CHANGING PSYCHOLOGICAL CONCEPTS OF AGING

[by]

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Introduction

With growing attention being paid to the fact that there are large numbers of elderly people in our society who are creating special problems which must be met, the need for consideration of the psychological problems of this group has become apparent. To consider the mental health of the aged population apart from that of the general population would be an artificial approach. On the other hand, the reciprocal relationship which exists between the older segments of our population and that of the younger segments is such that one cannot accurately consider the mental health of the Nation without recognizing the fact that we have large numbers of elderly people whose mental health needs are not being adequately met. In order to better understand the extent of this problem for purposes of program development by the Public Health Service, through the National Institute of Mental Health, the writer spent several months in a review of the literature and in visiting various individuals throughout the United States who are concerned with programs of research and programs of action dealing with the problems of our aging population.

After some reading of the literature on this problem, the writer visited Mr. Clark Tibbitts, Chairman, Committee of Aging and Geriatrics, of the Federal Security Agency. This was followed by a visit to Dr. Nathan Shock of the National Heart Institute. From those persons, some orientation on special problems in this field, together with securing the names of various individuals who would offer valuable consultation on problems in this area, formed the beginning of this study. Additional helpful suggestions regarding this study came from each of the individuals consulted.

For their intellectual stimulation, their challenging ideas and valuable information, and for their eagerness to take time to share their thoughts and unpublished data with a newcomer to this area of investigation, the writer wishes to express his gratitude, especially to the following persons:

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The Profusion of New Ideas on Aging

In visiting various psychologists, psychiatrists, social scientists, and industrial relations persons, together with people in the fields of biochemistry, physiology, neuropathology, and general medicine, it became quite clear that the writings in the literature which were already a year or two old were often no longer telling accurately the story of the progress and the current concepts which are being held by the leading workers on psychological changes in aging. In the first place, a study of the aged had been replaced by the general recognition that to learn about the aged one must study people not only in their old age but throughout their life spans. An emphasis upon the process of aging seems to be the most productive approach by which one can gain the necessary information on the changes which occur in various individuals at varying times and in varying patterns throughout their life histories. Thus, to learn something about old age one must know something about middle age in the individual studied. To learn about his middle age one has, in turn, to know something about his years of early maturity, and those years, in turn, depend upon his childhood and adolescence. Although a good deal of information has been accumulated through longitudinal studies on childhood and adolescence, there have been few studies which have followed individuals beyond adolescence.

A very interesting phenomenon observed by the writer has been the fact that new ideas and new formulations regarding psychological aspects of aging seem to be accepted or presented by individuals studying this problem in ways that seem to have the character of newly found "insights." It seems that many people have in the back of their minds a number of facts which are

"falling into place." Then, as someone presents to them a concept that neatly ties together those ideas, they seem to "ring true" in a way that has not previously been formulated in the experience of the individuals to whom they have been presented. There is, in a sense, a readiness to tie together various ideas into some of the formulations which are currently evolving in this field. The "life expectancy" of some of the formulations might be somewhat shorter than is usual since new and larger numbers of individuals are applying their efforts to the problems in this field and new ideas are rapidly evolving, therefore modifying the formulations and frames of reference which have previously been applied and which are currently being applied to the problems of aging. The growth of concepts in this field has been extremely rapid, more comparable itself to youth than to old age. Therefore, this writing must necessarily be read as a "topical" or "cross-sectional" type of report, reflecting current thinking about aging, which, it is hoped, will soon be outdated by better information based upon greater study.

Some Dimensions of the Mental Health Problem Related to Our Aging Population

First, some general statistics on our older age population. From 1900 to 1950 there has been an increase in the number of persons over 65 years of age from 3 million to 13 million. It has been estimated that by 1975 there will be more than 10 percent of the total population in the age group over 65 years. Those over 60 years of age total 18 million or 12 percent of the population; those over 55 years of age total 25.5 million or 17 percent; and if one considers all persons over 50 years of age in the United States as of 1950 there are 34 million or 23 percent of the total population. There is every reason to expect that the size of this group will continue to grow.

There are interesting differences in the longevity figures for men and women. In 1950, among those 65 years of age and over, the number of women exceeded the number of men by one-half million. For every 100 women in the group there were fewer than 90 men. Since there is a higher mortality among males, and since there is a tendency for women to marry usually about three years younger than men, widowhood becomes the most characteristic marital status of women 65 and over. In 1950, slightly more than one-half of the women in this age group were widows, as compared to one-fourth of the men who were widowers. (34)

The decline in mortality is reflected in increasing life expectancy at the time of birth. According to available information, 100 years ago life expectancy was approximately 40 years, whereas by 1949 the figure had increased to 67.6 years. This increased expectation of life can be attributed largely to marked reductions in the mortality of newborn and young children, but there has also been a significant decrease in the mortality of older persons. With increased availability of medical care, together with new developments in the treatment of illnesses, including the large battery of "wonder drugs", the situation has now become so altered that diseases such as pneumonia, said by Sir William Osler to be "the friend of the aged," is no longer the type of "friend" which terminates the problems of the elderly by removing them from the face of the earth.

Aging for the individual begins with conception and ends with death, according to many students of the subject. Others would add hereditary considerations, pointing to the importance of the longevity of the individual's ancestors. In any case, if one settles for the definition of aging as "living in time," then <u>aging</u> cannot be separated from <u>living</u>.

It is within this limited working concept of aging that the writer finds it most logical to regard aging dynamically as a continuum of adaptation in which the individual is constantly called upon to mobilize his personality strengths to meet the demands made upon him by stresses in his daily living. Those stresses vary from person to person, and so do the strengths to meet them. A better understanding of the phenomena involved, of both the stresses and the strengths, will help to reshape our thinking on this problem and our planning for handling it.

Thus, there is clearly a need for new social developments which will include the evolution of new attitudes, and eventually the shaping of new feelings, about the many problems which accompany old age, to offset the fear and the many misconceptions which surround the subject of old age. At the present time in our culture, prevailing attitudes do injustice to the real capacities of the older members of our society for mental health in old age, for increased productivity, and for continuing social contributions of the sort which have enriched markedly the Nation which these presently older members have helped to build and to develop.

Further in this report, there will be suggestions regarding ways in which the mental health of the aging population might be enhanced.

There are essentially two extremes in the way in which an individual handles the stresses of his aging and adapts to his constantly changing role in our society. One we might call "successful aging;" the other is "unsuccessful aging" or "dissolution." There are many examples of very successful aging. Anecdotes are plentiful and almost anyone can cite instances of elderly individuals who maintained their mental faculties, sense of humor,

and a good deal of physical stamina, until the time or shortly before the time at which they died. One can also look at many people who became quite feeble in old age. But most people, of course, fall in between the two extremes. Our aim would be to help most people to achieve the most successful aging of which they are potentially capable. Let us look now at the problem of those who have not succeeded in aging successfully.

One might mention first the threatening problem of the psychoses of the aged. The leading mental hospital problem in the United States today is concerned with patients past 60 years of age diagnosed as suffering from senile psychosis or psychosis with cerebral arteriosclerosis. There are additional cases of involutional psychosis, psychotic depression, and in addition, patients in the old age group bearing various other diagnostic labels. In terms of magnitude, these cases constitute the foremost area of mental disorder affecting the mental hospitals today. Beyond this, the mental disorders of old age are said to be the only group of committable disorders for which commitment rates are known to have increased during the past century. The demand for hospital beds by older patients can be expected to increase in the future in light of the total increasing population and the fact that the proportion of the older people in the population is increasing. Age-specific first admission rates for persons over 60 have increased over the last century and are now approximately twice the age-specific first admission rates for the age group 20 to 59 in New York State (20). To be sure, there are many psychotic elderly people who have not been able to secure hospitalization either because of a lack of hospital beds

available to them or because they were living in communities, especially rural areas, where the nature of their mental disorder could be tolerated more readily than might be the case in crowded cities.

There has been a good deal of concern that many communities are committing to mental hospitals elderly people who are homeless and indigent, despite the fact that they might not be suffering from mental illnesses. There is some evidence that this situation is changing because of the demands for hospital beds by those who are actually suffering from severe mental illnesses.

If one looks not only at the psychoses, but also at the neuroses of middle age and old age, the problem of aging as it affects the mental health of the Nation becomes a much greater one. Among the elderly people, as among individuals in childhood, adolescence, and early maturity, the types of manifestations of disturbed interpersonal relationships may take the form of fatigue, somatic disorders, protective rituals, hysterical disabilities, or neurotic depressions. Although these individuals frequently do not require hospitalization, the effects of their symptoms upon themselves and upon those about them affect seriously the total health and welfare of the Nation.

Now if one will extend the current concept of psychological medicine to the incapacitating illnesses of our older age population, the problem of the mental health aspects of our aging population will be even further increased. The role of the emotions in the etiology and aggravation of illnesses such as essential hypertension, with its resultant increase in the sclerosis of the vascular tree; various types of the arthritides; peptic ulcer; bronchial

asthma; many accidents; and self-imposed nutritional deficiencies, lead one to appreciate the great scope of the factors affecting and affected by the mental health of our aging population.

The problems which affect the older members of families also directly affect the younger family members and thereby any children of those younger family members. The context in which the personality development of the young individuals takes place depends to some extent, therefore, on the health of any aged persons in the family. In terms of prevention of mental illness, a very significant aspect of this problem is the shaping--i.e., healthy or unhealthy--of the concept of old age in the younger children and in the young adults. Their own self-conceptions throughout life and the ways in which they will handle their own aging will depend to a large degree upon their attitudes toward old age which are being formed early in life. Should those attitudes be based upon the presence of healthy older people who have handled aging successfully, one could expect healthy attitudes to develop in children which would eventually create healthy attitudes regarding older members in our society. However, should the converse be true, the cost to the Nation of illnesses in the older group would be aggravated, not only at present, but in future years, by the unsuccessful handling of aging by members of the average family unit.

Social and Political Considerations

The social and political dimensions of this problem have been given all too little attention by those writing upon the subject. Since there are approximately 34 million people past the age of 50 years in the United States, one can look to the majority of them as being voters, affecting significantly

the leadership and legislative activity of this country. One needs to look only to social movements of elderly individuals, such as the Institute of Social Welfare, in California, under the direction of Mr. George McLain, to realize the potentialities of this large group of people. As long as they are healthy and able to make sound decisions, bringing mentally healthy functioning to bear upon their decisions, together with long lives of enriching experience, our Nation can indeed look for wise decisions from this group. However, if the leadership of these old people, who could be organized into groups which are concerned only with the needs of elderly people to the neglect of needs of younger people and children, is under the direction of less responsible persons, one might then anticipate less expenditure for education and schools, and much more expenditure for what might be unreasonable pension systems, etc., for the older age groups. It has been pointed out by Dr. Else Frenkel-Brunswik that the stresses of old age might elicit authoritarian behavior in our older groups unless their needs are met. Hitler, in his early days of the Nazi movement, played upon the special needs of the elderly to gain their support for the resurgence of "The Fatherland." After Hitler gained power, it was not long before many elderly people were put to death. Fortunately, the Institute for Social Welfare in California has leadership which does not appear to be of a harmful sort but the lobbying, picketing, and legislative activity of the elderly group does not reflect the activity of lonely people, but rather of an active older age population. It is in the potentialities of such organized old people that one sees the necessity to satisfy their needs lest every American be affected adversely, should

the present trend toward mental illness continue to grow in older people. To offset such a possibility, active programs will be necessary to enhance their mental health.

