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ABSTRACT

Aging is a continuum which begins at birth and ends at death. A multidisciplinary approach is necessary to the study of aging as a part of developmental psychology. The individual is a biological organism as well as a member of society. Biological adjustments to life are affected by physical changes which influence motives and emotions. Some of the changes are obvious and some are not. Social influences affect intelligence, ability, and skill, whereas heredity determines the foundation which is modified as a result of experience. Thus it becomes necessary to arrange the physical and social environment to facilitate the optimum functioning of the aging. The opportunities and challenges to work with the aging are great. It will be for those in the future to continue improving the quality and quantity of services available to all mankind.
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SELECTED ISSUES ON AGING

by

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SELECTED ISSUES ON AGING

INTRODUCTION

Aging is a continuum which begins at birth and ends with death. A multidisciplinary approach is necessary to the study of aging as a part of developmental psychology. The individual is a biological organism as well as a member of society. Biological adjustments to life are affected by physical changes which influence motives and emotions. Some of the changes are obvious and some are not. Social influence result in intelligence, ability, and skill. Heredity determines the foundation but this is modified as a result of experience. Thus, it becomes necessary to arrange the physical and social environment to facilitate the optimum functioning of the aging. One clear example of a socially determined event is retirement.

How sweet, how passing sweet is solitude!
 But grant me still a friend in my retreat,
 Whom I may whisper, Solitude is sweet.
 William Cowper

RETIREMENT: A CONTROVERSY

The 1971 White House Conference on Aging influenced increased concern about the controversial issue of retirement. Compulsory retirement is unfair to the capable older worker psychologically as well as socially damaging and economically wasteful (20:347). The National Center for Health Statistics, 1971, reveal that only 37% of all persons over 65-years of age report any limitation in their major activities. Review of the research about compulsory versus flexible retirement has been carried out by Palmore (20:344-345). Significant arguments in these two methods are outlined below:

Compulsory Retirement

- Simple and easy to administer
- Prevents discrimination against individual workers
- Provides predictability
- Requires employers to provide benefits to retirees
- Reduces number of workers competing for limited jobs
- Prevents tenure provisions that block employment and promotion of young
- Forces retirement only in a limited number of cases
- Saves face for the older worker
- Most workers 65-years and older have impaired health.

Flexible Retirement

- Discriminates against an age category
- Age alone is not an accurate indicator of ability
- National work output can be increased through utilization of skills, experience, and potential of older persons
- Increase income of the aged and reduce poverty level recipients
- Improve life satisfaction and longevity of the aged
- Reduce resentment and animosity caused by compulsory retirement



Most older workers cannot perform
as efficiently as young workers

Most workers forced to retire could
get other jobs if they wanted

Most workers forced to retire have
adequate retirement income

Palmore (20:347) is a proponent of flexible retirement and proposes one of the following approaches: (1) Outlaw all compulsory retirement by removing the age limitation in the present law against age discrimination, or (2) Provide tax incentives for flexible retirement policies by reducing the amount of Social Security tax paid by the employer, or (3) Develop a compromise between compulsory and flexible retirement based on ability alone. ----- Two of the above proposals would require legislative action while the last mentioned one would depend upon performance evaluation of behavior on the part of the employer. In any event, the solution to the controversy appears difficult and not apt to occur without a lot of effort being expended to accomplish a resolution.

He who ceases to try to do better
ceases to do well, -----
Oliver Cromwell

-4-

Nothing in life is more wonderful than
faith, the one great moving force which
we can neither weigh in the balance nor
test in the crucible.-----

Sir William Osler

HEALTH PATTERNS IN THE AGED

A number of themes permeate the longitudinal studies on the aged reported by Palmore (22:417-418). These themes include advantages of the interdisciplinary approach as well as exceptions to the well-known patterns of health and physical functions when applied to the majority of the aged. In contrast to the general theme of decline, some members of the sample group actually improved in physical functions and health. One significant finding was the minimal decline in social and psychological functioning. The larger variation in life satisfaction was found to be partly due to physical functioning and partly due to activities engaged in.

