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THE UNIVERSITY OF OKLAHOMA

GRADUATE COLLEGE

DISENGAGEMENT AND REINFORCEMENT IN THE ELDERLY: AN EXPLANATORY SURVEY

A DISSERTATION

SUBMITTED TO THE GRADUATE FACULTY

in partial fulfillment of the requirements for the degree of

DOCTOR OF PUBLIC HEALTH

BY

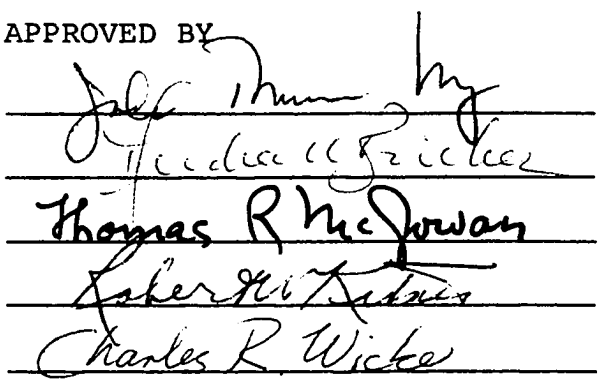
BARBARA SEARLE HENTHORN

Oklahoma City, Oklahoma

1975

DISENGAGEMENT AND REINFORCEMENT IN THE ELDERLY: AN EXPLANATORY SURVEY

APPROVED BY



DISSERTATION COMMITTEE

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DISENGAGEMENT AND REINFORCEMENT IN THE ELDERLY: AN EXPLANATORY SURVEY

CHAPTER I

SOCIOCULTURAL CONTEXTS OF AGING IN AMERICA

Characteristics of the Older Population

In 1970, one out of every ten persons in the United States was sixty-five years old or older. The percentage has more than doubled in this century, from 4.1 percent in 1900 to 9.9 percent in 1970. Florida has the highest proportion of elderly of any state. 15.5 percent, while Oklahoma ranks eighth with 11.9 percent. The 1970 census reveals the following facts about the nation's elderly: (1) the elderly are increasing in numbers more rapidly than the population as a whole; (2) elderly women outnumber elderly men by a ratio of 138 to 100; (3) the elderly who choose to live alone rather than with relatives have increased in number; (4) compared to twenty years ago, proportionally fewer elderly men are working, while slightly more elderly women are in the labor force; (5) the elderly as a group are less well educated and have lower incomes than the younger segment; and (6) only 5 percent of the elderly live in institutions. The continued growth of

the population aged sixty-five and over is due to several factors: a rise in the number of births from the late 1800s to the 1920s, the flood of immigrants prior to World War I, and advances in the medical sciences which have eliminated or reduced the occurrence of many infectious diseases.

The growth of the elderly population is expected to continue increasing at a rate of 16 to 18 percent for each decade through 1990, then to drop sharply for two decades as the small cohort born during the depression begins to reach age sixty-five. The "baby boom" which followed World War II will cause an upward swing again between 2010 and 2020, after which growth will decrease abruptly due to the declining birth rates of the 1960s and 1970s (Administration of Aging, 1973; Public Information Office, Bureau of the Census, 1973).

Societal Attitudes Toward Aging

Simmons points out:

> We are so successful in keeping very old people alive that we do not know what to do with them. . . . More and more of life with less and less in it is not a happy prospect. . . . Whether life can be good to the last drop or not really depends on when and how we drop (Simmons, 1960, p.87-88).

How can continued involvement in life be promoted for the increasing number of elderly in America?

Constraints on living fully in old age are imposed by societal attitudes. Expressions of devaluations of the elderly in the United States include numerous misconceptions. Stereotypical thinking holds that most of the aged are ill,

disabled, or senile; most aged lack sexuality; older persons are like children; older people will not change; and older people are all alike (Leanse and Jacobs, 1972). Western culture values youth, action, achievement, and the future (Linden, 1956; 1957; Ludwig and Eichorn, 1967).

Kalish (1971) observes that the aged are the very ones who earlier transmitted these values: now they pay the penalty. He disputes the idea that we are living in a youth-oriented society, but suggests that our values are middle-aged and middle-class oriented. Members of a youth-oriented society will accept as valuable any way of life youth chooses, be it beachcomber or bureaucrat. However, in America the bearded, long-haired youth who discontinues his formal education because he fails to see its relevance is not rewarded. The rewards go to the less hairy youth who follows the traditional college pathway to a "good job."

The concepts of aging that a society holds tend to be internalized as self-concepts of the aged. Rosenfelt (1965) refers to the "elderly mystique" which she sees as having emerged during the 1940s as a result of the social and technological changes resulting from World War II. The outdated skills of the aged, the increase in the labor force, and the growth of retirement plans and social security changed the expectations of those approaching old age. Negative attitudes developed toward old age itself. At some point in life a person begins to consider himself old, and different from his

earlier self in many respects. This is viewed as a misfortune, and the aging individual develops the elderly mystique, in essence, the view that there is no hope in old age. The elderly person is not expected to continue learning, to keep up with the times, or to maintain sexual relationships. Rosenfelt (1965, p. 42) asks:

> What are the consequences of belief in the elderly mystique? As with the feminine mystique, acceptance of so limited and so limiting a view ends by not only blinding its holders to the full range of possibilities available to them but also by so deforming them in conformity with its warped image that they become as restricted as the mystique would have them.

In other words, the elderly mystique becomes a self-fulfilling prophecy.

Rosenfelt's elderly mystique illustrates the prejudice of "ageism," the stereotyping and discrimination against people because they are old. Ageism joins sexism and racism as major prejudices of our society. But unlike the racist or sexist, who need not fear a change in skin color or sex, the ageist may some day join the ranks of the aged, and will become the victim of his own prejudice (Butler and Lewis, 1973):

> A story is told of a father who gave his own father, the grandfather of the household, a wooden bowl because his palsied hand always broke china ones. One day he found his son modeling a block of wood. When he asked him what he was doing, his son replied: "I am making you a wooden bowl, Father, for when you get old." (Sloan and Frank, 1970, p. 132).

Societal Roles for the Aging

Within a society, people form different strata com-

posed of persons of similar age. The age strata change in size and composition through the process of cohort flow, in which successive cohorts (those individuals born in the same period and aging together) form and move through life together, then eventually dissolve through death. Each cohort can differ in size and composition, and does differ in its knowledge and attitudes, due to a life-span covering different periods of history. The process of chronological aging causes mobility from one age strata to the next, and involves developmental changes (psychological, social, and biological), including role changes.

Roles differ by age groups along the dimensions of (1) the number of different kinds of roles; (2) the number of openings available in each kind of role; (3) the priority given to different roles; (4) the biological constraints on numbers and kinds that can be played; and (5) the social evaluation of roles. Mechanisms exist for assigning individuals in successive cohorts to appropriate roles. For example, compulsory retirement policies make room for entrance into the worker role by younger cohorts (Riley, Johnson, and Foner, 1972).

A progressive loss of roles occurs during the aging process, as children move away from home, the worker retires, and spouse and friends die. Rosow (1973) describes the social context of the aging person in terms of the effects of role losses. He postulates that the loss of roles excludes the aged from significant social participation and that it de-

values them. Historically the elderly of today are the first cohort to survive in large numbers into old age. Therefore they have few role models of successful aging to follow. The elderly are less prepared for old age than they were for earlier stages of life. Because society does not specify an aged role, the lives of the elderly are socially unstructured. There are few prescriptions, norms, and expectations of what an old person should be like.

Since social self consists of roles, role loss affects the self-concept. The social life-space is made up of the totality of a person's social roles: ". . . . In the way the bone skeleton is the supportive framework of an organism, so is the network of social roles the framework of the emotional life." (Stenbäek, 1973, p.10). The uselessness felt by the older person is influenced in our urban society offering few alternative social roles which would give the individual a feeling of significance (Birren, 1964).

Statement of the Problem

Like all members of society, the elderly are involved in the social structure because of the roles they perform. At the same time there are less role alternatives in aging than in earlier stages of life. Given this dilemma, how can continued involvement in life be promoted for the increasing numbers of elderly in America?

Personal experience in working with the elderly in nursing homes and senior citizen centers has revealed a wide range of involvement among the aged. Some have remained

actively engaged and interested in life, living fully until they died. Others seem arrested in their development, becoming disengaged, withdrawn, and alienated. These persons merely exist until they die. What is the difference between Margaret Kuhn, the elderly widow who led the Gray Panthers in picketing an American Medical Association convention in Chicago, and the aging woman alone in her rented room, surrounded by empty wine bottles, who ventures out only to sift through the neighborhood garbage cans for scraps of food? One is engaged; the other disengaged. Is there any explanation for their contrasting behavior?

Models of Aging

An effective strategy of dealing with the unknown is to construct a scientific model (Zubin, 1973). Models may be described as:

> . . . . conceptual representations of reality. They provide the outline or sketch for which theory provides the working insides (Riehl and Roy, 1974, p. 6).

Models provide a framework, then, for analyzing a problem and specifying modes and agents of intervention (Riehl and Roy, 1974). Three models of aging which might provide such a framework are the developmental model, the social-learning model, and the ecological model.

The Developmental Model

The developmental model of aging is concerned with the description and explanation of age-related changes in behavior

throughout the life span from birth to death. Developmental psychologists maintain that psychological development continues throughout the life span, with the individual capable of continuously "becoming," growing toward an ever more advanced state based on previous accomplishments (Erikson, 1963; Kastenbaum, 1964; Goulet and Baltes, 1970; Nesselroads and Reese, 1973; Havighurst, 1973). Accordingly, old age is seen as an opportunity for continued growth, rather than as a negative and deteriorative process. This philosophy is succinctly illustrated by a Dr. Edward Bortz, who refused to write an article on how to stay young, stating: "I am not interested in arrested development!" (Gillette, 1973, p. 395).

The Social-Learning Model

Ahammer (1973) suggests that social-learning theory is particularly appropriate for studying developmental changes occurring throughout life because the same laws of learning hold for all age groups. The learning model postulates that behavioral changes occurring in aging are the sequela of learning. The individual learns to be old in the same way he learns anything in life, through reinforcement. Through a process of selective reinforcement by significant persons in the social system, the individual learns that his behavior has consequences which can be rewarding or non-rewarding. If his behavior is followed by pleasant consequences (positive reinforcement), he tends to repeat the behavior in the future. If the behavior is ignored or followed by unpleasant

consequences, the behavior is not likely to recur. Reinforcement can be given either by those in the social environment, be self-administered, or be vicariously felt through observing reinforcement of others (Zubin, 1973; Bandura, 1969; Gerwitz, 1969; Skinner, 1953, 1974).

> Frequent reinforcement . . . builds and maintains an interest in what a person is doing . . . when reinforcement is no longer forthcoming, behavior undergoes "extinction" and appears rarely, if at all (Skinner, 1974, p. 58).

The Ecological Model

The ecological model has an implicit commonality with both the developmental and the social-learning models: man interacting with his environment. Old age is seen as an experience that is determined by the interaction of the elderly person and his total environment. The ecological model is based on the concepts of human ecology, defined by Hoyman as:

> . . . a unitive view of man, as a self-regulating, self-actualizing organism. It is concerned with the whole man, as an open-system, in his reciprocal dynamic transactions with his total environment—physical, biotic, and sociocultural. Human ecology is concerned with the unique individual as well as with populations and "statistical man"; with his personality as well as his tissues and organs; and with his spiritual outlook on life and need for personal fulfillment, as well as with his biologic needs for survival (Hoyman, 1971, p. 539).

For an ecological perspective, an assessment is made of the elderly person's interactions in five realms of human experience: the physiological/biological, the physical-environmental/safety, the sociocultural/belonging, the psychological/self-esteem, and the spiritual/self-actualization (Bircher, 1972, 1973; Maslow, 1954; Hood, 1968). All

of these realms are interrelated and interacting subsystems of the person's total ecosystem. For the aged, this may be called a gerontological ecosystem. Such a system may be analyzed at any of these five levels as suggested in Table 1.

TABLE 1

LEVELS OF ANALYSIS OF A GERONTOLOGICAL ECOSYSTEM

Level of Analysis	Possible Object of Study	Example
Physiological/ Biological	Physiological Changes of Aging	Decreased Sensory Acuity of Hearing and Vision
Physical-environmental/ Safety	Place of Residence	Adequacy of Heating and Lighting, Safety Hazards
Sociocultural/Belonging	Involvement in the Social Structure	Number of Roles in Which Involved
Psychological/ Self-esteem	Behavior of the Individual	Participation in Role Activities; Amount of Reinforcement Currently Received
Spiritual/Self-actualization	Areas of Aesthetic Experiences	Use of Leisure Time

An examination of these subsystems should promote an understanding of the differences in involvement in the social

structure among the aged.

The ecological model of aging provides a more comprehensive view of the aging process than the developmental and social-learning models. In fact, these models may be subsumed under the ecological model. Christie and Newman suggest that:

> The key to successfully utilizing the ecological approach is being able to separate out, from the myriad of factors involved in any single situation, those factors most significantly involved in the problem under study (1969, p. 93).

Analyses of gerontological ecosystems indicate that the average environment of the elderly is deficient in terms of its social and physical components, and its reinforcement systems (Baltes and Labouvie, 1973; Riley, Foner, Hess, and Toby, 1969). The problem of maintaining involvement of the elderly in the social structure may be best approached by analyzing the gerontological ecosystem at the social-psychological levels of analysis. Might disengagement, the withdrawal from societal roles, be related to the reinforcement occurring in the ecosystem of the elderly?

Purpose of the Study

The purpose of this study is to investigate whether there is a relationship between the degree of disengagement exhibited by elderly persons and the reinforcement received by them.

Findings from the study should contribute to an understanding of differences in involvement of aging persons in the social structure and should be of interest to persons who work with the elderly. Knowledge gained from the study may

provide the means to intervene in elderly lives to make them more meaningful. If the level of current reinforcers is found to be low for a disengaged individual, re-engagement can be facilitated by increasing reinforcement. Identification of idiosyncratic reinforcers (those specific for an individual) would provide a concrete basis for interventions to enhance the participation in an environmental milieu.

In addition, the older person could be taught to look at his interpersonal interactions in terms of the consequences for each party. Someone who sits home feeling sorry for himself because no one ever visits can be helped to determine whether his behavior is reinforcing to his visitors. Have they stopped coming because his constant complaints about his physical disabilities have become aversive?

Finally, the results may suggest ways to prepare for aging, such as the development of a broad repertoire of activities which may be continued to the end of the life span. Each person has some choice in <u>how</u> he will age:

> We may ripen as we age or we may merely rot, and which process dominates depends largely on the efforts of the individual. The supreme art of aging lies in so shaping one's life that ripening continues to the very end and rotting is kept to a minimum. (deRopp, 1960, p. 242).

CHAPTER II

ROLE THEORY AND LEARNING THEORY: A CENTRAL CORE

Riegel and Roy (1974) suggest that theory provides the working insides of a model. For this study, the ecological model is used as an outline or sketch for investigating the problem of involvement of the elderly in the social structure. Role theory, from the sociocultural level of analysis, and learning theory, from the psychological level of analysis, are used to provide the central core of the ecological model.

Role Theory

Every person is at different times of his life the center of different social circles or environmental systems which evaluate him by certain standards, expect him to perform certain duties, and grant him certain rights. The interaction of these four components (person, social circle, duties, and rights) comprise a social role (Znaniecki, 1965).

Linton in 1936 proposed a classic distinction between role and status:

> A status, as distinct from the individual who may occupy it, is simply a collection of rights and duties. . . . A role represents the dynamic aspect of a status. The individual is socially assigned to a status and

> occupies it with relation to other statuses. When he puts the rights and duties which constitute the status into effect, he is performing a role. Role and status are quite inseparable, and the distinction between them is of only academic interest. There are no roles without statuses, and no statuses without roles (Linton, 1936, p. 113-114).

Each person occupies numerous positions or statuses in society. Each of these positions involves an aggregate of complementary role-relationships. Merton defines this aggregate as a role-set: ". . . that complement of role-relationships in which people are involved by virtue of occupying a particular social status." (Merton, 1957, p. 110). For example, the family may be viewed as a role-set in which its members play complementary roles as they occupy the position of mother, father, or child.

A role, therefore, is a position or status which is filled by a person. It involves expectations of behavior defined and encouraged by significant persons in his environmental system (Anderson and Carter, 1974). Furthermore, not only do others have expectations of behavior for the person fulfilling this position, but the person himself has expectations.

Life is characterized by role entrances and role exits, a more or less continuous sequencing of roles. At each life stage, individuals learn how to enter and perform new roles, how to adjust to changing roles, and how to exit from old ones (Merton, 1968; Blau, 1972; Riley, Johnson, and Foner, 1972).

At birth, the newborn enters into a family role-set, in which he will play the role of son or daughter until the death

of both parents. There is a mutual socialization into the roles of parent-child, as the parent and infant interact. With the entrance into the school years, the child assumes the role of student, a role which some individuals play for many years. During adolescence, the teenager goes through processes of sorting and choosing in relation to friends, academic interests, and life goals. The choice of whether to continue the student role and enroll in college, or to quit school and enter into the work role will be influenced by such factors as social status, intelligence, orientation toward school, and education level of parents (Clausen, 1972).

For the average male in America, full adult status results in a transition from the student role into the role-set sequences of occupation, family, and citizen-community member. All three are interdependent, but the work role, for most men, has top priority. Clausen (1972) qualifies this assertion by stating that this is more likely for the man who began working later in his life after a long period of education, than for the earlier entrant into the labor force, whose generally lower status job offers less opportunity for intense involvement. The increasing degree of economic independence which accompanies the work role makes possible more social contacts with the opposite sex. As a consequence, many individuals marry within a few years of assuming the work role, and thus enter a stage with additional family roles.

Marriage requires a change in identity for both partners, but probably more so for the woman. She must adjust to

a new home, and to reflected appraisals due to her husband's name and occupation. If both marital partners work, the wife's job is probably secondary to the needs of her husband. If she does not work, her identity may become so closely linked to that of her husband that widowhood leaves her completely bereft.

For many couples, the newly-married stage evolves into a procreative stage, as children are born and new roles as parents emerge. The demands of the young child may conflict with the demands of the husband, resulting in a role conflict for the wife and mother. Community roles may evolve for both parents, as they become involved in such activities as P.T.A. or scouting. Involvement in community affairs is also related to increased success in the work role. The contacts made in the community may enhance job performance. Moreover, many successful businessmen seem to feel an obligation to become involved and active in community affairs. A similar obligation is felt by wives, especially those of professional men, who may gain fulfillment through volunteer activities for the hospital, symphony, or theater. On the other hand, men who are not upwardly mobile tend to spend less time on their jobs and have less investment in the community, but have relatively more investment in family and leisure activities (Clausen, 1972).