General Factors in the Background of This Problem

Looking at this problem at this particular time in the evolution of the human and social organisms, a number of basic points deserve consideration. It has been pointed out by Dr. Paul Yakovlev and others (34) that the human being is the only animal which has so fully developed its language and abstract thinking processes. Although other animals make sounds they do not have the human capacities for language and abstract thought. The human organism has developed to the point where he uses increasingly symbolization and abstraction in his communication. The increasing complexities of group living add to the necessity for utilization of symbols, as people become increasingly interdependent and further removed from the basic processes involved in procuring food, shelter, clothing, etc. With progressive socialization of human behavior, there has developed an increasing dependency upon the group for survival and also for emotional gratifications. Practically nobody is self-sufficient in our civilized society. Human behavior has thus become a subject for study mainly in group terms. (See the concept of "marasmus in old age," developed below.) Civilization has required increasing abilities for abstraction and for symbolization. Those old people who can most easily exercise such abilities are able best to survive the stresses in their adaptation to social living.

The progressive industrialization which began early in the life of this country made for increased urban living. Greater complexities of survival

are reflected in urban changes in housing, social life, and an emphasis upon youth and productivity, all of which favor the young. The elderly find more acceptance in rural life, which has been decreasing rapidly.

Another factor in changing the way in which old people get along in our culture has been the recent increase in mobility of our people. It is more difficult for old people than it is for young people, as a rule, to adapt to change in terms of increased mobility. There is a greater tendency for young people to become separated from their parents and for grandchildren to become separated from their grandparents. This effect upon family living decreases the possibility for grandparents of playing an active family role which carries with it status, satisfactions, and a sense of usefulness for many old people. The home itself has become less important, since more living takes place outside the home than it did previously. Urban housing, which is designed largely for two generations, does not often include space for keeping grandparents in the home.

The recent war demonstrated pretty clearly that there were many potentialities among older people for productive occupational efforts. The present manpower shortage may again reverse the severity of the problem since more old people will be actively engaged in occupations than was the rule previously. However, this may be offset to some degree by the mobility of younger people traveling to secure various positions away from their parents.

Another point of importance which has received too little attention is the question of the cultural values in our country. It is only recently that the arts and the classics have begun to play a significant role in the lives of the average college student. A quarter century ago, most college athletes

would have been embarrassed to be found at a symphony concert, at the opera, or in an art gallery. Certainly, few would have attended the ballet. Today that picture has changed.

For the older group, however, the emphasis in their youth upon economic productivity to the neglect of the arts was such that numerically insignificant numbers of them devoted themselves to classical writings and to other sources of pleasure which might be useful as activities in old age. The recent emphasis upon hobbies, crafts, and activity programs for older people which do not call for great intellectual stimulation seems to be weighting the handling of one's problems in terms of narcissistic gratification requiring mainly manual skills. Intellectual skills might also be exercised more in old age if the cultural pattern would encourage this more in youth.

The benefits accruing to those who can utilize the arts and classics for gratifications in old age will be elaborated upon in the section on activities programs, below.

The Self-Concept Changes in Aging

One might ask the question, "What is the age at which one is elderly?," or he may go even farther than that to ask, "What is the age at which one begins to feel that he is getting old? At what point does this matter begin to concern him?" In view of the many differences among individuals, chronological age can serve to stereotype people with even less justification in the older group than in the younger group. Recognizing the danger attendant upon stereotyping any group, one must recognize clearly that the differences between older people are much greater than the differences between younger people, in view of the differing patterns of life experiences over a longer

period of time. There is no single point at which one can establish a chronological age as the time when "people begin to feel old."

The personal and social aspects of aging confuse the matter greatly, according to many writers. The way in which one regards old age will, of course, depend upon the way he learned to think about old age in his earlier years. The impact of the attitudes and feelings of significant persons in the development of an individual's personality and value system will shape his attitude toward his own aging. That is to say, the way in which his parents, grandparents, aunts, uncles, and friends handled the problems of old age will largely determine the self-concept of the individual as he considers his own aging process. This may be modified through life experiences, and it is generally agreed that one's concept of aging changes continually as he gets older.

In California, the Governor's Conference on Aging spent a good deal of time in trying to gain agreement as to when a person is old. A number of people at that meeting finally agreed, "A person is old when he is 10 years older than you are, regardless of your age."

Dr. Leo William Simmons has gleaned many beautiful examples from literary and historical sources which indicate wide variations. He has generously permitted the writer to use them in the following several paragraphs.

William James considered a person "an old fogey" at 25. Casanova began worrying about his age and loss of manhood at 38. Roger Bacon believed one was aged at 53. Sir Walter Scott, at 55. George Washington wrote, in 1783 when he was 51 years of age, "The scene is at length closed. I will move

gently down the stream of life until I sleep with my fathers." He repeated at 52 that he was "descending the hill."

It is interesting now to see a quotation from Prime Minister Winston Churchill, who said in 1934, "I am now getting to be a very old man. I shall attain my sixtieth birthday in a few weeks. Having held great offices of state for nearly a quarter century, I can assure you I am quite indifferent whether I hold office again or not." History will record the way in which he strongly influenced the destiny of the Western World to a great degree in the following 18 years, at least.

To be sure, the personal and sentimental assessment of aging can deceive us. The idea that "you are as old and no older than you feel, and to behave in any other way is to be untrue to yourself," is perhaps a reassuring way for many of us to consider old age.

Some people would shift the point of measure of aging from personal feelings to personal interests. Some believe that one begins aging when, upon self-examination, he finds that his thoughts and reflections turn to the past rather than the future. It is believed by some that in a very real sense old age begins at the point where one makes little effort to compensate for the losses in his life experience. Some will draw the line between those who continue to strive and those who cease to care; those who remember and those who forget; those who are still vigorous and those who are tired, etc. Others draw the line of aging between the time when they identify themselves with the younger generation and when they become critical and unfair toward it. This point has special significance when one considers the fact that there are indications from the experience of those working with adult

education groups that those individuals who are particularly suited to working with children seem often to be rather unsuited to working with the elderly.

The importance of the self-concept in aging cannot be overestimated. It is more common for people to handicap themselves by their concepts regarding aging than to honestly accept their capacities and potentialities, making the most of them.

On the other hand, it was pointed out by Dr. Fred Zeman at the Home for Aged and Infirm Hebrews that in the self-concept of the residents at that institution, the older people did not complain enough about their illnesses. They seemed to attribute too many of their symptoms simply to "old age." It is their belief that one just naturally has aches and pains and digestive upsets because he is elderly. Consequently many individuals do not report their illnesses to the physicians present until there are far-advanced conditions, many of which are beyond the stage of successful treatment.

An interesting phenomenon at that institution, cited by Dr. Zeman, is the low incidence of peptic ulcer among the resident population. That finding, when compared with the high incidence of peptic ulcers among elderly people at the Mt. Sinai Hospital in New York, in the outpatient and inpatient groups, would indicate that there is some factor which may be related to the psychological acceptance of an institutional residency status. It may be speculated that the conflicts surrounding dependency, which have been related to peptic ulcer in many psychosomatic studies, would apply to the problem of dependency in old age. With better handling of the problems of dependency and acceptance of the situation, the resident group would presumably have

less disturbance than those living outside who are dependent upon their families, upon social agencies, upon dwindling savings, and upon other sources for financial and for interpersonal nurture.

A certain amount of self-concept alteration seems to occur among some individuals attending day recreation centers, such as the Hodson Center in the Bronx, New York. There, among elderly people paying much attention to their own disabilities, it is commonly an experience to meet older people, who had suffered from similar disabilities, who reassure them that participation at the day center has given them important interests and has alleviated, to some degree, the disturbing symptoms which bothered them. Also, in seeing older people who are in good health, there is something salutary about the aspect of being younger than a healthy old person, so that the age factor itself is somewhat less handicapping. Similarly, when seeing younger people dying, the self-concept appears to be altered in terms of a sort of "omnipotence" or the feeling that the individual may be "specially chosen" to stay on earth a bit longer. The meaning of death has a changing connotation for those individuals who participate in activities with other elderly persons. It is reassuring to most people to know that their funerals will be attended, that they will be missed; this is a significant "linkage with immortality."

This has raised the question of giving more positive education to people of all ages regarding the successful handling of old age, by offering good examples. Wilma Donahue, at the University of Michigan, has suggested that there is a need for training films and other methods of education which would show successful handling of problems in old age, such as planning a trip to

Florida or California or some other place; successful handling of problems related to changes in housing; meeting the problems of adequate nutrition and medical care; and a variety of other problems which must be handled by elderly people. It is felt in many places that there has been too much emphasis placed upon the handicapping aspects of old age and not nearly enough upon positive ways for dealing with common problems which arise in later life.

Since one's attitude concerning his own aging is a reflection of his own culture's impact upon him, together with his own experiences, it is interesting to look at the problem of aging in other cultures. Since the concept of an individual regarding his own aging may very well affect his performance during his later years, the examination of other cultures should throw light upon the mental health of elderly people where the attitudes toward aging are different.

Margaret Mead has pointed out (21) that in Bali there is a dominant belief in reincarnation, and there people easily learn new, complicated tasks in their 60's. One might, therefore, speculate that since people in that culture do not believe in death, the meaning of old age is therefore altered, and cannot be so handicapping. Learning new tasks in old age there would additionally have value for the individual, since he would believe his life to be a continuing, "endless" process. Therefore, the element of motivation to learn may enter into his performance, also.

A good deal of attention has been paid to the attitude toward the elderly in oriental cultures. The respect prevailing for the elders in China and Japan has been the subject of much writing. The question has been raised by

many as to the possibly lower incidence of senile deterioration in elderly people in China or Japan since their cultural pattern places quite a premium upon the role of being an elderly person. Recent writings have indicated that the tolerance for older people in the Orient has changed markedly with increasing mobility of the population due to war, industrialization, and the stresses of "westernization" which have been imposed upon the Orient recently. In order to maintain the popular concept of respect for the aged in China, it would be necessary to have a stable social life in China, which certainly is not the case today.

With increasing communication, the world becomes smaller in terms of differences among people. The only areas in which basic studies might be made upon primitive cultures to compare the role of the aged in those cultures, would be in isolated pockets around the globe. Most parts of the earth have been "contaminated" by civilization. Civilization has brought mobility and an emphasis upon productivity which, for example, have removed the siestas from Mexico City and have placed a heavy emphasis upon piece-work output.

Nevertheless, cross-cultural studies are still possible since the ways in which the aged and their problems are handled in various cultures do vary greatly, and it might be possible to compare the mental health of individuals in varying cultures to the benefit of the plans which might be made for finding successful ways in which some of the current problems of aging might be handled. An ideal means for achieving such studies would be for individuals from various cultures to be trained here, in our own country, to get our frames of reference of the necessary disciplines, such as sociology, psychology

anthropology, etc., returning then to their own cultures to make the studies and then write up their findings for communication to those of us in this culture.

Relationship of Anatomical and Physiological Changes to Mental Health in Old Age

It has been commonly believed by most people in the medical field that psychological changes in old age are related largely to changes of an anatomical and physiological sort that occur within the central nervous system as one grows older. In those cases showing the most marked psychological deterioration the diagnosis of "senile psychosis" or of "psychosis with cerebral arteriosclerosis" is usually made. In making that diagnosis, most psychiatrists have placed the cause of the change upon changes in the parenchyma, the cortex, and the vessels of the brain. Recent formulations and recent findings of a number of investigators (6, 9, 12, 19, 27, 36) indicate that the anatomical changes which occur in the central nervous system constitute only one of many stresses and many factors which enter into the psychological changes in the deteriorated individuals. Studies comparing post-mortem brain specimens from individuals who, immediately prior to their deaths, were making adequate adjustments with little or no apparent psychological deterioration--as opposed to brains of those who manifested senile psychosis--have shown very convincingly that one may indeed find mild, moderate, or severe pathological changes in the brains of elderly people, but that those changes do not correspond in a one-to-one relationship with the clinical statuses of the individuals studied (27, p. 257).