Palmore (22:419-422) has summarized the findings of his longitudinal studies about the normal aged into 48 tentative hypotheses. For the purpose of background knowledge, these are given below:

A. Physical Problems

1. About half of the aged surviving any given time period have decreased physical capacities, but the other half have no significant decrease and some have significant improvement in physical functioning.
2. The aged with lower socioeconomic status have more limitations on their physical functioning and more impaired vision, arteriosclerosis, cardiovascular disease, high blood pressure, pulmonary disease, arthritis, and neurologic impairment than the aged with higher socio-economic status.
3. When matched for age and socioeconomic status, the physical capacity of the normal aged does not differ significantly between the sexes nor between the races.

4. Over a third of the aged have one or more neurologic impairments such as abnormal reflex, gait, tremor, or loss of olfactory function.
5. Most aged have some skin problem such as lax skin, seborrheic keratoses, and dermatophytosis.
6. The conjunctival blood vessels show that most aged have one or more symptoms of vascular problems such as venous sludge or arterial masses.
7. Cholesterol level is less related to cardiovascular disease among the aged than it is among the middle-aged.

B. Mental Illness

1. Over half of the aged have symptoms indicating mental illness, with hypochondriasis and depression being the most common psychoneurotic symptoms.
2. Depression among the aged is primarily related to the loss of self-esteem which results from declining health, declining social roles, declining financial security, or a combination of these factors. There is usually an absence of guilt feeling, self-condemnation, or other evidence of inwardly turned hostility.
3. When depression among aged who are community residents is compared to depression among aged hospitalized patients, the community aged have less severe depression, show less guilt, have less tenacious depression, involve less suicidal thoughts, and have fewer related physiological changes.
4. Negro aged and aged of lower socioeconomic status have higher rates of disabling depression than whites and upper socioeconomic aged.
5. Most of the aged have some mild impairment of memory or mild intellectual impairment such as difficulty in concentrating and comprehending newspapers or magazines. However, most are able to compensate adequately for these difficulties.

C. Electroencephalographic Patterns

1. About half of the normal aged have some EEG "abnormality" (according to young adult standards), but many of these "abnormalities" have little or no prognostic or diagnostic value among the aged.
2. Diffuse slowing of the EEG is associated with impairment of intellectual functioning, while the occurrence of fast activity is associated with well-preserved learning ability.

3. Diffuse EEG slowing in the aged is often accompanied by circulatory disturbances.

D. Reaction Time

1. Normal aged have slower reactions than younger persons, both in terms of premotor time and motor time.
2. Normal aged can improve their reaction times with practice more than younger persons can.
3. Normal aged have greater individual differences in reaction time than younger persons.
4. Slower responses among many aged are related to their diminished amounts of exercise.

E. Intelligence

1. The usual intelligence score norms for the aged (based on Kansas City subjects) are not applicable to some other regions, such as the Southeast.
2. Intelligence of the normal aged tends to be stable over periods of several years.
3. Rorschach performance is more closely related to intelligence than to chronological age.
4. Even the aged with cardiovascular disease are usually able to maintain their intellectual abilities despite their CVD.

F. Perception and Affect

1. Hearing loss has more serious effects on rigidity of emotions, vocabulary, and perceptual organization than does impaired vision.
2. Normal aged tend to express less emotion and activity than younger persons, but the aged express more emotion and activity than ill persons.
3. Galvanic skin responses show that normal aged perceive normal auditory stimuli as often and as rapidly as younger persons.
4. Normal aged can recall, as well as the young, phrases with strong meaning to them, although overall recall is lower among the aged.

G. Marriage, Family, and Sexual Behavior

1. Happy marriages among the normal aged are characterized by

a) husbands several years older than wives, b) absence of mental disturbances, c) more frequent sex relations, d) husbands equal to or superior to wives in mental abilities.

2. Most normal aged with children live in a household separate from the children but maintain close ties with them based on mutual affection and some dependence.
3. About one-half of men aged 72-77 continue to be sexually active.
4. About one-fourth of men 78 or over continue to be sexually active.
5. Aged men continue to have more sexual activity and interest than aged women.
6. The majority of normal aged experience some decline in sexual interest and activity, but a substantial minority maintain stable activity and interest and some even experience increasing activity and interest.