The end of the stage of active parenting usually arrives for parents between the ages of forty and fifty, as the

last of the children depart from home. This is the first role loss for many parents, but it may be seen in a positive way. Frequently the diminishing of the parental role is accompanied by a sense of relief, as responsibilities lessen and the amount of available money increases (Lowenthal and Chiriboga, 1972). However, the parental role loss may be viewed as a traumatic event by the woman whose life has revolved around her children. For the working mother, there may be a reduction in whatever guilt she has had about not being available at home. For the non-working mother, it is an opportunity to seek new activities, such as a return to the student role or increased involvement in community roles, activities which may be carried into the later years.

The middle years are not only marked by a reduced parental role, but by the impending loss of the work role. This is the time when one realizes he is slowing down, that life is half over. There seems to be no inevitable crisis; most people adapt as they did to earlier stages. Many individuals re-evaluate their goals and decide to stay in their current position rather than accept an advancement to a job with more pressures and responsibilities.

The work role usually deteriorates with age, as the individual becomes unable to keep up with the changes or demands of his job. Factors affecting the older person's ability to continue his work role are health, education, and work performance (Riley, et al., 1972). Retirement and the subsequent

loss of the work role may be accompanied by ambivalent feelings. Adjustment to retirement depends upon how much disruption there is in the whole social network of roles.

Socialization into Roles

Socialization can be described as the process by which an individual learns to be a member of society and is prepared to fill its roles. Inherent in this process is an interaction between the individual and the social system to which he belongs. Socialization is both a continuous learning process which begins at birth and continues throughout the life cycle, and a reciprocal process which affects both the socializee and the socializer (Clausen, 1968; Riley, Foner, Hess, and Toby, 1969; Berger and Berger, 1972).

The mechanisms of socialization are essentially carried out by some individual who selectively reinforces one performance rather than another, selectively punishes some types of behavior, and extinguishes other behaviors by non-reinforcement (McGinnies, 1970).

The large repertoire of behavioral responses acquired through socialization is organized into roles. Socialization, therefore, develops the individual's ability to perform appropriate role behavior (Burgess and Bushell, 1969; Ullmann and Krasner, 1969; Brim and Wheeler, 1966).

Learning Theory

The socialization process employs principles of learning

theory, particularly operant conditioning (Skinner, 1953, 1974).

Operant Conditioning

A paradigm or model which accounts for most of our learned behavior is the model of operant conditioning. Operant conditioning is based on the assumptions that behavior is learned, behavior occurs in a certain setting or situation, and behavior is altered by its consequences (Skinner, 1974; Loomis and Horsley, 1974).

Operant conditioning accordingly focuses on behavior, and is concerned with the activity of a person in relation to his environment. All behaviors are seen as resulting from operation of the same learning principles. Past events are considered important in the forming of behaviors, but the concern of the behavioral analyst is with present behavior. The essential components of behavior have been identified as responses and stimuli. Responses are units of behavior (the action of an individual); stimuli are units of the environment (the environmental conditions or events which interact with behavior and influence it) (Kanfer and Phillips, 1970; MacMillan, 1973; Loomis and Horsley, 1974). The terms response and behavior will be used interchangeably in this study.

There are two types of responses: (1) respondents, involuntary or reflexive behavior that is not learned, but elicited ("drawn out") by specific changes in the environment; and (2) operants, responses which "operate" on the environment,

are emitted ("sent out") by the individual and are under his control (MacMillan, 1973; Keller, 1969). For example, when someone shines a light in an eye, the pupil of the eye will contract. The contraction of the pupil is a respondent; the action of shining the light into the eye is an operant. The owner of the eye could not voluntarily control his behavior (the pupil contraction), but the person with the light could choose not to emit his behavior (shine the light in the eye). Respondents usually involve autonomic activity, thus emotional responses are generally considered respondents. Operant responses include those that involve the skeletal system, such as motor movements and verbal responses (Kanfer and Phillips, 1970).

Stimuli may be classified according to function as either eliciting stimuli, reinforcing stimuli, discriminative stimuli, or neutral stimuli. Eliciting stimuli precede responses and tend to elicit only fixed or stereotyped responses of the respondent type. Reinforcing stimuli follow responses and increase the probability that those responses will be emitted in the future. Discriminative stimuli precede or accompany operant responses, but do not cause them to be emitted. Instead, they serve as cues to the person as to what responses are likely to be reinforced in the situation. Neutral stimuli are those which have no effect on responses, whether they precede, accompany, or follow a response (Skinner, 1953; MacMillan, 1973).

The learning model of operant conditioning focuses on operant behaviors, rather than respondent behaviors. Since operant responses are emitted voluntarily, how often they will occur depends on the consequences, or the effect on the environment. Two possible effects are the appearance of a stimulus, or the disappearance of a stimulus.

When the appearance of a stimulus results in an increased probability that the behavior will be emitted in the future, the stimulus is said to be a positive reinforcer. For example, a geriatric stroke patient often is left with a residual muscular weakness and partial paralysis of the extremities of one side of the body. He must learn to use a walker or cane in order to safely ambulate. If the nurse who assists him in walking praises his progress each time, and he then begins to attempt walking more frequently, the nurse's praise is a positive reinforcer.

When the disappearance of a stimulus, as a consequence of a behavior, results in an increased probability of that behavior recurring, the stimulus is called a negative reinforcer. The behavior has led to the termination or disappearance of a stimulus that the person has found unpleasant or aversive. Ayllon and Michael (1959) applied this concept of negative reinforcement to increase self-feeding behavior in two female psychiatric patients who were feeding problems. The two patients, who were on separate wards, refused to eat unless they were spoon-fed by the nurses. However, both seemed to care for neat and clean clothes. The nurses were

instructed to deliberately spill some food on the patients' clothing whenever they were spoon-fed. This loss of personal cleanliness (an aversive stimulus to the patients) could be avoided by self-feeding, the desired response. This negative reinforcement approach was combined with positive reinforcement: the nurse was to sit with the patient and talk with her for at least three minutes whenever she was feeding herself. The approach was effective with both patients, resulting in a marked increase in self-feeding behavior.

A third possible effect of an operant on the environment is that the behavior is followed by an unpleasant consequence, a punishment, resulting in a decreased likelihood that the behavior will occur in the future. An example is the spanking (aversive stimulus) a toddler receives after running into the street, an operant response. This may be labeled as "punishment by hurt." Punishment may also occur when a pleasant stimulus or positive reinforcer is removed, as when a teenager has privileges taken away from him when he stays out too late (a punishment by loss).

The behavioral effects of presenting or withdrawing a reinforcer are summarized in Figure 1.

The cells may be interpreted as:

I. Behavior increases following the presentation of a positive reinforcer. This is called positive reinforcement.

II. Behavior decreases following the withdrawal

of a positive reinforcer. This is punishment by loss.

III. Behavior decreases following the presentation of a negative reinforcer. This is punishment by hurt.

IV. Behavior increases following the withdrawal of a negative reinforcer. This is called negative reinforcement.

	Present	Withdraw
Positive Reinforcer	I Behavior Increases POSITIVE REINFORCEMENT	II Behavior Decreases PUNISHMENT BY LOSS
Negative Reinforcer	III Behavior Decreases PUNISHMENT BY HURT	IV Behavior Increases NEGATIVE REINFORCEMENT

Figure 1.—Behavioral effects of the presentation and withdrawal of reinforcers.

Specific conditions can be set up in the environment by which a positive reinforcer is presented contingent upon a behavorial response. The person then has to do something (emit the desired behavior) in order to obtain something (the positive reinforcer). Such conditions are called contingencies of reinforcement. They can also be described as the interrelationships between the occasion upon which a response occurs, the response itself, and the reinforcing consequences

(Keller, 1969; Skinner, 1969). Many common sayings are statements of contingencies of reinforcement, such as Grandma's Law: "First clean up your plate, then you may have your dessert." (Homme, 1970). Behavior, therefore, can be affected by pointing out the relation between behavior and its consequences, the contingencies of reinforcement, as when a mother tells her toddler that he will receive a spanking if he runs into the street.

However, operant behavior is more complex than the simple examples previously discussed. Even though operant responses are emitted voluntarily, they are affected both by those events in the environment which precede them and those which follow them. The environmental event which precedes a response is called a discriminative stimulus in operant conditioning. A discriminative stimulus does not elicit a response, but sets the stage or cues the individual when to emit a response. It also signals that the response is likely to be positively reinforced if emitted. If the discriminative stimulus is not present in the situation, the individual learns that he is not likely to be reinforced for emitting the behavior. Therefore, the probability that a behavior will be emitted is increased in the presence of a discriminative stimulus; it is decreased in its absence.

The probability that a behavior will be emitted is also decreased in the presence of a stimulus delta. The stimulus delta is another environmental event that precedes a response

and cues the person whether to emit the response. This stimulus is always present when a response is either punished or not reinforced, and signals that a response is not likely to be reinforced. For example, the appearance of an ice cream truck in the neighborhood is a signal (a discriminative stimulus) for a child to run to ask his mother for money to buy ice cream. If his mother smiles when he submits his request, the smile is a cue or signal (another discriminative stimulus) that he will receive the money. A frown (a stimulus delta) is a different signal that indicates that he probably will be refused (MacMillan, 1970; Loomis and Horsley, 1974; Burgess and Bushell, 1969; Burgess and Akers, 1966).

To reiterate, both the discriminative stimulus and the stimulus delta are signals or cues in the environmental setting that suggest what the consequences will be if a behavior is emitted. The presence of a discriminative stimulus signifies that it is appropriate to emit the behavior, and that it will probably be reinforced. The presence of a stimulus delta, on the other hand, forewarns that the behavior should not be emitted, or unpleasant consequences may occur. Hence, the expectancy of reinforcement is <u>increased</u> in the presence of a discriminative stimulus and <u>decreased</u> in the presence of a stimulus delta.

How then do stimuli come to have such power over responses? Some, called primary or unconditioned reinforcers, are necessary for survival, and therefore have had power to

reinforce behavior since birth. Primary reinforcers are those which directly fulfill biological needs. Examples are food, sex, warmth, and sleep.

Through the process of association with a primary reinforcer, stimuli which were originally neutral (having no effect on the frequency of responses) become secondary or conditioned reinforcers. For example, the mother with a small infant delivers the primary reinforcer of food. Food is a particularly strong reinforcer because it relieves a physiological deprivation. Since feeding is generally a social occasion, the mothering one smiles and talks to the baby while feeding him. By frequent association with food, the mother's smile, voice, and face become conditioned positive reinforcers capable of increasing the frequency of behaviors preceding them. Once they have become positive reinforcers in one situation, they will generalize and function as reinforcers in other situations (Burgess and Bushell, 1969; Bijou, 1970).

Since conditioned reinforcers acquire their power through association with other reinforcers, a pyramiding effect occurs. Almost any stimulus has the potential of becoming a conditioned reinforcer, consequently a wide range of reinforcers is quickly established. Some stimuli have been paired with so many other reinforcers, becoming discriminative stimuli for first one reinforcer and then another, that they become more and more reinforcing by themselves. Money, social status, attention, approval, and affection are examples of such

generalized reinforcers (MacMillan, 1973; Keller, 1969; Burgess and Bushell, 1969).

Potential changes in reinforcement effectiveness in the elderly are postulated by Lindsley (1964). Long-range conditioned reinforcers, those which occur at some distant date, are less efficacious for the person who feels he might die soon. As Rotter (1954) points out, in order to delay reinforcement the individual must have some expectancy that the future reinforcements that are promised are likely to occur. Thus, the elderly are more dependent on immediate and idiosyncratic reinforcers.

Furthermore, the effectiveness of a reinforcer is influenced by conditions of deprivation or satiation. A person deprived of food for a period of time will place a higher value on food as a reinforcer than the person who has just finished Thanksgiving dinner and is satiated.

As previously discussed, behavior is increased and maintained through the use of positive reinforcers. Behavior is decreased through a process called extinction. In extinction, a behavior which was previously reinforced is no longer reinforced. As the positive reinforcer is withheld, the behavior gradually decreases and finally extinguishes, becoming dormant at the frequency level at which it occurred prior to being increased by reinforcement.

New behavior may be developed by combining the processes of reinforcement and extinction to shape the desired

response. Essentially, shaping consists of selective reinforcement. Responses or behaviors that are rough approximations of the desired behavior are reinforced; all other responses are not reinforced. Step by step the behavior is shaped by reinforcing closer and closer approximations. The behaviors which are not approximations will be extinguished through lack of reinforcement.

The process of shaping is illustrated in a study by Isaacs, Thomas, and Goldiamond (1960), who used shaping procedures to reinstate verbal behavior in a psychiatric patient who had been mute and withdrawn for nineteen years. During one group therapy session, an alert therapist noticed that the patient's eyes followed a package of gum as it fell from the therapist's pocket. The therapist subsequently set up a shaping program for the patient, during which he worked with the patient on an individual basis three times a week. At the beginning of the program, the patient was reinforced for focusing his eyes on a stick of gum. When he emitted this behavior, he received the gum. Next, the gum was not awarded until he made a small mouth movement. The next step required that he make some sound. Finally, he did not receive the gum until he spoke the word "gum". At the end of the sixth week, the patient said, "Gum, please." At this time he also began to answer questions about his name and age. Eventually he began making verbal requests (when his non-verbal requests were ignored by personnel).

Bandura and Walters (1963) suggest that learning can be shortened through modeling or imitation, the provision of social models. Like shaping, imitation is important for learning new behavioral responses. Models provide accelerated learning and are an essential means of transmitting behavior patterns, often reflecting social norms and values. Bandura and Walter state: "The essential learning process consists of the presentation of a model, symbolic or otherwise, whose behavior the observer matches." (1963, p. 91). Models of successful aging, such as parents who survived to old ages, have not been available in the past for many of the present cohort of the aged (Rosow, 1967).

The degree to which an observer is influenced by the behavior of a model is partially dependent on the consequences which occur to the model. Thus the observer's behavior may be inhibited if the model is punished for his behavior, or it may be disinhibited if the behavior is not punished as was anticipated. Inhibitions are lessened, therefore, as another's social behavior is observed, especially if there are no aversive consequences. Modeling may also facilitate a response which has been dormant in a response repertoire.

Social Learning Theory

The social learning theory developed by Rotter (1954, 1966; Rotter, Chance, and Phares, 1972) expands the model of operant conditioning to include the concept of anticipated reinforcement.

Rotter's social learning theory focuses on the

interaction of the individual and his meaningful environment. A person's experiences and interactions with his environment influence each other. His selection of new experiences is influenced by his past experiences.

Behavior is goal-directed. In any situation, the individual seeks to maximize his positive reinforcements, that is, he emits those behaviors which are the most profitable in terms of reinforcement. New goals or reinforcements become important because of their association with goals obtained during previous learning experiences.

The probability of a person emitting a behavior is influenced by the importance of the goals or reinforcements toward which the behavior is directed, and by the expectancy or anticipation that these goals or reinforcements will occur. The person's anticipation or expectancy for their occurrence is determined by his previous learning experiences.

Four basic concepts of social learning theory are behavior potential, expectancy, reinforcement value, and the psychological situation.

Behavior potential is the probability of a behavior occurring in any given situation when considered in relation to a particular goal or reinforcement, or a set of reinforcements. The potentiality of any behavior occurring is calculated in relation to other alternatives available to the individual, thus behavior potential is a relative concept.

Expectancy is the subjective probability held by a

person that a specific reinforcement will occur in a particular situation as a result of his behavior. In other words, it is the expectancy for a behavior-reinforcement sequence. An individual's expectancy is a function of his experience in a particular situation and in related situations.

Reinforcement value is the importance attached to a goal or reinforcer by an individual. It may also be defined as the degree of the individual's preference for the reinforcer to be presented if it were equally possible for all other alternative reinforcers to occur. Reinforcement value, then, indicates how much one reinforcer is preferred over another, and therefore is also a relative concept. For example, a man prefers to be paid $10.00 per hour rather than $1.00 per hour if he has his choice.

The psychological situation is the unique environment, external and internal, of the individual at one point in time. Behavior does not take place in a vacuum, but in a specific situation which contains behavioral cues for the individual. These cues activate expectancies for the reinforcement of behavior, as they signal whether or not reinforcement is likely to occur in that situation.

The relationship of these four concepts can be expressed in the formula BP = f (E and RV). This formula reads: The probability that a behavior will occur in a specific situation is a function of the expectancy that it will be followed by a particular reinforcer, and by the value of that reinforcer for

the individual (Rotter, 1954, 1966; Rotter, et al., 1972).

Summary of Learning Theory

The theories of Rotter and Skinner can be recapitulated as follows:

1. Most of man's behavior is learned.
2. Man builds up a repertoire of behaviors that are developed by the application of certain learning principles:
   a. Behavior which is followed by an effect or event which is pleasurable is more likely to be repeated than that followed by an unpleasant event.
   b. A pleasurable effect or event thus has a positive effect on the behavior, reinforcing or strengthening the probability that it will occur again. Therefore the pleasurable effect or event is called a positive reinforcer.
   c. The emitting of a desired behavior increases when its occurrence is followed by something that is enjoyable, a positive reinforcer.
   d. The frequency of an undesirable behavior decreases when its appearance is not succeeded by a pleasurable event or positive reinforcer.
3. The probability that a behavior will occur in a specific situation is a function of two variables: the subjective expectancy that it will be followed

by a pleasurable event, and how much that event is enjoyed (its reinforcement value).

Thus the emitting of desired behaviors can be increased by rewarding or reinforcing their occurrence. Behaviors which are not rewarded tend to extinguish (lessen in frequency). For example, if every time a daughter telephones her elderly mother, the mother complains about her daughter's neglect, the daughter will interpret this as unpleasurable, and therefore will be hesitant to call again. Withdrawal from desired behavior will be lessened by providing reinforcement for the emitting of that behavior.

Process Definition: Positive Reinforcement

The concept of reinforcement is a major variable in this study. In order to clarify its meaning, the following process definition is proposed:

1. An individual emits a behavior in a particular environmental setting.
2. The behavior is followed by the occurrence of a highly valued or pleasurable event.
3. The individual anticipates that the behavior will be followed by a pleasurable event if he emits it again.
4. He repeats the behavior.
5. His expectations are met; the pleasurable event occurs.
6. The individual increases the frequency of his

behavior.

Principle: The probability that a behavior will occur in a specific situation is a function of the expectancy that it will be followed by a pleasurable event and of the perceived value of that event.

Criticisms of Learning Theory

The fact that men control one another's behavior is a fact of life: the control and influence of another is as old as social living. Advances in the social sciences have steadily increased the understanding of human behavior, thereby increasing the power to influence, change, and mold it (Ullmann and Krasner, 1969; Skinner, 1953; Rogers and Skinner, 1956; Schaefer and Martin, 1975).

The application of learning theory, particularly operant conditioning, is popularly known as behavior modification. Most criticisms of learning theory focus on its application, rather than its theory.

The use of behavior modification to control human behavior raises several ethical and philosophical considerations. Who decides what behavior should be changed? Who does the controlling and who is controlled? (Rogers and Skinner, 1956; MacMillan, 1973).

