficulties and had been forced to sell a number of its holdings to private corporations. The home itself had experienced an instability of administrators, having had four or five different administrators over a two year period. The administrator in charge of the home at the time of the research period had been employed for two weeks prior to the research period and left four weeks after the research was completed.

The bed capacity of the home was 100 beds. At the time of the research there was a 65 bed occupancy. The home was built in the form of a star with four wings. Two of the wings were reserved for the more ambulatory residents. At the intersection of the four wings was the dining area, lounge, and nurses station. The administrator's office was located in one wing just off the center of activity.

The majority of residents of the home were not receiving financial assistance from the state but were living on social security payments and private savings. The home did have special medical care facilities and was also considered a skilled health care unit.

The essential differences between the Alpha and the Beta home was in terms of type of ownership, type of clientele, and stability as opposed to instability of the head administrator.

The third home, designated as Gamma, was a corporation owned and operated facility. The corporation consisted of eight persons who resided in the community. The community was a rural community of approximately 10,000 population.

The home had been built in the mid-1960's as part of a national corporation effort. The home had been sold to the private corporation several years prior to the research. The home had experienced a stable administration during the preceeding two years, with the same administrator being in charge of the home over this period.

The bed capacity of the home was 100 beds with an 85 bed occupancy. The home was built in the form of a star with four wings extending outward. Where the wings intersected was the nurses' station, dining facility and recreation lounge. The administrator's office was located in one of the wings off of this intersection.

The facility was classifed as skilled health care and provided special care such as oxygen and dietary facilities. Two of the four wings were reserved for intensive health care while the other two wings were for the more ambulatory residents. The majority of residents were receiving state support for their stay.

The distinguishing feature of this home when compared to the other two homes was the relative stability of administration and special care facilities.

Measurement of Staff Dimensions

The measurement of staff properties was done by means of a fixed-alternative questionnaire consisting of 52 items and divided into four distinct parts (See Appendix A). Section I of the questionnaire was a variant of the Custodial Maintenance Inventory (hereafter referred to as C.M.I.). This particular scale was originally developed by Gilbert and Levinson[1] for use in a hospital situation. The scale is a twenty item, fixed-alternative questionnaire of Likert design. Alternatives range along a seven point continuum of strongly agree through neutral to strongly disagree. Cumulative scale scores range from +60, indicating an orientation towards institutional efficiency, through 0, indicating a neutral or mixed position, to -60, indicating a "humanistic" orientation.

This particular scale is considered to be an attitudinal measure with the principle dimension being institutional efficiency. The latter is an orientation towards control by staff personnel. Thus an individual with a high institutional efficiency score is considered to be a person who would consider himself as the "best" judge of what is desirable for a resident, regardless of the resident's wishes. On the other hand, a score towards "humanitarianism" would indicate a feeling that the nursing home is a place where individual expression may take place and an attitude of attempting

to help residents as human beings, as opposed to objects, may be exhibited.

The second part of the staff questionnaire consisted of a twenty item index known as the Kiddie Mach (hereafter referred to as K-M). The Machiavellian scale was originally constructed by Christie and others in 1968.[2] The scale was modified to a seven point, fixed-alternative questionnaire of Likert form. This made it compatible with the C.M.I scale. The K-M, as opposed to the complete Machiavellian scale, was employed to reduce the overall time required to complete the questionnaire.

The K-M is a scale that attempts to "tap a person's general strategy for dealing with people, especially the degree to which he feels other people are manipulable in interpersonal situations."[3] The prime rationale for its inclusion was as a check on the C.M.I. scale. That is, the K-M should provide a clue as to whether an attitude towards the efficiency of the institution per se was a situationally specific phenomenon, or whether persons who value institutional efficiency simply have a general attitude towards the manipulation of people. Thus, if the K-M scale and the C.M.I. scale differed significantly, it would be tenable to conclude that the two were aspects of different things. Namely, K-M would be an indicant of a general behavioral context, while C.M.I. would indicate an institutional perspective.

The K-M is a cumulative scale. A score of +60 indicates a high positive attitude towards the manipulation of people in interpersonal situations. A score of 0 indicates a neutral or a mixed position towards the manipulation of people. A score of -60 indicated an

attitude opposed to the manipulation of people in interpersonal settings.

The third section of the staff questionnaire is a six question occupational values scale developed by Rosenberg.[4] This particular scale attempts to "categorize people into occupational value complexes, described as 'self-espression-oriented', 'people-oriented', and 'extrinsic-reward-oriented'."[5]

From the research perspective, the value orientations of staff members may be indications of motivational aspects of work and the value they place upon differing rewards of the work situation. Thus, a value complex of extrinsic rewards would denote an individual whose principle value is upon the monetary rewards of the work situation. Self-expression would be related to personal autonomy, such as a sense of professionalism. A person whose value complex indicates high people-orientation, would be considered typical of the humanistic orientation of helping people.

The occupational value scale consists of six items. Each of these items is ranked high, medium or low by a respondent, depending upon whether they consider that particular aspect as being highly important, of medium importance of low in importance, in terms of the work situation. From the high, medium and low rankings, a respondent is asked to rank-order all those aspects he considered to be high in importance. The rank order is: one for the most important high, two for the second most important high, and so on. Thus, by assigning a value system of eight for a high first choice, a six for a high second choice, a four for a high third choice, a two for a high fourth choice and a one for mediums and a zero for all lows, individual

respondents may be distinguished from each other. Operationally a HIGH is any cluster of values that receive an overall score of six or more. A MEDIUM is a cluster of values ranging in total score from a two to a six. A LOW is any cluster of values that receives a score of one or less.

The fourth and final section of the questionnaire was devoted to a 'block-booking' of demographic variables.[6] Block-booking refers to the incorporation of variables into a general scheme of variables which would be expected to "fall together"; that is, variables which a researcher feels are intertwined with each other and important enough to the situation to merit their inclusion. The following are the variables which are included, along with propositions relating to each of the other section of the questionnaire.

(1) Number of Hours Worked Per Week: The number of hours an individual works per week is related to (1.1), espoused institutional efficiency; (1.2), manipulative attitude towards people; and (1.3), occupational value cluster. The number of hours a staff member works is defined in terms of a part-time, full-time, or over forty-hours a week employee.

(2) Sex: The sex of the staff member is related to (2.1), espoused institutional efficiency; (2.2), manipulative attitude towards people; and (2.3), occupational value cluster.

(3) Professional Level: The level within the staff that an individual has achieved, e.g. registered nurse, licensed practical nurse, nurses aide, cook-custodian-dishwasher, is related to (3.1), espoused institutional efficiency; (3.2), manipulative attitude towards people; and (3.3), occupational value cluster.

(4) Age: The age of the staff member is related to the (4.1), espoused institutional efficiency; (4.2), manipulative attitude towards people; and (4.3), occupational value cluster.

(5) Length of Tenure in the Home: The amount of time an individual has worked in the current position is related to (5.1), espoused institutional efficiency (5.2), manipulative attitude towards people; and (5.3), occupational value cluster.

(7) Educational Attainment: The level of education achieved by an individual, e.g. no high school, some high school, high school graduate, some college, college graduate, or special training, is related to (7.1), espoused institutional efficiency; (7.2), manipulative attitude towards people; and (7.3), occupational value cluster.

During the analysis phase of the research, each of the exploratory variables was statistically tested to determine where any differences between staff members existed.

Gathering of Staff Data

Staff questionnaires were filled out by the members of each institution at the change of the various work shifts. The researcher requested, and received, permission from the administrators to take 15 minutes of the workers' time to complete the instrument. While most of the staff members were present, a number had days off, were engaged in duties they could not leave at the time, or for other reasons were not present. For those who were unable to complete the form at the requested time, copies were left at the main staff desk with the request that the individual fill it out at his convenience.

As a result of this procedure, the return of usable questionnaires of total number of staff was: Home I, 17 staff members--15 usable questionnaires (89.4%); Home II, 42 staff members--31 usable questionnaires (73.8%, Home III, 40 staff members--24 usable questionnaires (60.0%).

Measurement of Resident Characteristics

The gathering of resident data was done by means of a close-ended interview. The interview was conducted in the resident's room (See Appendix B). From previous research[7] it was felt that a female interviewer would obtain better overall interview data. It appeared from the previous research that respondents, the majority of whom were female, would have responded to a female interviewer better than they would respond to a male interviewer.

The interviewer was instructed to interview residents who appeared to be above a minimal level of coping behavior. It was felt that individuals who were in the process of simply surviving would be unable to respond to the interview in any meaningful way and that they should have the human right to be left alone. Thus, the interviewer was instructed to begin interviews with persons who did not appear to be critically ill and to terminate interviews when it appeared the respondent was (1) giving erroneous information, (2) confused or disoriented to the situation, or (3) becoming upset by the nature of the questions being asked. With these guidelines, seven interviews were terminated and sixty-four usable interviews compiled.

Morale: Morale was measured by the Life Satisfaction Index A (referred to as LSIA). This index was originally developed by

Neugarten, Havighurst and Tobin in 1961.[8] The LSIA was developed during an extensive five-year investigation of older people in Kansas City. The scale is comprised of five components which are: zest for life as opposed to apathy; resolution and fortitude as opposed to resignation; congruence between desired and achieved goals; high physical, psychological and social self-concept; and a happy, optimistic mood tone.[9]

In his 1969 study, Adams suggests that four distinct factors, as opposed to the original five, might best be delineated. These four are mood tone, zest for life, congruence and mixed.[10] He further suggests that the scale should be reduced from a total of twenty items to a total of eighteen items. This is the pattern which was followed in the present study.

In terms of morale, the LSIA would appear to be an adequate measure of morale. It has been used in a variety of studies of the aged relating to their morale. Such authors as Wood, Wylie and Sheafor in 1969;[11] Philblad and Rosencranz in 1967;[13] Wylie in 1970;[13] and Bultena in 1969[14] have all used the instrument with varying degrees of success.

The scoring of the scale was revised by Wood, Wylie and Sheafor. They suggest that scale scores of "0" for a 'wrong' answer, a "1" for a neutral or no response, and a "2" for a 'correct' answer be given. This was the scoring technique used in the current investigation. Thus an individual's score could range from a zero to a thirty-six. A zero would indicate a low life-satisfaction score while a thirty-six would be indicative of a high life-satisfaction score.[15]

Social Integration

Since social integration is conceptualized as existing on two levels, external integration and interpersonal integration, two separate measures were developed.

External world integration is conceptually linked with the Bradburn-Caplowitz positive affect dimension. To assess this, questions were adapted from the Bradburn-Caplowitz 1965 study of Happiness.[16] A total of fifteen items comprise the scale. The items have values ranging from zero to four.

As a result of this weighting, the cumulative score values range in potential from a score of zero to a score of sixty. The higher the score of the individual, the greater his involvement with external world happenings. The lower the score, the lesser his involvement with the world external to the nursing home.

The measure of interpersonal integration consisted of three sociometric questions.[17] Since the use of sociometric choices do represent about as social a choice as possible,[18] the researcher felt that this particular type of data collection would provide as good a clue to the interpersonal social integration as possible.

While the particular range of potential questions is quite large,[19] the realm of the questions were narrowed into three areas. First, who do you consider to be your best friend? Second, whom would you most like to serve on a committee discussing operation of the home? And third, who would you most like to be seated by in the dining room?

While it was anticipated that sociometric data would be difficult to obtain[20] the interviewer was instructed to pursue the questions as

far as possible to see if the respondents could name other persons in the home.

A number of demographic characteristics, along with certain characteristics which other research indicates might be important, were "block-booked". Specific propositions relating to these variables are:

(1) Length of Time Resided in the Home: The length of time a resident has spent in a particular home is related to the (1.1), life-satisfaction score; (1.2), external social integration score; and (1.3), interpersonal integration score.

(2) Living Arrangement Prior to Entrance: Whether the individual was residing alone, with family, with a friend or with a housekeeper is related to (2.1), life-satisfaction score; (2.2), external social integration score; and (2.3), interpersonal integration score.

(3) Age: The age of the resident is related to the (3.1), life-satisfaction scale; (3.2), external social integration score; and (3.3), interpersonal integration score.

(4) Marital Status: The current marital status of the individual, e.g., being single, divorced, separated, widowed, or married is related to the (4.1), life-satisfaction score; (4.2), external social integration score; and (4.3), interpersonal integration score.

(5) Former Occupational Status: The occupational status of the resident prior to his admittance into the home, e.g., housewife, blue-collar, white-collar, professional is related to the (5.1), life-satisfaction score; (5.2), external social integration score; and (5.3), interpersonal integration score.

(6) Sex: The sex of the respondent is related to the (6.1), life-satisfaction score; (6.2), external social integration score; and (6.3), interpersonal integration score.

(7) Confidant: Whether or not an individual has a person in whom they can confide their problems is related to the (7.1), life-satisfaction score; (7.2), external social integration score; and (7.3), interpersonal integration score.

(8) Life-Satisfaction Score: Whether the individual considers himself to be in good, fair or poor health is related to the (8.1), life-satisfaction score; (8.2), external social integration score; and (8.3), interpersonal integration score.

(9) Educational Attainment: The level of school achievement of the respondent is related to (9.1), life-satisfaction score; (9.2), external social integration score; and (9.3), interpersonal integration score.

During the analysis phase of the research, each of the above variables was tested against the results of the other sections of the interview.

Summary

In the latter part of August, 1971, the staff members of three nursing homes in North Central Oklahoma were asked to respond to a questionnaire. The homes were selected because they differed on a number of external characteristics and seemed divergent in make-up. The scale was divided into four parts. The first part (C.M.I.) was a twenty-item index designed to measure "humanitarian" attitude as opposed to an institutional efficiency attitude. The second part

of the questionnaire consisted of a twenty item Machiavellian scale. This scale differentiated populations into the degree to which the respondents tend to favor the manipulation of people in interpersonal situations. The third section of the questionnaire divided staff members into occupational value clusters. That is, what things they would consider as being important in their "ideal" work situation. The final section of the questionnaire consisted of exploratory demographic variables.

The residents of each of the three homes were interviewed in September and October of 1971. The interview consisted of four sections. The first section was an 18 item life-satisfaction index used as a measure of morale. The second section consisted of a measure of external integration; that is, the degree to which the resident had been able to maintain a degree of contact with the social world outside the home. The third section dealt with sociometric choices of residents. The final section of the questionnaire consisted of a number of exploratory demographic variables.

FOOTNOTES

[1]Doris J. Gilbert and Neil J. Levinson, "Custodialism and Humanism in Mental Hospital Structure and in Staff Ideology," The Patient and the Mental Hospital, ed. Greenblatt, Levinson, and Williams, (Glencoe, 1957).

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[5]John P. Robinson, Robert Athanasiou and Kendra B. Head, Measures of Occupational Attitudes and Occupational Characteristics (Appendix A to Measures of Political Attitudes) Institute for Social Research, (Ann Arbor, August 1970) p. 506.

[6]Morris Rosenberg, The Logic of Survey Analysis, (New York, 1968) p. 26-28.

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[11]Vivian Wood, Mary L. Wylie and Bradford Sheafor, "An Analysis of a Short Self-Report Measure of Life-Satisfaction: Correlation with Rater Judgments," Journal of Gerontology, 24 (October 1969) pp. 465-469.

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[15]Vivian Wood, Mary L. Wylie and Bradford Sheafor.

[16]Norman M. Bradburn and David Caplovitz, Reports on Happiness, (Chicago, 1965).

[17]See: Helen H. Jennings, "Sociometric Choice Process in Personality and Group Formation," The Sociometric Reader, ed. J. L. Moreno, et.al., (Glencoe, 1967) pp. 87-112.

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CHAPTER III

DATA FROM MEASUREMENT SCALES

The results of the Custodial Maintenance Inventory of staff scores along with the accompaning "z" scores are presented in Tables I, II and III.

The "z" score of each individual is included for several reasons. First, the score gives a basis for comparison of each individual's score on each of the measures. Second, the "z" score provides a clue as to whether the population distributions approximate the normal. The "z" score (see Appendix C for formula) gives one a measure of the deviation from the mean in terms of standard deviation units.[1] The "z" distribution has a standard form in terms of a mean of zero and a standard deviation of one. Thus, a person with a "z" score of less than one falls within a band of one standard deviation either side the mean. A person with a score of one to two is within a band of two standard deviation units either side of the mean, and so on.

In Table I, Alpha Nursing Home, twelve persons lie within one standard deviation unit of the mean. Two fall within the band of two standard deviation units. One person lies beyond two deviation units. Since the normal distribution assumes that 68.26% of the cases will fall within one standard deviation unit either side of the mean, 95.44% within two standard deviation units and 99.74% within three deviation units,[2] it would appear that the distribution of scores

TABLE I

CUSTODIAL MAINTENANCE INVENTORY AND "z" SCORES FOR ALPHA NURSING HOME

Individual	C.M.I.	"z"
1	-14	- .22
2	- 2	.56
3	17	1.79
4	-19	- .55
5	3	.88
6	- 4	.43
7	- 2	.56
8	-16	- .35
9	-21	- .68
10	-20	- .61
11	-10	.04
12	-17	- .42
13	-18	- .48
14	-49	-2.49
15	13	1.53
N = 31	Mean = -10.6	s = 14.97

TABLE II

CUSTODIAL MAINTENANCE INVENTORY SCORES AND "z" SCORES FOR BETA NURSING HOME

Individual	C.M.I.	"z"
1	-16	.17
2	0	1.22
3	-43	-1.66
4	1	1.29
5	-41	-1.52
6	-21	- .19
7	-24	- .39
8	5	1.55
9	-25	- .45
10	-17	.08
11	-15	.22
12	-20	- .12
13	-25	- .45
14	-21	- .19
15	-32	- .92
16	- 6	.82
17	-10	.55
18	- 9	.62
19	-23	- .32
20	17	2.35
21	-12	.42
22	-17	.08
23	- 2	1.08
24	-18	.02
25	-21	.19
26	- 9	.62
27	-13	- .35
28	-47	-1.92
29	-42	-1.59
30	-47	-1.92
31	-12	.42
N = 31	Mean = -18.2	s = 14.97

TABLE III

CUSTODIAL MAINTENANCE INVENTORY SCORES AND "z" SCORES FOR GAMMA NURSING HOME

Individual	C.M.I.	"z"
1	-29	- .97
2	- 8	.47
3	-22	- .49
4	-24	- .63
5	-16	- .08
6	- 3	.81
7	-38	-1.58
8	-17	- .15
9	-15	- .01
10	-16	- .07
11	-26	- .76
12	-17	- .15
13	- 6	.61
14	0	1.02
15	- 3	.81
16	- 1	.95
17	-12	.20
18	-16	- .08
19	-14	.06
20	18	2.25
21	-20	- .35
22	9	1.64
23	-28	- .90
24	-53	-2.61
N = 24	Mean = -14.9	s = 14.60

for the Alpha home would be approaching normal. It is, however, somewhat lyptokurtic with 80% within one unit either side the mean, 93.3% within two units and 100% within three units.

The overall trend of the Alpha population appears to be towards "humanitarianism" and away from "institutional efficiency." The one highly divergent score, "z" = -2.49, is in the "humanitarian" direction. The mean of the distribution is -10.6. One should note that the standard deviation score is somewhat high with the statistical unit being equal to 15.40.

Table II, C.M.I. scores for the Beta nursing home, has twenty-one of its members falling within one deviation unit either side the mean (67.7%). Nine members fall beyond one deviation unit and within two units (97.7%). One individual falls between two and three deviation units making a total of 100%. Thus, the curve appears to be not as lyptokurtic as the Alpha home and in the normal direction.