The frequently seen sudden onset of the symptoms of the senile psychoses following an upset in the life pattern of an individual, e.g., the death of a spouse or child; the loss of a job; retirement; a necessary change in residence; involvement in an accident, etc., leads one away from placing full onus for the personality changes upon the degree of structural alteration in the central nervous system.

On the other hand, one must clearly accept the fact that structural changes do occur constantly in the bodily tissues of everyone. Those structural changes constitute real stress in the individual. The individual differences noted in old age seem to represent differences in the handling of the physical changes and psychological stresses which occur during the life experience--including old age--of the individual. There is much evidence that those who have adapted most successfully to their life situations during their early years, adapt best to the stresses of the later years, including moderate, and in some cases severe, brain changes. As in all considerations of behavior at any age, levels of adjustment in old age are based upon the variables of constitutional endowment, personality development, and the past and current situational factors operating upon the individual.

The rate of physical change is of great importance. In such a condition as Alzheimer's pre-senile dementia, the onset of the disease may be quite early, in the third, fourth, or fifth decade. The pathological brain changes are essentially those of senile dementia, but the progress of the illness is so rapid (average duration about 4 years from first signs to death) that there is little opportunity for mobilization of defenses against the decrements in function associated with it.

But brain changes in the average person occur so gradually throughout his life that most people can, and do, adapt successfully, without great apparent deficits in personality integration.

For a detailed discussion of the neuropathology and clinical manifestations associated with Alzheimer's disease, senile dementia, and psychosis with cerebral arteriosclerosis, the reader is referred to psychiatric texts and to Dr. Oscar J. Kaplan's excellent volume entitled "Mental Disorders in Later Life." (1, 3, 20, 22, 25)

New approaches to the problems of anatomical and physiological change, as they affect aging, are being utilized in a number of research centers. A good deal of the research thus far on aging has had to do with problems of diet, metabolism, and the pathological changes which occur in atherosclerosis and arteriosclerosis in the human organism. It has long been noted that there are great individual differences among people in the degree to which those changes take place.

At the Donner Laboratory of Radiation Studies, located at the University of California, at Berkeley, California, new techniques have been devised for measuring certain physiological and biochemical correlates of aging. One of those new developments is the measurement of changes in peripheral circulation which take place during the life span.

A second type of investigation which has been taking place in the past several years at that Laboratory has been concerned with the role of lipoproteins in the development of atherosclerosis. Research on the relationship of heparin to atherosclerosis is also going on. That group of investigators has found that those physiological changes most characteristic of the aging

process are changes in metabolism, particularly fat metabolism. Work at various laboratories including the National Heart Institute is aimed at finding agents to "clear" the large lipoprotein molecules (S_f 10-20 class) from the blood and thus arrest atheroma formation.

Factors of known significance in the development of atherosclerosis are diet, the metabolic handling of fat, the activity of the sex hormones, and thyroid function. There are additional factors still to be found which relate to this process. There are numerous differences of opinion among workers on this problem as to the relative significance of the numerous factors listed above as they play their roles in the process of atherosclerosis.

Dr. William Malamud told the writer of some of the studies which he had been doing, along with Dr. David Rothschild, at the Boston State Hospital prior to the outbreak of World War II. In one of those studies in which they were attempting to relate pathological changes to changes in personality, Dr. Malamud and Dr. Rothschild were given sections of brain tissue from 24 patients who had died, some of whom were psychotic and some of whom had died through accidents, infections, and other causes, when there had been no apparent psychological deterioration. The investigators had no knowledge as to which brain specimens were from which people--that is, they did not know whether the individuals were severely disturbed or whether they showed mild or moderate personality changes or no personality changes at all prior to their deaths. Both Drs. Rothschild and Malamud examined the tissues and they classified the pathological changes as mild, moderate, or severe. In examining the clinical histories, it was found that one could not correlate in any one-to-one relationship the clinical behavior with the brain changes

which were found, either in the most mild or most severe specimens. Dr. Malamud would like to see this as yet unpublished study carried out on a large number of cases to further evaluate his findings.

A study by Drs. Alexander Simon, John W. Gofman, Nathan Malamud, Hardin B. Jones, and Frank T. Lindegren, concerning the lipoproteins in general and cerebral arteriosclerosis (33) showed that the lipoprotein levels of a group of patients diagnosed as having psychosis with cerebral arteriosclerosis displayed little significant difference from a group of normals of similar age. That group of investigators concluded that if the level of lipoproteins (S_f 10-20 class) is a reflection of the activity of atheroma formation, then patients with this diagnosis showed no more atherosclerotic activity than presumably normal individuals of the same age. Further, the autopsy findings in 24 cases suggested that cerebral atherosclerosis played an insignificant role in so-called psychosis with cerebral arteriosclerosis, the latter being due either to senile or arteriosclerotic changes. Although the findings of this group are not conclusive, they seem to indicate that one should look beyond structural brain change for additional factors as causes of this condition.

Dr. Alexander Simon also points out (32) that the severity of mental symptoms does not necessarily parallel the extent of the cerebral lesions. As others have found, he noted that aged persons who were apparently normal mentally until death, may at autopsy be shown to have changes in the brain which are as severe or more severe than those noted in the post-mortem examinations of patients with obvious psychoses, such as senile psychois or psychosis with arteriosclerosis.

It is felt by Dr. William Malamud that a fertile field for future study on the relationship between senile brain changes and mental health might be the further utilization for study of cases of Alzheimer's pre-senile psychosis. The pathology in such cases, as mentioned above, is essentially the same as that for senile psychosis, only it is more marked and the changes occur more rapidly and earlier. A number of individuals, including Dr. Malamud, feel that studies of the changes in the choroid plexus may throw some light upon the cause of the senile plaques, fibrillary changes, waxy degeneration, etc. Many persons in the field have recognized the need for relating metabolic, biochemical, physiological, and psychological changes in the same individual to the sociologic factors in his background and current situation, matching the ill individuals against healthy individuals in the community where psychological changes have not been marked.

Since the above noted changes, together with other physiological and anatomical changes, occur in many individuals who are healthy, as well as those who show signs of psychological deterioration, a more promising field for endeavor would appear to be a study beyond the limits of those studies to comparative studies utilizing many parameters among the ill and the healthy.

Psychological Changes Within the Range of "Normal"

From the preceding section, the point was made several times that one cannot find a one-to-one relationship between psychological change and the degree of brain damage within the individual, since many mentally normal individuals have marked pathological changes and since many of the most severely disturbed individuals carrying the clinical diagnosis of one of the

senile psychoses will often be found to have only very mild changes in the brain. This lack of absolute correlation leads one to consider other factors which affect psychological change in normal people as they age.

In the earlier part of this writing, reference was made to changes in the self-concept. It has been pointed out that with decreasing physical stamina and decreasing energy for tolerating the stresses of adaptation to older age roles and positions and functions, certain compensatory mechanisms may be mobilized by the average individual. These include his experience, his knowledge, his special skills, interests, and motivations. Should those defense mechanisms be insufficient, then there are signs in the individual which are fairly typical, leading the casual observe to remark, "He's just getting old, that's all." As Dr. Charles D. Aring (1) points out:

> "Disease may be defined as an imbalance between organism and environment. The body is in a constant state of equilibrium with the environment, and disease may be viewed as a defect in adaptation."

Thus, since living, and therefore aging, represents a continuum of adaptation, we may consider problems of the aging population as problems in adaptation.

Dr. Aring stresses that today one must evaluate the question of senility and the senile psychoses in terms of a consideration of the basic needs of human beings.

> "These are the need to feel wanted and loved and secure; the need for self-esteem that is sometimes termed the dignity of the human being, where status as a person is expressed in achievement and work, the feeling of creating and contributing, and the desire to belong and partake of a group."

Dr. Aring goes into consideration of cultural factors which have been mentioned in some of the discussion in this paper above.

Further comments regarding the symptoms of senility in the light of the psychological status of the aging person as described by Dr. Aring deserve direct quotation as follows:

> "If one's environment is unloving and painful and without prestige or status, what would be more natural than escape into the past? Almost universally, the elder had more status and was more successful in some of his endeavors in bygone years. The only retreat possible is that afforded by the human mind, which can escape a situation while remaining in it, by such psychological mechanisms as repression or regression (flight). The pathological signs of the latter are quite common to senility, sexual exhibitionism, disheveled dress and soiling, all of which are universal manifestations of the early phases of human existence. The aged are sensitive to the rejection with which they are usually met, and they react hostilely with the commonly seen anger, irritability, and querulousness.
>
> "Their inability to adapt, their lack of flexibility, is not only due to the physical stiffening that goes with aging but also to the blow that is inherent in the acceptance of new ideas which implies that those previously held were less good. Since the aged are not accepted at par in the human family, their interests narrow; old ways are looked upon as the best, and there is reciprocally a loss of interest in the present. Their lack of love they attempt to compensate by the techniques of loving themselves--'If no one loves me, I'll love myself.' Thence the boastfulness and bragging so common to advanced years.
>
> "Of course, the role of previous personality structure is paramount in determining the reaction of the oldster to the current environment; depending on how flexible or rigid, on how narcissistic, depends to a considerable degree the clinical picture of senility."

The question of adaptation to aging as it relates to personality structure is indeed an unsettled one at this time. Both cross-sectional and longitudinal studies are needed to throw light upon the way in which old people adapt to the stresses of early maturity, middle age, and the later years. Most people would speculate or indeed hold the conviction that

"outgoing" adaptable people do best in their old age, that "rigid" people who do not adapt readily throughout their lives and are somewhat withdrawn in terms of interpersonal relationships would do less well in handling the stresses of aging. It would seem, on the other hand, that if a person is rigid in his personality structure and is in a suitable situation which is not time-bound, he might indeed show little reaction to the stresses of aging. If the situation in which he spends most of his life does have a necessary termination at a time when his physical energy and psychological capacities are under a good deal of stress and decline, then the person with rigid personality structure would be expected to have a very difficult time.

But for the "outgoing" type of person who is friendly and sociable, and who can adapt to things throughout his life as long as there is a good deal of social gratification, there are stresses which strike him especially in his old age if he is among the people who are forced to retire from an ordinary job. This type of individual then needs additional support and gratification from group membership and social activities. It is at such time, however, that reduced income following retirement would cause many such individuals to withdraw from club membership rather than to extend social activities. It is a time when such an individual might be forced to secure different housing which is less costly and to make a number of adjustments in his way of living which in some ways force him to withdraw from his usual social activities. This places great stress upon the "outgoing" sort of person. However, if his needs are met by community resources and recreational programs and ways of expressing himself in social activities, this individual might be expected to fare better than other types.