In essence, the decision about what behavior should be changed is based on prevailing societal attitudes and values. Normality is a social evaluation. As Ullmann and Krasner point out: "Labeling a person as abnormal is a social act within a definite context of time, place, and person . . .

being normal is acting in a manner expected or valued by other people." (Ullmann and Krasner, 1969, p. 9, p. 200).

Skinner (1953) suggests that there are several solutions to the issue of control of human behavior. The first is to deny that control is possible, for man is a free agent. Skinner feels that this view is becoming less and less tenable. As more is learned about the effects of the environment on behavior, there is less evidence to attribute human behavior to an autonomous controlling agent. Furthermore, Skinner adds, the view that a person's behavior is determined by his genetic endowment and by his environmental conditions has a marked advantage over the autonomous view of man when someone begins to do something about behavior.

> Autonomous man is not easily changed; in fact to the extent that he is autonomous, he is by definition not changeable at all. But the environment can be changed, and we are learning how to change it (Skinner, 1971, p. 96).

A second solution, proposed by Rogers (Rogers and Skinner, 1956) is to refuse to control. Rogers indicates that the psychotherapist, for example, does not need to control his client. If certain qualities of interpersonal relationships (empathy, genuineness, and warmth) are established, the client will, on his own, become more self-responsible, more self-directed, and more self-actualized. The psychotherapist's role is to free the patient to decide for himself. The client has the solution to his problems within himself. Skinner disagrees, stating: "To refuse to control, however, is merely to

leave control in other hands." (Skinner, 1953, p. 439). Forces in other parts of the patient's world will then exert control.

Schaefer and Martin (1975) suggest that the "controller" is not independent of the "controllee". The controller's actions are equally affected by the person who is being controlled. The controller must understand the controllee (his idiosyncrasies, likes, and aversions) if he hopes to influence his behavior.

In addition, the controllee often engages in countercontrol, particularly when he views the control as aversive. This may be seen at a societal level when a group of the controlled seek to overthrow a dictatorship in order to establish a world which they find more reinforcing. Countercontrol against the misuse of control is also exerted by ethical standards and practices, such as those of the profession of psychotherapy (Skinner, 1953).

On a theoretical level, there is a conflict between the psychoanalytic therapists who use a medical model for viewing abnormal behavior, and the behavioral therapists using a learning model. In the medical model, odd behaviors are seen as symptoms of an underlying problem: the behavior is abnormal <u>because</u> of some underlying cause. If the behavioral symptom only is treated, the real cause will not be cured. If the underlying cause is not treated, a new maladaptive behavior may appear. This is another criticism of behavior modification, that it merely changes behavior, but doesn't deal with

the real cause. The therapist using the medical model assumes that when the patient recognizes the underlying problem, his behavior will automatically change. In contrast, the behavior modifier sees the behavior as the disease, and behavior modification as the cure.

Ullmann and Krasner (1969) hold that symptom substitution following behavioral modification is the exception and not the rule. They suggest that if a new maladaptive behavior emerges after another maladaptive behavior is extinguished, the original behavior was probably one of a set of maladaptive behaviors in a behavioral repertoire whose components have to be extinguished one by one.

> As a subject finds that his prior modes of behavior are no longer successful, he may emit behaviors that have been less likely in the past but may also be maladaptive (Ullmann and Krasner, 1965, p. 14).

In addition, any change in the person generates a change in his environment. The change in the person's behavior may not be reinforced by significant others. A meek and compliant husband who begins to assert himself may not be welcomed by his wife.

Another criticism of learning theory argues that if behavior is determined by the physical and sociocultural environments, then no one can be held accountable for his actions. Schaefer and Martin (1975) refute this by citing the example of a thief. Though environmental factors do influence the thief's actions, among these factors is one for which he can be held accountable: ". . . He knows that by stealing he

wrongs society." (Schaefer and Martin, 1975, p. 11). Ullmann and Krasner (1969) further support this rebuttal by pointing out that when abnormal behavior is seen as being no different than normal behavior in the way it is learned and maintained, the individual can be held responsible for his actions. Abnormal behavior is not to be construed as sick behavior, and thereby excused. A person acts the way he does because he learned to act that way. He learns to be abnormal in the same way that he learns to be normal. Hence, the individual can be held accountable for learning new, more adaptive behaviors.

A different type of criticism of the application of learning theory is expressed by Willems (1974): behavior modifiers fail to apply an ecological perspective to their work. They do not concern themselves with the long-range consequences and possible side effects of their interventions. Most technological interventions have unintended side effects, as exemplified by the building of the Aswan Dam on the Nile River. The dam was built for compelling reasons: to provide irrigation water, to manufacture electrical power, and to prevent floods. Unfortunately, two disastrous side effects occurred: (1) the food cycle of the Mediterranean sardine was disrupted, resulting in a reduction of the sardine harvest from 18,000 tons to 500 tons per year, and (2) schistosomiasis, a disease transmitted to humans by snail flukes, increased both in virulence and incidence. The schistosomiasis problem was attributed to two factors: the snail population carrying the

virulent flukes increased in the quiet waters of the dam, and more persons came in contact with the snails as the new body of water attracted large crowds.

Willems (1974) cites another example of unwanted side effects, this time in a behavioral modification program. The nagging behavior of a mother was selected as the target behavior to be modified. At the beginning of the program, the mother emitted commands (nagged) at the rate of 100 or more per hour, resulting in little obedience by her child. As the nagging behavior was reduced to a rate of fifteen per hour, the child obeyed more frequently. However, the mother became increasingly more tense and nervous. She began eating more frequently, gained weight, and finally left home, abandoning the child. Willems suggests that the behavior modifier should begin collaborating with the ecologist, to determine what kinds of unintended effects occur most frequently and why they occur and thus to determine the unanticipated costs of behavior change. In response to Willems' proposals, Baer (1974) emphasizes that there is also a need to consider the cost of <u>not</u> modifying a behavior when it is a problem.

Disengagement: Withdrawal from Social Roles

Both role theory and learning theory form a base for understanding the phenomenon of disengagement in the elderly. The theory of disengagement was first explicated by Cumming and Henry (1961) and later modified (Cumming, 1968). It essentially postulates that disengagement is an inevitable process

of aging which results in a gradual withdrawal of the older person from his various role-sets. Traditional social theories of aging in the past suggested that the older person was gradually isolated through desertion by others in the social structure. Disengagement theory suggests that the older person participates in creating his shrinking social environment (Leake, 1961).

Three types of disengagement may occur: (1) mutually satisfactory: desired by both the individual and society (a person wants to retire and his company agrees); (2) forced engagement: the individual wants to disengage, but society doesn't want him to (the elder statesman is asked to continue serving as an ambassador instead of retiring to private life); and (3) forced disengagement: society wants disengagement, but the individual doesn't (the professor is forced to retire at age sixty-five although he would like to continue teaching) (Atchley, 1972).

The fully engaged person will interact in a large number and a wide variety of roles. In contrast, the disengaged person has experienced a severing of most of the relationships connecting him to his social system. Each person may be located on a continuum of disengagement, ranging from full engagement to the only total disengagement: death.

Disengagement, then, is a natural process leading to the final stage of life:

> When a middle-aged man dies, he is torn from the fabric of life; when an old man dies, he has already unravelled

> the web of interaction so much that he can slip from life almost unnoticed. . . . his bonds have been all but severed—disengagement is complete, he is free to die, and death is the last logical step in the process of living (Cumming and Henry, 1961, p. 226).

The process of disengagement probably begins somewhere in middle age when the individual is hit with an awareness of the inevitability of death and the briefness of the time he has left, the point "when we wonder for the first time whether we are wasting the time we have left." (Cumming and Henry, 1961, p. 224.) This is the moment when a person senses that there is not enough time left for everything he wanted to accomplish. Allocations and priorities for the future are established. There is a shift away from the need for achievement, and disengagement commences.

In some ways, disengagement is a circular process, since the withdrawal from roles leads to lesser contacts, and social interaction becomes more of an effort. There is a lessening of activity which leads to less stimulation; lack of stimulation leads to further decrease in engagement (Kleemeir, 1964).

Roles are the primary modes of engagement, therefore the engagement of a person in societal life can be studied by analyzing his level of involvement and participation in the social roles of his role-sets.

In a study of the social involvement of the American widow, Lopata (1970) found that the major factor in determining continued engagement was the degree to which the widow's various roles were dependent upon her husband. If she has

maintained her own identity through a career or volunteerism, the widow is more likely to remain engaged. The "Merry Widow" role of sociable leisure activities enhances engagement.

Cumming and Henry (1961) propose that retirement is society's permission for men to disengage; widowhood is the formal permission for women to disengage. However, widowhood may be permission to engage for those whose marital life was marred by an alcoholic or incompatible husband.

Carp (1968 b) postulates that disengagement occurs from one's children, other people, activities, ideas and mental stimulation, and material possessions. Disengagement from children may be along the lines of being more willing to let them run their own lives. Disengagement from material possessions frequently transpires after the death of a spouse, or the move into a nursing or retirement home, as family artifacts are distributed in anticipation of the individual's own death.

Prasid (1964) found no empirical support for the contention that most men are ready to disengage from the work role. Lehr and Rudinger (1969) suggest that there is a sequence of engagement to disengagement at the time of retirement, followed by a re-engagement after adjustment to retirement. This type of disengagement is seen as a reaction to the stress of changing the life style. Such temporary disengagement appears to be a frequent way of coping with specific life situations. For example, the person with a new colostomy

may be reluctant to participate in social activities for fear that there may be a sudden discharge of fecal material from the stoma whose odor would be offensive to others. As the colostomate is able to regulate this discharge by daily irrigations, he will become more willing to re-engage in society.

Rose (1964) and Maddox (1964) disagree with the view that disengagement is intrinsic and inevitable. They argue that disengagement is situational, rather than intrinsic, and must be considered in the context of the social structure and social trends.

Tallmer and Kutner (1969) maintain that environmental stresses such as illness, widowhood, and retirement, are related to disengagement, and that it is not age per se which produces disengagement, but the impact of the physical and social stresses of aging.

Streib (1968) appears to be one of the few gerontological researchers who agree with Cumming and Henry (1961). Streib's findings indicate that the process is inevitable, universal, and primarily a matter of time. Disengagement, he suggests, is differential, occurring at different rates and amounts for the roles in a person's role-sets (Streib and Schneider, 1971; Williams and Wirth, 1965).

The major critics of disengagement have been the proponents of the activity theory of aging. This theory holds that successful aging means maintaining, as long as possible, the

activities and attitudes of middle age. If useful roles have been given up, new roles should be substituted (Atchley, 1972; Havighurst, 1961). Activity theorists may agree with disengagement as a process, but not as a theory of successful aging (Neugarten, 1972, Havighurst, Neugarten, and Tobin, 1968). Carp (1968 a) offers evidence that the degree of engagement may be less important in determining adjustment and life satisfaction than the closeness of its fit to the supplies and demands which are available.

Process Definition: Disengagement

Disengagement, the other major variable in this study, may be process-defined by utilizing concepts from role theory and learning theory:

1. An individual is born into a social circle in which he is ascribed the role of child.
2. He learns the duties and rights of a child through selective reinforcement of his behaviors by significant persons in his environmental setting.
3. In addition, role models provide anticipatory preparation for role changes and acquisition of new roles.
4. A sequencing of roles occurs; he exits old roles and enters new ones.
5. He expands his role as a child to include the student role.
6. He passes from the student role to the worker role.

7. Increased economic independence permits entry into the spouse role.
8. The newly-married stage evolves into the procreative stage; a new parental role emerges.
9. Community roles of citizen, volunteer, and association member develop in connection with role obligations of parent and worker.
10. As the last of the children leave home, the procreative stage is followed by a less active parenting stage.
11. The individual becomes aware of the inevitability of his death and the briefness of the time he has left.
12. He begins to wonder whether he is wasting the time he has left.
13. He establishes priorities for the activities in his present and future life.
14. There is a gradual withdrawal from the social structure, occurring at different rates and amounts for the various roles in his role-sets.
15. Withdrawal from family, friends, ideas, and material possessions becomes complete with the event of death.

Principle: Disengagement from involvement in the social structure is differential, occurring at different rates and in varying degrees for each of the roles in an individual's role-sets.

Role Options in Aging

Blau (1972) advises those growing older to develop a variety of roles in preparation for aging, so that the inevitable role exits do not leave one "roleless". Butler (1970) concurs:

> One of the greatest dangers in life is being frozen into rigid roles that limit one's self-development and self-expression. We need to enhance both the reality and the sense of personal growth throughout the course of life until its very end (Butler, 1970, p. 124).

Bruhn (1971) suggests that aging be studied as the interaction between societal role alternatives and the individual's ability to adapt to these alternatives. What are some role options for the later years of life?

Blau (1972) remarks that until new, meaningful social roles for the aged become commonplace, the aged may find the sick role preferable to being roleless. On a more positive note, Foner (1972) points out that the role of citizen is only slightly constrained by age: there is a minimum age for voting but no maximum.

Hence the political role is one that is maintained well into old age, especially among men. There is a high level of party identification. A higher percentage of eighty to ninety year olds vote than twenty to thirty year olds. Decrease in other role commitments provides opportunity to keep up with political affairs and to actively participate. Atchley (1972, p. 244) notes that older persons "appear to enjoy political participation but at the same time to be

cynical about its concrete effects." Even physical immobility need not keep the elderly from voting, for absentee ballots may be obtained for most elections. Many candidates offer free rides to the polls. Continued political participation is a way of remaining involved in the larger societal structure.

Another role alternative is that of association member. Norms exist in our society for the elderly to continue membership in voluntary organizations. Older persons are more likely to belong, in rank order, to these types of organizations: lodges or fraternal; church-related or religious; civic or service; veterans, military, or patriotic; and social or recreational (Riley and Foner, 1968).

Retirement cohorts, people who have known each other on the job and who retire together, may provide a continuity of identification with the work role (Atchley, 1971). Some consider retirement to be a "roleless role" with little agreement about the behavior that should be associated with it. However, Atchley (1972) suggests that there are certain expectations. The retiree is expected to spend more time with his family, expand leisure time, drop memberships in work-related organizations, get by on a reduced income, spend more time with friends, and increase involvement in non-work related organizations.

Primary role relationships with family, friends, and neighbors comprise a major group of role alternatives. Most older women exit the role of wife to enter the role of widow.

Blau (1972) found that widowhood for women has less adverse effects than retirement for men. Cumming (1968) reports similar findings and suggests that it may be due to the cultural view that retirement, unlike widowhood, carries with it a tinge of failure. Less opportunities are available for women to remarry, because of the unequal ratio of men to women. An additional constraint on marriage is loss of income, as social security benefits for a married couple may be less than the combined benefits for two single persons.

Roles as grandparents or great-grandparents exist for the 70 percent of older people who have living grandchildren, and the 40 percent with great-grandchildren (Atchley, 1972). Older persons with children, grandchildren, and great-grandchildren have a unique opportunity to serve as role models of aging, thus providing the anticipatory socialization for growing old that they themselves lacked. In addition, 80 percent of older people have living siblings, with whom there seems to be more effort made to renew and maintain relationships than in earlier years.

The social role of friendship is optional. During old age, peer friendships become as important as with adolescents (Blau, 1972). Both Blau (1972) and Rosow (1967) have found that age-segregated housing promoted peer friendships and social interaction, while dispersion in the community promoted social isolation. Friendships are more likely to occur among members of the same age cohort. This is so because they have

had similar role sequences, role strains, socialization, and historical contexts; they speak the same language. Once established, friendships may endure with only intermittent reinforcement, thus ties may be maintained with old college roommates, army buddies, or former neighbors in another town. Friends provide direct assistance in coping with role entrances, alterations, and exits, such as that of spouse to widow or worker to retiree (Hess, 1972).

Some changes in expectations of the friend role have been identified. Older people in their seventies describe friends as people with whom common interests and activities are shared, while those in their eighties see friends as people who do things for them. (Cumming and Henry, 1961).

Indications are that the increased leisure time now available in our society is creating a trend toward increased acceptance of a leisure role as a counterpart for the work role. Admittedly, the concept of a leisure role-set requires stretching of the definition of a role-set. The complementary relationships in the leisure role-set may involve relationships with people, as in a tennis game; relationships with material objects, as in a ceramics hobby; or relationships with ideas, as in books.

Summary

Socialization, the process by which an individual learns to be a member of society and prepares to play a sequence of roles, is based on social learning, a category of learning in

which the mediating and dispensing of reinforcers is provided by people. Through selective reinforcement by significant others in their social environment, individuals learn appropriate behavior for specific situations, their roles (Ahammer, 1973; Burgess and Bushell, 1969; Ullman and Krasner, 1969; Brim and Wheeler, 1966; McGinnies, 1970; Gerwitz, 1969).

An individual moves through an orderly sequence of roles as he advances through the various age strata of society, exiting some roles and entering others. He experiences a constriction of available roles in old age. Yet role alternatives continue to exist for an individual, particularly the roles of citizen, friend, association member, and extended kin.

Disengagement, the gradual withdrawing from societal roles, is a process that begins at middle age, and ends with the total disengagement of death. Differential disengagement is common, with disengagement occurring at different rates and degrees for various roles.

Disengagement, then, is decreased involvement in the social structure as demonstrated by diminished role behavior. Role behavior is learned and maintained according to learning principles: behavior which is reinforced will be continued; behavior which is not reinforced will appear rarely, if at all. Involvement in the social structure will be promoted by providing reinforcement for desired role behavior in both old and new roles.

CHAPTER III

PURPOSE, METHOD, AND INSTRUMENTATION

Purpose of the Study

Social learning principles have not been applied to the study of the process of disengagement to any large extent. However, the approach is suggested by Lindsley (1964, p. 55) who labels disengagement theory as "more descriptive than explanatory." He adds, "In my terms, disengagement means mostly the abrupt cessation of reinforcement, or extinction."

Cautela (1972 a, 1972 b) supports this view with his description of a "Pavlovian basis of old age" based on Pavlov's findings that monotonous and/or continuous stimulation caused his experimental dogs to become drowsy, sleepy, or very quiet. Cautela reflects on the similarities displayed by residents of geriatric institutional settings, and proposes that these may be due to lack of reinforcement of activity and a limited variety of stimuli.

Anderson (1959, p. 771) points out that there is a relation between the overall amount of stimulation received by a person and his activity level:

> . . . thus there is a kind of psychological tonus not

too different from the concept of physiological tonus, which is maintained by arousal stimuli. When these drop below a certain level, all activities are affected.

Cumming (1968) remarks that "social withdrawal consists in failure to approach." According to learning theory, approach behaviors are emitted when one anticipates positive reinforcement (Skinner, 1966; Rotter, 1954).

The purpose of this study is to investigate whether there is a relationship between the degree of disengagement disclosed by the elderly and the self-reported reinforcement occurring in their lives.