One major distinction does exist between the two sets of scores. Whereas in the first table the deviant individual was deviant in the negative direction, in the second table the individual with the most deviant score was in the positive direction.

In terms of general pattern, the overall C.M.I. scores of the Beta nursing home appear to be in the direction favoring an attitude towards "humanitarianism" as opposed to institutional efficiency. The mean of the staff members is a -18.2. The standard deviation is 14.97.

Table III, C.M.I. scores for the Gamma nursing home, indicates that 19 persons fall within one deviation unit either side of the mean (79.2%). Three lie within the area of one to two deviation

units (91.7%). Two persons lie in the area of two to three deviation units from the mean (100%). The distribution would appear to approximate the normal with deviant scores either side the mean off setting each other. The overall trend of the scores is in the "humanitarian" direction. Two of the twenty-four scores are zero or positive. The mean is -14.9 and the standard deviation is equal to 14.60.

In order to evaluate how well each of the individual items was contributing to the total score obtained by the individuals, a biserial is a statistic that considers the situation where "one continuous variable and another which is actually continuous but which has been forced into a dichotomy" exists.[3] By the use of a computer program found in Veldman[4] the researcher was able to obtain scores of the biserial for a Likert type scale. The results of the biserial correlation coefficients for each item appears in Table IV.

TABLE IV

BISERIAL CORRELATION COEFFICIENTS OF CUSTODIAL MAINTENANCE INVENTORY

Item	Biserial	Item	Biserial
1	.587	11	.485
2	.556	12	.454
3	.649	13	.390
4	.320	14	.375
5	.368	15	.432
6	.450	16	-.193
7	.473	17	.552
8	.233	18	.440
9	.523	19	.455
10	.424	20	.147

Using the criteria of judgment of an "r" of at least .300 to be a "good" item, one can see that the majority of C.M.I. items appear to

be well correlated with the total score. Only items eight, sixteen and twenty have an "r" of less than .300. The highest item correlation is item three with an "r" of .649.

After careful consideration and a detailed look at the items, the researcher decided to retain the three "poor" items. This decision was made primarily because (1) the scale had been used before in other research settings and had proved to be an adequate measure. (2) The score of the respondents on these questions were data that simply could not be ignored.

Tables V, VI, and VII report the results of the K-M scale for each nursing home. Table V, K-M scores for Alpha nursing home staff all appear in the negative direction, indicating an attitude away from the manipulation of people. The mean of the distribution of scores is -22.4 and the standard deviation is 9.12.

In terms of the "z" distribution, ten persons obtained scores between one deviation above the mean and one deviation below the mean (66.7%). Four obtained scores between two deviations above the mean (100%). From these percentages it would appear that the distribution curve is skewed toward the negative side of the continuum, even though the most divergent score is in the positive direction.

Table VI, K-M scores for the Beta nursing home, reflect that the general distribution is away from the manipulation of people in interpersonal situations. The mean of the distribution is a -19.3. The standard deviation of the scores is 11.36.

Within the area of one deviation either side the mean, there was a total of twenty-two persons (70.7%). An additional seven persons

TABLE V

TOTAL KIDDIE-MACHIAVELLIAN SCORES AND "z" SCORES FOR ALPHA NURSING HOME

Individual	K-M	"z"
1	-13	1.03
2	-26	- .40
3	-31	- .94
4	- 7	1.69
5	-34	-1.27
6	-26	- .36
7	-28	- .61
8	-20	.26
9	- 3	2.13
10	-30	- .83
11	-18	.48
12	-16	.70
13	-35	-1.38
14	-23	- .07
15	-26	- .40
N = 15	Mean = -22.4	s = 9.12

TABLE VI

TOTAL KIDDIE-MACHIAVELLIAN SCORES AND "z" SCORES FOR BETA NURSING HOME

Individual	K-M	"z"
1	4	2.05
2	-11	.73
3	-29	- .86
4	-13	.55
5	-29	- .86
6	-18	.11
7	-14	.46
8	-26	- .59
9	- 9	.90
10	-31	-1.03
11	-30	- .95
12	-19	.02
13	-20	- .07
14	-32	-1.13
15	-32	-1.13
16	-26	- .59
17	-15	.38
18	-13	.55
19	-16	.29
20	- 6	1.17
21	-27	- .68
22	-34	-1.30
23	-12	.64
24	-24	- .42
25	-33	-1.21
26	- 8	.99
27	0	1.70
28	-30	- .95
29	-24	- .42
30	-30	- .95
31	10	2.58
N = 31	Mean = -19.3	s = 11.36

TABLE VII

TOTAL KIDDIE-MACHIAVELLIAN SCORES AND "z" SCORES FOR GAMMA NURSING HOME

Individual	K-M	"z"
1	-29	- .15
2	-11	1.50
3	- 7	1.86
4	-28	- .06
5	-19	.77
6	-33	- .51
7	-23	.40
8	-41	-1.25
9	-20	.67
10	-22	.49
11	-31	- .33
12	-42	-1.34
13	-42	-1.34
14	-42	-1.34
15	-33	- .51
16	-21	.58
17	-28	- .06
18	-32	- .42
19	-21	.58
20	- 1	2.41
21	-38	- .97
22	-35	- .70
23	-20	.67
24	-38	- .97
N = 24	Mean = -27.4	s = 10.95

obtained "z" scores between one and two deviations either side the mean (93.5%). All the rest of scores, two more, are to be found within the bank of two to three deviation units either side the mean (100%). A total of three scores are zero or positive. The remainder of the scores are in the negative direction. It would appear that the distribution approaches the normal, but with two divergent scores in the direction of favoring manipulation of people.

Table VII, K-M scores for the Gamma home, has a mean of -27.4 and a standard deviation of 10.95. The scores all exist on the negative side of the continuum, away from the attitude of manipulation of people.

The "z" values for each of the three areas approximates those expected of a normal distribution. Seventeen "z" score values (70.8%) lie in the plus and minus one standard deviation range. Six more (95.8%) scored within two deviation units either side of the mean. The final value fell within three deviation units (100%).

To evaluate the items, a biserial correlation coefficient was computed for each of the twenty items. The results of the computations appear in Table VIII. Using the criteria of .300 value for the "r" figure for a "good" item, eight of the twenty appear not to measure well. While this is harmful to the overall scale results, since the items had been established prior to the present research and because the items do represent data from the staff they were not omitted from subsequent analysis. Conclusions from the K-M scale must be cautious and inferential rather than generalized and obvious.

TABLE VIII

BISERIAL CORRELATION COEFFICIENTS OF KIDDIE-MACHIAVELLIAN SCALE

Item	Biserial	Item	Biserial
1	.220	11	.387
2	.360	12	.221
3	.296	13	.223
4	.156	14	.342
5	.377	15	.331
6	.411	16	.242
7	.528	17	.188
8	.366	18	.571
9	.128	19	.352
10	.316	20	.377

TABLE IX

OCCUPATIONAL VALUE CLUSTERS OF THE THREE NURSING HOMES STAFFS

Orientation	Alpha	Beta	Gamma
Self-Expression			
High	7	16	4
Medium	8	13	18
Low	0	2	2
People-Oriented			
High	1	0	1
Medium	8	17	7
Low	6	14	16
Extrinsic-Reward			
High	9	20	12
Medium	6	11	12
Low	0	0	0

Table IX presents the occupational value clusters developed by the nursing staff of the nursing home. Looking at the tabled results by column, in terms of self-expression being important, Alpha staff was nearly equally split between this value being of high and medium importance. The people-orientation of the staff tends to be toward the low end of the scale. The majority feel this to be a Medium important area, but a large number (six) feel the value to be low in importance. Extrinsic reward appears to be the most important reason why individuals work. The monetary gain to be made from working would seem to appeal to the majority of the staff members.

Looking at the tabled results by ranking, one notes that the "high" rankings have two value orientations which rank above the rest. These are self-expression and extrinsic-reward. People-orientation ranks relatively low in "high" value orientation of staff members.

The second ranking, "medium", appears to be well divided among the alternatives with no one score appearing much larger than the others. The third ranking for the Alpha home, "low," has a relatively high scoring value cluster of people-orientation.

In terms of a general statement about the Alpha nursing home staff, one would have to conclude that in descending order the staff members value extrinsic-reward, self-expression, and people-orientation.

The occupational value clusters of the Beta nursing home are presented in Table IX. Reading the table row by row, the majority of staff members felt that self-expression was quite high in importance to their work. Another large number felt that self-expression was of medium importance, while two rated this as low in importance. The second row, people-orientation, indicates that no staff members

ranked this "high," while all ranked it "medium" or "low." The row involving extrinsic-reward places the large majority of staff members in the high category. A number of respondents indicated extrinsic reward to be of medium importance, while no one indicated it to be "low."

Reading Table IX, the rankings of the Beta column would be extrinsic-reward, self-expression, and people-orientation, with the latter receiving no endorsement. The "medium" column appears to be more evenly split with the ranking of this column being helping people, self-expression and extrinsic-reward being ranked one through three.

In general, Table IX would lead one to the conclusion that the Beta home nursing staff considers extrinsic-reward and self-expression to be the most important reason for their working. They rank the helping of people to be relatively unimportant to their work.

Table IX presents the results of the occupational value clusters for the Gamma nursing home. Investigating the table row by row the first row, self-expression, indicates that the large majority of the Gamma staff feel that self-expression is of medium importance to their work. "High" and "low" columns only receive support by four and two individuals respectively. The row, people-oriented, locates two-thirds of staff members in the "low" column, nearly one-third in the "medium" column and only one in the "high" column. The extrinsic-reward row results in an exactly even split between the "high" and "medium" value columns with no one from the home considering this to be of little importance.

In reading the table item by item, one notices that the majority of "highs" appear in the extrinsic reward column, with relatively few in any of the other two value complex categories. The second column, "medium," is relatively evenly split with the rank order being self-expression, extrinsic-reward and people-orientation. The final category, "low," is bi-modal with an almost equal number of individuals specifying self-expression and extrinsic-reward as being relatively important to their work, while people-orientation was considered to be of little importance.

In terms of general statements, it may be concluded that the Gamma home may be rank-order classified in the following order: extrinsic-reward, self-expression and people-orientation.

In terms of overall comments about the comparison of the three in terms of value complexes, all three homes ranked "working for extrinsic-reward" as being the most important value cluster. The Beta nursing home ranked self-expression very close to the extrinsic-reward category, but so did the other two homes, though perhaps not quite as close. The three homes again appear to be in agreement on the "helping people" dimension. This is consistently given a fairly low level valuation.

Table X presents the results of the demographic variables per home along with the accompanying total across homes. This data specifies that the "typical" worker in the nursing homes is a person who works between twenty and forty hours per week. A number of the workers, particularly in the Beta home, work more than forty hours per week but only a few workers appear to be employed on a part-time basis.

TABLE X

DEMOGRAPHIC CHARACTERISTICS PER NURSING HOME

Characteristic	Alpha	Beta	Gamma	Total
Number of Hours Worked per Week				
Less than 20	0	2	1	3
20 - 40 hours	12	18	18	48
More than 40	3	11	5	19
Sex				
Male	1	6	1	8
Female	14	25	23	62
Professional Status of Staff				
Registered Nurse	1	1	1	3
Licensed Practical Nurse	1	4	1	6
Nurses Aide	9	15	14	38
Other	4	11	8	23
Age				
18 - 25	1	23	6	30
26 - 35	4	2	7	13
36 - 45	4	2	3	9
46 - 55	5	2	7	14
56 - 65	1	0	1	2
Tenure in Present Home				
0-6 months	6	19	7	32
7-12 months	2	5	5	12
13 mo.-2 yrs.	3	6	8	17
3-4 years	2	1	4	7
5 or more yrs.	2	0	0	2
Marital Status				
Single	4	11	5	20
Married	8	19	16	43
Divorced	2	1	2	5
Separated	1	0	1	2
Education Attainment				
No high school	1	0	2	3
Some high school	3	2	8	13
High school grad.	4	6	5	15

Table X - continued

Characteristic	Alpha	Beta	Gamma	Total
Some College	1	12	5	15
College graduate	0	2	1	3
Special training	6	9	5	20
	N =15	N =31	N =24	N =70

The great majority of workers are female and are in the majority in all three of the homes. In the Beta home, however, a higher proportion of the workers are male than in either of the other two homes.

In terms of the professional status, each home has one registered nurse. Beta has the highest number of licensed practical nurses with four. The largest category in all three homes is the nurses aide, while the category "other," which includes cooks, janitors, and so on, is the second largest category in all three of the homes.

The age profile of the staff workers is quite young, that is a majority are under age 45. The most unique picture, however, is in the Beta nursing home where the majority of all workers are between the ages of 18 and 25. This is probably the result of the nursing home being located in a college community, wtih a large proportion of the population being under the age of 25. Other than that particular category, the age distribution of the three homes appears to be quite similar.

The majority of the workers in the three homes have worked for less than one year in the particular home. Highly noticeable is the number from the Beta home (19) who have worked in the home for a relatively short period of time. This would appear to follow the

proposition previously suggested that the home is located in a college community which might have a more mobile, younger population. In terms of other tenure units, the Alpha and Gamma nursing homes would appear compatible in terms of having employees who have worked for more than one year in the particular home. Both of these homes would rank above the Beta nursing home in terms of tenure of staff members.

The majority of the workers in the homes are either married or single. Beta nursing home attracts a larger proportion of single people while Gamma may have a higher proportion of married and Alpha a more general split of staff members.

In regard to educational attainment, the Beta nursing home would appear to have an overall higher educational attainment level than either of the two other homes. Alpha would appear to have a somewhat less educational level of attainment, while the Gamma home would lie in between the two. This would be in keeping with the conclusion that the Beta nursing home may be somewhat unique because of its location.

In the special training category, Alpha would appear to have the highest proportion of the workers having some type of special training. Looking back at the category of professional status, Alpha was on a level equivilent to the other two homes. It would seem that the special training of the staff of the Alpha home might lie in special dietary schooling, hair styling, or short courses related to nursing. While this can also be said of the other two homes, it is important to note that special training in each of the three homes may not reflect "professional" special training in terms of the nursing home itself.

In conclusion, the nursing homes would appear to be comparable. The home which appears to be the most divergent, in terms of demographic characteristics, would be the Beta nursing home. The tentative conclusion is proffered that the difference may be attributed, in part, to the fact that the home itself is located in a college community. This community may tend to have a younger, more mobile and higher educated population than would normally be expected. In terms of the other characteristics, there does not appear to be a singly divergent characteristic in either of the two homes.

The resident data was collected in September and October of 1971. The interviews were conducted after the staff questionnaires had been given out, in order to avoid possible conflicts. The results of the LSIA index, along with the "z" scores for each of the scores, are presented in Table XI, XII, and XIII.

Table XI presents the results of the residents of the Alpha nursing home. The mean of the population is 18.9, which is almost a neutral position. The standard deviation unit of the scores is 4.98.

Due to the fact that many of previous studies used a twenty item scale scoring of one for a "right" answer and zero for a "neutral" or "wrong" answer, the comparability of the present scores when based upon eighteen items instead of twenty items must be looked upon with logic. If a possible score in the former is twenty for a high score and zero for a low score, a score of ten would lie in the middle. In the present research, a high of thirty-six is possible with a low of zero. Thus a score of eighteen would lie in the middle.

TABLE XI

LIFE-SATISFACTION INDEX A AND "z" SCORES OF THE ALPHA NURSING HOME RESIDENTS

Individual	Total Score	"z" Score
1	23	.83
2	17	- .37
3	25	1.23
4	13	-1.18
5	19	.03
6	27	1.63
7	15	- .77
8	14	- .98
9	24	1.03
10	14	- .98
11	26	1.43
12	20	.23
13	15	- .77
14	12	-1.38
N = 14	Mean = 18.9	s = 4.98

TABLE XII

LIFE-SATISFACTION INDEX A AND "z" SCORES OF THE BETA NURSING HOME RESIDENTS

Individual	Total Score	"z" Score
1	15	- .34
2	31	1.78
3	14	- .47
4	18	.06
5	13	- .61
6	20	.32
7	13	- .61
8	28	1.39
9	25	.99
10	23	.72
11	6	-1.53
12	12	- .74
13	6	-1.53
14	22	.59
15	15	- .34
16	18	.06
17	14	- .47
18	30	1.65
19	19	.19
20	8	-1.27
21	5	-1.67
22	17	- .07
23	28	1.39
24	11	- .87
25	28	1.39
N = 25	Mean - 17.7	s = 7.54

TABLE XIII

LIFE-SATISFACTION INDEX A AND "z" SCORES OF GAMMA NURSING HOME RESIDENTS

Individual	Total Score	"z" Score
1	27	1.83
2	22	.96
3	7	-1.64
4	17	.10
5	16	- .08
6	10	-1.12
7	13	- .60
8	19	.44
9	9	-1.29
10	23	1.14
11	17	.10
12	22	.96
13	31	.79
14	13	- .60
15	19	.44
16	9	-1.29
17	20	.62
18	21	.79
19	26	1.66
20	10	-1.12
21	12	- .77
22	10	-1.12
23	23	1.14
24	17	.10
25	8	-1.46
N = 25	Mean = 16.4	s = 5.77

In the Adams study,[5] the sample received a mean of 12.5, above the "middle" score. The Kansas City sample[6] upon which the scale is based received a mean of 12.4 above the "middle" score. The present study found that in the Alpha nursing home the mean was 18.9, only slightly above the "middle" score.

It may then be suggested that the nursing home sample of the Alpha nursing home lies somewhat below the general population of older people. That is, their life-satisfaction is somewhat less. This is true in comparing this older population with a retired population in the same state. In that research,[7] retired professions scored significantly higher than the Kansas City population on the twenty item LSIA; 13.9 vs. 12.4. The same is true when comparing a retired clergy population in the same state to the original study of LSIA; 14.1 vs. 12.4.

In terms of the "z" scores, eight of the residents had "z" lying within the area of one deviation unit either side the mean (57.1%). An additional six scored within two deviation units of the mean (100%). No residents scored beyond two deviation units of the mean. It would appear that the distribution of scores is lytokurtic with a slight skew towards the lower end of the scale continuum. Of course with an N=14 the law of large numbers would not apply and this statement should be noted in that context.

Table XII presents the LSIA scores of the Beta nursing home residents. The mean of the distribution is 17.7. This mean is somewhat lower than the mean obtained for the Alpha home and is below the "middle" score. The standard deviation unit, 7.54, is somewhat larger than the Alpha unit, however.

The "z" score units divide the population into sixteen individuals within one deviation unit either side the mean (64.0%). Nine persons are in the area between one and two deviations from the mean (100%). No persons lie outside the range of two deviation units. The curve of the scores appears somewhat more plytokurtic than the curve for the Alpha residents with five persons each in the band of one to two deviation units each side the mean. There does appear, however, to be a loading of respondents within the bank of one deviation unit below the mean, indicating a trend towards a lower LSIA score. The range of the Beta scores runs from 31 to 5 compared to 27 to 7 for the Alpha home.

Table XIII presents the LSIA scores for the Gamma nursing home. With a mean of 16.4, the score is the lowest of the three groups and some 1.56 units below the "middle" score. The standard devaition unit is 5.77, which falls between the deviation units for Alpha and Beta.

The "z" score tabulation indicates that fourteen persons lie within one deviation unit either side the mean (56.0%). The rest of the eleven respondents all lie within two deviation units in either direction (100%). The curve appears quite plytokurtic with seven individuals lying in the negative area of one to two deviation units while ten of the respondents lie in the positive one area.