H. Activities and Satisfaction

1. Disability usually causes less activity but usually is unrelated to satisfaction with life.
2. Socioeconomic status, rather than race, is the primary social influence on activities and attitudes of the normal aged.
3. Patterns of activity and attitudes among surviving normal aged tend to remain stable, with little or no overall decline during periods of 10 or more years. The few aged with declines tend to be balanced by a few aged with increases.
4. Declining activity usually causes declining life satisfaction, while stable or increased activity usually sustains stable or increasing satisfaction.

I. Attitudes toward Health and Cautiousness

1. Two-thirds of the aged are fairly realistic in evaluating their health and tend to be consistent over time in their evaluation.
2. The hypochondriac aged tend to be younger, less active, and more often female and of lower socioeconomic status in comparison to aged who deny their illness.
3. Few of the normal aged have much concern about, or plan for, future illness.

4. Although the normal aged tend to avoid choosing among risky alternatives when possible, their cautiousness is no greater than that of younger persons when they are forced to decide what chances of success they would accept in choosing a risky alternative.

J. Age and Death

1. About two-thirds of community residents over 65 identify themselves as elderly, old, or aged (rather than young or middle-aged); and the older a person's chronological age, the more likely he is to identify with one of these older categories.
2. Negroes and persons feeling in poor health tend to identify more often with an older age category.
3. Aged Negroes believe there are more advantages to old age than do white aged.
4. The age category in which an aged person identifies himself has no significant relationship to most activities and attitudes.
5. Most normal aged do not have strong fears about death.
6. Fear of death among the aged is mostly associated with a) less belief in life after death, b) less Bible reading, c) depression, and d) lower intelligence.
7. Health, mental abilities, and satisfying social roles are the most important factors related to longevity.

Talk health. The dreary, never-changing tale
Of mortal maladies is worn and stale.
You cannot charm, or interest, or please
By harping on that minor chord, disease.
Say you are well, or all is well with you.

Ella Wheeler Wilcox

Life is a stream
Flood tide has past
Now it runs quietly. Flows gently.
Ebbs. ----- Sus Turner, R.N.

THEORIES OF AGING

There are three theories of aging which seem to be used as a foundation in situations dealing with the aged. These are:

1. Disengagement theory
2. Activity theory
3. Socioenvironmental theory

The disengagement theory has been used extensively in the past as a way of explaining why persons withdraw from life activities as they grow older. This theory postulates that aging is an inevitable withdrawal resulting in decreased interaction between aging persons and others in the social system to which they belong. (17:84).

The activity theory, on the other hand, implies that there is a positive relationship between activity and life satisfaction which keeps the aging person participating in socialized situations (18:511). Bromley (5:77) suggests that disengagement and activity are counterbalancing social mechanisms. By this he means that disengagement allows the person to withdraw from intolerable social situations and to participate in activity to prevent the engagement process from leading to isolation, apathy, and inactivity.

Lemon and others (18:522) have pointed out the advantages and problems in developing specific theory in social gerontology. They suggest that explicit theory development be given priority by researchers. Their review lends only questionable support to the activity

theory and mention that the disengagement theory is really defended in rare situations. These researchers recommend an axiomatic approach to theory building which begins by a nominal definition of terms.

Theory, by definition, is a set of inter-related constructs (concepts), definitions, and propositions that present a systematic view by specifying relations among variables, for the purpose of explaining and predicting phenomena (18:512). Definitions of some concepts used are as follows:

Activity refers to regularized or patterned action or pursuit which is regarded as beyond routine physical or personal maintenance.

Role Support means support accorded to an individual by his audience for his claims concerning his role-identity.

Self-concept is the organization of qualities (role identities) that the individual attributes to himself.

Role Loss designates the alteration in set of behavior patterns expected of an individual by virtue of the loss of some status position within a given social structure.

Life Satisfaction connotes the degree to which one is presently content or pleased with his general life situation.