In keeping with the above comments of Dr. Charles D. Aring on the importance of being loved and the importance of one's self-esteem, the physical problem of nutrition becomes indeed a psychological one in old age. It has occurred to the writer that some of the concepts of psychiatry and pediatrics would apply neatly to the problem of nutritional inadequacies found in many elderly persons. In the literature and in talking with nutritionists, it seems to be a common finding that older people, especially those who live by themselves, frequently eat insufficient, unbalanced diets. This also happens often with younger people who are separated from their families and the people whom they love. Although most adults know what elements of food constitute a balanced diet, they "simply do not bother" to prepare those essential foods. There is a surprising number of old people who live largely on tea or coffee, and toast or cookies, without adequate proteins and vitamins. It is interesting to compare this situation with the concept in children of "marasmus" in which young children who are in hospitals following surgery, where there is little attention paid to them or children in orphanages who are very young and deprived emotionally, seem to waste away and die for no "apparent" medical reason. It is from such cases, formerly diagnosed as "marasmus," that the concept of "T.L.C." (tender loving care) evolves. It was found that such children, given plenty of tender loving care, instead of dying would thrive and respond well to the situation. The concept underlying this phenomenon has been summed up in the following phrase, "Love me, or I die." Now, if one looks at this phenomenon and beyond it, to studies on free diet selection in children, interesting concepts might be formulated. In the studies of free diet selection, children without supervised eating

were found in a short time to take the proper foods which their bodies needed for health and growth. They did not concentrate alone upon candy, cakes, and other "dessert-type" foods, as one might expect. Thus, if children are able to make proper decisions, without the intellectual knowledge of what constitutes balanced diets, then it would seems that adults, and particularly older people who have the general knowledge of what proper foods are, should be in a position intellectually to make the correct decisions about eating. It is very significant that many such people do not act upon what they know is right for them. It appears to the writer that a general "marasmus" may be one phenomenon operating in which the lonely older people are also saying, "I am lonely and unloved. Love me, or I die." In other words, such people are unconsciously committing slow suicide through inadequate and improper dietary intake because they are lonely and depressed. It is a fact that in our culture, with increased socialization and group behavior which is the context in which our personality development has taken place, eating is essentially a social event. At the point in our social development in which our culture finds itself, eating has come to be associated with a group experience. Therefore, the subject of inadequate diet in lonely people warrants further study. Research might be done to determine the validity of this phenomenon of poor eating in lonely persons compared to persons living in groups in institutions, in their own homes, etc. Also, studies are needed to learn a good deal more about actual nutritional needs of older persons, the resistance of many cases of nutritional anemia in older persons to respond to iron, etc.

If there is some validity to the foregoing preliminary formulation regarding slow suicide in elderly people of this sort, one might also extend this concept into other areas of self-destruction such as accident-proneness, in which so many elderly people are involved as pedestrians in automobile accidents in which they are injured or killed while crossing the street; and into other ways in which personality changes are noted, largely of a depressive type, affecting adversely the health of the individuals.

In the foregoing section on changes in the self-concept as one gets older, some of the factors related to the attitudes toward aging were enumerated. Also, some of the changes in behavior were mentioned. Now let us look at some of the changes which are not as severe as those discussed in terms of senile psychosis or psychosis with arteriosclerosis and look, not at the neuroses to which mention was made in preceding chapters, but rather to the types of capacities, abilities, and psychological test performance which have been recorded in studies on aging.

For a neat review of the psychological aspects of aging, the reader is referred to the more comprehensive reviews of Oscar J. Kaplan (15) and in addition, to works, quoted in that article, by Nathan Shock, Samuel Granick, Harold E. Jones, and Oscar J. Kaplan in "Psychological Aspects of Mental Disorders in Later Life," Wilma Donahue, "Psychological Aspects of Aging," and others, references of which will be found (15).

The words "test performance" must be given careful attention, since the problems in testing elderly people are such that their responses are really responses to the test and not yet clear responses which measure the true

psychological capacities of the elderly people, but rather dwell upon their abilities. More will be mentioned regarding this difference later in this section.

Since present psychological studies do not give a sufficiently clear picture of capacities of the elderly, one is tempted to look at these elderly people who have given such strength to our country during the past 60 or 70 years, then at their "weak" performance on tests, and ask, as T. S. Eliot did (8), "Where is the knowledge we have lost in information?"

It has been felt that there is a need to relate tests of psychological performance more to the experiences of individuals so that one might have a better measure of their adaptation levels than is the case with learning nonsense syllables, etc. It has been suggested that there must be some means of allowing the elderly individuals to bring to bear their wisdom in solving problems. This would require test situations in which experience, as well as abilities, would be mobilized. This might be done through offering as parts of the tests alternative solutions to given problems. In this way, the elderly person might use his judgment, wisdom, etc. In addition, one should not only measure learning of new things, but should test re-learning (18).

Elderly people are often unwilling to subject themselves to elaborate tests of physiological responsiveness, as well as psychological responsiveness, and are also somewhat reluctant to involve themselves in deep-going psychiatric interviews, since such interviews often tend to "stir them up" emotionally. Consequently, provision should be made, in valid undertakings of this sort, to deal with the emotional stresses of such test situations.

Among other cultural factors which were not mentioned above, the question of discussing one's sex experiences seems to be more threatening to older people than it is to people of the younger ages who have had more sex education and have heard this subject talked about more. There has been some residual of a mid-Victorian attitude which has tended to be held onto by elderly people in our culture today. Also, one must make provision for the screen memories and retrospective distortions which occur in testing elderly people.

In order to get older persons to submit as subjects to prolonged and intensive testing, it has been suggested that various plans of "reward" be worked out. One plan would be to emphasize the benefits to the individual of periodic check-ups on his capacities, physical status, etc. This reciprocal service would be in exchange for the opportunity of the investigators to make such tests as seem necessary (21). Another suggested reward and additional incentive to motivate them to do their best in the performance tests is some form of remuneration for the subjects. In the past, such things as War Bonds or Defense Bonds have been given to people at the conclusion of such studies. This information might have bearing, later in the report, upon suggested studies.

Another criticism of the performance studies which have been done to date in the areas of psychological testing is that the question of motivation has not entered into the evaluation of the tests sufficiently. Beyond this, there is a concept of the "economy of perception," which will be elaborated later in this section.

First, in considering the sensory and motor functions as they change with age, most studies point out that "at low illumination levels older

persons with adequate acuity are visually inferior to the young and middle aged. Quickness of visual perception begins to decline soon after adulthood is reached." (15) It might be that the hardening of the lens of the eye makes for accommodation difficulties which affect the speed of response, and the degree of acuity in fine visual discrimination which has been tied in with aging.

There have also been studies which indicate that there is some change in hearing in older persons, with decreasing acuity of hearing, commonly attributed to sclerosis in the hearing apparatus.

It has been suggested that motor response speed declines gradually in many task situations, depending upon the task and the individual being studied. This has been attributed, to some degree, to the decline in sensation as well as the questionable motivation of the individual and his recent experience with the activity tested. Although speed and strength seem to show the most pronounced decline soon after maturity, there have been investigations which indicate that older persons are more comfortable, as well as more proficient, at tasks stressing accuracy above speed. This ties in with the quality of performance concepts. In Dr. Kaplan's article (15), mention was made of a study by R. A. Brown (2) in which

> "subjects were asked to trace digits, with emphasis upon both speed and accuracy. Time scores remained fairly constant from the 20's into the 30's, but errors increased markedly during this period. Beyond age 40, speed dropped steadily but errors decreased to a level considerably below that achieved by subjects in their 20's. It is of interest, that in the group of 65 subjects, the two quickest ones were in their 20's, but the third best performance was turned in by a subject aged 74!"

Although motor function performance is such that it tends to decrease with age, it is interesting that older persons are less likely to be involved in serious accidents than the young persons at the very summit of their physiological prowess.

> "Older individuals apparently are more aware of their limitations and are more safety minded than are their younger counterparts, thus operationally compensating for the losses which occurred in sensation and motor function with advancing years." (15)

It is interesting that many insurance companies have raised the rates of automobile accident insurance for drivers under 25 years of age.

A good deal of performance ability depends upon recent exercise of those abilities. It seems to be clear that those exercised abilities, in terms of developed skills, can be maintained after many general physical capacities have been lost. Dr. Paul Yakovlev mentioned to the writer the case of an 86-year-old man who adjusted the sights on guns. When he could no longer arrange his own transportation to and from the gun factory, a car was sent to take him to and from his home, since his skills at adjusting gun sights were retained into his 90's. The man was physically crippled, but this particular skill was not lost and he was better in this job than younger men, so that he was more valuable to the company. Dr. Kaplan cites the role of experience in a study in which performance of men and women of different ages on the McFarlane Coat Assembly Test, a test of manual skill, showed that the average 20-year-old man was found to be inferior to the average 70-year-old woman (15).

Dr. Sidney L. Pressey has been analyzing the performance record on various tasks of older people as against younger people and he finds that

there are compensations which enable the older people, because of more dependability, conscientiousness, etc., as well as acquired skills of long standing, to have work records which compare very favorably with the younger workers' and in many cases superior to them.

With modern industrial capacities for producing new tools and instruments to suit individual needs, the physical strength and stamina of elderly people can become less important. By application of the skills of the individuals as they change along the life span, through job analysis to jobs which require differing abilities, the range of jobs to which an elderly person might be assigned could be increased markedly.

On the subject of learning ability, Dr. Irving Lorge has been convinced for many years that old people can learn quite well, if sufficiently motivated to do so. Speaking of the teachings of Dr. E. L. Thorndike, Dr. Lorge has devoted a good deal of time to study of the principles of learning in old age. He is not as much impressed as some with the importance of speed as a measure of learning. He feels that such things as re-learning are very important. Studies by Thorndike showed that there is a slight decrease in learning capacity from the peak age of 22, to 45 years of age, beyond which the rate of loss becomes accelerated. The types of loss in learning capacity will vary with the importance to the individual of the thing being learned. There have been some studies by Dr. Lorge and by his student, Dr. W. Virgil Nestrick which indicate that in terms of constructional activities of males in their later years, those skills most readily used by the individuals in later life were learned between 6 and 18 years of age (22). Dr. Lorge therefore feels that it is very important for individuals to learn in

childhood, during grammar school and in junior high school, the manual skills which will serve them well in hobbies and crafts in their later years.

Dr. Kaplan points out (15)

> "there is experimental evidence to support the claim that those who continue to apply themselves to the learning of verbal materials all through life are able to maintain their efficiency as learners better than those who do not have such a history. This fits in very well with the observation that aged persons who have practiced motor skills for many decades often surpass young persons at these skills."

Dr. Kaplan further makes the point that

> "it seems reasonable to suppose that in certain kinds of learning situations the older person may actually have an advantage. For example, if we were to compare the performance of a 25-year-old chemist with that of a colleague aged 50 in digesting and comprehending the contents of an article in a professional journal, it is quite possible that the older man will win out because of his greater familiarity of the field."

Thus experience in a field will affect learning and will affect comprehension of the material being learned in many situations. Dr. Kaplan points out, therefore, that

> "Although it is entertaining and informative to study learning ability 'in the raw,' in a large number of occupational situations it is impossible to divorce experience and apperceptive mass from other factors in learning."

A number of writers have felt that investigations regarding memory function have not taken into account sufficiently the relationship of memory to the type of occupation and task being performed, as well as the personality structure of the individual, his motivation, and his practice of using the material being memorized. The comments of Dr. Aring regarding the retention of remote memories of more pleasant times in place of less satisfying

recent memories of elderly people would seem to have some bearing on this matter. Questions of distractibility, attention, and the practice of memorizing will affect test performances in this area.