In general the results of the LSIA appear to lie in the direction of being lower than one would expect from a "normal" population of aged persons. The ranking of the nursing homes would be, according to mean value, Alpha, Beta, then Gamma.

The results of the measure of external integration is presented in Table XIV, Alpha Nursing Home; Table XV, Beta Nursing Home; and Table XVI, Gamma Nursing Home. The potential values range from sixty, for high external integration, to zero, for low external integration.

The mean score of the Alpha home lies toward the lower end of the possible range. The mean value of 14.5 is indicative of a cumulative score of less than one per item. The scores appear to be generally clustered within one deviation unit of the mean (71.4%), while 92.8% of the scores are within two deviation units. The final individual lies beyond two but within three deviation units above the mean (100%). The range of the scores are from 23 to 7 which would indicate a fairly compact distribution.

The mean score for the Beta home also lies in the lower end of the scale continuum. The mean value is 15.8. This is slightly higher than the Alpha mean and the standard deviation value of 5.76 compared to 3.85 would appear to indicate that the Beta scores are a little more heterogeneous than the Alpha scores.

The "z" score distribution points out that the distribution is somewhat skewed towards the "higher" scale score. While seventeen individuals (68.0%) lie within one deviation unit either side the mean, the majority (nine) are above the mean. In the area of one to two deviation units, an additional six individuals score. This accounts for 92% of the distribution. However, of those six individuals, five are on the positive side and only one on the negative side. The final two persons achieved "z" scores which place them in the positive three area of the "z" score distribution (100%). No individuals

TABLE XIV

EXTERNAL INTEGRATION OF ALPHA
NURSING HOME RESIDENTS

Individual	E-I Score	"z" Score
1	16	.32
2	11	- .90
3	13	- .29
4	15	.23
5	15	.23
6	23	2.14
7	19	1.18
8	17	.66
9	8	-1.59
10	7	-1.85
11	15	.23
12	12	- .72
13	13	- .46
14	18	.87
N = 14	Mean = 14.5	s = 3.85

TABLE XV

EXTERNAL INTEGRATION OF BETA
NURSING HOME RESIDENTS

Individual	E-I Scores	"z" Score
1	13	- .55
2	28	2.12
3	13	- .49
4	15	- .08
5	10	-1.01
6	18	.32
7	6	-1.64
8	27	2.00
9	14	- .31
10	21	.90
11	11	- .83
12	22	1.02
13	7	-1.59
14	18	.44
15	13	- .49
16	19	.50
17	17	.21
18	20	.67
19	14	- .37
20	6	-1.70
21	8	-1.30
22	15	- .08
23	21	.90
24	21	.90
25	18	.44
N = 25	Mean = 15.8	s = 5.76

TABLE XVI

EXTERNAL INTEGRATION OF GAMMA
NURSING HOME RESIDENTS

Individual	E-I Score	"z" Score
1	12	- .97
2	11	-1.17
3	6	-2.11
4	14	- .57
5	14	- .57
6	12	- .84
7	11	-1.04
8	19	.43
9	19	.43
10	22	1.67
11	17	.03
12	19	.43
13	17	.16
14	16	- .10
15	25	1.63
16	17	.03
17	24	1.57
18	22	1.03
19	24	1.50
20	16	- .17
21	15	- .37
22	18	.36
23	7	-1.91
24	24	1.50
25	14	- .44
N = 25	Mean = 16.5	s = 4.99

scored within these ranges on the negative side of the scale. This lends support to the statement of a skew in the "higher" scale score direction.

The Gamma nursing home residents obtained an overall score of 16.5. This value is higher than the other two homes. The deviation value of 4.99 would place the variation of the Gamma home between the variation of the Alpha home and the variation of the Beta home.

In looking at the "z" distribution, fifteen persons (60.0%) are within one deviation value either side the mean. Nine more are within two deviation units (96%). One, towards the negative end, is between two and three deviation units (100%). On the basis of the "z" distribution and the standard deviation value, the distribution of scores is fairly heterogeneous; as heterogeneous as the Beta home but more so than the Alpha distribution.

In terms of an overall view of the three homes, all three appear to lie on the "low" end of the scale continuum. The amount of external involvement would seem to be small. The residents seem to be somewhat isolated from the world outside the home, with the ordering from low to high being Alpha, Beta, and Gamma.

The sociometric data from the three homes was tabulated into standard sociometric diagrams, Figures 1, 2, and 3, and into a series of sociometric matrices, Tables XVII, XVIII, and XIX.

From the sociometric diagram and matrix representing the Alpha nursing home, it would appear that three individuals are very isolated. These are individuals number 9, 10 and 13. In the diagram, Figure 1, it is indicated that none of these three individuals were chosen nor chose any of the other persons in the home. Individuals number 1, 5,

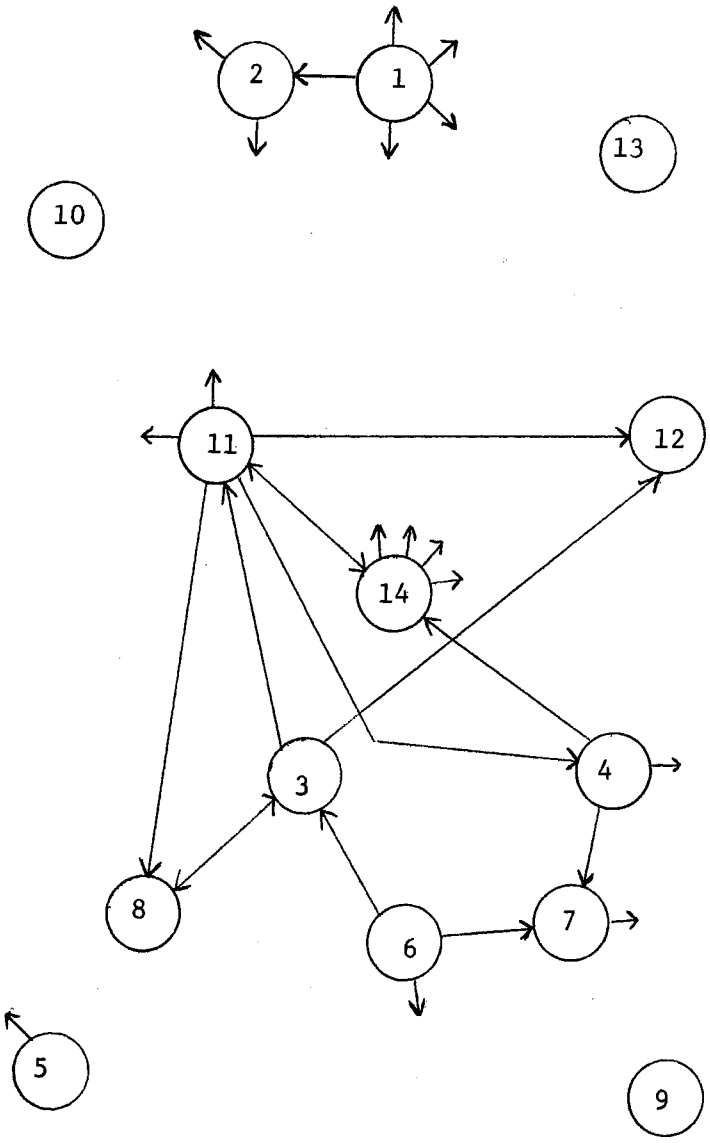

Figure 1: Sociometric Diagram for Alpha Nursing Home

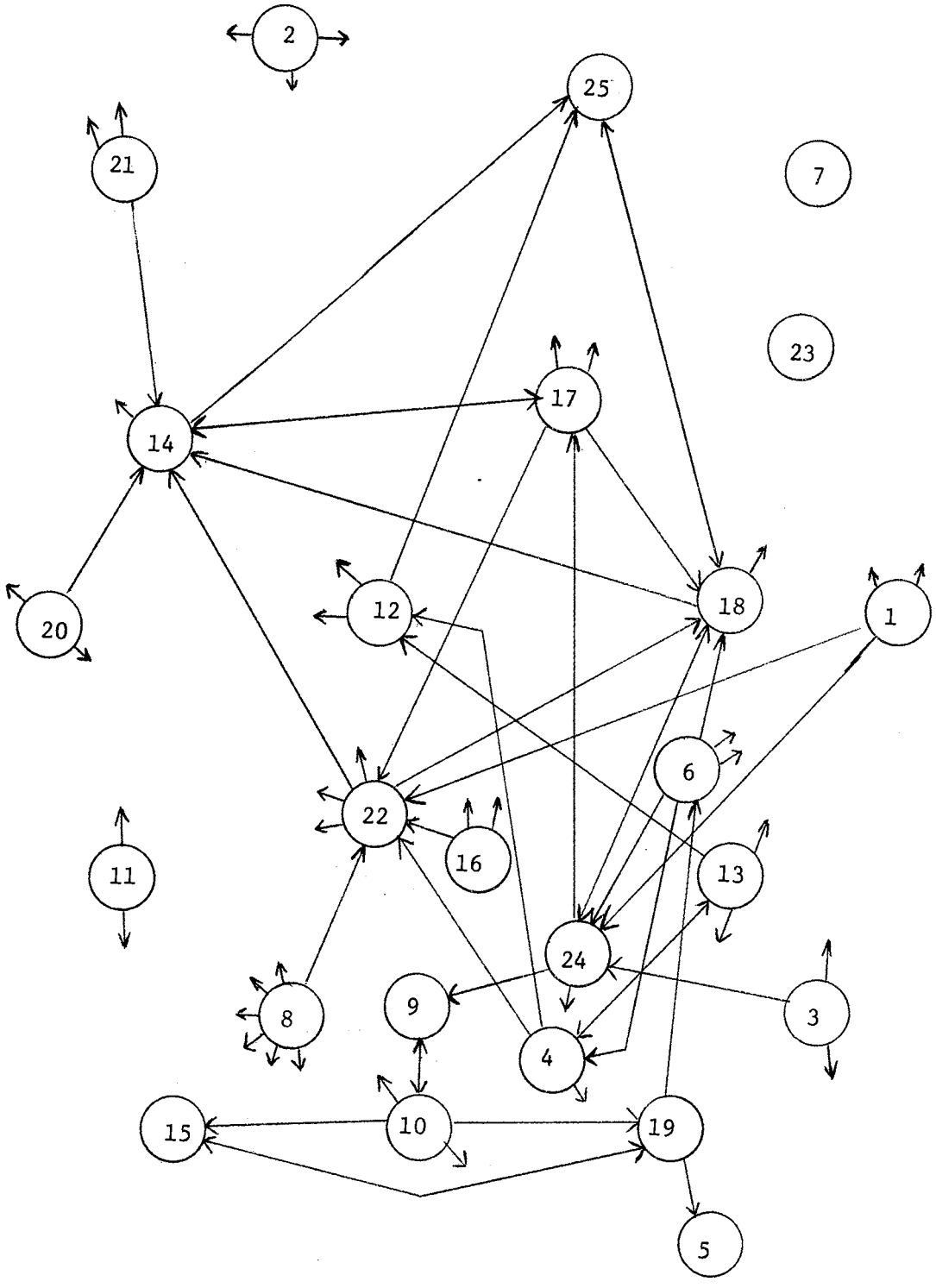

Figure 2: Sociometric Diagram for Beta Nursing Home

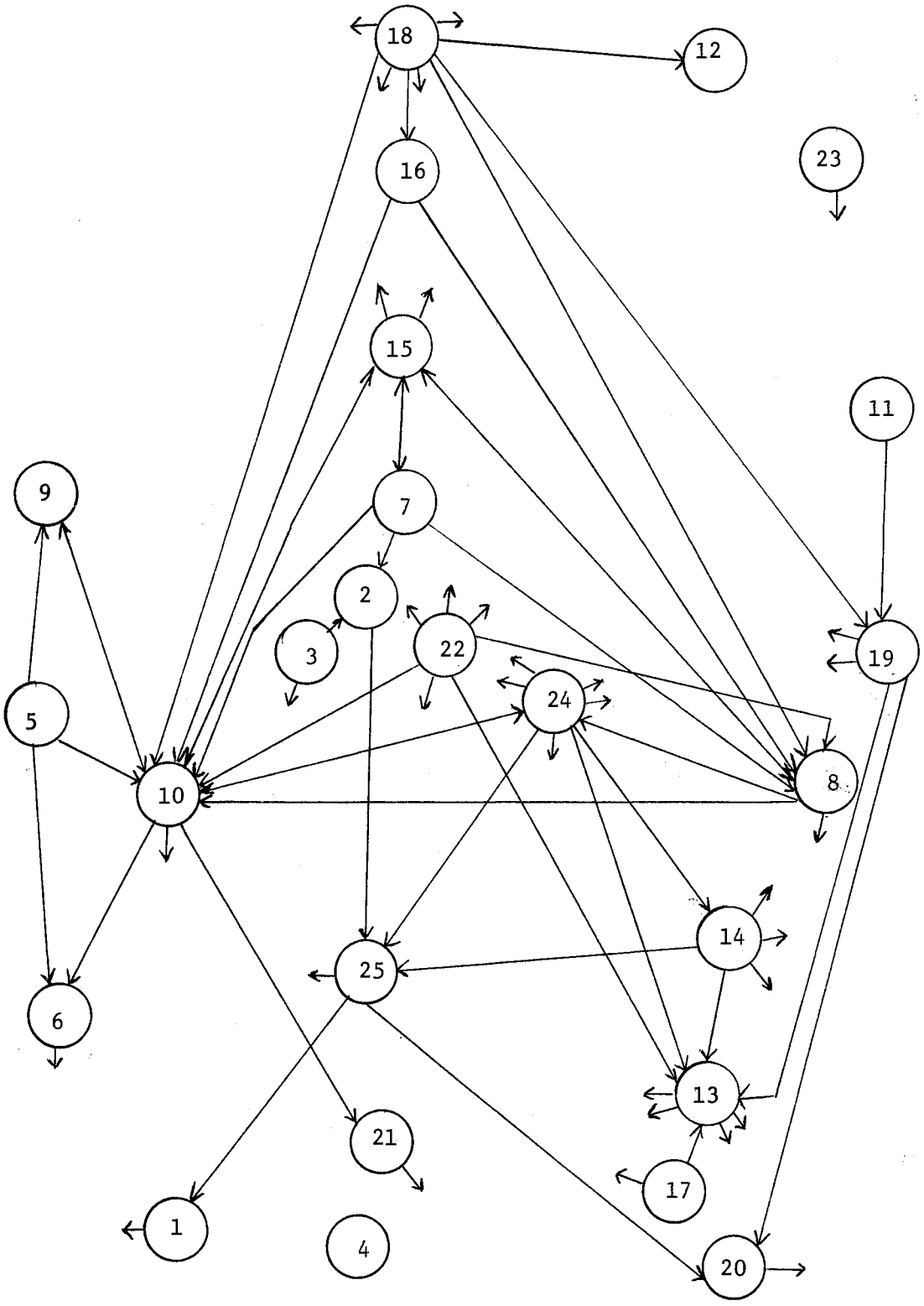

Figure 3: Sociometric Diagram for Gamma Nursing Home

TABLE XVII

SOCIOMETRIC MATRIX OF ALPHA NURSING HOME RESIDENTS

Individual Choosing \ Chosen	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Total
1		x													5
2															2
3								x			x	x		x	4
4							x							x	3
5															1
6			x				x								3
7															1
8			x												1
9															0
10															0
11				x				x				x		x	5
12															0
13															0
14											x				5
Total Chosen	0	1	2	1	0	0	2	2	0	0	2	2	0	3	

TABLE XVIII

SOCIOMETRIC MATRIX OF BETA NURSING HOME RESIDENTS

Individuals Choosing	Individuals Chosen																									
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	Total
1																						x		x		4
2																										3
3																								x		3
4												x	x									x				4
5																										0
6				x														x						x		5
7																										0
8																						x				7
9										x																1
10									x						x				x							5
11																										2
12																									x	3
13				x								x														4
14																	x					x			x	4
15																			x							1
16				x																		x				3
17														x				x						x		5
18														x										x	x	4
19															x											2
20														x												3
21														x												3
22														x				x								5
23																										0
24									x								x	x								4
25																		x								1
Total Chosen	0	0	0	3	1	0	0	0	2	1	0	2	1	5	2	0	2	5	2	0	0	5	0	5	3	

TABLE XIX

SOCIOMETRIC MATRIX OF GAMMA NURSING HOME RESIDENTS

Individuals Choosing	Individuals Chosen																									
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	Total
1																										1
2																									x	1
3		x																								2
4																										0
5						x			x	x																3
6																										1
7		x						x		x																3
8							x			x					x								x	x		6
9										x																1
10							x	x	x						x						x			x		7
11																			x							1
12																										0
13																							x	x		6
14													x											x	x	6
15							x	x		x																5
16								x		x																2
17													x													2
18									x	x		x				x			x							9
19													x							x						4
20																			x							2
21																										1
22								x		x														x	x	8
23																										1
24										x			x												x	9
25		x	x																	x						4
Total Chosen		1	3	0	0	0	1	3	5	3	9	0	1	4	0	2	1	0	0	3	2	1	2	0	5	4	

and 6 were not named by any of the other respondents. These three did, however, name other persons in the sample, or in the home, as indicated by the lines extending from the circle representing them indicate. Individual number 14 was the person named the most. Individual number 14 also was the person who was able to name the greatest number of people.

Figure 2 and Table XVIII represent the sociometric data from the Beta home. It is apparent from the data that two persons, numbers 7 and 23, would be considered as the most isolated in the Beta home. These two persons were not named, nor did they name anyone. Of the remaining persons, nine were not named by other persons in the sample. These are individuals number 1, 2, 3, 6, 8, 11, 16, 20, and 21. These nine persons did, however, name other people. Individuals number 14, 18, 22, and 24 are quite popular and these four form the nucleus of a clique in the home. The rest of the members of the home range between the two extremes with a variety being named and naming other persons. It might be noted that the person who had the most "out" choices in the Beta home is individual number 8.

Comparing the total number of choices made by the Alpha home with the total choices made by the Beta home, it is noted that the per person ratio of choices made by the Alpha home residents is 2.14. The same figure for the Beta home is 3.04. It is apparent that the people in the Beta home are better able to name persons in their surrounding environment.

In terms of the number of times being named, the Alpha home had 50% of the sampled population who were not named, while the Beta home had 48% who were not named.

The sociometric data for the Gamma nursing home is presented in Figure 3 and in Table XIX. One person, number 4, would appear to be isolated both in terms of being chosen and in choosing. That person did not name, nor was not named, by any other person in the sample. Seven other persons were not named by anyone else. These are number 3, 5, 11, 14, 17, 18, and 23. One of the persons, number 10, would seem to be quite popular, having been named nine times. Individuals number 8, 13, and 24 are fairly popular, having been named at least four times. The remaining residents fall somewhere between the two extremes with persons number 18 and 24 having named the highest number of other people. Individual number 10 is the central figure among the residents. This individual was named nine times by other residents and in turn named seven other people.

Comparing Gamma home to the other two homes, it is apparent that the ratio of per person choices is higher than either of the other two homes. The ratio for Gamma is 3.44. Gamma also had the lowest percentage of persons who were not named with a total of 32%.

In general, the residents of the Gamma home have the highest degree of interpersonal integration. While there appears to be one definite clique in this home, the ranking on per person choices and the relatively low percentage of persons not being named would indicate that it is somewhat more integrated on an interpersonal level.