Hypotheses

The following hypotheses are proposed:

1. An inverse relationship holds between disengagement and the level of reinforcement in the life of elderly persons. That is to say, the greater the degree of disengagement, the lower is the level of reinforcement.
    a. Therefore, there is a positive correlation between scores on a disengagement index and scores on measures of the level of reinforcement where low scores on the disengagement index indicate a greater degree of disengagement, and low scores on measures of level of reinforcement indicate a low level of reinforcement.

2. An inverse relationship holds between disengagement and anticipated reinforcement expected by elderly persons. That is to say, the greater the degree of disengagement, the lower is the anticipated reinforcement.
    a. Therefore, there is a positive correlation between scores on a disengagement index and scores on measures of anticipated reinforcement where low scores on anticipated reinforcement measures indicate a lack of anticipated reinforcement.
3. Elderly persons residing in nursing homes are more disengaged than those residing in the community.
4. The level of reinforcement and the anticipated reinforcement self-reported by elderly persons in nursing homes is lower than that reported by persons residing in the community.

Operational Definitions

For the purposes of this study, the following definitions are used. A further description of the measurement and scoring of each is detailed in the last section of this chapter, Measurement and Scoring Techniques.

1. Elderly Person: Any male or female born in the year 1909 or any prior year.
2. Disengagement: The process of decreasing participation and involvement in the role-sets of family, work, community, and leisure, as measured by the number of roles reported, the amount of time reported as spent participating in these roles, the degree of emotional

importance reported for these roles, and perceived life space relative to previous conditions.

3. Role: A position which is occupied by a person, involving expectations of behavior defined and encouraged by significant persons in his environmental systems.
4. Family Role-set: An individual's reported role-relationships while occupying the social positions of parent, child, sibling, or other relative related by blood ties, marriage, or adoption; and the social position of pet owner.
5. Work Role-set: An individual's reported role-relationships while occupying the social position of worker within the past year, as measured by reported performance of work for pay, work as a housewife, reported association with former co-workers, and reported membership in professional or work-related organizations.
6. Community Role-set: An individual's reported role-relationships while occupying the social positions of friend, neighbor, voter, and club, organization, or church member.
7. Leisure Role-set: An individual's reported role-relationships while occupying specific leisure positions, for example, gardener, dancer, tourist, or hunter.
8. Perceived Life Space: A reported comparison of the amount of time spent in role-relationships at age

forty-five with the present.

9. Positive Reinforcer: Any event, activity, object, or action self-reported as pleasurable.

10. Reinforcement Value: A rating given to a potential reinforcer by an individual which indicates how much the reinforcer is enjoyed or gives pleasurable feelings. Possible ratings include "not at all", "a little", "a fair amount", "much", or "very much". For this study, any reinforcer receiving a rating of "much" or "very much" is considered a positive reinforcer.

11. Level of Reinforcement: The number of positive reinforcers reported as received or occurring within the past month. High numbers indicate a high level of reinforcement; low numbers a low level of reinforcement.

12. Expectancy Estimate: An estimate by an individual of how strongly he expects that a positive reinforcer will be received or will occur within the next month. Possible estimates include "sure it will happen", "pretty sure", "even chance", "not too sure", or "sure it will not happen".

13. Anticipated Reinforcement: An expectancy that the emitting of a particular behavior will be followed by an event subjectively perceived as pleasant or enjoyable. For this study, anticipated reinforcement is the number of positive reinforcers reported as "sure" or "pretty sure" to occur within the next month. A low

score indicates lack of anticipated reinforcement; a high score indicates that reinforcement is anticipated.

Research Method

The relationship between disengagement in the elderly and reinforcement has not been explicitly investigated at the time of this study. To identify whether such a relationship exists, the explanatory survey method of research is utilized.

Personal interviews were conducted with the study population using a structured interview schedule developed by the investigator. The selection of subjects and data collection are discussed in Chapter IV.

Development of the Interview Schedule

No consistent measurement of disengagement was found in the literature. The disengagement index developed for this study is based on the research of Cumming and Henry (1961), Lowenthal and Boler (1965), Havighurst and deVries (1967), Phillips (1967), Lipman and Smith (1968), Riley and Foner (1968), Gordon, Gaitz, and Scott (1973), and Martin (1973; personal communication, 1974). Three components of disengagement were adopted from Martin's unpublished Involvement in the Social Structure scale. These components include number of roles, amount of time spent in role behavior, and amount of emotional importance attached to current roles.

The literature review suggests that four primary role categories are available in American society: family, work,

community, and leisure. The disengagement index was organized within this framework. Social participation in organizations was measured by the Chapin Social Participation Scale (Chapin, 1955). The index also ascertained perceived life space (Cumming and Henry, 1961), as operationalized by such questions as: "Would you say you have more contact with your relatives now than you did when you were age forty-five, or less, or about the same?"

Since the disengagement index is a new instrument, it has only face validity. Criterion validity was examined by comparison with the Jessor Alienation Scale (Jessor, Graves, Hanson, and Jessor, 1968). The wording of one item was changed to read, "Most of the time I feel the things I'm doing are important and useful", instead of, "Most of the time I feel the work I'm doing is important and useful." This was based on the assumption that most of the sample population were retired.

The other major instrument employed was an adaptation of the Reinforcement Survey Schedule (Cautela and Kastenbaum, 1967; Cautela, 1972). The schedule consists of a list of potential reinforcers, for which the participant is asked to indicate how much he enjoys each one. Although the original intent of the authors was only to identify possible reinforcers that might be used to modify behavior, and not to develop a psychological test with norms, reliability, and validity, Cautela (1972) describes several studies that investigated the reliability of the Reinforcement Survey Schedule. Kleinknecht,

McCormick, and Thorndike (1971) examined the test-retest reliability by re-administering the schedule to 118 undergraduate subjects at one week, three week, and five week intervals. At one week, there was a correlation of .829 with the original answers; at three weeks a correlation of .775; and at five weeks a correlation of .801.

Evaluation of the schedule's validity involved determining the ability of the reinforcers rated as enjoyed "much" or "very much" to act as reinforcing stimuli. Mermis (1971) investigated the relationship between self-reported reinforcers on the Reinforcement Survey Schedule and the amount of time spent looking at slides of items on the schedule. A significant correlation was found between the time spent looking at pictures and the reinforcers rated "much" or "very much".

For this investigation the Reinforcement Survey Schedule was modified by the addition of reinforcers suggested by monthly calendars of senior citizen center activities, and by personal experience in nursing homes. The section of the original Reinforcement Survey Schedule which contains descriptions of six situations such as being at a party, leading a team to victory, and sitting by a fireplace with a loved one was deleted from the interview schedule after pre-testing of the questionnaire suggested that the situations were inappropriate for this age group, or aroused too many unpleasant emotions, i.e., crying and expressions of sorrow at the loss of spouses.

Measurement and Scoring Techniques

The operationalization of the definitions on pages 53-55 and the method used for scoring the disengagement index and the measures of reinforcement are described in the following sections.

Disengagement

Disengagement was measured by combining the scores obtained by a role-set count, role participation, role importance, and perceived life space.

Role-set count. For the family category, the subject was asked to indicate types of living relatives. (See Appendix B: Questionnaire, Disengagement Index, question A-1.) For five or more types of relatives, a score of two was given, for less than five, a score of one, for none, a score of zero.

The worker cluster, (Disengagement Index, B-1) was scored by assigning one point for each position checked (full or part-time worker, housewife, union or professional organization member), and by utilizing the Chapin Social Participation Scale (question B-1 d) to measure participation in work-related organizations. The Chapin Scale is scored by assigning one point for each organization listed, two points for attendance in the past year, three points for any financial contributions, four points for each current committee assignment, and five points for each office currently held. Contact during the past year with anyone with whom the subject or his spouse formerly worked rated two additional points

Disengagement Index, B-2).

Scoring of the community cluster was obtained by combining the scores for the roles of neighbor (question C-1), friend (C-2), citizen (C-3), and church member (C-4). Five or more neighbors visited scored two points; less than five scored one point; none scored zero points. The same scoring was used for friends. The citizen role was tallied by assigning one point for each item checked (registered voter, actual voting in past year, political work, political officer holder, member of League of Women Voters or political club). Participation in politically-oriented organizations and in church activities was scored according to the Chapin Social Participation Scale, as described under the worker cluster. For nursing home residents, attendance at Sunday worship services was allotted two points and at devotionals two points.

The leisure category score was tabulated by giving one point for each leisure role occupied during the past year (Disengagement Index, D-1), and by scoring participation in clubs and organizations by means of the Chapin Social Participation Scale (D-2).

The scores for each role category or cluster were added together to obtain a total role-set score.

Role participation. Role participation (Disengagement Index, E-1 through E-8) was measured by having each subject estimate the number of hours per week he spent in specific role-oriented activities. For each area, one point was given

if one hour or less was spent; two points for 2-5 hours; three points for 6-10 hours; four points for 21-40 hours; and six points for over 40 hours.

Role importance. To determine the importance of role-sets to the subject, he was asked to rate the importance of different areas of his life on a scale from one to six (Disengagement Index, F-1 through F-8). The sum of the ratings measured role importance.

Perceived life space. This measure was computed by adding the scores for each question asked about changes in role activities since age forty-five, such as, "Were you working more hours for pay per week when you were forty-five than now, or less, or about the same?" (Disengagement Index, questions A-2, B-3, C-1b, C-2b, C-3b, C-4c, D-1a, D-2b.) Two points were assigned for answers of "more now"; one point for "about the same"; and no points for "less now".

Total disengagement score. The scores of the role-set count, role participation, role importance, and perceived life space were combined to obtain a total disengagement score. The lower the score that was obtained, the greater was the degree of disengagement. Conversely, the higher the score, the lesser the degree of disengagement. For this study, those persons with a total disengagement score of seventy and below are designated "most disengaged"; those with scores of ninety and above are considered "least disengaged"; and those with scores of seventy-one to eighty-nine are seen as "moderately disengaged".

Reinforcement

The concept of reinforcement was measured in three different ways: number of self-reported positive reinforcers, level of reinforcement, and anticipated reinforcement.

Positive reinforcers. The subject was asked to rate every potential reinforcer on the Reinforcement Survey Schedule as to the extent to which he found it pleasurable: "not at all", "a little", "a fair amount", "much", or "very much". (See Appendix B: Questionnaire, Reinforcement Survey Schedule.) All items rated "much" or "very much" are considered positive reinforcers for this study. The total number of positive reinforcers reported by each subject was calculated by counting the number of potential reinforcers rated as "much" or "very much".

Level of reinforcement. For each positive reinforcer, the subject was asked whether he had experienced the reinforcer within the past month (column L.O.R. in the Reinforcement Survey Schedule). A check was placed by each reinforcer experienced in the past month. The subject's level of reinforcement was computed by counting the number of positive reinforcers checked. In addition, the percentage of the total number of positive reinforcers which occurred in the past month was calculated.

Anticipated reinforcement. For each positive reinforcer, the subject indicated how strongly he expected to experience it within the next month (column E.E. in the Reinforcement Survey Schedule). Possible ratings were "sure

it will happen" (five points), "pretty sure" (four points), "even chance" (three points), "not too sure" (two points), and "sure it will not happen" (one point). Scores for anticipated reinforcement were obtained by counting the number of reinforcers rated five ("sure it will happen") and four ("pretty sure"). The percentage of the total positive reinforcers expected to occur within the next month was also calculated. For each subject the sum of the estimated expectancies and a mean estimated expectancy was computed.

Alienation

The Jessor Alienation Scale was scored by allocating four points for "strongly disagree", three points for "disagree", two points if the subject was undecided and would not answer, one point for "agree", and no points for "strongly agree" for all items except items 3, 7, and 11. These three items were scored in the opposite direction: four points for "strongly agree", three points for "agree", two points for undecided, one point for "disagree", and no points for "strongly disagree". The lower the score which was obtained, the greater was the degree of alienation.

CHAPTER IV

SURVEY COMMUNITY: PRAIRIE MEADOW, U.S.A.

The community in which the older person resides is not only a territorial unit, but a source of role-partners, a locus of activities, and a culture area. The older person who has lived in the community for a long time may have an intense emotional involvement in the community. The continuity of community roles (citizen, friend, neighbor, and association member) may substitute for loss of other roles such as those of spouse or worker (Starr, 1972).

The selection of a discrete geographical unit provides an ecological environment in which the opportunities for role involvement are more uniform. Therefore, Prairie Meadow (a fictitious name for a small midwestern city) was selected for the sample space of this investigation.

According to the 1970 census, the population of Prairie Meadow is 18,698. Approximately 10 percent, or 1,922 persons, are aged sixty or over. In this age group, there are 789 men (41 percent) and 1,133 women (59 percent).

Prairie Meadow offers suburban living for its many residents who work in the nearby metropolis. During much of

the year, the population shifts each morning as working commuters from Prairie Meadow drive to their jobs in the metropolitan area, and student commuters from the metropolis drive to Prairie Meadow to attend classes at Prairie Meadow University, the third largest state institution of higher learning.

The community has demonstrated a concern for its elderly citizens by the establishment of programs to enhance their well-being. For example, within the past two years a telephone reassurance service has been initiated by a coalition of churches, as well as a mobile meals program. A senior citizens center, sponsored by the city government, was established in the fall of 1973.

Three nursing homes are located in Prairie Meadow: two proprietary (privately-owned) homes, Prairie Meadow Manor and Autumn Abode Nursing Home; and one non-proprietary, church-sponsored home, the Good Samaritan Home for the Aged. (All names are fictitious).

Prairie Meadow Manor, a 54-bed nursing home established by a local doctor in 1963, is located across the street from an elementary school, and thus is a favorite place for the school children to present special programs. The resident composition of Prairie Meadow Manor has altered with each change in ownership of the nursing home. The residents now are a mixture of geriatric chronic medical and psychiatric patients, and both young and old mentally retarded patients. On occasion, residents are transported to the local Y.M.C.A.

for a session in the indoor swimming pool. Several residents participate regularly in the community sheltered workshop program for the mentally retarded. Sunday worship services are conducted by a local church.

Autumn Abode Nursing Home, the community's newest and largest nursing home, was constructed in 1969. Its 100 beds are contained in four wings radiating from a central administrative core. The resident composition is similar to that of Prairie Meadow Manor, though with fewer mentally retarded patients. Autumn Abode residents may walk to the small convenience store situated a block away. Faculty and students from a small church college on the south edge of Prairie Meadow conduct Sunday worship services in the home.

The Good Samaritan Home for the Aged erected its 50-bed nursing home unit in 1957 in conjunction with a group of retirement cottages. At the time of this investigation, all applicants for admission were required to be capable of caring for themselves. In addition, three references attesting to the Christian character of the applicant are submitted. The Home complex provides for continuity of care, as the resident becomes less able to meet his own needs. For example, when a cottager decides he can no longer maintain his cottage, he may move into a private room in the two ambulatory wings of the nursing home unit. When he requires more frequent nursing observation and some assistance with activities of daily living, he is moved to the intermediate care wing. If he becomes bedfast, or requires close supervision, he enters the "bedside

care" unit. Many of the patients now in the bedside care unit are those who have been in the cottages or nursing home for many years. As the original residents have grown older, the need for additional beds in the bedside care unit has increased. The home is in the process of building a 50-bed addition to meet this need. The Good Samaritan Home provides weekly bus service to Prairie Meadow shopping centers, and to Sunday services at a local church. In addition, Sunday school and worship services are conducted at the home.

Selection of the Sample

Contrasting samples were selected for the study population (Festinger and Katz, 1966). Based on the literature review, a nursing home population seemed likely to demonstrate the variables of disengagement and lack of reinforcement, and registered voters residing in the community a contrasting sample. Fifty persons were randomly selected for each group based on the following criteria: nursing home—those persons born in 1909 or before who are judged by nursing home personnel to be mentally and physically capable of being interviewed; and community registered voters—those registered voters born in 1909 or before who reside in Prairie Meadow precincts outside of nursing homes.

In August, 1974, the total population of the three nursing homes born in 1909 or earlier was 182 persons, 135 women (75 percent) and forty-seven men (25 percent). Of these, sixty-eight persons met the additional criteria of

being mentally and physically capable of being interviewed: fifty-four women and fourteen men. A table of random numbers was used to select the final sample, which consisted of thirty-nine women and eleven men. The percentage distribution of the nursing home sample was 78 percent women and 22 percent men, making it similar in sex distribution to the total nursing home population.

Community registered voters born in 1909 or earlier were identified from computer printouts of registered voters in Prairie Meadow precincts. A list of 1,035 voters was compiled, containing 595 women (57 percent) and 440 men (43 percent). The population of registered voters was similar in sex distribution to the older population of Prairie Meadow as a whole. Each voter was assigned a number, and an initial sample of fifty-five was selected by use of a table of random numbers. However, because of a high refusal rate, it was necessary to draw additional samples in order to obtain a final sample of fifty. A total of 113 names was drawn, sixty-six women (58 percent) and forty-seven men (42 percent). Those who refused to be interviewed (seventeen men and twenty-five women) usually gave one of three reasons: not interested, too busy, or poor health. Four persons (two men and two women) were deceased; seventeen persons (nine men and eight women) had either moved from Prairie Meadow, or were no longer in the current telephone directory and were presumed to be deceased or no longer in the community. The final sample of community registered voters consisted of nineteen men (38

percent) and thirty-one women (62 percent).

Ages in the nursing home sample ranged from sixty-seven to ninety-five years, with a mean age of 83.68. Eleven participants were in the age range ninety and over (22 percent); twenty-eight (56 percent) in the eighty to eighty-nine range; nine (18 percent) in the seventy to seventy-nine range; and two (4 percent) in the sixty-five to sixty-nine range. The community registered voter group were younger, with a mean age of 72.32 and a range from sixty-five to eighty-seven years. Five were in the age group eighty to eighty-nine (10 percent); twenty-five (50 percent) in the seventy to seventy-nine range; and twenty (40 percent) in the sixty-five to sixty-nine range.

The marital status of nursing home residents included two (4 percent) married; four (8 percent) single; three (6 percent) divorced; one (2 percent) separated; and forty (80 percent) widowed. Thirty-three (66 percent) of the community registered voter sample were married; fifteen (30 percent) widowed; and two (4 percent) single.

Educational years completed averaged 10.5 for the nursing home residents and 12.3 for the community registered voters. Five nursing home participants (10 percent) had obtained a baccalaureate or higher degree, as compared to seventeen (34 percent) of the community registered voter group. These proportions are statistically significant ($p<.05$).

Teachers represented the most common occupational

group, comprising 22 percent of the nursing home participants (N=11) and 28 percent of the community registered voters (N=14).

The nursing home residents had lived in Prairie Meadow an average of ten years; the community registered voters an average of twenty-eight years.

Thirty of the nursing home participants (60 percent) and thirty-two (64 percent) of the community registered voters perceived themselves as belonging to the middle or upper class. Family or individual annual incomes of less than $2,000.00 were reported by sixteen nursing home residents (32 percent) and three community registered voters (6 percent). No incomes above $8,000.00 were reported by nursing home residents; eleven community registered voters (22 percent) claimed incomes above this level. Eight nursing home residents (16 percent) and five community registered voters (10 percent) refused to divulge information about their incomes.