Regarding intelligence testing, it is felt that studies undertaken to date have been very limited in sampling and inadequate in terms of control. Despite the suggestion that there is decrease in intelligence with chronological age, Dr. Kaplan points to the following factors of importance:

> "(1) Some maintain their mental abilities into advanced later maturity without appreciable loss; (2) Losses that occur are due largely to disuse or lack of appropriate training; (3) The test instruments and procedures are unsuited to older persons; (4) Motivational factors differ at various ages." (15)

Dr. Kaplan makes a point of discriminating the assessment of mental abilities rather than capacities. Thus far, there is no accurate way of gauging mental capacities directly, and he gives an example in which

> "a person who has the capacity to do problems in differential calculus may lack the ability to solve such problems because he has never been instructed in the subject. Another possibility is that the ability to work problems was once in the possession of the subject and has atrophied because of disuse. In such a case, the possibility exists that the ability may be rewon by additional studies. Still another possibility is that the subject may be able to solve readily problems in differential calculus, but may be incapable of acquiring easily other abilities of comparable difficulty. In short, abilities may survive the capacities which permitted the acquisition of the abilities. Unquestionably, this accounts for the vocabulary levels of deteriorated senile psychotics, their knowledge of words being unattainable on the basis of present capacities." (15)

Throughout the literature on this subject, it is quite clear that there are great individual differences, and this has been emphasized in many writings.

It has been pointed up that there is a need for an intensive study of persons who retain their physical and mental abilities in later life. This goes along with the idea that it would be valuable to have longitudinal studies in which the information would be accumulated for comparisons throughout the life span, by means of detailed studies on those individuals who can be found cross-sectionally to be rare in their retention of capacities and abilities in later life. The following quotations by Dr. Kaplan of Raymond Kuhlen's summary of the literature on individual differences in aging points out that

> "in Jones' and Conrad's study of adult intelligence, only 10 people out of a total of 1,191 exceeded the score interval occupied by the brightest 55 to 59-year-olds. In Galton's data on adults, the strongest man in the 60 to 70-year age group was exceeded by only 2 percent of the 20 to 29-year-old males. A report by Misiak dealing with age trends in critical flicker frequency, a phenomenon of some interest to students of aging, states 'that there were critical flicker frequencies at age 82 as high as at age 7 and. . .critical flicker frequencies at age 7 as low as at age 80.'" (15)

The number of anecdotes of individuals over 100 who are alert and active with I.Q.'s and good physical stamina add up as one talks to increasing numbers of people on this subject. Dr. George Engel of the University of Rochester School of Medicine, recently told the writer of a man 108 years old who has been studied at that School of Medicine and whose age has been verified, who is extremely alert. That man is very active and very perceptive, and physically comparable to persons 70 years of age. He worked at a job to the age of 103, at which time he lost his job because the insurance company would no longer insure him and his employer did not want to run

the risk of having a man working for him who was not covered by insurance. Similarly rich anecdotal material has been furnished the writer by numerous individuals.

In considering the psychological changes which occur, there are certain factors which are quite important affecting the measurement of performance by elderly people in our culture. The appropriateness of the tests employed have been questioned by many, as noted above. In addition, there are attitudes toward testing which are quite different among the older people in our society from those who are younger and who have had more education and experience with testing. Since the average person who is presently in his 60's or 70's did not have the advantages of education, in most cases, beyond grade school, such individuals have had little experience with "mental tests."

Culturally, there seems to have been much more emphasis in the past upon quality and accuracy of production than upon speed. The lengthy apprenticeships which were required by earlier trade unions provided for a good deal of skill, together with attention to the quality and accuracy of tasks performed. This may be one reason among many that there is less tendency by the presently aged group to guess in answering questions, and there is much reluctance on the part of many older people to move from one question to the next before the first has been completed. Consequently there is much controversy regarding the meaning of slowing of speed in testing. As Dr. Kaplan points out, the role of culture in the psychology of aging remains to be delineated also as it affects test performance.

Some new approaches to the problem of <u>perception</u> in old people have been suggested by looking at the concepts of Dr. Jack Weinberg, a psychoanalyst

in Chicago who has worked extensively with the aged, and by some physiological experiments by Dr. I. Arthur Mirsky. First, to consider the ideas of Dr. Weinberg. It is his impression that old people tend to repress in varying degrees their responsiveness to stimuli from the environment in order to conserve energy. In other words, they do not perceive as much as their senses would allow, in order that they might "economize" and thus respond with less expenditure of their waning energies. He feels that the common experience of having an elderly person who is allegedly hard of hearing in a situation in which the older person hears something that was not intended for his ears (i.e., something which was spoken in a quiet voice), is not simply a humorous fact, it is a frequent experience of many persons. There are many studies of people with hearing difficulties and visual difficulties which would indicate that, when motivated, those senses have much more acuity than when not fully mobilized by the situation. It is common to block out from one's attention the ticking of a clock, the noise of a fan, or numerous other sounds which might interfere with the selectively attended material one is responding to.

Complementing Dr. Weinberg's idea that there is some repression of perception Dr. Mirsky has done some research on olfaction in a study which elicited preliminary findings that especially prominent in males is a decrease in acuity of the sense of smell, following adolescence, which again becomes more acute at the end of middle age. It is one of Dr. Mirsky's preliminary speculations covering this finding that the sense of smell is diminished by repression in order that the individual male have less response to the odor of the breasts of his mate during the sexually active period of

his life, in order to avoid conflicts involving oral incorporation of the "mother figure." In the mid-50's or later, this need for repression is lessened because of lessened sexual activity, and therefore the sense of smell becomes more acute again. Dr. Mirsky intends to work further upon various explanations of this phenomenon. The evidence that people can again smell better in old age is of considerable significance. One might also speculate that the increase in smell comes about as a compensation, since more attention could be paid to odors in the environment, in the light of decreasing faculties of hearing and vision. Another idea expressed to the writer by Dr. Paul Yakovlev is that with broader representation in the cortex for smell, which may be developed over the period of a lifetime, a need for smell can elicit olfactory perceptions despite the fact that there is a change in the nerve and structures of the fine endings in the nose with actual decrease in these fine tissues as one gets older. Dr. Yakovlev feels that one might expect less sense of smell on the basis of the organic structure, but because of broader representation in the cortex, additional centers may be mobilized for smell beyond the most primitive centers which are utilized early in life. Perception studies would seem to be a rich area for further investigations following these leads, and others which will inevitably develop.

Mental Disorders of Middle Age

As pointed out early in this report, one cannot consider the psychological problems of old age without considering the psychological problems of middle age, and indeed, of the whole life span. In considering the dimensions of this problem, one must consider the many changes occurring in women

following the active reproductive period. One must also consider in men, during this period of life, a growing awareness of the fact that they are getting older and have less physical stamina.

Many of the neuroses of a compensatory sort become quite clear in the individual who accepts, over-emphasizes, or denies completely that changes are taking place within him. The neuroses of the middle years, as the neuroses of childhood, young adulthood, and old age, represent unsuccessful attempts at adaptations to difficulties which occur in the life experiences of the individual. One might oversimplify this problem of middle age by pointing out that in many men, finding themselves with decreasing physical strength, some decreasing attractiveness as their hair becomes lost or thin and their waistlines thick, some decrease in sexual vigor, and usually an awareness of some disparity between their goals and their achievements, certain reactions will occur, depending upon the personality structures and life histories of the individuals involved (3). Many men will try to deny that changes are taking place. They will become increasingly active physically, often excessively, with sequellae of moderate to severe degree. There may be efforts to become more attractive through exercise, diet, and changes in appearance. To test his attractiveness, a man may become involved in an extra-marital love affair, with a good deal of subsequent guilt and neurotic reaction complicating this situation. He may become a faddist, and may actually speed the process of physiological aging through excessive attempts to offset the changes which have taken place.

If one looks at this period of life in a woman whose reproductive capacities and physical attractiveness have been extremely important to her,

as is the case in our culture, she may pay undue attention to the advertising for "wrinkle creams," rapid diets, and she may engage excessively in social activities or possible extra-marital love affairs to prove to herself and to others that she is still attractive. As the woman's children grow to the point of leaving the home for increasing amounts of time and increasing distances, it may be that she will find herself without a clear role, and with fears lest she be unattractive to her husband. This may bring about a number of reactions, depending upon her personality characteristics.

It has been the observation of a number of people in other cultures, such as that in western Europe, that American women in their 30's and 40's frequently try to look as though they are in their early 20's. The unwillingness of aging individuals to come to terms with their aging, to find gratifications which are realistic and within keeping of their capacities, raises a number of problems.

In his "Psychoanalytic Study of a 71-Year-Old Man with Senile Dementia," Dr. Martin Grotjahn observed:

> "... it is quite clear that growing old is a narcissistic trauma and that a person on the level of genital organization has much more opportunity for impersonal sublimation and may face the facts of senility and death with more calmness than the narcissistic person who in his imagination possesses eternal youthfulness.
>
> "An interesting fact in the psychology of old age is that as a rule the fear of castration with all its power and violence does not diminish. Death fear is enacted between ego and super-ego. The symptoms of senile dementia are based upon elaboration of the old castration anxiety which does not seem to grow old because the id does not participate in this process of growing older." (13)

In keeping with Dr. Grotjahn's observation, others have remarked on the severe type of reaction which follows surgery in women in their middle ages,

such as surgery on the uterus, breasts, or marked degrees of dental work. In males, there is a good deal of emotion tied to surgery on the prostate gland or genitals. It has been observed in a study by Dr. William Malamud that the onset of involutional melancholia or even involutional psychosis following such events occurs more frequently than was previously realized. That there is a good deal of conscious and unconscious feeling about one's reproductive capacities is evident to anyone reading the literature in psychology during the past half century. For those individuals who are quite active in various ways interpersonally, the middle years often do not take such a toll. Women with outside interests can usually adapt with some success to the increasing periods of free time frequently available to them. Men who have achieved some degree of success and are continuing to be active in their businesses or professions, and particularly those with outside interests, do not feel this problem so acutely. It is believed by Dr. Erich Lindemann and his group, who are working on the Wellesley Project studying community mental health, that the problems of middle age are serious problems, particularly for the women in our culture. For the individuals who have not achieved the goals they had set for themselves and who are having to realize that some of their aspirations must change, those who can accept this fact realistically and come to peace with the reality of the situation will show less disturbance than those who have more difficulty in adapting to the reality of their situations.

Dr. Irving Lorge has mentioned that in his own circle of friends and colleagues, among those with whom he has discussed problems of retirement, there seems to be a tendency to concern themselves mainly with the economic aspects of the problem, paying little attention to planning their activities to follow

retirement. Denial of the situation by simple failure to regard it honestly is one way of handling a problem, but not a very realistic way. One cannot help concluding that to have to deny the reality of a situation indicates that it is indeed a threatening situation and this reflects, even among university faculty people, the fact that there is a need for change in attitude toward the problems of old age.

Dr. Raymond Kuhlen at Syracuse University has been doing studies on changes in aspiration levels among various groups throughout the life span. He mentioned to the writer that the aspiration levels will differ for a laborer, who comes to accept the limitations upon himself very early in his career, as opposed to a male teacher who may have reached 40 before he has decided that he will not change his occupation and that he will not constantly try to change his job. Dr. Kuhlen found that among single women school teachers in the early 20's and in the later 20's also, there is a good deal of concern with getting married as an aspiration. After the 30's, however, there is a change in which they begin to pay increasing attention to their jobs and careers with a good deal of effort devoted to gaining more gratifications from their professional roles. The middle years seem to be years at which this problem must more realistically be faced lest the "Death of a Salesman" phenomenon occur. One cannot ignore the problem in the middle and later years of competition with younger people who are pressing people farther along the age span to perform more actively and more effectively. Many realistic situational factors make for the deferment for as long a time as possible in recognition of one's limitations in this culture.