The demographic data for the residents of the three homes is presented in Table XX. Looking at Table XX, it is evident that a number of residents have been in the homes for at least seven or more months. The three homes are comparable in terms of length of time residents stay, except that Beta has a slightly greater number who

TABLE XX

DEMOGRAPHIC DATA FOR NURSING HOME RESIDENT DATA

Characteristic	Alpha	Beta	Gamma	Total
Length of time resided in home				
0-3 months	4	7	5	16
4-6 months	2	3	0	5
7-12 months	1	7	7	15
13 mo.-2 yrs.	2	8	7	17
3-5 years	4	0	1	2
5 or more yr.	1	0	1	2
Living arrangement				
living alone	9	20	16	45
immediate relative				
relative	0	0	1	1
friend	1	0	0	1
housekeeper	0	3	1	4
Age				
under 60	1	1	0	2
61-64	0	1	1	2
65-69	2	0	2	4
70-74	2	3	2	7
75-79	2	5	1	8
80-84	2	6	5	13
85-89	2	7	6	15
90-94	2	0	6	8
95-100	1	2	2	5
Marital Status				
married	2	8	1	11
single	4	0	1	5
divorced	1	2	3	6
separated	0	0	1	1
widowed	7	15	19	41
Previous occupation				
housewife	2	6	12	21
blue-collar	2	4	0	6
white-collar	2	4	0	6
professional	1	10	3	14

TABLE XX (continued)

Characteristic	Alpha	Beta	Gamma	Total
Sex				
male	5	9	8	22
female	9	16	17	42
Race				
white	13	25	25	63
black	1	0	0	1
Degree of happiness				
very happy	4	3	2	9
pretty happy	5	10	14	29
not too happy	5	12	9	26
Confidant				
yes	9	19	15	43
no	5	6	10	21
Comparative happiness				
happier 5 years ago	9	19	15	43
about the same	5	6	3	9
happier now	0	0	0	0
Perceived health				
good	0	2	1	3
fair	1	5	3	9
poor	13	18	21	52
Educational attainment				
no high school	8	7	14	29
some high school	2	2	1	5
high school graduate	1	2	5	8
some college	2	5	0	7
college graduate	1	9	5	15
Religious preference				
protestant	11	20	20	51
catholic	1	2	1	4
jewish	0	1	0	1
other	2	1	2	5
none	0	1	2	3

have not lived in the home for an extended period of time. The preponderant number of these persons were also living alone at the time they entered the home.

Age appears to be well distributed, with a tendency of residents to be between the ages of 70 and 90. There was not a great distinction between the homes on bases of an age factor. In addition, most of the respondents were widowed, with a lesser number being married.

The majority of the respondents tend to be female with the greatest previous occupational attachment being housewife. There tends to be a few white-collar workers and a small number of professionals. It should be noted that the number of professionals tends to be concentrated in the Beta home which is located in a college community; therefore it might be suspected that many of the professionals might be retired college professors. In regard to other features, only one of the residents was non-white.

The majority of respondents specified that they were either pretty happy now or not too happy. Only a small proportion, particularly from the Beta and Gamma homes, indicated that they felt themselves to be particularly happy. A large number of residents are able to respond that there is someone in whom they feel they could confide their problems. Quite a few, however, do not have anyone in whom they can confide, particularly among the Gamma residents. Most of the residents feel that they were happier five years ago and most of them consider themselves to be in poor health. Educational attainment tends to be low with the Beta again having the highest educational level.

Summary

The data from the staff questionnaire and resident interviews found that all three homes ranked on the "humanitarian" side of the continuum in terms of the Custodial Maintenance Inventory. The rank order of the homes on the scale from most "humanistic" to least "humanistic" was Beta, Gamma, Alpha. In regard to the Machiavellian scale the staff members were generally opposed to the manipulation of people with a rank ordering of homes being Gamma, Alpha, Beta in regard to the home most opposed to manipulation of people to the home most in favor of it. The occupational value clusters revealed that in all three homes the most important expressed value was extrinsic-reward, then self-expression and finally, helping people. The demographic data suggests that the staff members of the Alpha and Gamma homes are comparable with a degree of uniqueness in the Beta home, probably the result of it being located in a college community.

The resident data from the homes rank residents lower on the life-satisfaction index than would be expected from a "normal" aged population living in the community. The ordering of homes from high to low life-satisfaction is Alpha, Beta, Gamma. The external-integration measure indicates that the nursing home residents do not have a highly involved contact with the external social world. The ordering of homes from the most to the least externally integrated was Gamma, Beta, Alpha. In terms of sociometric choices, a totaling of choice distributions suggests that the homes with the greatest degree of interpersonal integration is the Gamma home. The second is the Beta

home and the least is the Alpha home. The three homes are compatible in regard to demographic characteristics.

FOOTNOTES

[1]Hubert M. Blalock, Jr., Social Statistics, (New York, 1960).

[2]Richard P. Runyon and Audrey Haber, Fundamentals of Behavioral Statistics, 2nd Ed. (Reading, Mass., 1971), p. 83-84.

[3]N. M. Downie and R. W. Heath, Basic Statistical Methods, (New York, 1970) p. 112.

[4]Donald J. Veldman, Fortran Programming for the Behavioral Sciences, (New York, 1967).

[5]David L. Adams, "Analysis of a Life-Satisfaction Index," Journal of Gerontology, 24 (1969) pp. 470-474.

[6]B. L. Neugarten, R. J. Havighurst and S. S. Tobin, "The Measurement of Life-Satisfaction," Journal of Gerontology, 6 (1961) pp. 134-143.

[7]F. Gene Acuff, "Retirement, Meaning and Adjustment: The Emeritus Professor and Retired Clergy of a Southwestern State," (unpublished dissertation, University of Missouri, Columbia, June 1967).

CHAPTER IV

TESTS OF PROPOSITIONS

Statistical Tests

Three different statistical tests were employed in the data analysis. First, the one-way analysis of variance was used. This particular test was employed to evaluate the difference between the means of more than two samples.[1] The test assumes a normality of distribution, independent random samples, equal population standard deviations and tests the null hypothesis that the population means are equal.

Since the sample sizes of each of the three homes are unequal the technique of weighting the various samples was employed (see Appendix C for formula). While this type of test is essentially involved with computing differences in mean size, it does not work directly with the mean, but rather the variances of the sample.

The second statistical test used was the "t" test. The "t," for related as well as independent samples, is designed to determine whether two groups, as represented by their means, are statistically different. The magnitude of the "t" is crucially dependent upon the larger magnitude of the difference between group means. The larger the difference between the sample means, the larger the "t" value. The smaller the difference between sample means, the smaller the "t" value.

Since the "t" test works with means and standard errors of the means (see Appendix C for formulas) differences in variances of the samples may effect the value of the "t." The larger the variance, with small differences in the mean, the more the two samples tend to overlap. The smaller the variances, even though the mean differences remain the same, the less the overlapping of the two distributions. The assumptions of the "t" are that of a normal population, random sampling and interval measurement.

It should be further noted that the "t" was employed in cases where the samples compared had relatively small N's. As Downie and Heath point out "When the number of cases is small we used the 't' ratio, or Student's 't', instead of the normal probability tables in interpreting our ratios."[2] Since the "t" is particularly sensitive to sample sizes of less than 30, it seems that the "t" is an appropriate test.

The third statistical test was the Chi Square test. This particular test assumes independence of samples and discrete categories.[3] The Chi Square allows the researcher to categorize his data into discrete units and to perform a test of relationship between an independent and a dependent variable. This allows an indication of the degree of association existing between the two measures.

Since sociometric data cannot be assumed to be on an interval scale, the Chi Square would be appropriate; particularly where the drawing of categories of a socially integrated as opposed to a non-integrated individual was concerned.

Tests of the Major Propositions

The first question dealt with the nursing home personnel and the degree of espoused differences in institutional efficiency. A "t" test comparing each of the three homes to one another was computed. The results of the test appear in Table XXI.

TABLE XXI

COMPARISON OF NURSING HOME STAFF'S AND CUSTODIAL MAINTENANCE INVENTORY SCALE SCORES (t VALUES)

Home	Alpha	Beta	Gamma
Alpha		1.57	.85
Beta			.82
Mean	-10.6	-18.2	-14.9
	N = 15	N = 31	N = 24

The results of the "t" indicate that there is no significant difference between the homes in degree of espoused institutional efficiency. While the Alpha and Beta nursing homes do have a fairly large difference in their means, due to the large variances within each of the samples, the difference does not result in significance at the .05 level.

All three homes rank on the "humanitarian" side of the continuum and a rank-order of the three homes would place Beta, Gamma, then Alpha as the order towards "humanitarianism" and away from institutional efficiency.

Table XXII presents the results of the "t" independent for the K-M scores.

TABLE XXII

COMPARISON OF NURSING HOME STAFF'S AND KIDDIE MACHIAVELLIAN SCALE SCORES (t VALUES)

Home	Alpha	Beta	Gamma
Alpha		-.91	1.43
Beta			2.61*
Mean	-22.4	-19.3	-27.4
	N = 15	N = 31	N = 24

*p = .012

The results of the particular series of tests indicates that there is a significant difference between the Beta and the Gamma homes in terms of manipulation of people in interpersonal situations. The mean of -27.4 would place the Gamma staff as most in opposition to the manipulation of persons. With a mean of -22.4, the Alpha home would be ranked second in its opposition to manipulation. The Beta home would be ranked third.

In order to find out if the Custodial Maintenance Inventory and the Kiddie-Machiavellian Scale were measuring similarly in each of the three homes, a "t" for related samples was computed using the three homes as three separate samples. The results are presented in Table XXIII.

In one of the homes, Beta, the C.M.I. and the K-M scales are measuring approximately in the same way. That is, there is no significant differences between the scores obtained on the C.M.I. Scale and the scores obtained on the K-M scale.

TABLE XXIII

COMPARISON OF NURSING HOMES ON CUSTODIAL MAINTENANCE INVENTORY VALUES AND KIDDIE-MACHIAVELLIAN VALUES (t VALUES)

Alpha	t = -2.13	df = 14	p > .06
Beta	t = - .40	df = 30	p > .05
Gamma	t = -3.57	df = 23	p = .002

In Alpha, the "t" test is not significant at the .05 level, but is at the .06 level. It may be tenable that the two dimensions are different, or at least are being measured differently in the Alpha nursing home.

The Gamma home has a "t" value which is significant at the .05 level. Thus, in the Gamma home, the C.M.I. and the K-M values do differ, or at least the scales measured them differently.

As a result of the "t" for related samples test, it may be tentatively concluded that C.M.I. and K-M are different phenomena. That is, Custodial Maintenance is situationally determined phenomenon while Machiavellianism is a more general personality characteristic.

In the testing of the proposition, the next step was to evaluate the degree of integration achieved in each of the three homes. The results of the "t" independent are presented in Table XXIV.

The results of the test indicate that the homes do not differ in terms of the external integration which its residents have experienced. The mean differences are so small that the three homes may represent three replications, rather than three different situations.

TABLE XXIV

COMPARISON OF NURSING HOME RESIDENTS ON EXTERNAL INTEGRATION VALUES (t VALUES)

Home	Alpha	Beta	Gamma
Alpha		- .81	-1.42
Beta			- .40
Mean	14.45	15.80	16.52
	N = 15	N = 25	N = 25

The test of interpersonal integration involved the operationalization of differing levels of integration which a person may achieve. In this regard a person who is HIGH in interpersonal integration was defined as having been chosen by at least two people and having chosen at least three. A person of MEDIUM integration was defined as having chosen at least one person. A person who is considered LOW in integration is a person who was neither named by any other person, nor named another person.

With this operationalization, the results of the Chi Square test is presented in Table XXV. The Chi Square value is not significant at the .05 level. This provides the tenable conclusion that the three homes do not differ in terms of the interpersonal integration experienced by the members of the institution.

The results of the test of the first proposition is as follows: the degree of institutional efficiency espoused by members of the nursing home's staff does not vary from institution to institution and the degree of social integration which the residents have experienced does not vary from institution to institution.

TABLE XXV

COMPARISON OF THREE HOMES ON INTERPERSONAL INTEGRATION

Integration	Alpha	Beta	Gamma	Total
High	2(4.2)	8(7.4)	9(7.4)	19
Medium	5(3.7)	5(6.6)	7(6.7)	17
Low	7(6.1)	12(10.9)	9(10.9)	28
Total	14	25	25	64
df = 4	$x^2 \approx 2.89$		p = .479	

The second major proposition, that the level of morale of the nursing home resident was directly related to the degree of social integration which he has achieved, was tested on both the external integration and interpersonal integration levels. The results of the external integration test is presented in Table XXVI.

TABLE XXVI

COMPARISON OF EXTERNAL INTEGRATION AND LIFE-SATISFACTION INDEX SCORES OF RESIDENTS

LSIA	External Integration			
	High	Medium	Low	Total
High	5(2.4)	6(7.1)	0(1.5)	11
Medium	9(9.0)	28(26.2)	5(5.8)	41
Low	1(2.6)	7(7.7)	4(1.7)	12
Total	14	41	9	64
$X_c^2 = 4.16$		df = 4		p = .386

In Table XXVI, HIGH external integration was operationalized as beyond one standard deviation above the mean. MEDIUM external integration was defined as falling between one deviation unit below and one deviation unit above the mean. LOW external integration was defined as falling lower than one deviation unit below the mean.

In the same table, HIGH-LSIA was defined as beyond one deviation above the mean. MEDIUM-LSIA was defined as between one deviation above and one deviation below the mean. LOW-LSIA was defined as below one deviation on the negative side of the mean.

The Chi Square Correction for Continuity was applied. This particular test involves subtracting .5 from the differences between the expected and observed frequencies, prior to squaring. The correction for continuity is applied when a number, usually 20%, of the expected frequencies of the cell is less than five. In the case of Table XXVI, four of the cells have an expected frequency of less than five.

The results of the test indicate that the relationship between external integration and LSIA scores is not significant at the .05 level. The tenable conclusion is that these two variables are not related and are in fact independent of each other.

The test of interpersonal integration and LSIA scores is presented in Table XXVII.

Interpersonal integration and LSIA are separated into high, medium and low in the same way as before. The correction for continuity was employed since four of the cells had an expected frequency of less than five.

The Chi Square test was not significant at the .05 level. The tentative conclusion reached is that the degree of interpersonal

integration and the score achieved on the Life-Satisfaction Index are not related.

TABLE XXVII

COMPARISON OF INTEGRATION AND LIFE SATISFACTION INDEX SCORES (CHI SQUARE VALUE)

LSIA	Interpersonal Integration			
	High	Medium	Low	Total
High	3(3.6)	4(3.2)	5(5.2)	12
Medium	13(12.2)	9(10.9)	19(17.9)	41
Low	3(3.2	4(2.9)	4(4.9)	11
Total	19	17	28	64
$X_c^2 = 0.32$		df = 4		p = .986

By operationalizing HIGH external integration as above the grand mean (15.8), and LOW external integration as below the grand mean, a Chi Square test was computed evaluating the relationship between external integration and interpersonal integration. The results are presented in Table XXVIII.

The Chi Square test was not significant at the .05 level. The tentative conclusion is that external and interpersonal integration are not related. While the cells of high-high and low-low are loaded somewhat larger than any of the other cells, this is masked by relatively large values in the other cells.

TABLE XXVIII

COMPARISON OF EXTERNAL INTEGRATION AND INTERPERSONAL INTEGRATION VALUES (CHI SQUARE VALUES)

Integration / Interpersonal	High	Low	Total
High	13(8.9)	6(10.1)	19
Medium	6(8.0)	11(9.0)	17
Low	11(13.1)	17(14.9)	28
Total	30	34	64
$x^2 = 5.13$	df = 4		p = .200

Tests of Exploratory Propositions

Since the above statistical tests indicate that the nursing home staffs do not differ on attitudes towards institutional efficiency, and that only the difference between Gamma and Beta appear to be significant on the Machiavellian scale, the three homes are considered to be replications of the same situation. That is, each of the three homes represents only one aspect of the same phenomenon. It might further be suggested that differences in attitudes of staff members may not lie in the fact that they are situated in a particular home, but rather from some characteristic of staff personnel in general.

In view of the above, the three homes were combined to form a single population. From the population thus constructed, statistical tests were run to identify differences among staff members on

demographic characteristics. The statistical tests employed were the F test, for more than two subgroups and the "t" test for two subgroups.

None of the F tests proved significant at the .05 level and were deleted from the present study. According to Snedecor and Cochran,[4] while the F for the overall groups may not prove to be significant, it is possible that the difference between two of the subgroups may prove significant. It was decided to compute the "t" test on each of the possible subgroup combinations to locate where, if any, differences exist. It should be noted that when this procedure was followed it is possible that .05 percent of the comparisons may prove significant by chance, therefore any significant result must be interpreted with care.

Tables XXIX and XXX present the comparison "t" for each of the four possible professional levels. In Table XXIX the status of professional nurse is significantly different on the C.M.I. scale. The statistical tests comparing this group to the other three is significant at the .05 level on all of the tests. By looking at the comparison means, one can see that the registered nurse ranks much more toward the "humanitarian" end of the C.M.I scale than any of the other three statuses.

While it is not statistically significant, the licensed practical nurse would also appear to rank somewhat higher than the other two professional levels. This may be an indication that professionals, as represented by R.N.'s and L.P.N.'s, are much more "people-oriented," perhaps in part a result of professional school socialization.

TABLE XXIX

COMPARISON OF DIFFERENT PROFESSIONAL STATUSES ON CUSTODIAL MAINTENANCE INVENTORY (t VALUES)

Status	R.N.	L.P.N.	Aide	Other
R.N.		-3.67@	-2.57*	-3.13#
L.P.N.			-1.55	-1.08
Aide				0.57
Mean	-43.0	-22.2	-12.6	-14.8
	N = 3	N = 6	N = 38	N - 23

@p = .005 *p = .008 #p = .013

TABLE XXX

COMPARISON OF DIFFERENT PROFESSIONAL STATUSES ON KIDDIE-MACHIAVELLIAN SCALE (t VALUES)

Status	R.N.	L.P.N.	Aide	Other
R.N.		0.55	-0.13	-0.15
L.P.N.			-0.73	-0.66
Aide				-0.09
Mean	-23.3	-26.0	-22.5	-22.2
	N = 3	N = 6	N = 38	N = 23

Table XXX presents the comparison figures of the professionals on the Machiavellian Scale. None of the differences between the means appeared statistically significant at the .05 level. An inspection of the means indicates that the mean score of all four groups is relatively close. The L.P.N. mean is somewhat higher than any of the other three, but again it is not statistically significant.

The comparison of differing age levels are presented in Tables XLVIII and IL (Appendix D). The "t" tests on the C.M.I. scale did not prove to be significant in any of the cross-tests. An inspection of the means would indicate a possible relationship between age at the higher end of the scale (46-65) when compared to the group below 45. The means do appear to be somewhat higher, indicating more "humanitarianism" among the younger age groups. However, due to the variances within each of the groups, none of the comparisons proved to be significant.

The results of the Machiavellian scale are presented in Table IL (Appendix D). None of the age comparisons are significant at the .05 level. The age grouping with the "highest" attitude towards the manipulation of people in interpersonal situations was the category between 18 and 25. The group with the "lowest" attitude toward manipulation of people in interpersonal situations was the group between 56 and 65. While this may be important, the small "n" of the 56-65 age group and the large value of the standard error of the difference masked any significant relationship.