As might be expected, the nursing home sample perceived themselves as less healthy, with nine (18 percent) reporting poor health, sixteen (32 percent) fair health, fifteen (30 percent) good health, and eight (16 percent) excellent health. In comparison, the community registered voters reported their health as follows: two poor (4 percent); eleven fair (22 percent); seventeen good (34 percent); and twenty excellent (40 percent).

Thirty-eight (76 percent) of the community registered voters were still driving their own cars; no nursing home

resident interviewed was still driving.

Data Collection

Each subject was interviewed by the investigator during the period of August, 1974, to January, 1975. A structured interview schedule was used (Appendix B). Informed consent was obtained either by a face-to-face approach or by a telephone contact. (See Appendix A.) The length of the interviews varied from forty-five minutes to two and one-half hours in the nursing homes (mean=eighty-five minutes) and twenty-five minutes to two and one-fourth hours in the community (mean= seventy-five minutes).

The interview schedule was developed by the investigator, as described in Chapter III, and contained a disengagement index measuring involvement in the role sets of family, work, community, and leisure; a reinforcement survey schedule which identified positive reinforcers idiosyncratic to the participant, as well as the level of reinforcement and anticipated reinforcement; the Jessor Alienation Scale; several open-ended questions; and demographic data.

Prior to interviewing each nursing home resident, the personnel were contacted to determine the resident's current status (whether he was capable of being interviewed at that time). The resident was then approached and the purpose of the interview explained. If consent was granted, the interview was conducted in the resident's room. The interview schedule was read to the subject, with answers recorded by the investigator. The Reinforcement Survey Schedule was filled out by the

subject if he was willing and able. Only five nursing home residents were able to do this, as compared to twenty-two of the community registered voters. Each subject was given the opportunity to ask questions both during and after the interview, and to terminate the interview at any time. One subject, a nursing home resident, did terminate the interview as the last page of the questionnaire (primarily demographic data) was reached. Some of this information was obtained by casual conversation as the investigator was putting on her coat and preparing to leave the room. The loss of other data, such as perceived health status, and income, was not considered significant, as other subjects had refused this same information.

The settings of the nursing home interviews ranged from an uncluttered, impersonal two-bed room with institutional furniture, to a personalized private room containing many house plants, an organ, desk, recliner, end tables and lamps, and a wall covered with family pictures and momentoes. Most subjects were receptive and eager to talk. Several remarked that the interview was appreciated because "you've made me stop and take a look at myself, who I am and what I'm doing."

The persons in the community registered voter sample were initially contacted by telephone, when possible, and an appointment made for the interview. Personnel at the local post office provided directions for those subjects with a rural route address and no telephone listing, and for those with addresses in the new additions to Prairie Meadow that had been built since the last map was published.

The settings of the community interviews varied: kitchen, den, or living room. A wide range of environments was observed, from a living room so cluttered that a chair had to be cleared for the investigator's seating, to an immaculate living-dining room designed by an interior decorator, with the table set for the evening meal with sterling silver, china, and white cloth napkin in a napkin ring. A few in the community sample were somewhat suspicious about the interview. One woman did investigate the interviewer's credentials by contacting the telephone number provided for this purpose. (See Appendix A.) Most subjects were gracious hosts, offering coffee, and in one instance, assorted homemade wines.

CHAPTER V

THE RESULTS: MOST DISENGAGED, LEAST REINFORCED

Data Analysis

Differences between the two samples were tested with the *t*-test for the difference between the means of two independent samples. This test may be used when two groups are already constituted and the investigator wants to determine whether they differ in respect to some other variable. The use of the *t*-test is based on the assumptions that the observations were independent, the observations were drawn from normally distributed populations with the same variance, and the variables were measured in at least an interval scale.

The Pearson product-moment correlation coefficient *r* was used for measures of association between disengagement and reinforcement. This test is used to determine if there is a relationship between two sets of paired numbers, in this instance two different measures on each of several persons. The use of the test is based on the same assumptions as the *t*-test, plus the assumption that the relationship is a linear one (Siegel, 1956; Bruning and Kintz, 1968).

Results

Disengagement

The hypothesis that the elderly residing in nursing homes are more disengaged than those residing in the community was supported (Table 2).

TABLE 2

MEAN SCORES OF SUBJECTS ON DISENGAGEMENT INDEX

Group	Range	Mean	S.D.
Nursing Home (N=50)	45-109	68.64	12.91
Community (N=50)	60-220	102.66	28.62

t=7.66 df=98 p<.01

A significant difference in disengagement was also found between the residents of the two proprietary nursing homes and the residents of the non-proprietary church-related home (Table 3).

TABLE 3

MEAN SCORES ON DISENGAGEMENT INDEX: PROPRIETARY AND NON-PROPRIETARY NURSING HOME RESIDENTS

Group	Range	Mean	S.D.
Proprietary (N=17)	48-86	62.59	9.21
Non-proprietary (N=33)	45-109	71.76	13.53

t=2.50 df=98 p<.02

For the total nursing home sample, males were more disengaged than females (Table 4).

TABLE 4

MEAN SCORES ON DISENGAGEMENT INDEX: MALES AND FEMALES IN NURSING HOMES

Group	Range	Mean	S.D.
Males (N=11)	45-75	59.91	7.48
Females (N=39)	45-109	71.10	13.11

t=2.698 df=98 p<.01

There is no significant difference in disengagement between males and females in the community registered voter sample. The differences between nursing home males and community registered voter males, and between nursing home females and community registered voter females may be seen in Tables 5 and 6.

TABLE 5

MEAN SCORES ON DISENGAGEMENT INDEX OF MALE SUBJECTS

Group	Range	Mean	S.D.
Nursing Home (N=11)	48-75	59.91	7.48
Community (N=19)	60-134	93.16	19.51

t=5.39 df=28 p<.01

For the nursing home sample, there was a significant difference in disengagement between those who rated their health as excellent or good and those who rated their health as fair or poor. There was no significant difference in disengagement between those in the community who noted their

health as excellent or good, and those who rated it poor or fair (Table 7).

TABLE 6

MEAN SCORES ON DISENGAGEMENT INDEX OF FEMALE SUBJECTS

Group	Range	Mean	S.D.
Nursing Home (N=39)	45-109	71.10	13.11
Community (N=31)	61-220	108.38	31.89

t=6.66 df=58 p<.01

TABLE 7

MEAN SCORES ON DISENGAGEMENT INDEX AND PERCEIVED HEALTH

Nursing Home			
Group	Range	Mean	S.D.
Excellent/Good Health (N=23)	56-109	74.30	12.55
Poor/Fair Health (N=25)	45-88	63.28	11.46

t=3.182 df=46 p<.01

Community Registered Voters			
Group	Range	Mean	S.D.
Excellent/Good Health (N=37)	60-220	106.27	30.06
Poor/Fair Health (N=13)	61-134	92.38	21.89

t=1.525 df=48 p<.20

The community sample was divided into two equal groups according to the number of years lived in Prairie Meadow, those who had lived there thirty years or more, and those who had lived there less than thirty years. No significant differences on the disengagement scores were found for these groups. Nursing home residents who had been in the nursing home for three or more years were compared with those who had been in the homes less than three years. Again, there was no significant difference in the degree of disengagement exhibited by the two groups. In fact, the mean scores were extremely close, 68.92 for the three year group, and 68.38 for the less than three year group.

Reinforcement

The reinforcement occurring in the lives of the nursing home residents and the community registered voters was examined by considering the number of positive reinforcers self-reported by the subjects, the level of reinforcement within the past month, and the anticipated reinforcement within the next month.

No significant differences were found between the two samples in the total number of positive reinforcers reported (Table 8). The differences in level of reinforcement and anticipated reinforcement between the two groups may be seen in Tables 9 and 10.

TABLE 8

SELF-REPORTED POSITIVE REINFORCERS: MEAN SCORES FOR SUBJECTS

Group	Range	Mean	S.D.
Nursing Home	14-75	43.28	12.95
Community	4-89	49.74	19.95

t=1.921 df=98 p<.10

TABLE 9

LEVEL OF REINFORCEMENT: MEAN SCORES FOR SUBJECTS

Number of Positive Reinforcers Experienced in Past Month			
Group	Range	Mean	S.D.
Nursing Home	8-60	33.6	10.17
Community	2-74	40.98	16.36

t=2.70 df=98 p<.01

% of Total Positive Reinforcers Experienced in Past Month			
Group	Range	Mean	S.D.
Nursing Home	49-95%	77.98%	10.61
Community	50-100%	82.58%	9.18

t=2.318 df=98 p<.05

The results of Table 9 indicate that not only is there a significant difference between the two groups in the number of positive reinforcers actually received in the past month, but also in the proportion of all self-reported positive reinforcers which occurred in the last month. That is to say, the

community registered voters reported that a significantly greater proportion of all the things they enjoyed happened within the past month.

TABLE 10

ANTICIPATED REINFORCEMENT: MEAN SCORES FOR SUBJECTS

Number of Positive Reinforcers Anticipated in Next Month			
Group	Range	Mean	S.D.
Nursing Home	9-52	31.56	8.88
Community	2-77	39.22	15.54

t=3.027 df=98 p<.01

% of Total Posi Anticipated in Next Month			
Grou		Mean	S.D.
Nursin		3.98%	11.22
Commun		.5 %	11.13

t=2.47

Sum xpectancies of Pos cer Occurrence			
Group	Range	Mean	S.D.
Nursing Home	48-293	171.54	48.74
Community	15-378	208.64	81.23

t=2.769 df=98 p<.01

Mean Estimated Expectancy of Positive Reinforcer Occurrence			
Group	Range	Mean	S.D.
Nursing Home	2.45-4.78	4.004	.467
Community	3.23-4.85	4.229	.349

t=2.729 df=98 p<.01

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Community	2-77	39.22	15.54

t=3.027 df=98 p<.01

% of Total Positive Reinforcers Anticipated in Next Month			
Group	Range	Mean	S.D.
Nursing Home	43-94%	73.98%	11.22
Community	46-98%	79.5 %	11.13

t=2.47 df=98 p<.02

Sum of the Estimated Expectancies of Positive Reinforcer Occurrence			
Group	Range	Mean	S.D.
Nursing Home	48-293	171.54	48.74
Community	15-378	208.64	81.23

t=2.769 df=98 p<.01

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t=2.729 df=98 p<.01

Community registered voters, therefore, also anticipate that more positive reinforcers will occur in the next month, and that a greater proportion of all the things they find pleasurable are expected to happen in the next month. In addition, it appears that the overall level of expectancy (the grand total of the expectancies for occurrence of all positive reinforcers) is significantly greater for community registered voters than for nursing home residents. Similar results were found when comparing the overall average expectancy that positive reinforcers would be experienced (the mean estimated expectancy of positive reinforcer occurrence).

The results displayed in Tables 9 and 10 support hypothesis 4, that the level of reinforcement and the anticipated reinforcement self-reported by elderly persons in nursing homes is lower than that reported by elderly persons residing in the community.

Alienation

Scores on the Jessor Alienation Scale indicate a greater degree of alienation among nursing home residents (Table 11). In reply to item 13 ("If I had my choice, I'd live my life very differently"), 72 percent of the nursing home residents disagreed or strongly disagreed with the statement, compared to 94 percent of the total community registered voter sample. Participants in both groups generally interpreted this statement as referring to the past, rather than to the present, as evidenced by the remark: "Well, no one can do that, go back and live their lives differently. But, if I

could, I don't think I'd do it much differently. I'm pretty well satisfied." This suggests that these subjects on the whole are meeting the developmental task of integrity identified by Erikson (1963) as appropriate for old age. They seem to be accepting their life cycle as something that had to be, and to have adapted to the triumphs and disappointments of life.

TABLE 11

MEAN SCORES OF SUBJECTS ON JESSOR ALIENATION SCALE

Group	Range	Mean	S.D.
Nursing Home	15-41	29.32	5.99
Community	20-41	32.54	4.84

t=2.955 df=98 p<.01

To some extent, the validity of the disengagement index was supported by the use of the Jessor Alienation Scale as a criterion measure. There was a correlation coefficient of .3716 ($p<.01$) between disengagement and alienation for nursing home residents, and a correlation coefficient of .1884 (not significant) for the community registered voter sample. For the total sample, the correlation coefficient between disengagement and alienation was .3469 ($p<.001$). The results indicate that although disengagement and alienation are related, the disengagement index and the alienation scale do not measure the same thing. Another possible explanation is that those in the community may not have an opportunity to disengage even if they want to. The alienation scale may indicate

a desire to disengage but the situation may not permit it to happen.

Disengagement and Reinforcement

Pearson product-moment correlations were also used to examine the relationships between scores on the disengagement index and the measures of reinforcement (Table 12).

TABLE 12

PEARSON CORRELATION COEFFICIENTS BETWEEN SUBJECTS' DISENGAGEMENT SCORES AND SCORES ON MEASURES OF REINFORCEMENT

Measure of Reinforcement	Correlation Coefficient	
	Nursing Home	Community
No. of Self-Reported Positive Reinforcers	.4658*	.3772**
No. of Positive Reinforcers Experienced in Past Month	.6377*	.4574*
% of Positive Reinforcers Experienced in Past Month	.4584*	.2287
No. of Positive Reinforcers Anticipated in Next Month	.5775*	.5163*
% of Positive Reinforcers Anticipated in Next Month	.2023	.2755***
Sum of Estimated Expectancies	.5708*	.4712*
Mean Estimated Expectancy	.2238	.2609

*p<.001
**p<.01
***p<.05

For nursing home residents, there was a significant relationship between disengagement and the proportion of all

positive reinforcers which were experienced in the past month, but not between disengagement and the proportion of all positive reinforcers anticipated in the next month. This finding lends further support to Lindsley's (1964) contention that delayed reinforcers (those which occur at a later date) have less effect on the behavior of the elderly. As seen in Table 10, a smaller proportion of positive reinforcers is expected by nursing home residents to occur within the next month. The opposite situation exists for the community registered voters, suggesting that they may have more opportunity and less constraints in obtaining positive reinforcers. This, then, may lessen the impact of delayed reinforcement on the community registered voter. He may be more sure that they will occur in his situation, in contrast to the nursing home resident who remarked, "Well, who knows if I will be alive next month?"

The data in Table 12 supports the hypotheses that there is a positive correlation between scores on a disengagement index and scores on measures of the level of reinforcement (the number of positive reinforcers experienced in the past month), and anticipated reinforcement (the number of positive reinforcers anticipated in the next month).

Comparison of Most Disengaged and Least Disengaged Subjects

The total sample (N=100) was divided into three approximately equal groups according to scores on the disengagement index to obtain groupings of the most disengaged (scores of forty-five to seventy); moderately disengaged (scores of

seventy-one to eighty-nine); and least disengaged (scores of ninety and above). Thirty-two participants (twenty-nine nursing home residents and three community registered voters) were in the most disengaged category; thirty-five participants (nineteen nursing home residents and sixteen community registered voters) were considered moderately disengaged; and thirty-three participants (two nursing home residents and thirty-one community registered voters) were least disengaged. Mean scores on three measures of reinforcement (total number of self-reported positive reinforcers, the number of positive reinforcers experienced in the past month, and the number of positive reinforcers anticipated within the next month) were compared for the three categories. Significant differences ($p<.05$) were found between all groups on all measures, except between the least disengaged and the moderately disengaged on the measure of total positive reinforcers. The results further demonstrate that individuals experiencing a greater degree of disengagement report less reinforcement occurring in their lives (Figure 2).

Discussion

Part of the difference between the disengagement scores in the nursing home residents and the community registered voters can be explained by the scoring of its components. The use of the Chapin Social Participation Scale to measure the club and organization role implicitly gives a greater weight to this area, creating more potential for it to affect

the total score. For example, fourteen nursing home residents reported club role activities, with scores ranging from one to twenty-one, and a mean of 4.78. In comparison, twenty-four community registered voters were involved in clubs and organizations with a range of six to 104, and a mean of 23.79, a difference significant at the .05 level. The individual with the highest total disengagement score also had the highest club and organization score.

The marked difference in disengagement between men and women in nursing homes, but not in the community, suggests that men in the community may have more alternatives in their choice of opportunities for social interaction, and that the nursing home environment may be deficient in masculine reinforcers. For the male nursing home resident, the predominance of female patients often means that the nursing home program is aimed chiefly at feminine interests. The usual activities offered in nursing homes do not reinforce the male identity.

The difference in disengagement between the two proprietary nursing homes, Autumn Abode and Prairie Meadow Manor, and the non-proprietary home, the Good Samaritan Home for the Aged, might appear to be an artifact of the scale which includes church attendance. However, church services are held at all three nursing homes. Although morning devotionals are held five days a week at the Good Samaritan Home, only two additional points were assigned to each resident who regularly attended these devotionals, an amount which should not significantly weight the church scale in favor of Good Samaritan residents.