Three separate types of activity are ordered as to degree of interpersonal contact by Lemon, Bengtson, and Peterson (18:513).

These are:

1. Informal activity including social interaction with relatives, friends and neighbors,
2. Formal activity including social participation in formal voluntary organizations, and
3. Solitary activity including such pursuits as watching television, reading, and hobbies of a solitary nature.

Previously defined concepts and their inter-relationship have resulted in statement of postulates and theorems relating activity to life satisfaction (18:515). Formal axiomatic statement of activity theory was

constructed with various hypotheses being tested empirically (18:516).

No support was demonstrated for the general set of propositions relating activity to life satisfaction. Informal activity with friends is the only type of activity which is significantly correlated with life satisfaction. The general pattern of other findings as well as the above-mentioned study specifies that only informal activity with friends among married females reaches statistical significance.

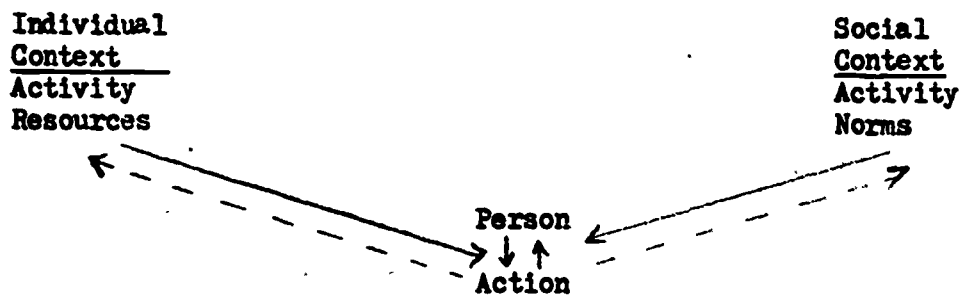
Gubrium (13:281) further points out that both the disengagement theory and the activity theory are limited as explanatory devices. The activity theory does not account for instances of high morale or life satisfaction associated with isolation and/or inactivity. By the same token, the disengagement theory is unable to explain the life dissatisfaction and despair expressed by those involuntarily isolated. Both situations could be adequately explained by the socio-environmental theory of aging.

The socioenvironmental theory of aging assumes a bi-dimensional approach. These are the social and the individual dimensions. This theory is built around the inter-relationship of two conceptual components which are:

1. Environmental effects such as social homogeneity, residential proximity, and local protectiveness, and
2. Personal resources influencing behavior flexibility such as health, solvency, and education.

A schema of the socio-environmental approach has been developed by Gubrium (13:282):

Old Age Environment.



Propositions of the socio-environmental approach to old age are stated to be predictive of behavior contingent only upon activity norms, activity resources, and the assumption of congruency.

Two general conclusions made ten-years ago about aging still seem to be valid. These were made by Birren (3:1):

1. Hypotheses about aging are more or less general in nature and
2. Mechanisms of aging are essentially unknown.

In all probability there is a complex of variables involved such as heredity, culture, environment, and others ad infinitum.

When I was a boy I wanted to know about the clouds and the grasses, and why the leaves changed colour in the autumn; I watched the ants, bees, birds, tadpoles and cadis worms; I pestered people with questions about what nobody knew or cared about. ----- John Hunter

LONGEVITY

Four predictors relating to longevity have been concluded by Palmore (22:315). These are:

1. Actuarial life expectancy at initial testing for inclusion into a study group. This has been found to be the best single predictor.
2. Physical functioning. This has been the most satisfactory predictor for women and Negroes.
3. Work satisfaction. This is by far the best predictor for men.
4. Performance intelligence. The intelligence of the normal aged tends to be stable over periods of several years. Rorschach performance has been found to be more closely related to intelligence than chronological age. The usual I.Q. score norms on the aged are not applicable to some regions, especially the southeastern areas of the U.S.