Tables XXI and XXXII present the results of the comparisons on various lengths of tenure within the nursing home. There is a significant difference between those individuals who have worked in the

TABLE XXXI

COMPARISONS ON LENGTH OF TENURE AND CUSTODIAL MAINTENANCE INVENTORY SCORES (t VALUES)

Time	0-6 m.	7-12 m.	13m.-2 yr.	3-4 yr.	5+ yr.
0-6 m.		-1.22	-0.72	-2.01*	-0.71
7-12 m.			0.45	-0.88	-0.13
13 m.-2 yr.				-1.23	-0.34
3-4 yr.					0.55
	N = 32	N = 12	N = 17	N = 7	N = 2

*p = .049

TABLE XXXII

COMPARISONS ON LENGTH OF TENURE AND KIDDIE-MACHIAVELLIAN SCORES (t VALUES)

Time	0.6 m.	7-12 m.	13m.-2 yr.	3-4 yr.	5+ yr.
0-6 m.		0.73	2.61*	1.34	1.44
7-12 m.			1.15	0.48	0.76
13 m.-2 yr.				-0.49	0.43
3-4 yr.					0.66
	N = 32	N = 12	N = 17	N = 7	N = 2

*p = .012

nursing home for less than six months and those individuals who have worked there for 3-4 years. The mean C.M.I. for the youngest age group was more in the direction of "humanitarianism," while the 3-4 year group had the lowest mean. It might further be noted that while the statistical tests did not prove significant, the groups who have been in the home the longest have the "most" favorable attitude towards institutional efficiency.

The Machiavellian scale results are tabulated in Table XXXII. There was a significant difference between those who have worked in the home from between one day and six months and those who have worked between one and two years. While the largest mean is located in the group who has worked for more than five years, the small "n" and the large standard error of the difference would render this value as non-significant.

It may further be noted that in Table XXXII the two groups which are new have the lowest means while those who have an apparent longer tenure have the highest means. This suggests that the newer group is somewhat more favorable towards the manipulation of persons in interpersonal situations.

Marital status is compared in Table XXXIII and Table L (Appendix D). The first table shows that those who are divorced are significantly more in favor of institutional efficiency than are the other groups. These differences are significant at the .05 level.

The groups with the mean closest to the divorced group are those who have been separated. The difference between these two groups is not statistically significant at the .05 level. It is tenable, that

being divorced, or perhaps separated, is related to the degree of institutional efficiency which one espouses.

TABLE XXXIII

COMPARISON OF MARITAL STATUS ON CUSTODIAL MAINTENANCE INVENTORY (t VALUES)

Status	Single	Married	Divorced	Separated
Single		-0.52	-2.41*	-0.57
Married			-2.29@	-0.38
Divorced				1.01
Mean	-18.25	-16.12	0.20	-12.00
	N = 20	N = 43	N = 5	N = 2
	*p = .023		@p = .025	

Table L presents the "t" tests comparing marital status and the Machiavellian scores. None of these statistical tests are significant at the .05 level. Inspection of the means of the four groups indicates that the two groups which are most divergent in their scores are those who were separated and those who were divorced. The single and married groups fall between the other two groups.

Table LI (Appendix D) indicates the results of the comparison tests on educational levels and C.M.I. values. None of the statistical tests on C.M.I. scores proved to be significant. While the category of "no high school" had the lowest overall mean, and the category of "special training" proved to have the highest mean, this difference was not significant at the .05 level.

It does appear, however, that there may be a slight relationship between educational attainment and C.M.I. scores. The means of the

groups appear to increase as an individual moves from not having attended college to having special training. The one divergent group from this trend are those who have had some college, but who have not graduated from college.

Table XXXIV has two comparisons which are statistically significant at the .05 level. These are comparisons between the category of "no high school" and the categories of "high school graduate" and "some college." From the means those who have not gone to high school are the people who are most opposed to the manipulation of people. While the categories of high school graduate and some college are not the most in favor of manipulation of people, the deviations about the mean is small enough to render these as significantly different from the "no high school" category.

TABLE XXXIV

COMPARISON OF EDUCATION ATTAINMENT ON KIDDIE-MACHIAVELLIAN SCORES (t VALUES)

Education	No H.S.	Some H.S.	H.S. Grad	Some Coll.	Coll. Grad	Special Training
No H.S.		-1.59	-2.31*	-2.16@	-1.42	-1.81
Some H.S.			0.05	-0.49	-0.92	0.50
H.S. Grad				-0.66	-1.21	0.56
Some Coll.					-0.80	1.20
Coll. Grad						1.48
Mean	-35.00	-22.46	-22.67	-20.25	-13.33	-24.45
	N = 3	N = 13	N = 15	N = 16	N = 3	N = 20

*p = .032 @p = .042

The "t" values in Table LII (Appendix D) suggest that the number of hours per week does not make a difference in the espoused institutional efficiency by staff members. None of the comparison tests proved to be significant at the .05 level. The means, however, indicate that those who work from 20-40 hours per week have the highest degree of espoused institutional efficiency. The mean score of this category is quite a bit smaller than either of the other two groups.

Table LIII (Appendix D) indicates no significant differences in Machiavellian scores and hours worked per week. There is a slight relationship, as indicated simply by the mean scores, between an increase in the number of hours worked and the decrease in manipulation of people scores. This relationship is, however, too weak to be significant.

Tables LIV (Appendix D) and XXXV present the comparison tests of males to females on the C.M.I. and K-M scales respectively. In terms of C.M.I., the males and females do not differ significantly on achieved score. The means indicate that males may be slightly more "humanitarian" but this difference is not slight due to large variances.

TABLE XXXV

COMPARISON OF MALES TO FEMALES ON KIDDIE-MACHIAVELLIAN SCORES (t VALUES)

Sex	Male	Female
Male		2.10*
Mean	-14.88	-23.73
	N = 8	N = 62

The Machiavellian scale differences between males and females is significant at the .05 level. Males are significantly more in favor of the manipulation of people than females.

To summarize the tests of the different categories and C.M.I.--K-M values, it should be noted that there are significant differences in C.M.I. scores between registered nurses and other professional levels. A significant difference was found between those who have worked for a comparatively short period of time in the home and those who worked between three and four years. There was also a significant difference between those who are divorced and those who are either married or single.

In regard to the K-M scale there is a significant difference between those who have worked a relatively short period of time and those who have worked between one and two years. The newer employees are significantly more in favor of the manipulation of people. There is also a significant difference between males and females, with males being more in favor of the manipulation of people than females.

The resident samples were grouped together to form a single population on which "t" tests were performed on the demographic variables. Since the F tests of resident data did not prove significant, they were deleted.

Table LV and LVI (Appendix D) present the results of the "t" text comparing various lengths of residence and LSIA scores. The first table found no significant relationship between the amount of time a resident has been in an institution and the subsequent LSIA value. There is a "low" LSIA mean at the four to six month period, but this is not significant when compared with the other time periods.

There does not appear to be a clear cut trend in the scores. It must be tentatively concluded that there is no relationship between length of stay and life-satisfaction.

Table LVI suggests that there is no significant relationship between the person's external integration score and length of residence. While the lowest level of external integration is displayed by those persons who have been in the home for five or more years, there does not appear to be a significant trend in that direction. The tentative conclusion must be accepted that length of residence and external integration are not related.

Since social integration cannot be considered to be an interval scale measure, the non-parametric Chi Square test is employed in testing whether interpersonal integration is significantly related to various demographic variables.

The result of the Chi Square comparison for length of residence and interpersonal integration is presented in Table LXX (Appendix E).

The computed Chi value falls beyond the .05 level for four degrees of freedom. The conclusion is that no significant relationship exists between length of residence and interpersonal integration. While the comparison value is not significant, a trend may be suggested from the data. That is, persons who have entered the home less than six months ago have not yet established interpersonal ties. Particularly the type of ties that those who have been there more than six months and less than two years have established. This would seem plausible, since it does take time to begin forming friendship groups and intimate relationships. It should be noted, however, that this relationship is not statistically significant.

The prior living arrangements of the individual are compared against LSIA Scores in Table LVII (Appendix D). None of the comparison "t" tests proved to be statistically significant. A trend, however, is suggested. Looking at the mean values on LSIA, the two groups which have the lowest values are those persons who were living along, or with an immediate relative. The characteristic of living along may begin producing a decreased satisfaction with life, while living with the immediate relative may place a strain upon the individual also producing a decreased satisfaction with life.

The two highest mean LSIA values are those persons who indicated that they were living with a relative, other than immediate family, or who were living with a friend at the time of their admittance. This might be suggestive of a trend towards higher satisfaction when living with another person, other than family. The small number of cases in each of these two categories would, however, make such a proposition highly suspect.

Table LVIII (Appendix D) suggests that there is no significant relationship between external integration and previous living arrangement. None of the comparison tests proved to be statistically significant.

The means indicate that the strongest external integration was experienced by the person who was living with a relative, other than immediate family. The "n," however, is only one. This would preclude any type of general statement. Other than the single high mean, the remaining four are relatively close to each other. Those who were living with a housekeeper are perhaps somewhat lower than

the remaining, which may be suggestive of a situation of absence of external integration, but the trend is not clear.

The Chi Square test comparing prior living arrangement and interpersonal integration is presented in Table LXXI (Appendix E). This relationship was not significant at the .05 level.

Appraising the cell totals, the persons who have the lowest interpersonal integration might be those persons who were living with someone prior to their admittance into the nursing home situation. Over half of all persons who were living with another person indicated "low" interpersonal integration. Those who were living by themselves tend to be distributed throughout the cells.

It may be that persons living alone welcome the opportunity to establish intimate personal relationships. Social competency skills may have diminished, yet finding other persons with whom to share things is favorable. Abilities to re-establish social ties are evident. Persons who were living with someone at the time of admittance may miss the relationship and fail to "re-integrate" successfully. Whichever of the above is correct, the data indicates that those who were living alone achieve interpersonal integration while those who were living with someone do not.

The comparisons of different age levels and LSIA scores are presented in Table XXXVI. Four of the comparisons are significant at the .05 level. The reader is reminded that when a number of comparison "t"'s are computed, the researcher runs the risk of having five percent be significant by chance. This might be the case with the three comparisons, however a trend might be noted.

TABLE XXXVI

COMPARISON OF AGE LEVELS ON LIFE-SATISFACTION INDEX SCORES (t VALUES)

Age								
-56	56-60	61-64	65-69	70-74	75-79	80-84	85-89	90-94
-56	2.56	.60	.43	-0.23	.79	1.14	2.13	.77
56-60		-1.69	-1.60	-2.84*	-2.10	-1.04	-0.78	-0.73
60-64			-0.15	-1.15	.01	.74	1.61	.49
65-69				-1.03	.25	1.08	1.86	.70
70-74					1.71	2.40'	3.51@	1.66
75-79						1.18	2.27#	.78
80-84							.87	-0.02
85-89								-0.61
Mean								
21.5	10.5	18.5	19.1	22.5	18.5	15.7	13.4	15.8
N=2	N=2	N=4	N=7	N=8	N=13	N=15	N=8	N=5

*p = .024 'p = .004 @p = .004 #p = .009

It appears from the data that the age group between 70 and 74 are significantly higher on the LSIA values than are either the age groups from 80-84 or 85-89. It is also evident that the age group from 75 to 79 is significantly different than the age group from 85 to 89. Perhaps, the period from 70 to 80 is not as hard upon the nursing home resident as is the period from 80 to 90. The literature is suggestive that a "health break" occurs sometime during the age period of after 70. It may be that this event intervenes and results in a lower LSIA score.

One of the comparison "t"'s is significant at the .01 level in Table XXXVII. The age level of 70-74 is significantly higher than the age level of 75-79. While this could well be a measurement

artifact, perhaps this is the group which has just suffered the greatest amount of immediate set-back as a result of entrance into the home. Potentially this is a new group of residents who have not adequately adjusted to their situation.

TABLE XXXVII

COMPARISON OF AGE LEVELS ON EXTERNAL INTEGRATION SCORES (t VALUES)

Age								
-56	56-60	61-64	65-69	70-74	75-79	80-84	85-89	90-94
-56	1.18	-0.15	-0.16	-0.64	1.09	-0.11	-0.07	.28
56-60		-1.44	-1.65	-2.06	-1.36	-1.20	-1.37	-0.80
61-64			.01	-0.61	1.58	.01	.09	.51
65-69				-0.74	1.82	.01	.11	.62
70-74					2.88*	.66	.81	1.20
75-79						-1.43	-1.60	-0.47
80-84							.09	.55
85-89								.51
Mean								
16.0 N=2	10.3 N=4	16.6 N=4	16.6 N=7	18.4 N=8	13.6 N=13	16.6 N=15	16.3 N=8	14.6 N=5

*p = .010

Dividing the age categories into younger, below 70; medium, between 70 and 84; and older, 85 and beyond; the Chi Square comparison of interpersonal integration levels is presented in Table LXXII (Appendix E).

The relationship is not significant at the .05 level. That is, age and interpersonal integration are not related. From the table, it would appear that the category which has the largest proportion of individuals scoring in the "low" integration category is the younger

age group. Well over one-half of all the younger persons were distributed in the category of not being interpersonally integrated.

The age category from 70-84 is about evenly split between "high" and "low" integration, with a number on the "medium" level. The "oldest" category seems to be fairly evenly split between all three integration levels, with the highest number being in the "medium" level.

A trend towards lesser integration for the younger age group might be suggested, although not statistically significant.

Table LIX (Appendix D) represents the "t" comparisons for the various marital statuses and the LSIA values. None of the comparison tests proved significant at the .05 level.

Looking at the "n" and the mean of each category, the category with the highest LISA value is the group who have never been married, while the lowest score are those who are separarated or are currently married.

Discounting the "separated" category due to so small an "n," certain things may be said about the LSIA results. First, it may be suggested that the singles score higher on the LSIA index primarily because they have learned to adjust to the situation of being alone. Perhaps throughout the course of their life, they have developed a satisfaction with what they as individuals are able to accomplish and have not developed a dependency upon other persons. Thus, they may not be as dissatisfied with the current situation of nursing home residents.

Second, it may be that those individuals who are married have come to expect an independence from external sources. To be in a

nursing home and dependent upon staff and administration may be antithetical to the independence that they had established throughout their lives as married persons, or perhaps one of the married pair is in the nursing home, while the other is not.

Third, the divorced and widowed follow the pattern established in the single and married groups. That is a trend towards a degree of independence being achieved by those who were living alone and "dependence" upon being "independent" by those who are married.

The results of the comparison between marital status and external integration scores is presented in Table XXXVIII. Two of the comparison tests are significant at the .05 level. The married are much less integrated with the external world than are either the divorced or the widowed.

TABLE XXXVIII

COMPARISON OF MARITAL STATUS ON EXTERNAL INTEGRATION SCORES (t VALUES)

Status	Married	Single	Divorced	Separated	Widowed
Married		-1.06	-2.93*	-0.69	-3.43#
Single			-1.21	-0.06	-1.27
Divorced				.74	.16
Separated					-0.52
Mean	11.2	13.9	17.4	14.3	17.0
	N=11	N=5	N=6	N=1	N=41

*p = .002 #p = .004

Perhaps in the case of divorced, substitutes for having been married involved an integration with world activities. Perhaps this is also the case of the widowed person. That is, as ties of familial relationships disintegrate, substitute activities which result in an increased social integration score.

The raw number results of interpersonal integration and marital status are presented in Table XXXIX. The raw scores are presented without the calculation of a Chi Square test, primarily because of small "n"'s in a number of categories. While it is possible to group categories to achieve a larger "n" in a number of cells, this would be impractical in the present case. The only practical alternative would be to group those who have been married with those who have never been married, or with those who are divorced or separated. If this were done, the first category would have 52 cases while the second only 12 cases.

The raw score results indicate that those individuals who are widowed are quite mixed in terms of interpersonal integration. A number of them seem to have been able to establish intimate contacts with other people. A large number have not been able to establish these contacts.

An unusual finding presents itself in the married category. None of the married individuals ranked "high" in interpersonal integration. It may be tentatively suggested that perhaps married persons in a nursing home tend to "stick" together without seeking interaction with other persons around them. This would result in their not being named, nor naming other persons.

TABLE XXXIX

RAW SCORE RESULTS OF COMPARISON OF MARITAL STATUS AND INTERPERSONAL INTEGRATION

Marital Status						
	Married	Single	Divorced	Separated	Widowed	Total
Integration						
High	0	1	1	0	17	19
Medium	5	1	1	0	10	17
Low	6	3	4	1	14	28
Total	11	5	6	1	41	64

The computed "t" values comparing occupations and LSIA scores are presented in Table XL. The computations indicate that there is no significant relationship between previous occupation and life-satisfaction score. While the professionals rank highest on the scale, perhaps indicating a continued participation in occupational interests, the differences are not strong enough to establish a significant relationship.

TABLE XL

COMPARISON OF PREVIOUS OCCUPATION ON LIFE-SATISFACTION INDEX SCALES (t VALUES)

Occupation	Housewife	Day Laborer	Skilled	White Collar	Professional
Housewife		.62	.68	1.40	-0.68
Day Laborer			.30	1.07	-1.26
Skilled				.54	-1.06
White Collar					-1.77
Mean	18.0 N=20	16.7 N=18	15.8 N=6	13.8 N=6	19.6 N=14

It should be noted that the category with the second highest mean are the housewives. While this might not be called an occupation, their mean score is somewhat higher than the day laborer, skilled or white collar worker. The white collar worker scored the lowest life-satisfaction of all five groups. It may be suggested that this group has the highest amount of attachment to an occupation and they are not able to continue the contact, as are the professionals. Whereas the blue collar, and perhaps the skilled, though less so for the latter group, do not find principle attachment via the occupation, the white collar worker does. Yet the white collar worker lacks the encouraged occupational interests after retirement as in the case of the professional.

Table XLI represents the "t" values comparing the occupations on the external integration measure. None of the comparison "t"'s prove to be significant. The means tend to indicate a trend similar to the one in the LSIA scores, with only a slight variation. It appears that in terms of external integration, the housewife and the professional are the most highly integrated. On the other hand, the skilled and the white collar again rank the lowest on the scale. This might substantiate the proposition that the white collar, and to a lesser extent the skilled, find attachments through their occupations. These attachments appear to lack replacement after retirement.

The computations comparing categories of white collar and professional were collected together. The occupational categories of day laborer and skilled were combined.

The results of the Chi Square computations indicates that there is no significant relationship between occupational level and the

degree of social integration which a person has achieved. Also, by looking at the cell totals, it would appear there is no major evident trend.

TABLE XLI

COMPARISON OF PREVIOUS OCCUPATION ON EXTERNAL INTEGRATION SCORES (t VALUES)

Occupation	Housewife	Day Laborer	Skilled	White Collar	Professional
Housewife		.88	1.47	1.74	.59
Day Laborer			.79	1.10	-0.20
Skilled				.40	-0.88
White Collar					-1.14
Mean	17.2 N=20	15.6 N=18	13.8 N= 6	12.9 N= 6	16.0 N=14

The "t" results in Table LX (Appendix D) are the comparison "t" values of males to females. The results point out that there is no significant difference between males and females in terms of LSIA scores. While the females do tend to score, on the average, somewhat higher, this relationship is not significant at the .05 level.

A significant difference between males and females on degree of external integration is presented in Table XLII. It would appear from these calculations that females are much more integrated with the world external to the nursing home than are the men.

The tentative conclusion might be that women in general are expected to be much more active in community activities. That women are expected to read the newspaper and watch the television more than men is a trend which continues even upon entrance into the nursing home.