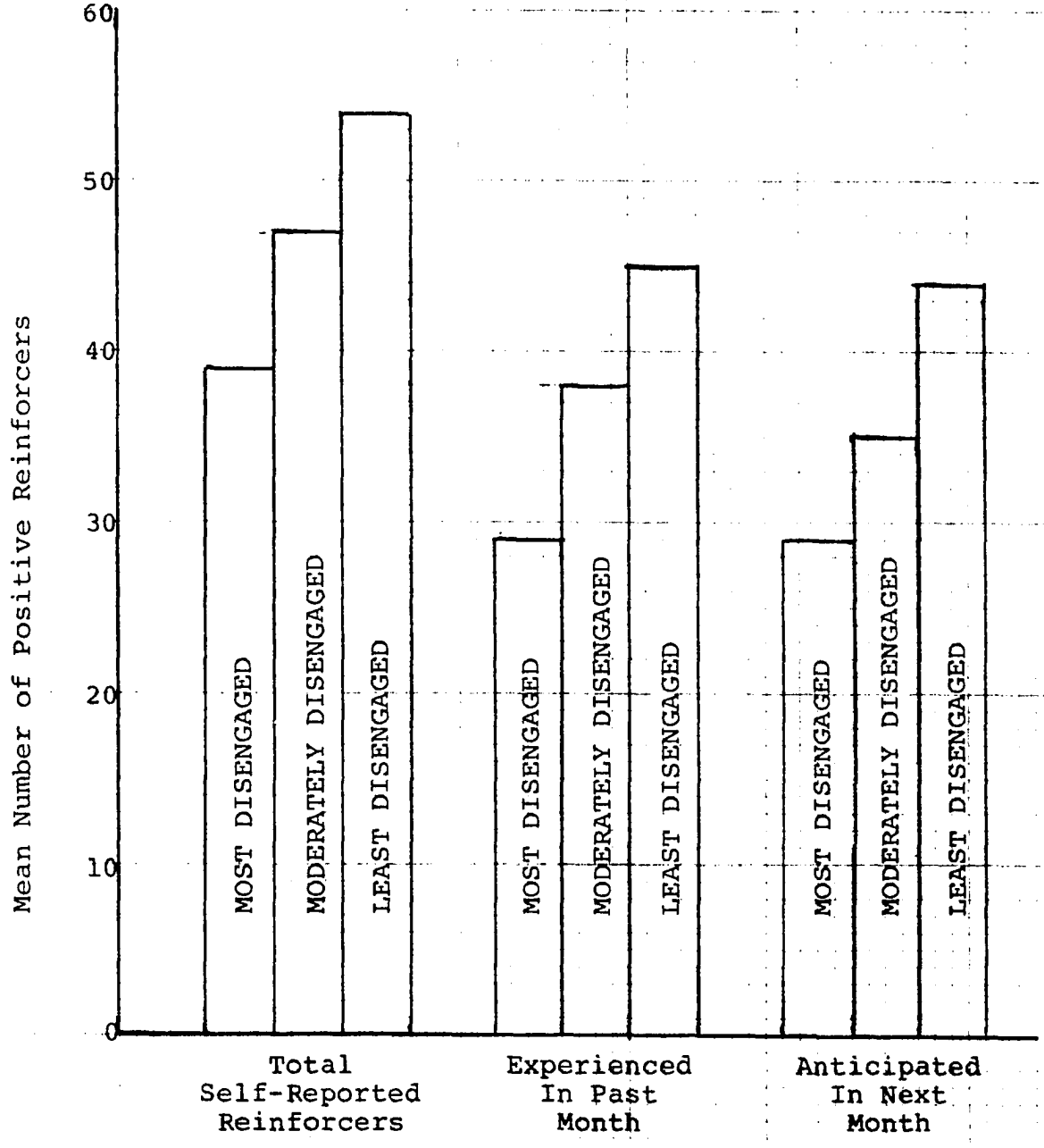

Figure 2.—Self-reported reinforcement of most disengaged, moderately disengaged, and least disengaged subjects

Some of the difference may be attributed to there being no men among the Good Samaritan subjects, given that, for the total nursing home sample, men were more disengaged than women. However, it is also possible that the ecological environment of this nursing home is more conducive to engagement than that of the other two homes.

Davis (1973) has categorized nursing homes as personalized and institutionalized. Characteristics of a personalized atmosphere are comfortable surroundings, home-like furniture and decor, personal belongings and keepsakes in individual rooms, flexible interpretation of regulations, and warm, sincere personnel. Institutionalized homes have a more sterile, institution-like atmosphere reflecting a "everything-in-its-place" rather than a "clean-but-cluttered" orientation found in a personalized home.

The characteristics of a personalized home were seen to a greater degree in the Good Samaritan Home for the Aged. More personal belongings, such as desks, rockers, pianos, plants, and family pictures were in evidence. Many residents expressed their feelings of sisterhood with one another. One remarked, "If you happen to mention that you need a piece of elastic or a spool of red thread, pretty soon it will appear on your dresser."

White tablecloths are used on each dining room table. Mealtimes are begun with a prayer by the hostess at each table. No robes or gowns are seen at breakfast, for everyone is up and dressed (usually complete with jewels and make-up)

for the 7:30 a.m. devotionals which precede breakfast.

Sunday evening suppers are served "a la cart", meaning that nursing home personnel wheel a cart of cold cuts and snacks down the halls and each resident selects his own meal. Small groups will then gather in a room around T.V. trays to share their mealtime. The longer average residency at this home (five years compared to one and one-fourth years at the other homes) promotes group cohesiveness, as does the requirement that all be members of the sponsoring denomination. In addition, during the time of the interviews, the individuals in the Good Samaritan Home shared a superordinate goal (preparing articles for sale at the annual home bazaar held each November).

The atmosphere of the Good Samaritan Home for the Aged is more that of a retirement home than a nursing home. Some residents emphasized that this was "not a nursing home, but a Christian home." One expressed displeasure at the new "bedside care" unit being added to the home, stating, "They're turning it into a nursing home." Several weeks after this new unit opened, it was necessary to return to the home to interview a resident who had been ill during the early period of interviews. She mentioned that she had not met any of the new residents in this addition, adding, "They're different from us." It will be interesting to observe the impact of the new addition on the ecosystem of this nursing home.

Those subjects in the least disengaged categories were more involved in clubs and organizations (70 percent) and

considered themselves to be in excellent or good health (79 percent). They also were younger (only 12 percent were in their eighties or nineties), more highly educated (67 percent had received educational preparation beyond the high school level), had worked in higher status jobs (45 percent were in the teaching or engineering professions), had higher incomes (39 percent had annual incomes over $6,000.00), and were more likely to be married (58 percent).

The highest scorer in the least disengaged category is an eighty-four year old community registered voter who is maintaining ten acres of land with the help of her children. Except for her sheep, chickens, ducks, and guinea hens, she lives alone. She is an active member of twelve clubs and organizations, and currently is an officer in eight of them. In addition, she is involved in community service activities, calling one day a week for the telephone reassurance service, and cooking one day a month for the mobile meals program. When time permits, she attends the senior citizens center, where, she proudly states, "I was the oldest one to learn to play pool." She collects antique bottles and old dolls.

Among the least disengaged of the nursing home residents is a ninety-two year old widow who began painting at the age of seventy-two. At the time of the interview, she was busy painting miniature scenes for the annual bazaar. Still involved in political affairs, she votes regularly and tried to influence the investigator to vote for her favorite candidate in an upcoming election. Noted for her abilities as a

cookie maker, she is frequently invited to friends' homes to prepare her specialty. Every Friday she attends classes at a program for older adults in a church in the nearby metropolis. She spends at least three hours a week in a session of double-twelve dominoes with other residents. Raised in the Kentucky bourbon country, her only regret is that she is unable to partake of this product in her current environment.

In contrast, the most disengaged group were older (75 percent were in their eighth or ninth decade), less well educated (only 22 percent had received education beyond the high school level), less active in clubs and organizations (18 percent were all that reported club activities), and were more likely to be in fair or poor health (69 percent). Only three (all in the community) were married. This group contained twelve men, thus representing 40 percent of the men in the total sample. More of this group had engaged in the less skilled occupations (82 percent). A greater percentage (78 percent) reported annual incomes of less than $4,000.00 compared to 39 percent of the least disengaged group.

The lowest scorer in the most disengaged category is an eighty-two year old widow, a nursing home resident for the past ten years, who suffered a stroke several years ago. Primarily confined to her bed or a geriatric chair, she reports her main activity is watching color television. She is an avid fan of the football team at the state's largest university, and expressed her disappointment at their banishment from television this year for recruiting violations. The nursing home

personnel related an incident concerning this resident which illustrates a common dilemma of today's elderly. During an earlier period, she became emotionally involved with another resident, but they were unable to marry because her welfare assistance would terminate upon her marriage. His income was not adequate to provide support for both of them. Her love is now deceased, and the personnel report she is still bitter about the whole affair.

The most disengaged of the community registered voter sample reported curtailing of activities due to their own or their spouse's failing health. One repeated a refrain heard in many interviews: "I can't do that anymore because of my eyes." The community resident with the lowest disengagement score demonstrates the impact of the environmental situation on disengagement. He is a seventy-six year old who has had to take over the running of the household because of his wife's poor health. During the past year he has not felt free to leave her to engage in his favorite pastimes of fishing and camping. Displaying strong views on many subjects, he expressed his disgust with the current political scene. He deplored the generation gap, stating, "They've made a sad mistake, the general public. They have desegregated the Negroes and segregated the old people." Reflecting his fierce independence, he offered this advice to those working with older people: "Give them the least supervision possible. Let them think for themselves and do what they want to do. It's irritable to be supervised. . . . We're supervised from the cradle to the

grave."

In response to the question, "What advice would you give to those working with senior citizens?", the majority of the subjects suggested patience, kindness, understanding, and a willingness to listen. The feelings of many were summed up by one person who advised, "Have plenty of sympathy and understanding. Try your best to let them know they are appreciated, admired, and respected—that they have a right to exist and to live."

Advice to the younger generation about growing old stressed the importance of preparing financially, socially, and emotionally for old age by saving money, and developing hobbies, interests, and friends in different areas in order to keep "creatively busy". As one stated, "Do not be afraid of growing old and dying. Look to the future with something constructive."

CHAPTER VI

RECOMMENDATIONS FOR EDUCATION, PRACTICE, AND RESEARCH

Recommendations for Education

The findings of this study indicate that social learning principles may be used to retard disengagement and enhance engagement. Accordingly, the education of health professionals who work with the elderly should include both an exposure to learning theory and an opportunity for practical application of the knowledge.

However, few nursing education programs include either didactic instruction in the principles of social learning theory or guided experience in their application. The inclusion of such learning experiences will enhance nursing practice in all areas. The offering of a "behavior modification for nurses" workshop would provide an opportunity for those already in practice to increase their knowledge and skills in this area. Such a workshop might be a joint venture of the nursing department and the psychology department of a university.

Given such a background and experience, the geriatric nurse can present inservice education classes for nursing home

personnel in social learning principles. Through these classes, the personnel can be helped to see how important a part they play in shaping the behavior of a patient, i.e., any response that the patient makes they either reinforce, extinguish, or punish. There are no other possibilities.

Personnel, patients, and families of patients can be taught to view reinforcement as a self-regulating system, with the behavioral results of reinforcement providing feedback of the effectiveness of a particular reinforcer. The concept of feedback is described by Wiener (1954) as the property of being able to adjust future conduct by past performance. Feedback tells a system whether its behavior has been effective, whether it has reached its goal or fallen short. For example, if a target behavior, such as dressing without help, is to be increased, the nurse or personnel present a positive reinforcer, such as a half hour of television, whenever the behavior is emitted. Failure of the behavior to increase in frequency provides feedback that the potential reinforcer of television is not effective for that patient. The personnel can then correct their approaches by trying another reinforcer.

The elderly themselves can be taught to look at the consequences of their behavior. Knowledge of reinforcement principles may help the older person to regulate and change his own behavior. If family and friends stop visiting, this provides feedback that something may be wrong with his behavior. He needs to then examine his own behavior and determine whether it has been a positive reinforcer or an aversive stimulus.

Recommendations for Practice

The ecological environment of the nursing home provides a unique opportunity for the geriatric nurse. Unhampered by the bureaucratic constraints of a large hospital, the geriatric nurse has considerable autonomy in fulfilling the nursing role. Given the backing of an enlightened nursing home administration, the nurse is free to implement the standards for geriatric nursing practice (Committee on Standards for Geriatric Nursing Practice, 1970). Two particularly relevant standards are:

> The nurse together with the older person designs, changes, or adapts the physical and psychosocial environment to meet his needs within the limitations imposed by the situation. (Standard 7.)
>
> The nurse employs a variety of methods to promote effective communication and social interaction of aged persons with individuals, family, and other groups. (Standard 6.)

Behavior modification is one method which may be used in implementing these standards.

Behavior of the older person may be modified in order to facilitate engagement and social interaction. The nurse has four functions in modifying behavior: (1) increasing the strength of adaptive behavior; (2) decreasing the strength of maladaptive behavior; (3) teaching new behaviors not in the patient's behavioral repertoire; and (4) teaching new ways of adjusting to the environmental setting (Loomis and Horsley, 1974). These functions can best be carried out by the application of social learning theory.

Appropriate behavioral responses can be reinforced

through a variety of techniques. The reinforcers used to reward behavior may be social rewards such as attention and approval, or material rewards of food, money, or tokens (Grosicki, 1968). The results of this research suggest that the Reinforcement Survey Schedule offers a way of identifying idiosyncratic reinforcers to use in planning individualized programs to promote engagement in the environmental milieu. Knowledge of an individual's idiosyncratic reinforcers can aid in the planning of activities with maximum appeal.

For example, during the course of interviewing at one nursing home, the Reinforcement Survey Schedule identified four people for whom playing the card game "pitch" was a positive reinforcer. Not one of the four had played the game in a long time; no one was aware that others in the home also liked to play. Such information is not only useful for planning diversional activities, but also for increasing the emitting of desired behaviors. For instance, if one of the four were reluctant to perform an activity of daily living such as feeding himself, contingencies of reinforcement could be set up which stated that no one was to play pitch with the resident unless he had eaten a meal by himself.

Cautela and Kastenbaum (1967) suggest that personnel as well as patients fill out the Reinforcement Survey Schedule. Personnel and patients may then be matched according to their preference for certain reinforcers. Personnel can also be provided with a list of reinforcers for each patient so that they may talk about something which the patient enjoys.

The schedule can be used to identify reinforcers that were enjoyed in the past but are not currently received. Such knowledge, plus knowledge of current reinforcers, can be used to select topics for remotivation sessions. Remotivation is a technique to increase interaction between a remotivator and a group of patients. A remotivation group usually meets once a week to discuss a particular topic. Two important goals of remotivation therapy are to encourage patients to think about and discuss topics in the real world, and to encourage patients to communicate and relate to others. The meeting of these goals will be facilitated by choosing topics which are reinforcing to group members. In addition, the social reinforcers provided in the group atmosphere will increase involvement in the social structure (Barns, Sack, and Shore, 1973).

The differences found in disengagement between men and women in nursing homes may indicate that there is a need to develop a masculine activities program. Activities which relate to using the hands or making things, such as woodwork, carpentry, home repairs, leathercraft, woodcarving, or publication of a nursing home newsletter are more appropriate for men. A puppetry workshop offers an opportunity to use or learn a variety of skills.

Involvement and engagement might be improved if an effort were made to restore some of the male's feelings of importance and usefulness in the world. The staff should be aware of opportunities to recognize a male's ability to do certain things, such as moving things for the nurses, and

being chivalrous (Midthun, 1965; Jacobs and Magann, 1974).

Other areas where the Reinforcement Survey Schedule might be of value are day care centers and senior citizen centers. For many older persons, day care centers offer a viable alternative to institutionalization in a nursing home by providing care when relatives must go to work (McDonald, 1971; Greiff and McDonald, 1973). Participation in such programs often enables the older person to maintain his independence in the community for a longer period of time. Since emphasis in the day care center is on increasing socialization and the performance of activities of daily living, identification and use of idiosyncratic reinforcers can enhance participation in these activities and promote engagement.

Senior citizen centers also contribute to the goal of keeping the older person at home and out of an institution. Shock (1968) estimates that only 5 percent of the retired population now participate in centers, and indicates that new methods are needed to attract more participants. Only three (6 percent) of the community registered voters in this study were active in the Prairie Meadow Senior Citizen Center. The results of this study indicate that identification of the idiosyncratic reinforcers of a target population may be used to increase participation in center activities.

Recommendations for Research

A major limitation of this study is the use of contrasting samples which limits the generalization of the

findings to the populations from which they were drawn. The study should be replicated with different populations, particularly those that are less well educated and less middle-class in composition.

The study was designed to test the relationship between disengagement and reinforcement at more of a theoretical level than an empirical level. Further research possibilities include testing this relationship at an empirical level in a controlled setting such as a day care center or a nursing home. Does an increase of the reinforcement in the lives of elderly persons promote their engagement? The administration of the Reinforcement Survey Schedule during a pre-admission or admission interview would identify potential reinforcers for selected engagement behaviors. If the emitting of these behaviors then increased, further support for the hypotheses of this study and for the validity of the Reinforcement Survey Schedule would be obtained.

An additional research area is suggested by the differences found in disengagement between the church-releated nursing home and the two privately-owned homes. Do church-related homes provide an environmental setting with more reinforcement? Are there significant differences in the degree of disengagement exhibited by residents of institutionalized homes?

Furthermore, entry into a nursing home may be seen as society's permission to disengage. The lack of a significant difference in disengagement between nursing home residents of

more than three years duration and less than three years suggests that there may be factors operating to maintain disengagement at a particular level. Was this an artifact of the composition of the sample? Thirty-three (66 percent) of the nursing home subjects were residents of the Good Samaritan Home for the Aged. Do the longer length of residence and the common bonds at this home combine to retard disengagement? Replication of this study with different nursing home populations should investigate this area.

The results of this investigation suggest that the total number of self-reported reinforcers (all the things enjoyed) is less significant in determining disengagement than how many actually occur or are expected to occur. Future research might explore whether the aging person with few but highly valued reinforcers is more disengaged than the person with more numerous but less valued reinforcers. Will the presentation of a few reinforcers which are greatly enjoyed be sufficient to maintain involvement, or will the presentation of a large number of reinforcers which are enjoyed "a fair amount" be more effective in promoting engagement?

Finally, future studies might explore differences in types of positive reinforcers reported according to sex, education, income, perceived socioeconomic status, and place of residence (nursing home or community).

CHAPTER VII

SUMMARY

This explanatory survey of the relationship between disengagement and reinforcement in the elderly was designed to contribute to an understanding of differences in styles of aging. It was presumed that knowledge gained from this study would provide an approach by which interventions can be jointly planned by elderly persons and others in their environment to make elderly lives more meaningful.

Residents of nursing homes were expected to be more likely to exhibit the variables of disengagement and lack of reinforcement than the elderly persons who resided in the community. Therefore contrasting samples were randomly selected from the nursing home population of Prairie Meadow, U.S.A., and from the elderly registered voters in Prairie Meadow precincts who resided outside of nursing homes.

Fifty subjects from each group in the designated age range of sixty-five and older participated in the ninety minute structured interviews which were conducted over a five month period. Items on the interview schedule included personal data, a disengagement index, a reinforcement survey schedule, an alienation scale, and open-ended questions asking

for advice for those working with senior citizens, and for those growing old.

The results were tabulated to obtain a score on the disengagement index and on three major areas of reinforcement: (1) the total number of positive reinforcers identified by each participant, (2) the level of reinforcement during the past month, and (3) the anticipated reinforcement during the next month. Pearson product-moment correlations were used to measure the association between disengagement and reinforcement. Differences between the two groups on measures of disengagement and reinforcement were tested with the t-test for differences between means of two independent samples.

The results supported the hypotheses that:

1. The greater the degree of disengagement, the lower is the level of reinforcement.
2. The greater the degree of disengagement, the lower is the anticipated reinforcement.
3. Elderly persons residing in nursing homes are more disengaged than those residing in the community.
4. The level of reinforcement and the anticipated reinforcement self-reported by elderly persons in nursing homes is lower than that reported by persons residing in the community.

For the total sample, those individuals experiencing a greater degree of disengagement reported less reinforcement occurring in their lives; those with less disengagement reported more reinforcement. Those most disengaged were more

likely to be in their eighties or nineties, and in poor or fair health. The disengaged were also less well educated, had less income, held lower status jobs before retirement, and were less active in clubs and organizations. Those persons least disengaged were younger, had better health and more money, were better educated and worked in higher status occupations prior to retiring, were more likely to have some type of hobby, and to be active in clubs and organizations.

This study has demonstrated the importance of assessing the reinforcement occurring in the lives of the elderly.