Weg (28) identifies four factors which have been proven to keep a person living longer. Her list is thus:

1. Useful role in life,
2. Positive viewpoints,
3. Good physical functioning, and
4. Avoiding smoking.

There is no evidence to establish a cause-and-effect relationship between age and disease. No magic formulas to longevity have yet been found but there may be alternate pathways to a better way of life while one is living. Each person grows in an individualistic way and deserves to be allowed to do so with dignity.

Granick and Patterson (12:136) point out that there are four areas potentially more likely to make substantial contributions to longevity and the quality of life. These have been identified as:

1. Prevention or treatment of arteriosclerosis,
2. Prevention of cigarette smoking or avoidance of its harmful influences,
3. Reduction of the detrimental effects of psychosocial losses, and
4. Helping the aged sustain effective life goals.

Maintenance of effective life goals has been demonstrated to have a positive influence upon the retention of intelligence, organization of daily behavior, morale, and adaptation. Satisfying goals to the aged are influenced by many elements of a society. These include employment, retirement policies, business, and economic factors. Attainment of varied goals within limits of the physical and emotional requirements of the aged.

There are degrees of successful and unsuccessful coping mechanisms with old age. Maintenance of effective life goals is successful coping and manifested by happiness, confidence, contentment, sociability, and freedom. Unsuccessful coping mechanisms result in frustration, hostility, fear, discontent, and unhappiness in general. These are the feelings that lead to depression, withdrawal, loneliness, and dependency. Bromley (5:104) mentions five strategies in old age:

1. Constructiveness which results in a well-integrated individual who enjoys life and establishes warm interpersonal relationships.
2. Dependency which tends toward passivity and dependence rather than activity and self-sufficiency.
3. Defensiveness which is reminiscent of minor neurotic faults and described as emotionally overcontrolled, habit-bound, conventional, and compulsively active.
4. Hostility which manifests as aggressive, suspicious, and complaining

traits in dealing with other people.

5. Self-hate which represents those who have turned their hostility upon themselves.

The strategies or coping mechanisms listed above are with reference to patterns of adjustment in the aging. Constructiveness, dependency, and defensiveness are satisfactory adjustment patterns. Hostility and self-hate would be unsatisfactory in terms of life adjustment in aging.

Remarkable success is seen in our society at prolonging life. Donahue (10:160) remarks that this is a tragic feature of our society. Our society is one adapted to the Puritan ethic of orderliness, cleanliness, and thriftiness. Not much time has been devoted to developing values aimed at appreciating old age. Rosen and Neugarten (24:62) state that older subjects express less emotional involvement in activities. They describe less assertiveness because their lives and surroundings have become simpler.

The best is yet to be,
The last of life, for which
the first was made.
Browning

Wherever the art of medicine is loved, there is also love for humanity. ----- Hippocrates

MEDICAL PERSPECTIVES

According to Dr Carl Eisdorfer (11:158) of Duke University Medical center, one of the most serious problems of being old is that the aged need a doctor. In the process of developing a better science of medicine it seems that a different strategy has evolved. Instead of caring for patients the focus is upon treating diseases. In 1931, 84% of physicians were general practitioners but in 1965 only 37% of physicians were general practitioners. Care and understanding of the patient was carried out in past eras but now technology has brought about better therapeutic techniques to treat diseases. The older person fails to receive adquate medical care because his difficulties are not organized to fit into the lines of medical subspecialties. No one takes total care of the patient. Each body system requires a separate medical subspeciality. Witness the technological equipment which is mentioned in much of the public literature such as the Wayland precision microscope system for studying the effect of aging on blood flow (8:29).

Dr. Erdman B. Palmore (21:194), also of the Duke University Medical Center, states that the aged have more serious and longer lasting illnesses than younger people. For example, 86% of the aged have one or more chronic conditions and one-half this group are limited in their activity by the condition. It is also interesting to note that 15% of the aged are completely limited in activity. The aged have one-half as many injuries per 100 persons per year and two-thirds as many

acute conditions as young people. These situations are further compounded by obstacles to care for the aged such as financial inadequacies, transportation deficiencies, and negative attitudes toward the aged by medical personnel. It has been demonstrated by Cutler (9:388) that older persons having transportation available have higher life satisfaction scores than older persons not having transportation available.