Men, in this regard, might be expected to carry on the types of active relationships, such as bowling teams or clubs, which cannot be continued after a person is admitted into the nursing home.

TABLE XLII

COMPARISON OF MALES TO FEMALES ON EXTERNAL INTEGRATION SCORES

Sex	Male	Female
Male		-3.01*
Mean	13.20 N=22	17.14 N=42

*p = .002

In regard to interpersonal integration, Table LXXIV (Appendix E), there is no significant difference between males and females. While the trend is that one-half of the males are "low" in terms of interpersonal integration as opposed to about three-sevenths of the women, this is not a strong enough relationship to be statistically significant.

In terms of racial composition and LSIA scores, Table LXI (Appendix D) finds no significant difference between the two races which were represented in the homes. This, however, is likely the result of having only one person among the sixty-four interviewed who was non-white.

Table LXII (Appendix D) points out again that in large part due to an extremely small number of non-whites, differences between the means is non-significant. The black individual did rank lower on the external integration measure, but a sample of only one cannot be a basis for

generalization. A Chi Square test comparing interpersonal integration and race was not calculated, due to there being no meaningful way to group the population.

The question on how the resident considered his current state of happiness is presented in Tables XLIII and LXIII (Appendix D). In the first case, there is a significant relationship between all three comparisons. The probability ranges from the .002 level, through the .01 level to the .05 level. In looking at the mean scores, it is evident that those persons who verbally express that they are currently very happy with their life situation score very high on the life-satisfaction index. Persons who indicate that they are pretty happy, score moderately. Persons who express their current unhappiness, achieve low satisfaction scores.

TABLE XLIII

COMPARISON OF SELF-PERCEIVED HAPPINESS ON LIFE-SATISFACTION INDEX SCORES (t VALUES)

Status	Not too Happy	Pretty Happy	Very Happy
Not too Happy		-3.43*	-4.66#
Pretty Happy			-2.45@
Mean	13.7 N=26	18.7 N=29	24.0 N= 9

*p = .001 #p = .018 N = 9

From this, one of two possible conclusions could be reached. First, the statement asking them to express their current satisfaction with their life situation is measuring the same thing as the life-satisfaction index. If such is the case, it would be better to use

the single question rather than the eighteen item scale. Or, the second conclusion might be that the two are measuring different aspects of the same situation in which case both should be retained. From the present data, either of the two conclusions would appear to be tenable.

As would be expected from the results of the previous test, Table LXIII (Appendix D) indicates no significant relationship between expressed current happiness and external social integration. This agrees with the tests relating external integration and LSIA values.

There does, however, appear to be an important trend. A review of the means of external integration indicates that the higher the mean level of social integration on the external dimension, the "happier" a person tends to express himself. The highest mean is the category "very happy." The lowest mean is the category "not too happy." The middle category, "pretty happy," is also the middle mean value.

Table LXXV (Appendix E) represents the Chi Square test for current happiness and interpersonal integration. The test is not significant at the .05 level. It appears from the cell totals, however, that those persons who express that they are not too happy have over fifty-percent of their numbers who indicated low interpersonal integration. Only one-third of the persons expressing that they were very happy were ranked in the "low" interpersonal integration category. Less than fifty percent of the "pretty happy" were placed in the lower classification.

It would seem from this that interpersonal integration and degrees of self-perceived happiness are related, but not strongly enough to achieve statistical significance.

The results of the "t" test comparing having a confidant and resultant score on the LSIA scale are presented in Table LXIV (Appendix D). This suggests that life-satisfaction and having a confidant are not significantly related. While the means of those with a confidant are somewhat higher, this relationship is not statistically significant.

The confidant is compared on external integration in Table LXV (Appendix D). The relationship lacks a strong enough trend to be significant. While the mean score of those having a confidant, variances within each group would be large enough to mask the differences.

The Chi Square computations relating having a confidant and interpersonal integration are presented in Table LXXVI (Appendix E). While this appears to be a tautology, most of the persons who were named as confidants were persons who were external to the home. Interpersonal integration is defined in terms of intra-home choices; so would not confluct with the expressed confidant.

The calculated Chi value is not significant. While well over fifty percent of those indicating they did not have a confidant also indicated low interpersonal integration and while less than fifty percent of those who had a confidant were so placed, the relationship fell below the necessary critical value for rejection of the null hypothesis.

The respondents were also asked to indicate their current happiness with their happiness five years ago. The results are presented in Tables XLIV and LXVI (Appendix D).

In the first table, none of the individuals indicated that they were happier now than they had been five years ago. This resulted in a collapsing of the data into the categories of happier five years ago

and about as happy now as five years ago. The statistical test of the differences in the means is significant at the .001 level. Those persons who said they were happier five years ago score significantly lower on the life-satisfaction index.

TABLE XLIV

COMPARISONS OF COMPARATIVE HAPPINESS ON LIFE-SATISFACTION INDEX SCORES (t VALUE)

Happiness	Happier 5 yrs. ago	About the same	Happier now
Happier 5 yrs. ago		-3.50*	
Mean	15.6 N=43	21.2 N=21	N=0

*p = .001

This would suggest conclusions similar to the ones reached in self-perceived happiness. That is, either the comparative happiness question and the LSIA questions are measuring the same thing, or they are measuring different phenomena. Whichever the case, the data would not allow a strong conclusion either way. Only the conclusion that whatever they are measuring they are measuring in the same direction.

Table LXVI (Appendix D) uses the comparative happiness question as a test of relationship on external integration. The results of the test are as would be expected; if LSIA, current happiness and comparative happiness are measuring in the same direction. That is the "t" value is not significant at the .05 level. The tentative conclusion then is that there is no relationship between the comparative happiness measure and the external integration score.

Table LXXVII (Appendix E) represents the calculations of the Chi Square test comparing extent of interpersonal integration and the response to the comparative happiness question. The relationship is not significant. While the cell totals suggest a slight favorable trend towards those who say they are about as happy now as they were five years ago, the cell totals are too mixed to draw any indication of a trend in one direction or the other.

The results of the "t" test relating sugjective health to LSIA scores are located in Table XLV. There are no statistically significant relationships indicated by the calculations. While the relationship is not significant, there is a trend toward higher LSIA scores with improved health, suggesting perhaps that those in good health might have a slightly better satisfaction with life.

TABLE XLV

COMPARISON OF SUBJECTIVE HEALTH ON LIFE-SATISFACTION INDEX SCORES (t VALUES)

Subjective Health	Poor	Fair	Good
Poor		.424	-.456
Fair			-0.28
Mean	15.3 N=15	18.0 N=22	18.1 N=27

Table XLVI represents the "t" tests and external integration values. None of the tests are statistically significant, though as in the LSIA values, the general trend is towards an increased external integration as health status increases.

TABLE XLVI

COMPARISON OF SUBJECTIVE HEALTH ON EXTERNAL INTEGRATION SCORES (t VALUES)

Subjective Health	Poor	Fair	Good
Poor		.423	.531
Fair			.120
Mean	13.8 N=15	16.1 N=22	16.7 N=27

The Chi Square computations are presented in Table LXXVIII (Appendix E). The test did not prove to be significant at the .05 level. In all cases, the cell totals on health status and social integration in the form of interpersonal contacts are too spread out to generate a significant relationship.

Educational attainment proved to be significant on two of the comparison tests. In Table XLVII, those who simply attended a high school are significantly higher in terms of LSIA score than either those not having attended or being a high school graduate. The second highest LSIA score is among those who had some college.

TABLE XLVII

COMPARISON OF EDUCATION ATTAINMENT ON LIFE-SATISFACTION INDEX SCORES (t VALUES)

Education	8 or less	Some H.S.	H.S. Grad	Some Col.	Col. Grad
8 or less		-2.44*	.48	-0.21	-1.82
Some H.S.			3.36@	1.93	.99
H.S. Grad				-0.65	-1.81
Some Col.					-1.03
Mean	16.0 N=29	23.4 N= 5	14.9 N= 8	16.6 N= 7	19.9 N=15

*p = .019 @p = .006

With the general situation of the high mean value among those who had some high school, no general trend may be articulated. The original data tends to support that those persons who have some high school are of two groups; females who are housewives and males who are day laborers. From the earlier findings, it would be expected that these two groups have a somewhat higher life satisfaction score. Perhaps it is that they succeeded far enough in school to achieve some degree of success, but were not oriented towards those occupations from which people retire unsatisfactorily, particularly the white collar occupations.

In regard to external integration, education makes little difference. None of the comparison tests in Table LXVI (Appendix D) proved to be significant at the .05 level. While the mean of those who have attended college, but had not graduated from it is smaller than any of the other means, this is not statistically significant. There is no overall trend in the data.

The Chi Square value comparing interpersonal integration and educational attainment is presented in Table LXXIX (Appendix E). The value is not significant at the .05 level. It is evident that no general trend exists. Those scoring low on social integration are about equally represented from the categories of less than an eighth grade education and some college.

Tables LXVIII and LXIX (Appendix D) represent the "t" values comparing religious affiliation and LSIA scores and external integration scores respectively. None of the relationships are statistically significant. Part of the explanation of this is found in the small numbers of persons who indicate any other affiliation than the protestant,

Because of the small "n" in each of the other four categories, no trend from either table may be expressed.

The final table compares levels of interpersonal integration and religious affiliation. Table LXXX (Appendix E) shows no significant relationship between the religion an individual adheres to and the extent of his interpersonal integration. Due to a mixing of cell totals, no trend is evident.

Summary

The tests of the major propositions resulted in the following: the nursing homes did not suffer in the degree of espoused institutional efficiency; the Gamma and Beta homes do differ in terms of Machiavellian scores. Second, the three homes did not differ in terms of the external nor interpersonal integration of the residents of the homes. Third, social integration, either external or interpersonal, was not significantly related to the morale of the resident.

As a result of these tests, it was concluded that the three homes did not represent polar types of a phenomenon, but rather represented three distinct replications of the same situation. It was decided to group the staffs and residents of each of the three homes and to test the demographic variables against the scale results to locate where differences exist.

The results of staff members on C.M.I. and K-M scales indicated that: first, registered nurses are much more "humanitarian" oriented than are the other professional levels. Second, there were no significant differences on either of the scales by age of the staff members. Third, there was a slight relationship between having worked in the

for a shorter period of time and having a more "humanistic" orientation and being somewhat more in favor of manipulating people than are those who graduated from high school, or who had attended some college. Fifth, there was no significant difference between staff members on either of the scales when they were compared on the number of hours worked per week. Sixth, males were significantly more in favor of manipulating people in interpersonal situations than were females.

In regard to resident data, no significant differences were found on the three scales in regard to length of residence. Secondly, the age group of from 70-80 appears to be more satisfied with life and be more externally integrated than the age group of 80-90. Third, those who were divorced or widowed were much more externally integrated than those who were married. Fourth, there was no statistically significant relationship between previous occupational level and any of the three scales even though a general trend of professionals and housewives seem much more satisfied with life and externally integrated than were the skilled workers or white collar workers. Fifth, females are significantly more externally integrated than are males. Sixth, there are no significant differences on any of the three scales in regard to racial characteristics, having a confidant, subjectively perceived health or religious affiliation among residents. Seventh, there is a significant difference on LSIA scores for those who indicate that they are presently unhappy with their situation and those who are more unhappy now than five years ago, when compared to other possible levels of comparative and perceived happiness.

FOOTNOTES

[1]Hubert M. Blalock, Jr., Social Statistics, (New York, 1960).

[2]N. M. Downie and R. W. Heath, Basic Statistical Methods, 3rd ed., (New York, 1970), p. 178.

[3]Richard P. Runyon and Audrey Haber, Fundamentals of Behavioral Statistics, 2nd ed., (Reading, Mass., 1971).

[4]George W. Snedecor and William G. Cochran, Statistical Methods, 6th ed., (Ames, Iowa, 1967).

CHAPTER V

SUMMARY AND CONCLUSIONS

The question of staff effects upon social integration and the subsequent effect upon resident morale has not been investigated fully. The purpose of this research was to define and clarify a number of variables relating to this process and to suggest areas for further research. This study sought to analyze (1) the nature of the staff attitudes towards institutional efficiency and the manipulation of people; (2) the degree of external and internal social integration of residents; and, (3) the subsequent effect upon resident morale.

Methods and Procedures

The data for this study was obtained from staff members and residents of three nursing homes located in North Central Oklahoma. The homes were selected as an availability sample on the bases of a number of distinguishing characteristics. An attempt was made to find homes as divergent as possible. The data was collected from the staff members by means of a fixed-alternative questionnaire. The questionnaire was designed to elicit responses relating to (1) their view of institutional efficiency, as opposed to "humanitarianism;" (2) their position in regard to the manipulation of people in interpersonal situations; (3) an indication of what a staff

member valued in terms of occupational needs; and, (4) various socio-demographic characteristics. The data for the residents was collected by means of a fixed-alternative interview designed to assess (1) their external integration; (2) their interpersonal integration; (3) an indication of their present morale; and, (4) various resident socio-demographic characteristics. The two instruments were developed to give some measure of the way the staffs felt about their jobs and about people in general, and to measure the extent to which residents had adjusted to the social milieu of the nursing home.

The staff questionnaire was administered by the researcher in the nursing home. Out of a total of 99 potential staff members, 70 completed the form. Resident interviews were conducted in the resident's room. The female interviewer was instructed to conduct interviews only with residents who were above the coping level of awareness. Interviews were to be terminated when it was apparent that the respondent was either giving disoriented responses or had become visably upset by the nature of the questions. A total of 64 completed interviews were obtained.

To compare the different homes, as well as the individuals, the Student "t" for mean differences and the Chi Square test of significance was employed. The statistical significance level for rejection of a null hypothesis of no significant difference between means or of no significant association between variables was the assigned .05 level or below.

Summary of Results and Discussion

Staff: The attitude which a staff member has toward the institution in which he works is important to the understanding of the manner in which he interacts within the framework of that institution, particularly his relationship with its residents. The data revealed that staff members have a favorable attitude towards "humanitarianism" as opposed to institutional efficiency. While the homes did differ in mean scores, none of these differences were significant at the .05 level. That staff members are people oriented is supported by the finding that all three staffs scored on the negative end of the continuum in terms of the manipulation of people in interpersonal situations. There was a significant difference in the comparison between the Beta and the Gamma homes, but both of these were in the negative direction. The Gamma home was simply "more" against the manipulation of people.

On the occupational value cluster, the data indicated a somewhat different conclusion. Personnel of all three homes express the most important reason for their working to be extrinsic reward from a particular occupation. The second most important reason was for self-expression. The least important reason for working was to work with people. Many persons who work in nursing homes are probably there principally for monetary reasons. In American society, nursing homes are not particularly glamorous institutions. The general cultural pattern considers them to be places of final residence and existence. People are sent to them only if nothing else can be done. It is plausible that this is reflected in staff attitudes and is not really

contradictory of a "humanitarian" orientation. Rather, money is necessary for survival. Nursing homes provide work opportunities. Staff members therefore work in nursing homes which are not glamorous but may provide an outlet for a basic sense of sympathy for people. The question would not be whether staff members are "humanistic" in orientation but rather whether given different opportunities would these staff members select working in a nursing home. Unfortunately this question is not answered by the present research.

In regard to other characteristics the staffs of two of the three homes appear to be comparable. The exception is the Beta nursing home. This home has a larger proportion of males, a higher number of licensed practical nurses, and a comparatively younger staff. These staff members tend to be single and to have a higher education. They are persons who have not worked in the home for an extended length of time. This particular home is located in a college community and the general population from which workers are drawn would be somewhat younger, more educated, and more transitory than would be anticipated in a non-college community.

It should be noted that the Beta home has a unique combination of characteristics from the three scales included in the questionnaire. In terms of institutional efficiency, the Beta home ranks most towards the "humanitarian" end of the continuum. In regard to the Machiavellian score, the home ranks on the more positive end of the continuum. On occupational values, the home has the greatest proportion who expressed extrinsic reward and self-expression as being important.

These findings suggest that the Beta home is unique. The uniqueness would be in the relative "instability" of the staff. They have

not worked for extended periods of time in the home and they are somewhat younger than staff members in other homes. The home is characterized by staff members who are "humanistic" in orientation and feel that the manipulation of people is not undesirable.

Be viewing the three homes as three replications, an analysis of staff characteristics and results of the C.M.I. and K-M found significant differences in C.M.I. values among the different levels of professional staff. This implies that those persons who have been able to achieve a higher level of professional status espouse a greater amount of "humanitarianism" than those who have not attained this level. Both the L.P.N. and R.N. are significantly more oriented toward the "humanist" end of the continuum than the aide or other staff members, such as cooks, hair-dressers, and so on. This probably is a function of professional school orientations of the "ideal" nurse whose job it is to assist the patient in a large variety of ways and to help them make their lives more meaningful.

This difference was not apparent on the K-M scale. "Humanitarianism" and opposition to the manipulation of people are divergent phenomenon. "Humanitarianism" values presents itself as a situationally specific attitude towards the institution. The manipulation of people presents itself as a more pervasive attitude.

Age of staff members effect the "humanitarian" position. There is a trend for older staff members to be less "humanistically" oriented. Younger staff members are less opposed to the manipulation of people. In the latter case, it may be that the younger aged groups are relatively more transitory in their work in the nursing home while the older workers are more inclined to have worked for an extended period

of time. Perhaps there is a degree of realism on the part of the older staff member which suggests that the present work situation must be tolerated because mobility in terms of occupations is somewhat decreased.

This is supported by the data concerning length of time a staff member has worked in a home. The trend is toward the shorter tenured staff members to be more "humanistically" oriented while at the same time more in favor of the manipulation of people. Perhaps in the work situation, after a number of years of contact with an older population, the original "humanitarian" values begin to wane. Or, perhaps cohorts differ in terms of "humanitarianism" in which they were socialized. Whichever the case, it would seem that lowered "humanistic" values are in part a function of the amount of time a worker has worked in a nursing home.

The manipulation of people seems to be the parallel of the above conclusion. As length of time spent working in the home increases, the favorable attitude towards the manipulation of people decreases. As a person spends more time in the nursing home there is a decrease spirit of helping people. As a potential dissillusionment sets in the desire to manipulate persons and to "make" them happier would decline. Thus, an individual may take a job as a staff member originally for money but also with a strong "humanistic" sense of responsibility. This sense of responsibility is reflected in a conception of being the individual who is going to help the person be happier in his or her situation. As the realities of the working in the home accrue, there is a decline in the "humanistic" orientation and a

depreciation in the sense of being able to help the person. A cynicism sets in to the effect of "leave them alone, they can't be made happier, only kept comfortable."

This finding runs counter to the original tenant of the research. It was thought that a person who desired to manipulate persons in interpersonal situations would also score low on a "humanitarian" scale. This was not the case. In fact, the opposite appears to be true.

A person's marital status has a slight effect on his "humanitarianism" position. Those who have apparently suffered some degree of marital discontent (divorce or separation) tend to score lower in terms of "humanitarian" orientation. Though this relationship does not hold for manipulation of people, this would seem plausible. Persons who have suffered upsets in their marriage may well have lost a "humanitarian" edge to their outlook. The realities of divorce and separation, being particularly traumatic for some, may disillusion others. Those persons who have not suffered these setbacks (single or married) may have an overall better outlook on life and their work in general, thus higher "humanitarian" scores.

The data as relates to educational attainment favors the conclusions reached in regard to length of tenure in the home and professional status. The higher the educational level, the higher the "humanitarian" orientation. The one exception to this trend is the group who had some college, but who did not graduate. This category is likely to be the college student who is working in the home out of need for money to go to school. An occupational investment of time as compared to the others would be low. "Humanistic" orientation would not necessarily be expected from this group.