> Human life involves an ecological elevator effect: favorable ecological factors tend to push man into the zones of wellness and health, unfavorable ecological factors tend to push him down into the zones of disease, disability, and death (Hoyman, 1971, p. 544).

The positive reinforcers experienced and anticipated by the elderly are favorable ecological factors that push the older person's ecological elevator into the zones of engagement and involvement in the social structure.

BIBLIOGRAPHY

Administration on Aging. New Facts About Older Americans. Washington, D.C.: H.E.W., June 1973.

Ahammer, Inge. Social-learning theory as a framework for the study of adult personality develcpment. In Paul Baltes and K. Warner Schaie. Life-Span Developmental Psychology: Personality and Socialization. New York: Academic Press, 1973.

Anderson, John. The use of time and energy. In James Birren (ed.). Handbook of Aging and the Individual. Chicago: University of Chicago Press, 1959.

Anderson, Ralph and Carter, Irl. Human Behavior in the Social Environment. Chicago: Aldine, 1974.

Atchley, Robert. Retirement and leisure participation: identity continuity or crisis? Gerontologist 11: 13-17, Spring 1971, Part I.

_____. The Social Forces in Later Life. Belmont, Calif.: Wadsworth, 1972.

Ayllon, Teodoro and Michael, Jack. The psychiatric nurse as a behavioral engineer. Journal of the Experimental Analysis of Behavior 2: 323-334, October 1959.

Baer, Donald M. A note on the absence of a Santa Claus in any known ecosystem: a rejoinder to Willems. Journal of Applied Behavior Analysis 7: 169-170, Spring 1974.

Baltes, Paul and Labouvie, Gisella. Adult development of intellectual performance: description, explanation, and modification. In Carl Eisdorfer and M. Powell Lawton (eds.). The Psychology of Adult Development and Aging. Washington, D.C.: American Psychological Association, 1973.

Bandura, Albert and Walters, Richard. Social Learning and Personality Development. New York: Holt, Rinehart, and Winston, 1963.

_____. Principles of Behavior Modification. New York: Holt, Rinehart, and Winston, 1969.

Barns, Eleanor; Sack, Ann and Shore, Herbert. Guidelines to treatment approaches. Gerontologist 13: 513-527, Winter 1973.

Berger, Peter and Berger, Brigitte. Sociology: A Biological Approach. New York: Basic Books, 1972.

Biddle, Bruce and Thomas, Edwin. Role Theory: Concepts and Research. New York: John Wiley, 1966.

Bijou, Sidney. Reinforcement history and socialization. In Ronald Hoppe, G. A. Milton, and E. C. Simmel. Early Experiences in the Process of Socialization. New York: Academic Press, 1970.

Bircher, Andrea. Mankind in crisis: an application of clinical practice to population-environmental issues. Nursing Forum, Vol. XI, No. 1, 1972, p. 13-33.

_____. On quality nursing care. Mimeograph, University of Oklahoma College of Nursing, April 30, 1973.

Birren, James. The Psychology of Aging. Englewood Cliffs, New Jersey: Prentice-Hall, 1964.

Blau, Zena. Old Age in a Changing Society. New York: New Viewpoints, 1972.

Bolles, Robert. Theory of Motivation. New York: Harper and Row, 1967.

Brim, O. J., Jr. and Wheeler, Stanton. Socialization after Childhood: Two Essays. New York: Wiley, 1966.

Bruhn, John. An ecological perspective of aging. Gerontologist 11: 318-321, Winter 1971, Part I.

Brunning, James and Kintz, B. L. Computational Handbook of Statistics. Glenview, Illinois: Scott, Foresman, and Co., 1968.

Burgess, Robert and Bushell, Don, Jr. Behavioral Sociology. New York: Columbia University Press, 1969.

Burgess, Robert and Akers, Ronald. Are operant principles tautological? Psychological Record 16: 305-312, 1966.

Butler, Robert. Looking forward to what? American Behavioral Scientist 14: 121-128, September 1970.

Butler, Robert and Lewis, Myra. Aging and Mental Health. St. Louis: C. V. Mosby, 1973.

Carp, Frances. Person-situation congruence in engagement. Gerontologist 8: 184-188, Autumn 1968 (a).

Carp, Frances. Some components of disengagement theory. Journal of Gerontology 23: 383-386, 1968 (b).

Cautela, Joseph. A classical conditioning approach to the development and modification of behavior in the aged. Geronotologist 9: 109-113, Summer 1969, Part I.

_____. Reinforcement Survey Schedule: evaluation and current applications. Psychological Reports 30: 683-690, 1972.

_____. (a) Manipulation of the social environment of the geriatric patient; (b) The Pavlovian basis of old age. In Donald Kent, Robert Kastenbaum and Sylvia Sherwood. Research Planning for the Elderly. New York: Behavioral Publications, 1972.

_____ and Kastenbaum, Robert. A reinforcement survey schedule for therapy, training, and research. Psychological Reports 20: 1115-1130, 1967.

Chapin, F. Stuart. Experimental Designs in Sociological Research, Rev. ed. New York: Harper and Row, 1955.

Christie, Tasso and Newman, Ian. A conceptual model for understanding the ecological approach to health. Health Education Journal 28: 93-99, May 1969.

Clausen, John (ed). Socialization and Society. Boston: Little, Brown, and Co., 1968.

_____. The life course of individuals. In Matilda Riley, Marilyn Johnson, and Anne Foner. Aging and Society. Vol. 3. New York: Russell Sage, 1972.

Committee on Standards for Geriatric Nursing Practice. Standards for geriatric nursing practice. American Journal of Nursing 70: 1894-1897, September 1970.

Cumming, Elaine. New thoughts on theory of disengagement. International Journal of Psychiatry 6: 53-67, July 1968.

_____ and Henry, William. Growing Old. New York: Basic Books, 1961.

Curtin, Sharon. Nobody Ever Died of Old Age. Boston: Little, Brown, and Co., 1972.

Davis, Marion. A descriptive analysis of the impact of a nursing home environment on physically disabled young adults. Unpublished doctoral dissertation, University of Oklahoma, 1973.

de Ropp, Robert. Man Against Aging. New York: St. Martin's Press, 1960.

Erikson, Erik. Childhood and Society 2nd ed. New York: W. W. Norton, 1963.

Festinger, Leon and Katz, Daniel, (eds.). Research Methods in the Behavioral Sciences. New York: Holt, Rinehart, and Winston, 1966.

Foner, Anne. The polity. In Matilda Riley, Marilyn Johnson, and Anne Foner. Aging and Society, Vol. 3. New York: Russell Sage, 1972.

Gerwitz, Jacob. Mechanisms of social learning: some roles of stimulation and behavior in early human development. In David Goslin (ed.). Handbook of Socialization Theory and Research. Chicago: Rand McNally, 1969.

Gillette, Ethel. The sounds of apathy vs. reality orientation. Gerontologist 13: 395-397, Autumn 1973, Part I.

Goulet, L. R. and Baltes, Paul. Life-span Developmental Psychology: Research and Theory. New York: Academic Press, 1970.

Gordon, Chas; Gaitz, Charles and Scott, Judith. Value priorities and leisure activities among middle-age and older Anglos. Diseases of the Nervous System 34: 13-26, January 1973.

Greiff, Shirley and McDonald, Robert. Roles of staff in a psychogeriatric day-care center. Gerontologist 13: 39-44, Spring, 1973.

Grosicki, Jeannette. Effect of operant conditioning on modification of incontinence in neurophyshiatric geriatric patients. Nursing Research 17: 304-311, July-August, 1968.

Havighurst, Robert. Successful aging. Gerontologist 1: 8-13, 1961.

_____. History of developmental psychology: socialization and personality development throughout the life-span. In Paul Baltes and K. Warner Schaie (eds.). Life-Span Developmental Psychology: Personality and Socialization. New York: Academic Press, 1973 (a).

_____. Social roles, work, leisure, and education. In Carl Eisdorfer and M. Powell Lawton (eds.). The Psychology of Adult Development and Aging. Washington,

D. C.: American Psychological Association, 1973 (b).

_____, and deVries, Augusta. Life styles and free time activities of retired men. Human Development 12: 34-54, 1967.

_____; Neugarten, Berneice and Tobin, Sheldon. Disengagement and patterns of aging. In Berneice Neugarten (ed.). Middle Age and Aging. Chicago: University of Chicago Press, 1968.

Hess, Beth. Friendship. In Matilda Riley, Marilyn Johnson and Anne Foner. Aging and Society, Vol. 3. New York: Russell Sage, 1972.

Homme, F. How to Use Contingency Contracting in the Classroom. Champaign, Ill.: Research Press, 1970.

Hood, William R. Scientific research and social responsibility. Paper presented at Psychiatry and Behavioral Sciences Colloquim, University of Oklahoma Medical Center, September 6, 1968.

Hoyman, Howard. Human ecology and health education II. Journal of School Health. December 1971, p. 538-547.

Isaacs, W.; Thomas, Jr. and Goldiamond, I. Application of operant conditioning to reinstate verbal behavior in psychotics. Journal of Speech and Hearing Disorders 25: 8-12, 1960.

Jacobs, Bella and Magann, Allene. Involving Men: A Challenge for Senior Centers. National Council on the Aging, Inc., March 1974.

Jessor, Richard; Graves, Theodore; Hanson, Robert and Jessor, Shirley. Society, Personality, and Deviant Behavior. New York: Holt, Rinehart, and Winston, 1968.

Kalish, Richard. Social values and the elderly. Mental Hygiene 55: 51-54, January 1971.

Kanfer, Frederick and Phillips, Jeanne. Learning Foundations of Behavior Therapy. New York: John Wiley, 1970.

Kastenbaum, Robert. Is old age the end of development? In Robert Kastenbaum. New Thoughts on Old Age. New York: Springer, 1964.

Keller, Fred. Learning: Reinforcement Theory, 2nd Ed. New York: Random House, 1969.

Kleemeir, Robert. Leisure and disengagement in retirement.

Geronotologist 4: 180-184, December 1964.

Kleinknecht, R. A.; McCormick, C. E. and Thorndike, R. M. Stability of stated reinforcers as measured by the Reinforcement Survey Schedule. Paper presented at the Annual Convention of the Association for Advancement of Behavior Therapy, Washington, D. C., 1971.

Koller, Marvin. Social Gerontology. New York: Random House, 1968.

Kunkel, John. Some behavioral aspects of social change and economic development. In Robert Burgess and Don Bushell. Behavioral Sociology. New York: Columbia University Press, 1969.

Kuypers, Joseph. Internal-external locus of control, ego functioning, and personality characteristics in old age. Gerontologist 12: 168-173, Summer 1972, Part I.

Leake, C. D. New psychologic theory on aging. Geriatrics 16: 501-502, October 1961.

Leanse, Joyce and Jacobs, Bella. Working with Older People. Washington, D. C.: National Council on Aging, Inc., October, 1972.

Lehr, V. and Rudinger, G. Consistency and change of social participation in old age. Human Development 12: 255-267, 1969.

Linden, Maurice. The older person in the family. Social Casework 37: 75-81, 1956.

_____. Effects of social attitudes on the mental health of the aging. Geriatrics 12: 109-114, February 1957.

Lindsley, Ogden. Geriatric behavioral prosthetics. In Robert Kastenbaum. New Thoughts on Old Age. New York: Springer, 1964.

Linton, Ralph. The Study of Man. New York: Appleton-Century, 1936.

Lipman, Asron and Smith, Kenneth. Functionality of disengagement in old age. Journal of Gerontology 23: 517-521, 1968.

Looft, William. Socialization in a life-span perspective: white elephants, worms, and will-'o-the-wisps. Gerontologist 13: 488-498, Winter 1973.

Loomis, Maxine and Horsley, Jo Anne. Interpersonal Change: A Behavioral Approach to Nursing Practice. New York: McGraw-Hill, 1974.

Lopata, Helena. The social involvement of American widows. American Behavioral Scientist 14: 41-51, 1970.

Lowenthal, Marjorie and Boler, Detje. Voluntary vs. involuntary social withdrawal. Journal of Gerontology 20: 363-375, 1965.

_____, and Chiriboga, David. Transition to the empty nest: crisis, challenge, or relief? Archives of General Psychiatry 26: 8-14, January 1972.

Ludwig, E. and Eichorn, R. Age and disillusionment: a study of value changes associated with aging. Journal of Gerontology 22: 59-65, January 1967.

Lundin, Robert. Personality: A Behavioral Analysis. New York: MacMillan, 1969.

MacMillan, Donald. Behavior Modification in Education. New York: MacMillan, 1973.

Maddox, George. Disengagement theory: a critical evaluation. Gerontologist 4: 80-82, June 1964.

_____ and Douglass, Elizabeth. Self-assessment of health: a longitudinal study of elderly subjects. Journal of Health and Social Behavior 14: 87-93, March 1973.

Martin, William. Activity and disengagement: life satisfaction of in-movers to a retirement community. Gerontologist 11: 322-327, Winter, 1971.

Maslow, Abraham. Motivation and Personality. New York: Harper and Row, 1954.

McDonald, Robert. Description of a non-residential psychogeriatric day-care facility. Gerontologist 11: 322-327, Winter 1971, Part I.

McGinnies, Elliott. Social Behavior: A Functional Analysis. Boston: Houghton-Mifflin, 1970.

Mermis, B. J. Self-report of reinforcers and looking time. Unpublished doctoral dissertation, University of Tennessee, 1971.

Merton, Robert. The role-set: problems in sociological

theory. British Journal of Sociology 8: 106-120, 1957.

_____. Social Theory and Social Structure (Enlarged Edition). New York: Free Press, 1968.

Midthun, Norman. Let's preserve the masculine image. Professional Nursing Home 7: 17-19, August 1965.

Miller, Delbert. Handbook of Research Design and Social Measurement. New York: David McKay, 1970.

Nesselroade, John and Reese, Hayne. Life-span Developmental Psychology: Methodological Issues. New York: Academic Press, 1973.

Nettler, Gwynn. A measure of alienation. American Sociological Review 22: 671-677, 1957.

Neugarten, Berneice. Personality and the aging process. Gerontologist 21: 9-15, Spring 1972.

_____; Havighurst, Robert and Tobin, Sheldon. The measurement of life satisfaction. Journal of Gerontology 16: 134-143, 1961.

_____; Moore, Joan and Lowe, J. C. Age norms, age constraints, and adult socialization. American Journal of Sociology 70: 710-717, 1965.

Palmore, Erdman. The effects of aging on activities and attitudes. Gerontologist 8: 259-263, Winter 1968.

_____. Attitudes toward aging as shown by humor. Gerontologist 10: 181-186, Autumn 1971, Part I.

_____ and Luikart, Clark. Health and social factors related to life satisfaction. Journal of Health and Social Behavior 13: 68-80, March 1972.

Prasid, S. Benjamin. The retirement postulate of the disengagement theory. Gerontologist 4: 20-23, March 1964.

Parsons, Talcott and Platt, Gerald. Higher education and changing socialization. In Matilda Riley, Marilyn Johnson and Anne Foner. Aging and Society, Vol. 3. New York: Russell Sage, 1972.

Phillips, Derek. Social participation and happiness. American Journal of Sociology 72: 479-488, March 1967.

Public Information Office, Bureau of the Census. We the American Elderly. Washington, D. C., June 1973.

Riehl, Joan and Roy, Sister Callista. Conceptual Models for Nursing Practice. New York: Appleton-Century-Crofts, 1974.

Riley, Matilda and Foner, Anne. Aging and Society, Vol. 1. New York: Russell Sage, 1968.

_____; Foner, Anne; Hess, Beth and Toby, Marcia. Socialization for the middle and later years. In David Goslin (ed.). Handbook of Socialization Theory and Research. Chicago: Rand McNally, 1969.

_____; Johnson, Marilyn and Foner, Anne. Aging and Society, Vol. 3. New York: Russell Sage, 1972.

Rogers, Carl and Skinner, B. F. Some issues concerning the control of human behavior. Science 124: 1057-1066, November 30, 1956.

Rose, Arnold. A current theoretical issue in social gerontology. Gerontologist 4: 46-50, March 1964.

Rosenfelt, Rosalie. The elderly mystique. Journal of Social Issues 21: 37-43, 1965.

Rosow, Irving. Social Integration of the Aged. New York: Free Press, 1967.

_____. The social context of the aging self. Gerontologist 13: 82-87, Spring 1973.

Rotter, Julian. Social Learning and Clinical Psychology. Englewood Cliffs, N. J.: Prentice-Hall, 1954.

_____. Generalized expectancies for internal versus external control. Psychological Monographs, Vol. 80, No. 1, Whole No. 609, 1966.

_____; Chance, June and Phares, E. Jerry. Applications of a Social Learning Theory. New York: Holt, Rinehart, and Winston, Inc., 1972.

Schaefer, Helmuth and Martin, Patrick. Behavioral Therapy, 2nd Ed. New York: McGraw-Hill, 1975.

Seeman, Melvin. On the meaning of alienation. American Sociological Review 24: 782-791, 1959.

_____ and Evans, John. Alienation and learning in a hospital setting. American Sociological Review 27: 772-782, 1962.

Shock, Nathan. Age with a future. Gerontologist 8: 147-152, Autumn 1968.

Siegel, Sidney. Nonparametric Statistics. New York: McGraw-Hill, 1956.

Simmons, Leo. Aging in preindustrial societies. In Clark Tibbitts, (eds.). Handbook of Social Gerontology. Chicago: University of Chicago Press, 1960, p. 62-91.

Skinner, B. F. Science and Human Behavior. New York: Free Press, 1953.

_____. Control of behavior by persons, groups, and culture. In Bruce Biddle, and Edwin Thomas. Role Theory: Concepts and Research. New York: John Wiley, 1966.

_____. The Contingencies of Reinforcement. New York: Appleton-Century-Crofts, 1969.

_____. Beyond Freedom and Dignity. New York: Bantam/ Vintage, 1971.

_____. About Behaviorism. New York: Alfred A. Knopf, 1974.

Sloan, R. Bruce and Frank, Dianan. The mentally-afflicted old person. Geriatrics, March 1970, p. 125-132.

Spence, Janet. Learning theory and personality. In Joseph Wepman and Ralph Heine. Concepts of Personality. Chicago: Aldine, 1963.

Srole, Leo. Social integration and certain corollaries: an exploratory study. American Sociological Review 21: 709-716, 1956.

Starr, Berneice. The community. In Matilda Riley, Marilyn Johnson, and Anne Foner. Aging and Society, Vol. 3. New York: Russell Sage, 1972.

Stenbäek, Asser. Research in geriatric psychiatry and the care of the aged. Comprehensive Psychiatry 14: 9-15, January-February, 1973.

Streib, Gordon. Disengagement theory in socio-cultural perspective. International Journal of Psychiatry 6: 69-76, July 1968.

_____ and Schneider, Gordon. Retirement in American Society. Ithaca: Cornell University Press, 1971.

Tallmer, Margot and Kutner, Bernard. Disengagement and the stresses of aging. Journal of Gerontology 24: 70-75, 1969.