Various studies of attitudes concerning the aged patient have been carried out in most health care areas. These include areas such as medicine, nursing, occupational therapy, physical therapy, and dietary workers. One representative group of occupational therapists is reported by Mills (19:201). Some questions and responses are reported below:

Question	Yes	No	Undecided
Do you feel that your attitudes toward the elderly are typical of the younger generation?	23%	37%	38%
Do you feel that you have a good understanding of occupational therapy?	75%		
Do you feel that after graduation you will be adequately prepared in geriatric occupational therapy in comparison to pediatrics?	19%	31%	49%
If you decided to attend graduate school (occupational therapy), would you be interested in specializing in geriatric occupational therapy?	8%	69%	

Mills (19:203) concluded that the majority of occupational therapy students demonstrated negative attitudes toward working with the aged. Researchers at Langley Porter Neuropsychiatric Institute

found similar attitudes in 1968 among medical students at the University of California School of Medicine in San Francisco. These students ranked wards for chronically ill old persons last in their choice of wards on which to serve. It appears that the treatment of the chronically ill aged presents a situation in which the traditional values of health care no longer exist. Epidemiological studies indicate that the prevalence of depression increases with age (23:291). It is no wonder that depression increases with aging.

Dr Prescott W. Thompson (27) has spent considerable time working with health care personnel toward developing a positive attitude in caring for the aged. He focuses upon questioning for the assets of the aging person.

Who is this person?

What has he done during his lifetime?

How did he get to where he is now?

What is important to him?

What has he enjoyed doing?

What are his expectations for the future?

This provides a framework for caring about the person as a unique individual rather than upon his medical condition. A basic understanding of human behavior as well as tolerance and acceptance is essential to the development of positive attitudes.

Modern medicine is a product of the Greek intellect and had its origin when that wonderful people created positive and rational science.

Sir William Osler

Knowledge comes, but wisdom
lingers.----- Tennyson

BIOLOGICAL PERSPECTIVES

According to Handler (14:709) research on aging deals with three broad questions. These are:

1. What processes are responsible for the progressive decline in structure and function of the adult?
2. What are the characteristics of the senile state as distinguished from frank disease phenomena?
3. How does the progressive loss of structure and function become incompatible with continued life?

These questions relate to the biological (physiological) processes of aging. Psychological and sociological influences upon aging are secondary to the biological.

There are two basic difficulties which hamper the attempts by research to find differences between young and old individuals (14:710). First, there appears to be no qualitative difference between the young and old in muscle contraction, nerve conduction, and secretory functions of body organs and tissues. The second difficulty is that the life span of mammals is too long to provide ideal standardized and optimum nutrition, freedom from infections and other external sources of stimuli. The problem lies in inability to distinguish changes due to nutritional variation, disease, or environmental stimuli. This is further compounded by the unavailability of suitable animals for research on aging. Biological supply houses are concerned primarily with animals that reproduce, live and die in short time periods to allow quick turnover in sales. Any researcher interested in studying aging animals must raise

and maintain his animals for his own research purposes. This is a very costly and time-consuming process.

The possibility of an underlying genetic mechanism for aging carries much weight. Understandings about how cell populations divide themselves is essential to this concept. The higher up the evolutionary scale the more complex the biological animal becomes. Cells divide themselves into three types in the multicelled animals of which man is the highest in complexity. Some cells such as nerve and muscle stop dividing once they reach maturity. Other cells divide slowly as those within the liver. Then, there are those cells which divide rapidly and these consist of cells composing blood elements, skin epithelium and the intestinal lining.

One of the facts shown in studies of aging is that simple responses become increasingly slow in later life. There is inability to perceive information in order to affect an appropriate response. The general slowing of perceptual abilities and voluntary responses contribute to the changes in behavior with aging. This is one reason why the older person is more comfortable in a situation where he can pace his responses. He is not able to follow quick, demanding sequential stimuli. To attempt to do so may create confusion and disorientation for the aged person.