Those who have gone to college or who have had some type of special training such as nursing school score the highest on the "humanitarian" value complexes. Those with no high school or with some high school are the lowest. A "professional" value system may be the operant creating the existing difference.

In terms of education and the manipulation of people, the trend is somewhat mixed. While there is a general trend that emphasizes the favorability towards the manipulation of people as one goes up the educational continuum, the group that has special training scores second highest on the scale. Perhaps this collection of persons exhibits a unique set of characteristics in that they have worked in a home long enough to have come into contact with the realities of the work situation. They may have found that you cannot "make" people happy. They may have had a socialization experience during the period of special training where they were encouraged to have a "humanitarian" perspective. Thus, they combine a practical sense of the realities of the home with a "humanitarian" value system. Whichever the case may be, the present data cannot provide a conclusive statement.

If a staff member is a full time employee who works between 20 and 40 hours per week, he is not as "humanistically" concerned as is the part-time or over-time employee. These workers, the 20 to 40 hour per week, may not be as dedicated to the occupation as the over-time workers. Nor do they have the opportunity to have a full week off before facing the residents again as might the part-time worker.

The part-time worker may be employed as a person working not so much for money, though this is important, but as a person who has a

sense of helping other people. The over-time worker may be the dedicated person who sees work as an expression of self. These people are likely to be the more tenured worker who has fairly high professional standing. The 20-40 hour per week worker would not be expected to be as dedicated to the work. She or he may be expected to be working for the monetary rewards more so than any sense of personal fulfillment. This worker does not have a five day break in which to regenerate one's self, nor do they have the professional attachment. The result could well be a lower "humanitarian" value.

The data from the Machiavellian measure supports this conclusion. It should be noted that the favorability towards the manipulation of people declines as an individual moves from being a part-time worker into the role of a full-time or over-time worker. This is not a strong relationship and may only be inferred.

The major trend suggested by the data involves a direct relationship between the favorability towards "humanitarianism" and the manipulation of people. It is possible that persons who consider themselves to be interested in helping other people also consider themselves to be the best judges of what is "good" for the other person. Manipulation of the other person in order to help him would be plausible. While this can only be identified as a trend from the current data, this may present itself as an ideal study area for further research. It may be that there is a tendency towards "instrumental humanitarianism" which pervades the nursing home environment.

Resident: The residents of the three homes appear comparable on the scores achieved on the three measures. The findings are uniform in that each of the three homes responded with much lower satisfaction

index scores than would be expected from a population of older people residing in the community. This indicates that persons who have suffered the trauma of a move to a nursing home do reflect upon their life with decreased satisfaction.

In comparing the three homes, the Alpha residents are more satisfied than the other two homes. The Beta residents rank in the middle. The Gamma home residents are the least satisfied. While these differences are not statistically significant, it is interesting to note that the home where the staff members indicated the lowest amount of "humanitarianism" had residents who scored highest in life-satisfaction. The home which was most opposed to the manipulation of people had residents who scored the lowest in terms of life-satisfaction. Both of these findings run counter to the original constructs of the research.

In regard to external integration, the Alpha home ranks lowest, the Beta home second and the Gamma home with the most integrated residents. It is tenable that the conclusion of Dick and Friedsam[1] (that the most dissatisfied individual in the nursing home is the person who is most like his counterpart living in the community) may be valid. While the mean scores of the homes tend to mask individual differences, the overall trend seems to be that as a home ranks high on external integration, residents score lower in life-satisfaction. The residents may find the comparison between their life in the home and the lives of people living in the community to be unfavorable. The resident views his situation as undesirable. He therefore has a lower sense of satisfaction with his life.

Interpersonal integration would support this conclusion. The home with the greatest amount of interpersonal integration has the lowest expressed life-satisfaction scores. This supports the Tallmer and Kutner[2] conclusion that the types of contacts available for residents within the home may not be desirable. While residents do tend to name other persons, it is possible that due to a limited social milieu they find only limited expression of interpersonal desires. A person who can name other persons may simply be naming them and not really feeling that these contacts would be desirable sources of interpersonal interaction if he were outside the home. The current nursing home situation may become one of "structured dislike." The actor is not satisfied with the actions he carries out, but since they are the only ones available he must continue to act within the framework.

Since none of the comparisons on the LSIA, external or interpersonal integration scores proved significant at the .05 level the residents were combined into three replications and compared on the various socio-demographic characteristics. In regard to the length of time a resident has been in a particular home, there were no significant differences in any of the three scales. From the data on LSIA values and external integration scores, no discernable trend may be established. In terms of time in the institution the newer residents are not as integrated as those who have lived there longer. This is self evident. As a person lives in a particular environment, he becomes increasingly salient as an individual. He is more likely to be named by other residents. Newer residents have not as yet formed the ties of integration which take time to develop.

In regard to living arrangements just prior to entrance into the home, the data does not permit a definitive statement. While scores on LSIA were higher for those living with a relative or friend at the time of admittance, a "n" of one in each case negates the statement. The same would be true in terms of the findings on external integration. Relatively small "n's" in terms of living with a relative or friend would make a general statement impossible.

Perhaps the best possible statement of a potential relationship in terms of interpersonal integration is obtained when one collapses the cells into categories of living alone or living with someone. Here disproportionate rankings seem to fall in the category of living with someone at time of admittance and lack of established interpersonal integration. This supports the Dick and Friedsam conclusion.[3] It also adds credence to the conclusion that the types of interaction available in the home are not really the type desired by the residents. The past attachments cannot be replaced by potential interaction available, therefore, decreased interpersonal integration.

In terms of age, there is a fairly steady decline in life-satisfaction as a person gets older. While this trend is only tenable, largely the result of small "n's" in a number of cells, the general trend is one of decline. Particularly, a general decline appears to develop after the age of 65. Advancing age with probable increased infirmity may result in a decreased satisfaction with general life situations.

This trend does not remain apparent when one considers external integration. Those who are most poorly integrated are the people between 75 and 79. This may well be the effect of a measurement

artifact and no definitive statement may be made about it. The same may be said for age and interpersonal integration.

There is a relationship between life-satisfaction and marital status. Those persons who are alone (single, divorced, widowed) have higher life-satisfaction scores than persons who are currently married. Perhaps those who are married score low on life-satisfaction as they vicariously share in the ill health and sense of hopelessness for their mate. Perhaps one mate is in the nursing home, another not. Again marriage may become antithetical to the institutional setting where the married couple is dependent upon the members of the institutional staff. Persons who are currently married, expecting greater independence, experience a decreased life satisfaction when this independence is not available.

In regard to previous occupation, housewives and professionals have a better life satisfaction and external integration score than any of the other three groups. These two groups cannot be said to really retire. They do not face the trauma of decreased attachment to a major role. The housewife may continue in a restricted sense activities in which she has spent her life. The professional may maintain professional organization affiliation and keep abreast of changes in his field even though not actively engaged in it. The skilled and white collar laborer and to a lesser extent the day laborer, may find primary occupational attachment through the identification with the work procedure and the social matrix at work. These attachments are severed to a much greater extent at the time of retirement than are the roles of housewife or professional. Lowered life satisfaction and external integration understandably result.

This relationship does not hold for interpersonal integration. Interpersonal integration is not attached to an occupational role. Rather, all occupations would have persons who are capable or not capable of establishing intimate contacts with other people. This is simply continued after retirement.

The greatest difference between males and females residing in a nursing home lies in their external integration. The females are much more externally integrated than their male counterparts. This would be true when considering that the general pattern in the American society is for women to attach themselves to ongoing community activities while men connect themselves to their work. Activities such as clubs and churches could be carried out by the woman even though she is in a nursing home. The male activities, such as work or active recreation, would be much more difficult to continue.

One of the more significant findings of the current research is that both self-perceived happiness and comparative happiness seem to measure the same thing as the longer life satisfaction index. While this is to be expected, since life satisfaction may be considered to be a state of current or comparative happiness, the two short items could be used in a study in lieu of the 18 item scale. This would allow a greater efficiency in measurement and the ability on the part of researcher to include a variety of other questions.

Both questions relating to happiness proved to be significant at the .05 level when compared to life satisfaction. Those who say they are not too happy now, or who say they were happier five years ago than they are today, tend to score lower on the life satisfaction measure. While not being statistically significant, the trend in

both of these questions would also indicate a relationship between external and interpersonal integration. Those who are not very happy now do not tend to be externally integrated, while those who indicate that they are fairly happy do appear to be named more often than those who are not currently very happy.

Having or not having a confidant is not significantly related to life satisfaction, external integration nor interpersonal integration. The trend is that those who have found someone in whom they could confide are a little happier and somewhat more integrated. While measurement may have masked any true relationship, it may only be concluded that having a confidant does help a person adjust to the nursing home.

The same may be said of subjective perceived health. The trend would seem somewhat stronger, however. Those persons who consider themselves to be in "good" health do score considerably higher on both the LSIA and external integration measures. The population of persons being highly integrated and in good health is also much larger than those who are highly integrated and in poor health. Health seems to have a relationship between the scores, but intra-group deviations may mask a stronger relationship than was discovered.

While differences appear in educational attainment and life satisfaction, none appear to be found in either of the integration measures. The educational measure is somewhat ambiguous. While those who had some high school education achieve the highest mean score, those who graduated from college averaged the second highest. Those who graduated from high school averaged the lowest, those who had only completed eighth grade or less were the second lowest. The only possible conclusion is that there was either measurement error

or the demarcations amount to significant breaks at which the individual feels he has reached a desired level of attainment. The data would not allow a definitive statement on this relationship. Finally, from the data, it is concluded that religious affiliation is not related to the individuals' life satisfaction or integration. This does not refer, however, to religious fervor which was not measured in the present study.

Conclusion

The final conclusions would be that staffs of nursing homes are "humanitarian" in orientation and opposed to the manipulation of people in interpersonal situations. There is tentative support for the idea that professional statuses are more oriented towards a humanitarian perspective. There is also support for the proposition that persons who have served for a longer time in the home, or who are somewhat older, are less "humanitarian" in perspective. These same persons are less in favor of the manipulation of people. A suggested area for research is to trace this tentative relationship to find out whether people who consider themselves to be "humanitarian" do consider themselves to be the best judge of what is good for people. Thus individuals who express this attitude may feel that they are the best judges of what is good for other people and attempt to define their situation for them.

Residents are much lower in life satisfaction than would be expected from a population of older people living in the community. The most significant trend is related to the previous occupational status. The professional and housewife have the easiest time, in

terms of life satisfaction and social integration. The white collar and the skilled worker appear to have the most difficult time. Further research in this area is needed to identify the relative effect of nursing home retirement on differentiated professions and occupations.

In regard to staff attitudes and resident integration and its effect on morale, no significant findings are reported. While some trends may seem evident, the discovered relationships were so slight as to lead to the conclusion that they are not related. Perhaps further investigation with refined measurement techniques would clarify the question.

As with any study, this research has a number of limitations. These are:

Sample: In terms of a sample of nursing home staffs and residents, the current study does not seem to be unrepresentative. The study failed however, to identify divergent nursing homes which exist on different ends of the continuum. A better means of selection needs to be devised to assure representativeness of divergent types. While this was attempted, the three homes investigated probably represent the middle range of nursing home quality.

Instruments: There was considerable intra-sample variability on each of the scales. The Machiavellian scale was particularly subject to this variation. Part of this may have been the result of placing a positive response on the left hand side of the continuum and a negative response on the right hand side. This is counter to our cultural conditioning and may have created confusion and caused excessive variation. Also, obtaining data from nursing

home residents via the fixed-alternative interview may be of limited value. Other techniques, such as assorted unobtrusive measures, may provide a better understanding of what is going on. Dependence upon resident responses could well negate much valuable information.

Comparisons: The present study would have been improved if simultaneous investigation of older persons living in the community could have been conducted. Comparative data could then have been employed. It may well be that measurable differences between residents do not exist. Rather, the real difference may be between the types of people who end up in a nursing home and types of people who are able to maintain community living.

FOOTNOTES

[1]Harry Dick and Hiram J. Friedsam, "Adjustment of Residents of Two Homes for the Aged," Social Problems, 11 (1964) pp. 282-289.

[2]Margot Tallmer and Bernard Kutner, "Disengagement and Morale," The Gerontologist, 10 (Winter, 1970) pp. 317-320.

[3]Harry Dick and Hiram J. Friedsam.

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APPENDIX A

QUESTIONNAIRE ADMINISTERED TO NURSING HOME STAFF

MIDWEST COUNCIL FOR SOCIAL RESEARCH ON AGING

OKLAHOMA STATE UNIVERSITY BRANCH

The following series of questions is part of a broader study of nursing homes being conducted by the Midwest Council for Social Research on Aging. Your cooperation and participation is requested in order to make the study useful. Please answer the following questions completely, reacting to them from your own personal point of view.

Please be assured that your responses will remain confidential and that no one will identify your answers with you as an individual.

On the following pages are a series of questions. Please mark your first reaction to the statement by circling the number below it which BEST corresponds to how you feel about that item.

1 indicates that you strongly agree

2 indicates that you usually agree

3 indicates that you sometimes agree

4 indicates that you have no feelings on that statement

5 indicates that you sometimes disagree

6 indicates that you usually disagree

7 indicates that you strongly disagree

STRONGLY AGREE — NEUTRAL — STRONGLY DISAGREE

K-M
1. Never tell anyone why you did something unless it will help you.
1 2 3 4 5 6 7

C.M.I.
2. It is best to prevent the less ill patients from mixing with those who are more sick.
1 2 3 4 5 6 7

C.M.I.
3. We should be sympathetic with older patients, but we cannot expect to understand their odd behavior.
1 2 3 4 5 6 7

K-M
4. Most people are good and kind.
1 2 3 4 5 6 7

K-M
5. The best way to get along with people is to tell them things that make them happy.
1 2 3 4 5 6 7

C.M.I.
6. We can make some improvements, but by and large the conditions of the nursing homes are about as good as they can be considering the type of patient living in them.
1 2 3 4 5 6 7

K-M
7. You should do something only when you are sure it is right.
1 2 3 4 5 6 7

K-M
8. It is smartest to believe that all people will be mean if they have a chance.
1 2 3 4 5 6 7

C.M.I.
9. Only persons with considerable professional training should be allowed to form close relationships with patients.
1 2 3 4 5 6 7

C.M.I
10. As soon as the older person shows signs of deterioration, he should be hospitalized.
1 2 3 4 5 6 7

C.M.I.
11. Many older patients demand more attention then they actually medically require.
1 2 3 4 5 6 7

K-M
12. You should always be honest, no matter what.
1 2 3 4 5 6 7

K-M
13. Sometimes you have to hurt other people to get what you want.
1 2 3 4 5 6 7

C.M.I.
14. Close association with ill older people is liable to make even a normal person become depressed.
1 2 3 4 5 6 7

STRONGLY AGREE — NEUTRAL — STRONGLY DISAGREE

K-M

15. Most people won't work hard unless you make them do it.

1 2 3 4 5 6 7

K-M

16. It is better to tell someone why you want him to help you than to make up a good story to get him to do it.

1 2 3 4 5 6 7

C.M.I.

17. One of the main causes of institutionalizing the aged is lack of family support.

1 2 3 4 5 6 7

C.M.I.

18. An older patient is in no position to make decisions about even everyday living problems.

1 2 3 4 5 6 7

K-M

19. Successful people are mostly honest and good.

1 2 3 4 5 6 7

C.M.I.

20. There is something about a senile person that makes it easy to tell them from normal people.

1 2 3 4 5 6 7

C.M.I.

21. Few, if any, patients are capable of real friendliness.

1 2 3 4 5 6 7

K-M

22. Anyone who completely trusts anyone else is asking for trouble.

1 2 3 4 5 6 7

C.M.I.

23. There is hardly a patient who appreciates the efforts you make in his behalf.

1 2 3 4 5 6 7

C.M.I.

24. Patients who fail to adjust to life in the nursing home have only themselves to blame; in most cases they have just not tried hard enough.

1 2 3 4 5 6 7

K-M

25. A criminal is just like other people except that he is stupid enough to get caught.

1 2 3 4 5 6 7

C.M.I.

26. Patients need the same kind of control and discipline as an untrained child.

1 2 3 4 5 6 7

K-M

27. Most people are brave.

1 2 3 4 5 6 7

STRONGLY AGREE — NEUTRAL — STRONGLY DISAGREE

C.M.I.

28. With few exceptions, most patients haven't the ability to tell right from wrong.

1 2 3 4 5 6 7

K-M

29. It is better to be ordinary and honest than famous and dishonest.

1 2 3 4 5 6 7

C.M.I.

30. In experimenting with new methods of treatment, hospitals must consider first and foremost the safety of patients and personnel.

1 2 3 4 5 6 7

K-M

31. It is smart to be nice to important people even if you don't really like them.

1 2 3 4 5 6 7

C.M.I.

32. Most families of the aged person simply create problems for the nursing home.

1 2 3 4 5 6 7

K-M

33. It is possible to be good in every way.

1 2 3 4 5 6 7

K-M

34. Most people can not be easily fooled.

1 2 3 4 5 6 7

C.M.I.

35. When a patient is discharged from the home, it is unlikely that he will be able to maintain himself in the community.

1 2 3 4 5 6 7

K-M

36. Sometimes you have to cheat a little to get what you want.

1 2 3 4 5 6 7

C.M.I.

37. Older people in nursing homes are to be pitied for their inability to care for themselves.

1 2 3 4 5 6 7

K-M

38. It is never right to tell a lie.

1 2 3 4 5 6 7

C.M.I.

39. Nursing homes are places where old people go to die.

1 2 3 4 5 6 7

K-M

40. It hurts more to lose money than to lose a friend.

1 2 3 4 5 6 7

Consider to what extent a job or career would have to satisfy each of these requirements before you could consider it IDEAL. Mark H if it is a highly desirable requirement, mark M if it is a medium requirement, and L if it is not as important.

_____1. Provide an opportunity to use my special abilities or aptitudes. (Self-expression)
_____2. Provide me with a chance to earn a good deal of money. (Extrinsic-reward)
_____3. Permit me to be creative and original. (Self-expression)
_____4. Give me social status and prestige. (Extrinsic-reward)
_____5. Give me an opportunity to work with people rather than things. (People-orientation)
_____6. Give me an opportunity to be helpful to others. (People-orientation)

Now go back and look at the requirements you rated high "H." RANK ALL THE H's ON YOUR LIST. DO NOT RANK THE M's OR L's. Rank them in the order of importance to you by writing next to each--1. indicates the most important, 2. indicates the next in importance, 3. the next, and so on.

During an average work week, how many hours do you work?
_____less than 20 _____20 to 40 _____more than 40

Indicate you sex. _____Male _____Female

What is your professional status?
_____R.N. _____L.P.N. _____Aide _____Other

Which age group do you fit into?
_____18-25 _____26-35 _____36-45 _____46-55 _____56-65

What is your marital status? Single_____ Married_____
Divorced_____ Separated_____

How much education have you had?
_____No high school
_____Some high school
_____High school graduate
_____Some college
_____College graduate
_____Special training

APPENDIX B

INTERVIEW ADMINISTERED TO NURSING HOME RESIDENTS

The following questions are designed to gather information about persons who are residing in nursing homes. It would be greatly appreciated if you would answer the following questions as completely and as honestly as possible. Since this is a study of residents of nursing homes in general, and not anyone in particular, you may be assured that your answers will be held in the strictest confidence.