Tobin, Sheldon and Neugarten, Berneice. Life satisfaction and

social interaction in the aging. Journal of Gerontology 16: 344-346, 1961.

Ullmann, Leonard and Krasner, Leonard. Case Studies in Behavior Modification. New York: Holt, Rinehart, and Winston, 1965.

_____. A Psychological Approach to Abnormal Behavior. Englewood Cliffs, N. J.: Prentice-Hall, 1969.

Wiener, Norbert. The Human Use of Human Beings. New York: Avon Books, 1954.

Willems, Edwin. Behavioral technology and behavioral ecology. Journal of Applied Behavioral Analysis 7: 151-165, Spring 1974.

Williams, R. H. and Wirths, C. G. Lives Through the Years. New York: Atherton, 1965.

Znaniecki, Florian. Social Relations and Social Roles. San Francisco: Chandler Publishing Company, 1965.

Zubin, Joseph. Foundations of gerontology: history, training, and methodology. In Carl Eisdorfer and M. Powell Lawton, (eds.). The Psychology of Adult Development and Aging. Washington, D. C.: American Psychological Association, 1973.

APPENDIX A

INTRODUCTORY STATEMENT PRIOR TO INTERVIEW

I am Barbara Henthorn, a nurse and a graduate student at the University of Oklahoma Health Sciences Center. I am doing a study of senior citizens in order to find out how I might give better care and be more effective in working with those who are growing older. Would you be willing to help me by telling me a little about your experiences, likes, dislikes, etc., and to give me suggestions about working with senior citizens? If you are willing to participate in this study, I will be asking you a series of questions about how things are going with you these days. Your answers will be kept confidential—your name will not be used in the study. All answers from people who consent to be interviewed will be grouped together.

There are no particular risks or benefits involved for you. However, your answers will be useful in increasing knowledge about aging, and will help me to give better nursing care. You may ask me questions at any time during the interview, and are free to stop the interview at any time. If you

have any concerns about this study, you may contact the Office of Research Administration in Room 120 of the Medical School Building at the Health Sciences Center, phone number 271-4690.

Do you have any questions about this? Would you be willing to participate in the study?

Facsimile

APPENDIX B

QUESTIONNAIRE

First, would you tell me a few things about yourself?

1. Sex: ( ) Male ( ) Female
2. May I ask your age? _____
3. How many years have you lived in Prairie Meadow, or around this area? _____
   a. How long have you lived at this address? (Nursing home?) _____
4. Are you married?
   1. ( ) Married 3. ( ) Divorced 5. ( ) Widowed
   2. ( ) Single 4. ( ) Separated
      A. Is your husband (wife) living here with you?
         1. ( ) Yes
         2. ( ) No If no, ask: "Where is he (she)?" (Specify details.)
5. How do you usually spend your time? For instance, what kinds of things do you do, both at home and away from home? (If reply is "Work", ask: "What do you do when work is done?")
6. Now tell me some things about your life—the people in it, the activities in which you're interested, etc. First,

tell me about your family.

Disengagement Index

A. Family Cluster

1. Which are you, in terms of your living relatives?

( ) Husband	( ) Wife
( ) Father	( ) Mother
( ) Father-in-Law	( ) Mother-in-Law
( ) Son	( ) Daughter
( ) Son-in-Law	( ) Daughter-in-Law
( ) Brother	( ) Sister
( ) Grandfather	( ) Grandmother
( ) Grandson	( ) Granddaughter
( ) Uncle	( ) Aunt
( ) Nephew	( ) Niece
( ) Cousin	( ) Cousin
( ) Pet Owner	( ) Pet Owner

2. Would you say you have more contact with your relatives now than you did when you were forty-five, or less, or about the same?

( ) More Now—2 ( ) Less Now—0

( ) About the Same—1

B. Work Cluster

1. During the past year, were you any of the following?

( ) a. A full-time worker—job for which you got paid.

( ) b. A part-time worker—job for which you got paid.

( ) c. A housewife.

( ) d. A member of a union or professional organization.

If d. is checked, ask for the following information:

Name of Organization (1)	Attendance In Past Year (2)	Financial Contributions (3)	Committee Member (Current) (4) Each Committee	Current Officer (5) Each Office

2. During the past year, were you in contact with anyone with whom you used to work, or with whom your husband (wife) used to work?

( ) Yes—2 ( ) No—0

3. Were you working more hours a week for pay when you were forty-five than now, or less, or about the same?

( ) More Now—2 ( ) Less Now—0

( ) About the Same—1

C. Community Cluster

1. Neighbor

a. About how many neighbors around here do you know well enough to visit with?

( ) Five or More—2 ( ) Less than Five—1

( ) None—0

If in nursing home, ask: "About how many of your neighbors come to see you?

( ) Five or More—2 ( ) Less than Five—1

( ) None—0

b. Would you say you have more contact with your neighbors than you did when you were age forty-five, or less, or about the same?

( ) More Now—2 ( ) Less Now—0

( ) About the Same—1

2. Friends

a. About how many close friends do you have, that is people that you do things with, or visit in their homes, or that come to see you?

( ) Five or More—2 ( ) Less than Five—1

( ) None—0

b. Did you have more close friends whom you saw regularly when you were forty-five, or less now, or about the same?

( ) More Now—2 ( ) Less Now—0

( ) About the Same—1

3. Citizen

a. During the past year were you any of the following?

( ) 1. A registered voter.

( ) 2. Actually voted in a state or national election, or primary.

( ) 3. Actually voted in a local election.

( ) 4. Did work for some political party.

( ) 5. A political officer holder.

( ) 6. A member of the League of Women Voters.

( ) 7. A member of Prairie Meadow Republican or Democratic Womens Club; or political couples club.

If 6 or 7 checked, ask for the following information:

Name of Organization (1)	Attendance In Past Year (2)	Financial Contributions (3)	Committee Member (Current) (4) Each Committee	Current Officer (5) Each Office

b. Would you say you are more active in political affairs and vote more often now than you did when you were forty-five, or less, or about the same?

( ) More Now—2 ( ) Less Now—0

( ) About the Same—1

4. Church Member

a. Are you a member of any church? ( ) Yes

( ) No

If yes, ask for the following:

Name of Church (1)	Attendance In Past Year (2)	Financial Contributions (3)	Committee Member (Current) (4) Each Committee	Current Officer (5) Each Office

b. If resident of nursing home, ask: "Do you usually attend the Sunday worship services and/or daily devotions here at the home?

Worship services: ( ) Yes—2 ( ) No—0

Devotionals: ( ) Yes—2 ( ) No—0

c. Would you say you are more or less of a church goer now than you were when you were forty-five, or about the same?

( ) More Now—2 ( ) Less Now—0

( ) About the Same—1

Next I'm going to read you a list that suggests some activities that people do in their leisure time. No one does all of these things—and they may not interest you at all. Or you may not have the opportunity or energy nowadays to do many of them. Tell me which ones describe you.

D. Leisure Role

1. During the past year were you any of the following:

( ) Gardener

( ) Dancer and/or drinker

( ) Participant in a sport (bowling, tennis, etc.)

( ) Fisherman or hunter

( ) Craftsman or artist (ceramics, sewing, needlework, woodwork, playing a musical instrument, etc.)

( ) Tourist

( ) Discussion group member at Prairie Meadow Library or other groups

( ) Student taking classes (credit or noncredit; any kind)

( ) Reader of books

( ) Attender of plays, concerts, or art shows

( ) Camper

( ) Home repairman

( ) Cooker or baker

( ) Television viewer

( ) Spectator of sports (watching sports live or on T.V.)

( ) Other (specify)

a. Would you say you are doing more or less of these activities than you did when you were forty-five, or about the same?

( ) More Now—2 ( ) Less Now—0

( ) About the Same—1

2. Club-Association Member

a. Are you a member of the Senior Citizens Club or any other social, civic club or organization, or a lodge? ( ) Yes ( ) No

If yes, fill out the following information:

Name of Organization (1)	Attendance In Past Year (2)	Financial Contributions (3)	Committee Member (Current) (4) Each Committee	Current Officer (5) Each Office

b. Would you say you are more or less active in clubs and organizations now than you were at age forty-five, or about the same?

( ) More Active—2 ( ) Less Active—0

( ) About the Same—1

E. During an average week, how many hours do you estimate you spend doing the following: (hand card)

	1 Hour Or Less (1)	2-5 Hours (2)	6-10 Hours (3)	11-20 Hours (4)	21-40 Hours (5)	Over 40 Hours (6)
1. Family-oriented things, like meals together, outings, visiting relatives, talking on phone or writing to relatives.						

	1 Hour Or Less (1)	2-5 Hours (2)	6-10 Hours (3)	11-20 Hours (4)	21-40 Hours (5)	Over 40 Hours (6)
2. Work-oriented things, like your job, attending prof. meetings, seeing former co-workers.						
3. Visiting with, phoning or going places with neighbors.						
4. Visiting with, phoning, writing, or going places with friends.						
5. Politically-oriented things, like talking politics, political group work, reading up on political meetings.						
6. In church, attending devotionals, or doing church things.						
7. In club or organizational activities, such as meetings or parties.						
8. In leisure-oriented things, such as crafts, sports, T.V., reading, plays, etc.						

F. Overall, compared with other areas of life, how important are the following to you?

	Very Important (6)	(5)	(4)	(3)	Very Unimportant (2)	(1)
1. Family life	____	____	____	____	____	____
2. Work and work-related things	____	____	____	____	____	____
3. Neighboring	____	____	____	____	____	____
4. Friendship (being a friend, having friends)	____	____	____	____	____	____
5. Politics and political things	____	____	____	____	____	____
6. Church and religion	____	____	____	____	____	____
7. Club activities	____	____	____	____	____	____
8. Leisure activities	____	____	____	____	____	____

This next section refers to things and experiences that may give you joy or other pleasurable feelings. Here is a list of things that other people have found enjoyable. Please check each item in the column that describes how much pleasure it gives you nowadays, or how much you enjoy these things. (hand RSS)

A. Reinforcement Survey Schedule

LOR		Not At All	A Little	A Fair Amount	Much	Very Much	E.E.
	1. Eating a. ice cream						
	b. candy						
	c. fruit						
	d. pastry						
	e. nuts						
	f. cookies						

LOR		Not At All	A Little	A Fair Amount	Much	Very Much	E.E.
	2. Beverages						
	a. water						
	b. milk						
	c. soft drinks						
	d. tea						
	e. coffee						
	f. fruit juices						
	3. Alcoholic Beverages						
	a. beer						
	b. wine						
	c. hard liquor (whiskey, rum, etc.)						
	4. Beautiful Women						
	5. Handsome Men						
	6. Solving Problems						
	a. crossword puzzles						
	b. mathematical problems						
	c. figuring out how something works						
	7. Listening to Music						
	a. classical						
	b. country/western						
	c. jazz						
	d. show tunes						
	e. rhythm & blues						
	f. rock & roll						
	g. folk						
	h. popular						
	i. religious/spiritual						
	10. Animals						
	a. dogs						
	b. cats						
	c. horses						
	d. birds						
	e. fish						
	11. Watching Sports						
	a. football						
	b. baseball						
	c. basketball						
	d. track						
	e. golf						
	f. swimming						

LOR		Not At All	A Little	A Fair Amount	Much	Very Much	E.E.
	g. bowling						
	h. tennis						
	i. pool						
	j. other _____						
	12. Reading						
	a. adventure						
	b. mystery						
	c. famous people						
	d. poetry						
	e. travel						
	f. true confession						
	g. politics & history						
	h. how to-do-it						
	i. humor						
	j. comic books						
	k. spiritual						
	l. love stories						
	m. sexy						
	n. sports						
	o. medicine						
	p. science						
	q. newspapers						
	13. Looking at Interesting Buildings						
	14. Looking at Beautiful Scenery						
	15. Entertainment						
	a. T.V.						
	b. movies						
	c. radio						
	d. concerts						
	e. plays						
	f. art shows						
	g. armchair travel (slides of other places)						
	16. Like to Sing						
	a. alone						
	b. with others						
	17. Like to Dance						
	a. ballroom						
	b. square dancing						
	c. folk dancing						

LOR		Not At All	A Little	A Fair Amount	Much	Very Much	E.E.
	18. Performing on a Musical Instrument						
	19. Playing Sports						
	a. bowling						
	b. baseball						
	c. basketball						
	d. track & field						
	e. golf						
	f. swimming						
	g. running or jogging						
	h. tennis						
	i. pool						
	j. bicycling						
	k. judo or karate						
	l. fishing						
	m. skin-diving						
	n. skating						
	o. hunting						
	p. skiing						
	20. Making Things						
	a. quilting						
	b. sewing						
	c. crocheting						
	d. knitting						
	e. rugs						
	f. ceramics						
	g. leathercraft						
	h. woodworking						
	i. decoupage						
	j. cooking or baking						
	k. other crafts (specify)						
	21. Discussion Groups (Remotivation, current events, etc.)						
	22. Shopping (for yourself or with friends & family)						
	a. clothes						
	b. furniture						
	c. auto parts & supplies						
	d. appliances						
	e. food						
	f. new car						
	g. new place to live						
	h. sports equipment						

LOR		Not At All	A Little	A Fair Amount	Much	Very Much	E.E.
	23. Gardening						
	24. Playing Games						
	a. cards						
	b. dominoes						
	c. bingo						
	d. working puzzles						
	e. table games such as Monopoly						
	25. Hiking or Walking						
	26. Completing a Difficult Job						
	27. Camping						
	28. Sleeping						
	29. Taking a Bath						
	30. Taking a Shower						
	31. Being Praised						
	a. about your appearance						
	b. about your work						
	c. about your hobbies						
	d. about your physical strength						
	e. about your athletic ability						
	f. about your mind						
	g. about your personality						
	h. about your moral strength						
	i. about your understanding of others						
	32. Having People Seek You Out for Company						
	33. Flirting						
	34. Having Somebody Flirt With You						
	35. Talking With People Who Like You						
	36. Making Somebody Happy						
	37. Babies						
	38. Children						
	39. Old Men						

LOR		Not At All	A Little	A Fair Amount	Much	Very Much	E.E.
	40. Old Women						
	41. Having People Ask Your Advice						
	42. Watching Other People						
	43. Somebody Smiling at You						
	44. Making Love						
	45. Being Close to an Attractive Man						
	46. Being Close to an Attractive Woman						
	47. Talking About the Opposite Sex						
	48. Talking to Friends						
	49. Going to a. beauty shop						
	b. barber shop						
	50. Winning a Bet						
	51. Being in Church or Temple						
	52. Saying Prayers						
	53. Having Somebody Pray for You						
	54. Peace and Quiet						
Please list any other things you can think of that give you pleasure nowadays							
	1.						
	2.						

B. After S completes RSS, take back and say: "You have just told me some things you enjoy. Now would you think ahead for the next month. Which of these things do you think you will see or do or will happen to you in the next month? How strongly do you <u>expect</u> that they will happen or that you will be doing them? Here is a card with some choices on it. Now, how strongly you expect something can be shown by telling me which

words best fit your expectations. When you are very sure something will happen, you can show this by saying, "SURE IT WILL HAPPEN." When you don't expect something to happen, you can show that by saying, "SURE IT WON'T HAPPEN." If you think the chances are about even, say "EVEN CHANCE" or "50/50." If you're pretty sure it will happen, say, "PRETTY SURE"; if you're not too sure it will happen, say, "NOT TOO SURE." Let's take an example. You've checked that you like _____ very much. How strongly do you expect that (this will happen) (that you will do/see this) sometime during the next month? Think about what you expect, how strongly you expect that this will be happening. There are no right or wrong answers. Just pick out the words that show how strongly you really expect it. (Repeat for each reinforcer checked as "much" or "very much".)

C. Now I would like you to think back over the things that gave you pleasure during the past month. I'm going to read you some of the things that you have checked, and I want you to tell me if you did them, or if they happened to you during the past month. (Read all items checked "much" or "very much". Place a check in LOR column beside each item reported as occurring in the past month.)

D. Now think back to when you were age forty-five. If you had been asked to fill out this list of things and experiences that give you pleasure at that time, how would your answers differ from what you've told

me today?

8. Next I am going to read you some things that other people have said about how they <u>really</u> feel. I'd like you to think about these and tell me, for each one, how you feel. After I read each one, tell me whether you strongly agree, agree, disagree, or strongly disagree. (Hand card. Circle response on questionnaire.)

   1. I often feel that people around here are not too friendly.
      SA A D SD
   2. Trying to figure out how to get ahead in life is just too complicated.
      SA A D SD
   3. Most of the time I feel the things I'm doing are important and useful.
      SA A D SD
   4. In spite of what some people say, things are getting worse for the average man.
      SA A D SD
   5. I often feel left out of things that are going on around here.
      SA A D SD
   6. Most of the people I know seem to have different ideas than I have about the kind of life they want for their children.
      SA A D SD
   7. When people around here are having a hard time, it's

up to me to try and help out.

SA A D SD

8. Nowadays children don't give their parents the respect they should.

SA A D SD

9. It's hard to know just how to treat people around here since you don't know what they expect.

SA A D SD

10. It's hardly fair to bring children into the world, the way things look for the future.

SA A D SD

11. I get the feeling that the people around here see most things the way I do.

SA A D SD

12. It's not really my concern if other people are in trouble.

SA A D SD

13. If I had my choice, I'd live my life very differently.

SA A D SD

9. So far we've talked about different things that somewhere along the way people thought were important. What do <u>you</u> think is important, or what is of concern to <u>you</u> that you might share with me?

10. What might be helpful advice for those who are working with senior citizens—like in a nursing home, or in a hospital, or in a community?

11. What advice would you give to the younger generation about growing old?

12. Now we have finished the regular part of the interview. Would you tell me a few more facts about you, so I can compare the ideas of men with women, people in nursing homes with people in the community, etc.?

    a. What is the last grade or year you completed in school? _____

    b. What was (is) your (your husband's) usual occupation? _____

    What kinds of things did (do) you (he) do on this job? _____

    c. If you were asked to use one of four names for your social class, which would you say you belong in: the lower class, the working class, the middle class, or the upper class?

    ( ) Lower Class—1

    ( ) Working Class—2

    ( ) Middle Class—3

    ( ) Upper Class—4

    d. What would you estimate that your annual income is: (hand card)

    ( ) Under $2,000

    ( ) Between $2,000 and $4,000

    ( ) Between $4,000 and $6,000

    ( ) Between $6,000 and $8,000

    ( ) Between $8,000 and $10,000

( ) Between $10,000 and $15,000

( ) Over $15,000

e. All in all, how would you say your health is nowadays —excellent, good, fair, or poor? (Note if S qualifies "for my age".)

1. ( ) Excellent
2. ( ) Good
3. ( ) Fair
4. ( ) Poor

f. How do you usually get to places too far to walk?

13. Now is there anything you would like to ask me? (If asks about the results of the study, offer to send them an abstract of the dissertation.)

Thank you for taking the time to answer my questions. You've been very helpful.