It has been suggested by Dr. Lorge that hobbies be ballyhooed by heroes

and heroines of the current American scene in order that the average citizen find it popular to have hobbies of various sorts, to give him interests which will be useful in his later years. He feels that it is important, in elementary and secondary education, in various English and social science courses, and in whatever way possible, to impress upon young people that old age has many rich potentialities, so that they will not be handicapped in their considerations and plans for this time of life.

Dr. Michael Dasco, at Goldwater Memorial Hospital, has been doing a good deal of work on rehabilitation of aged persons who are suffering from chronic disabling diseases. He has had amazing success in some of his undertakings. It is his feeling that people at a given age, such as mid-40's, should learn hobbies which will be productive for them in economic terms in their later years so that they will be less threatened with the feeling of dependency and the inevitability of getting along on minimal income. He feels that people should learn such tasks as require little physical effort, and which will be remunerative so that they can change from physically demanding jobs to jobs requiring less physical strength and thus be able to continue to work throughout the rest of their lives if they choose to do so. Many people, he feels, can develop hobbies which will bring them some income and additional status in later years.

Dr. Dasco also feels that courses should be designed for general practitioners and specialists in the treatment of the problems and illnesses of the elderly. Such courses could be given by mobile units of teachers who would visit various medical societies to lecture on this subject, on a circuit basis. It is his impression that all too few physicians know of the special problems of middle age and old age and that further information would

be helpful to them. Dr. Dasco also believes that special courses and special universities for elderly people, where they would not have to compete with young people, offering courses with free tuition would be a very helpful thing.

The increasing awareness of the time remaining prior to retirement on the part of middle aged people creates special problems which can be related to retirement.

Retirement Problems

The preceding section has dealt with problems of the middle years as they might affect the retirement years. Without developing the subject of the special economic problems related to retirement, the writer has not been able to divorce a study of the psychological problems of our aging population from the question of retirement as it affects the mental health of the individuals concerned.

Perhaps the most striking common finding in the work on this report to date has been the fact that since people have such varying capacities at the fixed retirement age, it is unwise to forcibly retire people on the basis of age alone. Retirement should be individualized. There is evidence that a good deal of activity is taking place which will offer pre-retirement counseling services to individuals to prepare them for retirement. A number of industries, such as the Bristol Laboratories in Syracuse, New York, the Consolidated Edison Company in Detroit, etc., are offering such pre-retirement courses to their employees. However, employees are often not satisfied in having to retire at a fixed age.

According to Dr. Lloyd Fisher at the University of California's Institute of Industrial Relations the average working man is not looking forward to the idleness which comes with retirement guarantees; he is looking mainly for the security which will come to him in having an income at a time when he is less likely to secure employment should he lose his job. Dr. Wilma Donahue at the University of Michigan's Institute of Human Adjustment points out that many people are hoping to insert clauses into their contracts with employers that will replace the concept of forced retirement with the concept of retirement for disability regardless of age. In other words, it is hoped that an individual might have the choice, at 65 years of age or so, to retire. On the other hand, if he does not choose to cease working, assuming that he is not disabled, a job should be provided for him within the limits of his abilities, even if it means shifting to a new occupation and learning to do a task requiring less physical stamina. That individual should be allowed to work as long as he is interested in doing so and as long as his abilities enable him to do so. When those abilities fail, he should be retired according to the disability involved.

Dr. Lloyd Fisher mentions that such plans and clauses in the contracts between labor and management depend upon a relative manpower shortage, such as exists at the present time. When the situation is such that there is a surplus of manpower, provision may very likely be expected to be made that forcible retirement be instituted in order that younger people not be blocked from advancement in their positions or from holding positions which are held by men who have passed the age at which they are free to choose retirement, but refuse to do so.

Pre-retirement counseling for employees is a growing business practice in this country and one which holds promise for making the problems of retirement less threatening to those who will cease working. It is important, however, that individuals not wait until they are approaching retirement before getting interests outside a limited way of life. It is pretty late, by that time, to develop such interests. It seems not quite realistic to hope that most people would be motivated to do so. The time to begin preparing for retirement is actually in the development of one's personality in the earliest years. This will be accomplished by building in children healthy attitudes toward aging, through example, environmental stimulation, and changes in prevailing attitudes toward aging. If one has a healthy personality and if he accepts himself within terms of his real capacities, he can find gratifications throughout every period of life. The earlier he learns to adapt successfully to ordinary life stresses, the better will he adapt to the physiological and psychological stresses which occur at the time of his retirement or later.

The stresses which accompany retirement have been likened in severity to the stresses of adolescence. The psychological changes which follow retirement depend largely upon the type of individual and the type of life adjustments which he has had up to that moment. In the experiences of most people, there have been acquaintances or relatives who have retired and died a short time later. The withdrawal from a degree of integration with one's environment which was closely tied to one's job performance, his status in being a bread-winner, and his social participation as a workman, together with other factors, creates a change in role which is, for many,

intolerable. It has been stated nicely by Dr. Eduard C. Lindeman (17) that it seems odd for a business concern to give a gold watch to a retiring workman, after a lifelong period of work, at the moment when time begins to mean so little to him.

The emotional significance of one's job to his total personality integration is something that will have to be studied in each case, individually. If there are not other satisfactions which can compensate for the loss of job activity and change in role, then there follows a degree of deprivation and disorganization of adaptation which many persons cannot handle. Upon retiring, the increased time spent at home by a dissatisfied man generally creates problems in the home for all of those about him. For example, there may be stresses in the relationship with his spouse. There may be difficulties in his relations with his children and his grandchildren. The resultant interpersonal difficulties may affect all of them adversely. Undue demands upon others may be made by the elderly individual as he begins to doubt his own importance and his status in the group. Depressions and involutional processes may ensue.

In some cases where one has an accurate perception of the situation with the recognition that such things are happening to him, it has been helpful for the individual to return to his former job or perhaps a less difficult job in his former business, if such return was possible and feasible. In other cases individuals have been able to find new occupations or even new careers following a period of retirement. It is interesting that YMCA secretaries have been notably successful in having occupationally active lives following retirement from the YMCA. Many of them have had successful

second, and even third, careers in their lives. In studying this group it has been speculated that the personality characteristics of the average YMCA secretary are such that he adapts well to change and that his interpersonal relations are sufficiently healthy that he can find new types of work readily. This type of phenomenon points to the need for studying healthy adaptation following retirement in those individuals who make such successful adjustments.

The importance of recreational centers, day centers, golden age clubs, and other activities to supplant the job which has been left by the retiring individual, will be the subject for the section later in this paper on activities programs for aged persons.

Management of Psychiatric Illnesses in Old Age

There has been a good deal of attention paid to the problem of the psychoses in old age, with little attention to the neuroses. The psychoses have been thought, by most psychiatrists, to be irreversible. This has been shown by recent experience to be untrue in many cases. Newer techniques for the treatment of elderly individuals who have become psychotic are offering promise that most of them can be helped significantly with comprehensive medical management and psychiatric treatment. Rehabilitation of this group of severely disturbed people has been attempted in some centers with striking success.

If one first considers the less serious mental illnesses in old age, it is interesting to learn that many psychiatrists are treating elderly people with psychotherapy. The anachronistic idea that people past 40 cannot

benefit from psychiatric treatment is brought up to date very well by Dr. Frieda Fromm-Reichmann.

> "Regarding the older aged group, psychiatrists used to think that women past the middle of their 30's and men past the middle of their 40's were no longer flexible enough and had to work through too long a span of personal history to undertake psychoanalytic psychotherapy. Psychotherapeutic changes for these people were also considered to be not too favorable because sexual gratification was considered a sine qua non of a happy life-adjustment. Recent experience has led most psychiatrists to change this viewpoint. It is true that there is a longer life history to be considered, and there may be a somewhat lesser degree of personal flexibility in these people. However, these liabilities, as a rule, are amply made up for in those older persons who are eager to overcome their difficulties by a more eminent matureness, a larger body of life-experience, and, above all, by a greater sense of urgency in finding better ways of living for the shorter span of life left to them. I, personally, have been gratified by being instrumental in the accomplishment of marked improvement in living of three women patients and one man who started their treatments during the second part of their 50's, and four women patients and one man who started treatment during the second part of their 40's." (11)

At the Home for Aged and Infirm Hebrews, new approaches to psychotherapy of elderly people have been tried by Dr. Alvin Goldfarb, a young psychiatrist who is interested in many aspects of the problem of emotional problems in the aged. He has been employing new techniques of brief therapy with individuals at the moment in which they begin to show signs of increased irritability, resentment, and disturbed interpersonal relationship.

Dr. Goldfarb hopes also to study delirium states in the elderly following trauma.

For the treatment of such illnesses as psychotic depressions in the elderly, as well as involutional melancholia, the application of new electroshock techniques, combined with physical therapy, environmental manipulation,

and social case work--and in some cases with psychotherapy--have given evidence of a good deal of reversibility of those illnesses. This will not be reflected in statistics, because few hospitals are staffed to treat these cases properly. Few State hospitals have the personnel or the orientation, at this point, to make the most of the knowledge which is available to them. In the more discouraging aspects of this problem, one may consider the fact that many elderly people who show early signs of psychological deterioration are denied early treatment. Either they are kept with their children, who feel too involved emotionally to send them to mental hospitals, or who appreciate the shortcomings of mental hospitals in such a way that they do not wish to send their relatives to mental hospitals to die; or the staffs of such mental hospitals are unable to give adequate treatment. Furthermore, elderly people who show early signs of confusion, memory defects, sleeplessness, etc., if taken from their homes and placed in wards of extremely disturbed younger patients, serve to interfere with the treatment of the younger patients and to have their own illnesses aggravated by the up-rooting from familiar surroundings to very disturbed wards where people are not only strangers, but are psychotic. This often disturbs the reality-testing of the elderly individuals in such a way that they cannot readily re-orient themselves. Thus, their recovery is often actually hindered to a great extent by placement in typical State hospitals. Many physicians are discouraged from treating the younger people, as well as the older people, by considering the patients on such wards as "a bunch of crocks" and therefore, they are motivated to ignore treatment of the entire ward and to satisfy themselves with mere custodial care of the patients. This

situation is inhumane and incompatible with acceptable standards of medical practice. It is based upon insufficient knowledge and poor planning by the communities and by the legislatures of most States for managing this growing problem.

To be sure, there are stages reached in the development of mental illnesses when the individuals can no longer be cared for at home or in other institutional settings apart from a mental hospital. But many cases, if not most cases, can be helped along before this stage is reached, when the clinical signs are quite apparent and when treatment is indicated. With attention paid to the physical status of such individuals, with proper medical care, nutritional considerations being met, together with competent, motivated attention being given to the individual, thousands of such patients might have a fair prognosis for recovery.

There are some developments, such as the Home Maintenance Plan of the Montefiore Hospital in New York, which have prevention aspects and early case finding aspects to them. Under that plan, periodic regular visits are made to the home by a physician and social worker. The entire family, including parents, children and grandparents, if they live in the home, are included in the treatment and prevention program. The close relationship between the physician, social worker, and the family offer the opportunity for the physician and the social worker to note early the development of breakdown in social relationships or early behavioral changes in the elderly individual. This plan makes possible early detection of the problem and early efforts at therapy.