1. How long have you resided in this or any other nursing home?_____

2. With whom, if anyone, were you living at the time of your admittance?_____

3. As of your last birthday, how old are you?_____

4. What is your marital status?_____

5. When you were employed, what type of work did you do?_____

6. Interviewer mark SEX M F RACE W B Asian Other

	Not at all	Once	Several times	Every day
Read a newspaper	0	1	2	3
Attend a club, group or community organization meeting	0	1	2	3
Listen to or watch a news program	0	1	2	3
Participate in a hobby group or activity around the home	0	1	2	3
Read your horoscope	0	1	2	3
Go for a ride	0	1	2	3
Attend a religious service	0	1	2	3
Talk to someone on the telephone	0	1	2	3
Visit with friends or relatives who are not in this home	0	1	2	3
Read the Bible	0	1	2	3

1. If you were asked to serve on a committee to investigate various complaints that people have in this nursing home, which three people in order of preference would you most like to serve with?
   1.
   2.
   3.

2. Taking all things together, how would you say things are these days-- would you say you're VERY HAPPY (1), PRETTY HAPPY (2), or NOT TOO HAPPY (3)?

3. Do you have any person whom you feel that you could confide your personal problems in? YES NO
If so, whom?_____

4. Compared with your life today, how were things 4 to 5 years ago-- Were you not quite as happy (1), about the same (2), or happier (3)?

5. Who do you consider to be your good friends in the nursing home?
1.
2.
3.

Please indicate whether the following statements are true for you or not:

	Never true	Not true now	Sometimes true	True
I have as many friends as I want	0	1	2	3
I lose my temper frequently	0	1	2	3
I have trouble getting to sleep at night	0	1	2	3
I get along with people easily	0	1	2	3
My family asks more of me than I am able to give	0	1	2	3

1. How would you describe your general state of health?
GOOD FAIR POOR

2. How much education have you had?
8th grade or less 1
part high school 2
high school graduate 3
part college 4
college graduate 5

3. What is your religious preference?
Protestant 1
Roman Catholic 2
Jewish 3
Other 4
None 5

4. If seats were to be assigned to patients in the dining room, which three persons would you most like to share a table with?
1.
2.
3.

Please indicate whether you agree or disagree or are neutral on the following statements as pertaining to yourself:

I am just as happy as when I was younger	A	D	N
These are the best years of my life	A	D	N
My life could be happier than it is now	A	D	N
This is the dreariest time of my life	A	D	N
Most of the things I do are boring and monotonous	A	D	N
Compared to other people, I get down in the dumps too often	A	D	N
The things I do are as interesting to me as they ever were	A	D	N
I have made plans for things I'll be doing a month or a year from now	A	D	N
Compared to other people my age, I make a good appearance	A	D	N
As I grow older, things seem better than I thought they would be	A	D	N
I expect some interesting and pleasant things to happen to me in the near future	A	D	N
I feel somewhat old and tired	A	D	N
As I look back on my life, I am fairly well satisfied	A	D	N
I would not change my past life even if I could	A	D	N
I've gotton pretty much what I expected out of life	A	D	N
When I think back over my life, I didn't get most of the important things I wanted	A	D	N
In spite of what people say, the life of the average man is getting worse, not better	A	D	N
I have gotten more of the breaks in life than most of the people I know	A	D	N

Please indicate whether you agree or disagree or are neutral on the following statements as pertaining to yourself:

I am just as happy as when I was younger	A	D	N
These are the best years of my life	A	D	N
My life could be happier than it is now	A	D	N
This is the dreariest time of my life	A	D	N
Most of the things I do are boring and monotonous	A	D	N
Compared to other people, I get down in the dumps too often	A	D	N
The things I do are as interesting to me as they ever were	A	D	N
I have made plans for things I'll be doing a month or a year from now	A	D	N
Compared to other people my age, I make a good appearance	A	D	N
As I grow older, things seem better than I thought they would be	A	D	N
I expect some interesting and pleasant things to happen to me in the near future	A	D	N
I feel somewhat old and tired	A	D	N
As I look back on my life, I am fairly well satisfied	A	D	N
I would not change my past life even if I could	A	D	N
I've gotton pretty much what I expected out of life	A	D	N
When I think back over my life, I didn't get most of the important things I wanted	A	D	N
In spite of what people say, the life of the average man is getting worse, not better	A	D	N
I have gotten more of the breaks in life than most of the people I know	A	D	N

"z" Score:

$$z = \frac{x - \bar{x}}{s}$$

Found in: N. M. Downie and R. W. Heath, Basic Statistical Methods, 3rd ed., New York, Harper and Row, 1970, p. 71.

Student t for related samples:

$$t = \frac{\bar{D}}{S_{\bar{D}}}$$

Found in: Richard R. Runyon and Audrey Haber, Fundamentals of Behavioral Statistics, Reading, Mass.: Addison-Wesley, 1971, p. 208.

Student t for independent samples, unequal size N's:

$$t = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{\left(\frac{\Sigma x_1^2 + \Sigma x_2^2}{N_1 + N_2 - 2}\right)\left(\frac{1}{N_1} + \frac{1}{N_2}\right)}}$$

Found in: Richard R. Runyon and Audrey Haber, Fundamentals of Behavioral Statistics, Reading, Mass.: Addison-Wesley, 1971, p. 196.

Analysis of Variance with unequal size N's:

Source	Df	Sum of Squares
Total	N-1	$\Sigma\Sigma X_{ij}^2 - C$
Between	a-1	$\left[\frac{X_i^2}{N_i}\right] - C$
Within	N-a	Subtract

Found in: George W. Snedecor and William G. Cochran, Statistical Methods, Ames: Iowa State University Press, 1967, p. 277.

APPENDIX D

STUDENT t VALUES OF VARIOUS TESTS

TABLE XLVIII

COMPARISON OF AGE LEVELS AND CUSTODIAL MAINTENANCE INVENTORY SCORES(t VALUES)

Age	18-25	26-35	36-45	46-55	56-65
18-25		-1.21	.49	-1.89	-1.33
26-35			1.14	-0.79	-1.39
36-45				-1.48	-0.93
46-55					-0.35
Mean	-18.0 N=30	-13.2 N=13	-20.9 N=11	-9.21 N=14	-5.0 N=2

TABLE IL

COMPARISON OF AGE LEVELS AND KIDDIE-MACHIAVELLIAN SCORES (t VALUES)

Age	18-25	26-35	36-45	46-55	56-65
18-25		1.06	1.62	1.07	1.25
26-35			.34	-0.07	.53
36-45				-0.48	.56
46-55					.68
Mean	-20.0 N=30	-24.2 N=13	-25.8 N=11	-23.8 N=14	-30.0 N=2

TABLE L

COMPARISON OF MARITAL STATUS ON KIDDIE-MACHIAVELLIAN SCORES (t VALUES)

Status	Single	Married	Divorced	Separated
Single		1.16	1.23	-0.56
Married			.71	-1.02
Divorced				-1.02
Mean	-20.2 N=2-	-23.7 N=43	-27.6 N= 5	-15.5 N= 2

TABLE LI

COMPARISON OF EDUCATION ATTAINMENT ON CUSTODIAL MAINTENANCE INVENTORY SCORES (t VALUES)

Education	No H.S.	Some H.S.	H.S. Grad	Some College	College Grad	Special Training
No. H.S.		.37	1.36	.70	1.42	.91
Some H.S.			1.64	.78	1.09	1.34
H.S. Grad				-0.60	.07	.20
Some College					.37	.68
College Grad.						.58
Mean	-7.7 N=3	-10.4 N=13	-17.5 N=15	-14.5 N=16	-18.0 N= 3	-18.7 N=20

TABLE LII

COMPARISON OF NUMBER OF HOURS WORKED PER WEEK ON CUSTODIAL MAINTENANCE INVENTORY SCORES (t VALUES)

Hours	Less than 20	20-40	More than 40
less than 20		-0.93	.01
20-40			1.90
Mean	-20.7 N= 3	-13.0 N=48	-20.7 N=19

TABLE LIII

COMPARISON OF NUMBER OF HOURS WORKED PER WEEK ON KIDDIE-MACHIAVELLIAN SCORES (t VALUES)

Hours	Less than 20	20-40	More than 40
less than 20		.43	.71
20-40			.33
Mean	-19.3 N= 3	-22.6 N=48	-23.6 N=19

TABLE LIV

COMPARISON OF MALES TO FEMALES ON CUSTODIAL MAINTENANCE INVENTORY SCORES (t VALUES)

Sex	Male	Female
Male		-0.42
Mean	-17.6 N= 9	-15.2 N=62

TABLE LV

COMPARISON OF LENGTH OF RESIDENCE ON LIFE-SATISFACTION INDEX SCORES (t VALUES)

Time	0-3m.	4-6m.	7-12m.	1-2yr.	3-5yr.	more 5 yr.
0-3m.		1.23	.49	-0.35	.71	.11
4-6m.			-0.90	-1.21	-0.72	-0.54
7-12m.				-0.76	.26	-1.13
1-2yr.					.87	.23
3-5yr.						-0.32
Mean	18.0 N=16	13.8 N= 5	16.9 N=15	18.9 N=17	16.3 N=9	17.5 N= 2

TABLE LVI

COMPARISON OF LENGTH OF RESIDENCE ON EXTERNAL INTEGRATION SCORES (t VALUES)

Time	0-3m.	4-6m.	7-12m.	1-2yr.	3-5yr.	more 5 yr.
0-3m.		-0.22	-1.54	-1.03	-0.52	-0.60
4-6m.			-0.66	-0.38	-0.10	.41
7-12m.				.38	.87	1.29
1-2yr.					.43	.93
3-5yr.						.91
Mean	14.5 N=16	15.2 N= 5	17.2 N=15	16.5 N=17	15.5 N= 9	12.3 N= 2

TABLE LVII

COMPARISON OF PRIOR LIVING ARRANGEMENT ON LIFE-SATISFACTION INDEX SCORES (t VALUES)

Status	Alone	Immediate Relative	Relative	Friend	Housekeeper
Alone		-0.13	-0.47	-0.94	-0.78
Immediate Relative			-0.37	-0.78	-0.54
Relative					.02
Friend					.28
Mean	17.1 N=45	17.3 N=13	20.0 N= 1	23.0 N= 1	19.8 N= 4

TABLE LVIII

COMPARISON OF PRIOR LIVING ARRANGEMENT ON EXTERNAL INTEGRATION SCORES (t VALUES)

Status	Alone	Immediate Relative	Relative	Friend	Housekeeper
Alone		.27	-1.56	.06	1.21
Immediate Relative			-1.69	-0.03	.99
Relative					1.87
Friend					.49
Mean	16.0 N=45	15.5 N=13	24.3 N= 1	15.7 N= 1	12.6 N= 4

TABLE LIX

COMPARISON OF MARITAL STATUS ON LIFE SATISFACTION INDEX SCORES

Status	Married	Single	Divorced	Separated	Widowed
Married		-1.99	-1.36	.77	-1.74
Single			1.02	1.88	1.32
Divorced				2.47	.24
Separated					-1.55
Mean	14.0 N=11	21.8 N= 5	18.5 N= 6	8.0 N= 1	17.8 N=41

TABLE LX

COMPARISON OF MALES TO FEMALES ON LIFE-SATISFACTION INDEX SCORES (t VALUES)

Sex	Male	Female
Male		-1.20
Mean	16.1 N=22	18.1 N=42

TABLE LXI

COMPARISON OF RACE ON LIFE-SATISFACTION INDEX SCORES (t VALUES)

Race	White	Non-White
White		.78
Mean	15.9 N=63	11.7 N= 1

TABLE LXII

COMPARISON OF RACE ON EXTERNAL INTEGRATION SCORES (t VALUES)

Race	White	Non-White
White		.78
Mean	15.9 N=63	11.7 N= 1

TABLE LXIII

COMPARISON OF SELF-PERCEIVED HAPPINESS ON EXTERNAL INTEGRATION SCORES

Status	Not too Happy	Pretty Happy	Very Happy
Not too Happy		-1.49	-1.75
Pretty Happy			.78
Mean	14.3 N=26	16.4 N=29	18.0 N= 9

TABLE LXIV

COMPARISON OF HAVING OR NOT HAVING A CONFIDANT ON LIFE-SATISFACTION INDEX SCORES (t VALUES)

Confidant	Yes	No
Yes		.95
Mean	16.6 N=43	14.1 N=21

TABLE LXV

COMPARISON OF HAVING OR NOT HAVING A CONFIDANT ON EXTERNAL INTEGRATION SCORES (t VALUES)

Confidant	Yes	No
Yes		1.84
Mean	16.6 N=43	14.1 N=21

TABLE LXVI

COMPARISON ON COMPARATIVE HAPPINESS AND EXTERNAL INTEGRATION SCORES (t VALUES)

Happiness	Happier 5 yrs. ago	About the same
Happier 5 yrs. ago		-1.07
Mean	15.3 N=43	16.7 N=21

TABLE LXVII

COMPARISON ON EDUCATION ATTAINMENT AND EXTERNAL INTEGRATION SCORES (t VALUES)

Education	No H.S.	SomeH.S.	H.S.Grad	SomeCol.	Col.Grad
No H.S.		-0.19	-0.40	1.32	-0.66
Some H.S.			-0.11	1.09	-0.21
H.S. Grad				1.71	-0.15
Some College					-1.58
Mean	15.7 N=29	16.2 N= 5	16.5 N= 8	12.8 N= 7	16.8 N=15

TABLE LXVIII

COMPARISON ON RELIGIOUS AFFILIATION AND LIFE SATISFACTION INDEX SCORES (t VALUES)

Religion	Protestant	Catholic	Jewish	Other	None
Protestant		-0.01	1.07	1.68	.33
Catholic			.72	1.14	.19
Jewish				-0.42	-0.51
Other					-0.77
Mean	18.0 N=51	18.0 N= 4	11.0 N= 1	13.0 N= 5	16.7 N= 3

TABLE LXIX

COMPARISON ON RELIGIOUS AFFILIATION AND EXTERNAL INTEGRATION SCORES (t VALUES)

Religion	Protestant	Catholic	Jewish	Other	None
Protestant		-0.39	-0.95	1.09	.98
Catholic			-0.41	.86	.81
Jewish				1.58	5.20
Other					.12
Mean	16.0 N=51	17.1 N= 4	21.0 N= 1	13.3 N= 5	13.0 N= 3

APPENDIX E

CHI SQUARE VALUES OF VARIOUS TESTS

TABLE LXX

COMPARISON LENGTH OF RESIDENCE AND INTERPERSONAL INTEGRATION

Time	6 months or less	6 months - 2 years	More than 2 years	Total
Integration				
High	2(6.2)	13(9.5)	4(3.3)	19
Medium	7(5.6)	7(8.5)	3(2.9)	17
Low	12(9.2)	12(14.0)	4(4.8)	28
Total	21	32	11	64
	$x^2 = 6.24$	df = 4	p = .182	

TABLE LXXI

COMPARISON OF PRIOR LIVING ARRANGEMENTS AND INTERPERSONAL INTEGRATION

Living Arrangement	Alone	With Someone	Total
Integration			
High	15(13.4)	4(5.6)	19
Medium	12(11.9)	5(5.1)	17
Low	18(19.7)	10(8.3)	28
Total	45	19	64
	$x^2 = 1.14$	df = 2	p=.571

TABLE LXXII

COMPARISON OF AGE LEVELS AND INTERPERSONAL INTEGRATION

Age	Younger than 70	70-84	85 and older	Total
Integration				
High	3(4.5)	13(10.7)	3(3.8)	19
Medium	2(4.0)	9(9.6)	6(3.4)	17
Low	10(6.5)	14(15.7)	4(5.8)	28
Total	15	36	13	64
$x^2 = 6.54$		df = 4	p = .162	

TABLE LXXIII

COMPARISON OF PREVIOUS OCCUPATIONS AND INTERPERSONAL INTEGRATION

Occupation	Housewife	Blue Collar	White Collar	Total
Integration				
High	7(5.9)	6(7.1)	6(5.9)	19
Medium	4(5.3)	7(6.4)	6(5.3)	17
Low	9(8.8)	11(10.5)	8(8.8)	28
Total	20	24	20	64
$x^2 = .94$		df = 4	p = .917	

TABLE LXXIV

COMPARISON OF MALES TO FEMALES ON INTERPERSONAL INTEGRATION

Sex	Male	Female	Total
Integration			
High	5(6.5)	14(12.5)	19
Medium	6(5.8)	11(11.2)	17
Low	11(9.7)	17(18.3)	28
Total	22	42	64
$x^2 = .85$	df = 2	p = .660	

TABLE LXXV

COMPARISON OF SELF PERCEIVED HAPPINESS AND INTERPERSONAL INTEGRATION

Perception	Not too Happy	Pretty Happy	Very Happy	Total
Integration				
High	6(7.7)	9(8.6)	4(2.7)	19
Medium	6(6.9)	9(7.7)	2(2.4)	17
Low	14(11.4)	11(12.7)	3(3.9)	28
Total	26	29	9	64
$x^2 = 2.52$	df = 4	p = .644		

TABLE LXXVI

COMPARISON OF HAVING A CONFIDANT AND INTERPERSONAL INTEGRATION

Confidant	Yes	No	Total
Integration			
High	15(12.8)	4(6.2)	19
Medium	12(11.4)	5(5.6)	17
Low	16(18.8)	12(9.2)	28
Total	43	21	64
$x^2 = 2.56$	df = 2	p = .278	

TABLE LXXVII

COMPARISON OF COMPARATIVE HAPPINESS AND SOCIAL INTEGRATION

Happiness	Not quite as happy as 5 yrs.	About as happy as 5 yrs. ago	Total
Integration			
High	11(12.8)	8(6.2)	19
Medium	14(11.4)	3(5.6)	17
Low	18(18.8)	10(9.2)	28
Total	43	21	64
$x^2 = 2.63$	df = 2	p = .268	

TABLE LXXVIII

COMPARISON ON SUBJECTIVE HEALTH AND INTERPERSONAL INTEGRATION

Health	Poor	Fair	Good	Total
Integration				
High	4(4.5)	6(6.5)	9(8.0)	19
Medium	4(4.0)	6(5.8)	7(7.2)	17
Low	7(6.5)	10(9.7)	11(11.8)	28
Total	15	22	27	64
$x^2 = .31$	df = 4	p = .986		

TABLE LXXIX

COMPARISON OF EDUCATION ATTAINMENT AND INTERPERSONAL INTEGRATION

Education	8 or less	H.S. or less	Some grad College	Total
Integration				
High	8(8.6)	5(3.9)	6(6.5)	19
Medium	8(7.7)	3(3.5)	6(5.8)	17
Low	13(12.7)	5(5.6)	10(9.7)	28
Total	29	13	22	64
$x^2 = 1.35$	df = 4	p = .853		

TABLE LXXX

COMPARISON OF RELIGIOUS AFFILIATION
AND SOCIAL INTEGRATION

Religion	Protestant	Other	Total
Integration			
High	16(14.8)	3(4.2)	19
Medium	12(13.3)	5(3.7)	17
Low	22(21.9)	6(6.1)	28
Total	50	14	64
$x^2 = .98$	df = 2	p = .618	

VITA

Marvin Leslie Ernst

Candidate for the Degree of

Doctor of Philosophy

Thesis: A MULTI-LEVEL ANALYSIS OF THE NURSING HOME ENVIRONMENT: STAFF ATTITUDES; RESIDENT INTEGRATION; RESIDENT MORALE

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