Birren (4:143) has pointed out that changes occur in integration of complex skills with advancing age. Any attempt to build a picture of the process of aging from the cellular level involves recognition of changes in properties of the nervous system. The foun-

dation to organization of behavior is the nervous system which governs the ability to receive and retain information. Also, the ability to modify and recombine information for responses depends upon the nervous system.

A major question arises as to whether or not aging occurs within the cell or among individual cells. Human fetal cells divide approximately 50 times and adult cells 20 times before cessation of cell division. (This is one reason why transplanted organs eventually fail.) All organ systems in the body do not age at the same rate. Handler (14:713) concludes that the first requirement for studies on aging is a description of biological processes. One example is that careful description of changes in the special senses and in neurological functions is needed for such practical matters as automobile driver license, education, occupational and rehabilitation capacities of the aging.

Schwartz and Proppe (25:228) suggest that gerontological research needs greater orientation to social action and more applicability to everyday problems of the aged. There exists an incongruent situation in our society. One hears much about idealized retirement plans, promises of increased medical care and support, options in housing and feeding, as well as proposals for more meaningful post-retirement roles. But, what one really sees are larger and more segments of disrupted social environments, contaminated life-space, degrading of meaningful roles, and decline in confidence and the self-esteem of the aged.

The need in research should be aimed at reversing the contaminated, polluted, blighted, impoverished and often degrading circumstances in which older citizens are caught (25:229). Much research involves the actual machinery of research and investigating the processes of aging. There has been neglect of the environmental events influencing the aged. From the sociologist's point of view, the needed areas for research involve improving the quality and length of life and to help maintain the aged person's sense of worth, effectiveness, dignity, and self-esteem.

From the psychological standpoint, the scientific study of human aging faces three main tasks ----- theoretical, methodological, and applied (5:18). Human aging is a pattern of changes in the structure and functioning of the body as well as the adjustments of the aging person. Most of these changes start soon after the individual reaches biological maturity between ages 15 to 25. The degenerative effects accumulate leading to a breakdown of critical organic processes and eventually death. Senescence arises from either

1. The cumulative ill-effects of damage/disease, or
2. From processes inherent in aging cells and tissues, or
3. Accumulation/deficiency in biochemical substances, or
4. A combination of these.

In England, termination of the human life cycle is brought about by natural causes or by violence (5:22). The most common natural causes are malignant neoplasms, heart disease, vascular lesions of the central nervous system, pneumonia, and bronchitis.

The most prevalent causes of death by violence are motor vehicle accidents, falls, and suicide. It is interesting to note that this same demographic pattern is applicable to the United States.

Browley (5:24) points out a series of advances in gerontology since World War II. These include such events as:

1. Medical advances with emphasis on problems of physical and mental health in maturity and old age.
2. The stimulus of individual research upon systematic research.
3. Demographic studies on the age structure of society in relation to social and financial problems.
4. Scientific periodicals carry increasing numbers of research reports on aging.
5. Establishment of an International Association of Gerontology.
6. Research organizations devoted specifically to problems of human aging.
7. Growing recognition of gerontology as a distinct area of research.

Man can do a great deal by observation and thinking, but with them alone he cannot unravel the mysteries of nature.

Sir William Osler

Thoughts of childhood, family, friends,
Helps face future with
Tranquility.-----Carol Marquez, R.N.

SOCIOLOGICAL PERSPECTIVES

An interim report in the USC Study of Generations has recently been made available by Bengtson (2:1-8). The respondent group consists of 313 members of a grandparent generation, 562 from a parent generation, and 606 young adults. Educational attainment of the group shows an increase among the parents over the grandparents and education in progress for the young adults. As to occupation, nearly one-fourth of the grandmothers and one-third of the grandfathers are working either full or part-time. In the parent generation, 52% of the mothers are working.

Alvarez (1:77) has pointed out that the habits of elderly Americans are changing. Ninety-six percent of persons 65-years and older are living in the community. More of these older people are living alone or with unrelated peers. The New York Department of Mental Health have predicted that more older people will live alone. Reasons for this are a smaller age difference between children and parents, tendency to have smaller families, likelihood of family unit living in an apartment or small house, and single women in the work force are no longer able to care for their elderly parents. An additional consideration in the changing situation is brought about by the new and more selective admission policies in mental hospitals where half the referrals are refused admission.