Further developments by the Montefiore Hospital in the home treatment of acute and chronic illnesses at all ages, but particularly affecting the old age group, in which the home treatment emanates from the general hospital as a central agency, offer additional possibilities for better treatment for elderly individuals.

For instance, if the individuals are suffering from accidents or physical illnesses which often cause delirious states in the elderly, there will be less adaptational stress placed upon the elderly if they are treated at home than if they are up-rooted and placed in new surroundings. The toxic and delirious conditions which elderly people sometimes develop for varying periods of time following the stresses of accidents or serious illnesses will often clear up given adequate attention and supportive care. In the home setting more attention can be paid to the individual needs, to the idiosyncracies, and to the total family situation than is possible in an impersonal hospital setting. It is significant that the home care program of the Montefiore Hospital costs one-fourth as much as care in the hospital for the individuals involved. In that program, there may be various people, such as occupational therapists, nurses, attendants, housekeepers, and others sent to the home for varying indicated times in order to free the family members to spend time with the patient in nursing care or to take over whatever degree of care can be carried out in the home, as is necessary in individual cases. It is apparent that programs of this type are spreading in the New York area. From Dr. E. M. Bluestone, who was instrumental in the development of that program, the writer learned that many foreign governments have inquired about that program so that their own health facilities

might plan similar home care programs in those countries. Consequently, one can anticipate growth of this program, with such developments helping the elderly, as well as others, to a marked degree.

Another facet of this question is concerned with hospitalization in mental hospitals of people at any age with early signs of mental illness; or actually the problem of treating the mentally ill, usually in relatively inaccessible rural areas, rather than in medical communities or communities from which the patients have been drawn. The location of mental hospitals in rural areas makes for increased neglect of the elderly, and younger patients too, by their families and by the community. It is made easier to excuse oneself for not visiting family members who may have been something of a burden, especially if it is difficult to reach the hospital where such a patient is being treated.

Further, the level of medical care is lowered in isolated hospitals, since the professional staffs are isolated from other medical groups and do not have the impact of those frequent contacts with their colleagues which tend to raise the level of medical practice.

Thus, institutions for care of the mentally ill--and for the elderly--should ideally be located in the communities from which such persons are drawn.

Another aspect of the problem of hospitalization of the mentally ill, particularly the elderly individuals, is that many communities do not have facilities for caring for their transient, unemployed, elderly citizens, and when those citizens become homeless they are often literally "dumped" into mental hospitals. This is the case in many parts of the country. In one

place, however, the writer was told that Dr. Frank Tallman, Director of the California Department of Mental Hygiene, noted this situation and wrote individual letters to Superior Court judges throughout California, informing them that it was a violation of the law to commit elderly people who are not psychotic to the state mental hospitals for care. Within the first year, there was a 40 percent decrease in the number of such cases sent to the state hospitals, the writer was told. Dr. Tallman feels that communities have a responsibility to provide facilities for the supervision and care of elderly people who do not require psychiatric treatment and who do not have other economic or social resources. He feels that day recreation centers and golden age clubs, together with other activities programs at the community level, will decrease markedly the number of individuals requiring institutionalization for mental illnesses in old age.

Many senile patients can be successfully treated in mental hospitals and returned to the community from the mental hospitals, when the facilities of the community permit.

Regarding the management of medical illnesses in which psychiatric complications often ensue for short times; or if the illnesses are chronic, in which psychological complications prevent complete recovery, some developments in physical rehabilitation of elderly people by those such as Dr. Michael Dasco at Goldwater Memorial Hospital are very encouraging. Dr. Dasco was referred to above, regarding some of his ideas on the needs of the middle-aged and elderly. In physical rehabilitation some new techniques have been devised for rehabilitating many people who were disabled by chronic illnesses. The writer was impressed, in his visit to Goldwater Memorial Hospital, with

a number of cases in which individuals had been hospitalized for the preceding 10 years or so, because of such conditions as rheumatoid arthritis, who were being rehabilitated and ready to leave the hospital by active programs of treatment in which their individual needs were considered. Treatments for such conditions as non-union of a fractured hip, in which weight-bearing was utilized with good results after 2 years of non-union, are characteristic of many successful new developments in medical treatment of illnesses which could otherwise become chronic and disabling in old age, if the modern approaches were not utilized. A number of such approaches for managing the complications of cerebral vascular accidents, diabetes, the arthritides, etc., indicates that the psychological complications of medical illness in old age will be less serious as those medical illnesses are treated with increasing success, and as the knowledge regarding such treatment becomes more widespread.

New developments in <u>housing</u> for elderly people should diminish the problems which result from disregarding the emotional needs of the elderly. At the Home for Aged and Infirm Hebrews in New York City new apartment-type dwellings in which the residents have great freedom to come and go as they wish, seem to fit more neatly the needs of most people. Residents are given spending money, if needed, and have a good deal of personal freedom to remain in direct contact with the community. They are located within a community so that they do not suffer so greatly the isolation of being institutionalized. However, one must mention that there is a good deal of disagreement as to whether elderly people should be placed in homes where there are not young people, since this represents an "artificial" way of living.

New studies on successful management of elderly people in family units, such as foster home placements, offer further areas for evaluation.

Drs. Alexander Simon and Earl Galioni, working at the Napa State Hospital on a project of rehabilitation of hospitalized patients with diagnoses of senile psychosis or psychosis with cerebral arteriosclerosis, have been convinced by pilot studies that elderly people with such conditions can often be rehabilitated and returned to the community.

The essential principles of treatment of the elderly are not markedly different from the treatment of those who are younger. The dynamics of the illnesses are in many ways the same as those of middle age, early maturity, adolescence, and childhood. Although there are differences, essentially they are problems of adaptation which can be met with the current body of psychiatric knowledge to a much greater extent than ever before possible. However, there is a need for much more knowledge regarding the special problems of the elderly, and this will be discussed under suggested studies, below.

Prevention of Mental Disorders in the Aged

One cannot adequately consider the problems which develop in old age outside the context of the life histories of individuals. Prevention must, therefore, begin as early as possible. This means developing healthy personalities in individuals during the early developmental period, and studying as many changes as possible which takes place beyond adolescence. Those changes have not received sufficient emphasis in longitudinal studies to date. The ways in which attitudes can be modified, and self-concepts changed constructively, must consider those changes within the individual at three

levels: First, the way in which the individual regards himself--that is, his self-concept. Secondly, one must consider the way in which the individual looks at the world beyond himself; there must be a consideration of his attitudes toward other people and institutions within the community, and the way he considers the world about him. The third level is the way in which the outside world actually does look at the individual. That is, the individual must be made to have an accurate self-concept which is validated against the way he feels the world looks at him and the way in which others outside the individual actually do consider him and his capacities and his work and his status. Since one's self-conception is constantly changing, his changing needs must be met.

Many books have been written on the subject of healthy personality development. To make possible wider application of established principles of child rearing is a part of the present program of the National Institute of Mental Health. Further efforts to learn of the ways in which healthy personalities develop, and longitudinal studies to see the ways in which various types of personalities handle the stresses of aging will throw a great deal of light upon this problem. A change in cultural attitude can be made only very slowly by a variety of means, utilizing educational media which include new social inventions in interpersonal communication to effect changes in the self-concepts of parents so that their children might have healthier attitudes toward living and this will include old age. Teachers and other people closely influencing the growth and development of individuals in our society must reflect healthier attitudes toward aging. This is not limited to the early years, but to later years as well.

Our social institutions must be modified to some degree to make greater provision for utilization of the capacities of elderly people for longer periods of time. Management and labor alike must get more information regarding those capacities so that more realistic planning can be made to meet the needs of all groups.

These problems cannot be separated in any way from the economic security which is essential to mental health in old age. One must consider the dynamic evoluntionary aspects of society and make his provisions with sufficient flexibility that plans can change with the times. There are constant and inconstant changes in value systems among people which must be recognized. The ideas of stability in our culture, or indeed in any culture, are definitely time-bound. Longitudinal research must be sufficiently flexible that it does not itself become "senescent" otherwise it cannot adapt to such changes, as pointed out by Dr. Harold E. Jones at the University of California.

Now let us look at some of the things that might be done for the elderly people who have not become mentally ill but are presently active in the community.

For those who are able to continue working in their own businesses or at satisfactory employment, there is little problem. For those who are not occupied in the community in gainful employment, various activities programs are necessary. For those who are able to remain active in gainful employment, there is the necessity of recreational activity and diversional enterprises which will maintain their mental health.

One of the leading areas for further development is the establishment of community activities programs which will occupy the time of those who have

retired from full-time employment. Such programs require good active leadership by persons who are suited to working with elderly individuals. There are indications from the experiences of persons working in the field of adult education that those individuals who make good teachers and group leaders for children and young people are very often unsuccessful in working with older age groups. The reasons for this phenomenon have not been clearly understood. One might speculate that peer relationships of the individuals, and the identification patterns of such individuals more with younger people or older people, have a bearing on the problem. One might wonder whether those who work well with children and who cannot work well with elderly people have conflicts regarding their roles as parent figures or their identifications with children, in having problems in dealing with older individuals who may represent parent figures or authority figures. On the other hand, those who work well with older people but who do not work successfully with children may in some ways unconsciously picture themselves more as children than as parent figures for a variety of reasons, thus making them more successful in working with the elderly. It is interesting, however, that often older people will look upon the younger group leaders of the activities programs, such as recreation centers, as "mother figures" or "father figures". It is the experience of individuals, such as the writer, working in homes for the elderly to assume a "parent" role in the eyes of the elderly individuals who look to the more active younger people for security, counseling, and direction.

A number of activities for elderly people might be enumerated. It has been the impression of those at the Hodson Day Center, located in Bronx, New York, that extremely few of their members have required institutionalization for mental illness. With more than 900 members, approximately one-half

of one percent have been hospitalized for psychological disorders, while it has been estimated that 3 to 4 percent of individuals over 65 years of age in the general population are disabled by mental disorders. (24).

Day recreation centers have been able to develop such activities as lectures and classes on various subjects, including arts and crafts, creative writing of articles, plays, poetry, news, music, etc.; music groups in which individuals take music lessions or are organized into choirs, orchestras, and rhythm bands. Some centers publish newspapers, hold dances, have committees to call on the sick, hold birthday parties; and of importance not to be underestimated, have for the members the assurance that their funerals will be attended. Day recreation centers, as well as such groups as golden age clubs, and many institutions for the aged, such as residences with activities programs, can teach new skills and awaken dormant skills with the development of new interests in elderly people. As mentioned previously, the constructive aspects of having one or both individuals in the family unit participating in activities makes for greater gratification and greater mental health on the part of everyone concerned. This also enhances the physical health of the participating groups.

There are such groups as those of retired scientists of the Bureau of Standards in Washington, who have formed a club called the Fossils' Club. According to Dr. Sidney Pressey, members of that club include retired physicists and engineers who devote themselves to solving certain problems of aged individuals. For example, they have designed special ice grippers for shoes to be worn by the elderly, as well as efficient night lights, low railings, etc.

There are political activity groups such as the Institute of Social Welfare in California, under the current leadership of a younger person, George McLain. That group participates in legislative activities, lobbying, picketing, propaganda efforts, etc. Mention was made in the earlier parts of this report of the potentialities of such groups, and the need that such members be mentally sound since they potentially carry a good deal of voting political power, once organized.

Such activities as civil defense responsibilities by the elderly offer those individuals participation status. According to Mr. Louis Kuplan, Chairman of the California Governor's Conference on Aging, it has been the impression of a number of people that elderly individuals are more consistently devoted to their tasks in civil defense posts than are younger people.

There has been tremendous growth of adult education programs throughout the country. This is particularly marked in cities such as Los Angeles, California where, during the past couple of years, approximately 60 adult education groups have developed, in which the content is related to various problems of aging. Such problems as the medical, nutritional, economic, social, educational, and mobility aspects of aging are considered. Those classes are now being supplemented by a greater variety of topics covering a wider range of interests of the individuals participating. Throughout California there are approximately 400 adult education programs with approximately one million enrollees in evening classes.

This program is operated by the State Board of Education and local school districts and it extends into all of the state correctional institutions and into 5 mental hospitals at the present time. It is interesting

that old persons and young persons must be mixed for most success in these classes, since it has been found that if one separates old people from young people by designing the courses and designating them for older people, there will be much less interest and participation by elderly people. Older persons seem to resent being arbitrarily placed in groups apart from younger people.

For those elderly people who are institutionalized, the needs to relate the activities programs of the institution to areas outside the institution and within the community have been clearly established by the work of Dr. Wilma Donahue in a demonstration program in Grand Rapids, Michigan. It is important that elderly people go beyond passively watching television or motion pictures or other activities. It is important that they participate in useful activities.

The pre-retirement programs of industry, mentioned above, also have a prevention function, since they help to lessen the stresses of retirement and adaptation to a changed way of life.

At the Utica campus of Syracuse University, a program has been established offering extension courses to elderly people without tuition. Since such courses are open free to the elderly, it is hoped that there will be greater participation by them.

At San Diego State College, Dr. Oscar Kaplan has a weekly television program in which he considers the problems of the elderly and shows the community what activities are being participated in by elderly citizens. At San Diego State College there are many elderly persons who are taking college courses, some of them preparing for new careers. The use of television to reach many people who are at home is showing promise as a medium of great

helpfulness for the aged. Other communication methods will be helpful as they develop, for reducing the number of elderly persons requiring institutionalization.

The importance of intellectual pursuits as activities in old age has been stressed by Dr. Charles D. Aring. Although a good deal of attention has been paid to crafts and manual operations in old age, it is Dr. Aring's feeling that in our culture too little attention has been paid until recently to the classics and the arts. Intellectual pursuits by retired individuals or individuals who are unable to work offer a constructive expenditure of time which is satisfactory for many people. Dr. Aring cited the instance of a physician who is now 100 years of age, who goes to the library almost every day to read great works and to write critiques on them. He mentioned other elderly individuals who were very active in their later years, and two nonagenarians with economic security who had marked apparent physical changes with gross arteriosclerosis.

> "They had outlived all of their contemporaries and sought friends among younger generations and were particularly admired by children. Their reading would have done credit to men of the professions, as would their knowledge of current events. While somewhat isolated by reduced ability to hear and slowed movement, both of them traveled, though most of their social intercourse they maintained with the help of servants." (1)

Dr. Aring mentioned that many elderly people find a great outlet for interests and social participation in literary clubs for the reading and discussion of new and classical works.

It has been suggested by Dr. Eduard Lindeman that the wisdom of elders who have retired from active jobs in industry, and particularly those with some executive experience, be applied, through the role of their participation

on special advisory councils, to special problems in industry or in the problems facing their former pursuit (17). The pooled experience of many elderly individuals is wasted, whereas it could often be utilized very constructively. The status of continuing to be useful on the part of the elderly people would enhance their mental health.

The foregoing points up the fact that a good deal of attention has been given to the shortcomings of old age and not enough emphasis has been placed upon the assets of old age. New experiments in this direction are needed. The role of elder statesman or wise elder is one enjoyed by many people in our culture, but that role has received little focus. A study of healthy performance by such individuals in old age might be extremely rewarding. Dr. Paul I. Yakovlev points to such persons as Bernard Baruch, George Bernard Shaw, Winston Churchill, Arturo Toscanini, and others, as examples of men whose old ages have been enriching because their full faculties have been utilized. The world benefits from their efforts. To bring about a situation in which we know more about the types of factors which will enable increasing numbers of elderly people to achieve successful old age, for the enrichment of our country as a whole, as well as for greater satisfaction to the individuals concerned, further study will be required.

Suggested Studies

There is a great need for further studies at many levels concerned with the mental health of our aging population.

Generally, the writer has found almost universally an awareness on the part of investigators in this field of the need for longitudinal studies which would be concerned with psychological changes throughout the life span.

Such changes would take into account physiological, psychological, anatomical, and sociological factors, including comparative studies with other cultures. The following suggestions are among many made to the writer by various persons consulted:

1. With a view to learning ways to foster the mental health of our presently aged population, it has been suggested that one might study the effect on the mental health of individuals who participate in various types of activities programs. For instance, one might compare the changes in the mental health and, indeed, in the physical health of individuals who participate in day recreation center programs, golden age clubs activities, etc., as opposed to individuals of a similar background who do not have such activities in their daily living. It has been suggested that studies on aged groups might consider their educational status, occupational status, religion, class stratification, family structure, and orientation of the family in attitudes which are adopted. For instance, it would be interesting to learn what the fathers, grandfathers, significant relatives of the individuals studied did in their later years.

2. It has been suggested that a useful study would be a sociological investigation into the tenement hotel residents. Such a study would investigate the family relations and background of the individuals who end up in tenements in metropolitan areas, small towns, and semi-rural environments.

3. It has been suggested by Miss Ollie Randall that studies of family relationships in various sub-cultural groups within our country would be rewarding. It would be helpful to know the various types of life patterns which exist in families in which elderly people have a significant and useful

place, as opposed to those families in which no place has been made for the elderly members. Such contrasts would throw light upon some of the problems involved and possibly upon ways of meeting those problems.

4. Mr. Louis Kuplan, who is chairman of the Governor's Committee on Aging in California, suggested the need for pilot studies on counseling techniques for the elderly. One might develop programs of counseling throughout the life span for individuals rather than simple vocational counseling for young people.

5. Studies into the best types of housing for various types of elderly individuals would be helpful (e.g., separate from--or with--younger people, etc.).

6. Cross-cultural studies on the role of the aged in primitive societies would be very useful. Dr. Leo William Simmons, Professor of Sociology at Yale University, suggests that further cultural studies might be undertaken in the few isolated pockets which have not been "contaminated" by civilization, or in various civilized cultures where the role of the aged is said to be quite different, as in the Orient. One might send teams to learn whether there is actually less mental illness in cultures where there is more prestige for the elderly than in our own culture. One might learn also whether there are the same psychological changes in the effects of various ways of living upon the behavior of elderly people and upon their capacities. An example of such a study is suggested by the remarks of Margaret Mead (21) in which the people of Bali, believing in reincarnation, are less handicapped by concern with being old, dying, etc., to the same extent that people in this country are, and consequently old age has a different meaning for them.

One might validate such impressions with further studies, on a case investigation basis, to learn ways in which such persons handle various stresses throughout their lives.

7. A further suggested study has been a proposal by Drs. Alexander Simon, Earl Galioni, John Gofman, and Nathan Malamud at the Langley Porter Clinic, to do comparative studies on patients with senile psychosis and psychosis with cerebral arteriosclerosis, comparing alternate admissions given different rehabilitation efforts in their hospital management, and comparing cases studied within the hospital with cases in the community on a matching basis, to learn what factors have made for hospitalization. In that study would be included new cholesterol level studies and post-mortem examinations of tissues. The proposal by that group would be such that, in terms of personnel available, cost of program, etc., it could be readily applicable to other State hospital programs. It is suggested that attention be paid to rehabilitation efforts which would not include great numbers of psychiatrists, but rather would emphasize the utilization of the sub-professional personnel in the treatment program. It would be the goal of that group to rehabilitate and return to the community as many severely disordered elderly individuals as would be successfully treated under the program, and to determine some of the factors which cause hospitalization to be necessary for those individuals, as well as significant factors in their rehabilitation in the hospital and in the community.

8. Further programs which would be helpful were suggested, such as the tying together of various isolated groups which have been studied longitudinally, with the introduction of new measures which would throw light

upon the ways in which those groups are handling aging.

9. If one considers the problem of the mental health of our aging population to be sufficiently pressing, however, then data should be gathered more rapidly. It has been suggested by Dr. Raymond Kuhlen, Professor of Psychology and Education at Syracuse University, that another approach would be very useful. He would take 100 individuals of each sex in each decade from the 20's through the 80's. He would follow those individuals selected from various occupations, ethnic backgrounds, etc., and study them serially throughout a 10-year period. He would then have a mosaic of information on changes which occur throughout the life span on a large sample of individuals in a short period of time. It might be advisable to have such a study as well as lifelong longitudinal studies on identified individuals. Dr. Kuhlen would include slight stress situations, as well as studies on learning, relearning, etc. His study is very well formulated and, although costly, might well represent the type of study most useful for meeting the needs for rapid accumulation of information on the processes in aging.

10. To learn of the potentialities of college graduates past 60, another study has been organized by Lawrence K. Frank, sponsored by the Walt Foundation, Inc., at Cold Spring-on-Hudson, New York. The Cold Spring Project will take 30 individuals past 60 years of age who are college graduates and have them live together for a year or more to evaluate and re-evaluate their capacities. They will be studied by internists, endocrinologists, nutritionists, psychologists, psychiatrists, and social scientists. This will be an effort to learn what capacities elderly people have and what can be done with a comprehensive program for helping them to develop or

redevelop those capacities past 60 years of age.

11. It is suggested, also, that there might be a national survey on the problems of aging.

12. Dr. Charles D. Aring and Dr. William Malamud have both suggested the value of studies of serial psychological and sociological examinations, combined with medical status examinations on individuals, to be compared with the post-mortem examinations of the nervous systems of those individuals. For instance, there would be examinations of a series of brains of individuals who died after 60 years of age, who were apparently normal mentally according to psychological examinations and close scrutiny by clinicians; that is, they had no signs of mental deterioration. The brains of those individuals would be matched against the brains of an equal number of individuals who died after 60 who had varying degrees of mental deterioration. The post-mortem examinations of such individuals would be compared in large numbers after the method of Drs. William Malamud and David Rothschild.

13. Dr. Sidney Pressey has been carrying out research on the healthy adaptation of elderly individuals in the community, such as self-employed persons. He is getting together lists of total resources available in the community for the elderly for part-time jobs, community participation, etc. In his program, studies are taking place with job performances correlated with age. He is studying the capacities of healthy older persons who are active in the community.

14. Dr. Anton J. Carlson has suggested that there is a challenge in studying the sleep habits of the elderly.

15. Additional studies on the nutritional habits of the elderly and nutritional deficiencies have been suggested by Dr. Ouida Abbott at the University of Florida.

16. It has been suggested that institutes on a pilot project basis be held for physicians and particularly for psychiatrists to educate them and orient them to the current concepts regarding psychological changes of the aged population. This would include informational content courses related to problems of aging which go beyond the psychological. Dr. Wilma Donahue feels that there is a need for a positive approach in the making of films to show successful handling of problems in old age, such as planning for retirement, an old couple traveling on a trip after retirement, means of economizing, changing housing, etc., in old age.

Conclusion

The foregoing report is in no way a final and comprehensive statement on the psychological problems of our aging population. In the time available, it was impossible to survey all of the literature on the subject and to visit all of the centers involved in significant research and action programs dealing with aging. It is hoped that the preceding statements will be helpful in reflecting and partially integrating the thinking of a number of leaders who are currently working on this problem, and in emphasizing its challenge for all of us.

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