Changes in activities and attitudes of normal aged persons over a ten-year period were studied at Duke University(22:340).

The evidence in these longitudinal studies reveal no overall decrease in activities and attitudes among men and only slightly among women. This is contrary to most cross-sectional surveys and assumptions that decreases do occur. It has been suggested that normal aging persons tend to compensate in some activities and attitudes by increases in others. There may also be a tendency to compensate reductions at one point in time with increases at other times. The greater decrease among women seems to indicate that aging causes more overall changes among women than men.

Positive correlations between changes in activity and changes in attitudes have been found by Palmore (22:340). This suggests that reduction in activity is associated with decrease in satisfaction. Interpretation of this is contrary to the disengagement theory but supportive of the activity theory of aging. There is no evidence that patterns of behavior or attitudes become increasingly rigid or differentiated. Studies of emotional needs of elderly compared to the child reveals that the child is fundamentally a dependent person getting acquainted with independence while the elderly has been independent and now experiences threat to his self-sufficiency (30:57).

It has been emphasized by Small (26:191) that educational resources directed toward alleviation of social problems is ineffective. Vast sums of money have been appropriated by Congress, state, and local governments since the early 19th Century to alleviate social problems. Accumulated evidence indicates that funding for educational programs and teacher preparation is predicated upon improving the

quality of individual lives. The assumption made is that enhancement of individual lives through educational programs will somehow improve the quality of life for the community. Educational programs as a means of preventing social problems would be more realistic than their use as solutions. Three phases that education should aim for is experimentation in attacking a social problem, dispersing information acquired, and incorporation of this knowledge into educational systems.

Wilner and others (29:261) studied psychological factors in housing for the aged. Their conclusions reveal that housing itself has very little causative influence upon health, illness, or social pathology. Housing seems to be much more expressive of status of life. "Good housing" does not materially affect life for the better. Retirement housing is a growing phenomenon. This may be a solution for those alone and without family but housing alone will not improve the situation of the aged. A common fear among older persons is that they will become sick or disabled and no one will help them. This is one reason why high-rise apartments and hotels have been less successful than retirement housing and/or retirement communities.

American formula for happiness in old age
----- keep active. Palmore

PSYCHOLOGICAL PERSPECTIVES

Burnside (7:245) states it appears that there are few controlled studies of the effectiveness of group work with the aged. She suggests that leaders from different disciplines should attempt to adapt group principles and group dynamics to a variety of groups and settings. It is difficult to draw out commonalities in techniques because of many modalities. The most important traits of the group leader should be flexibility, warmth, perseverance, patience, and the ability to listen.

There are two closely related behavior patterns of the elderly (16:74) which deserve mention.

1. Anxiety aroused in the elderly by the possibility of impending dependency, and
2. Guilt and ambivalence elicited by thoughts of becoming a burden to their grown children.

The self-concept and resultant behavior of the elderly are embedded in values internalized many years earlier and thus highly resistant to change. Middle class America has a low level of indulgence for dependency at any age. Non-indulgence of dependent behavior not only increases anxiety over dependency feelings but it also increases the need for dependency. As maturity progresses in our society, approval for independent acts increases while approval for dependent acts remains constant or diminishes. Doing things without supervision is increasingly expected. Now the aging adult encounters the prospect of losing his ability to function independently. He has to cope with disapproval displayed by surrounding cultural factors as well as his own fears.

Our society prides itself on encouraging individualism and the pursuit of happiness. There is a tendency to place a high value on self-actualization, on happiness of individual and responsibility to his spouse and children. However, the growing adult perceives very little responsibility to his own parents. Corrective action would necessitate changes in values regarding dependence, helplessness and privacy. Effective change must proceed along two lines:

1. Trying to help people at all age levels to accept dependence as natural and appropriate with less emphasis on independent behavior,
2. Offer people at all age levels, especially children, the opportunity to encounter, learn about, and discuss the problems of aging in our society.

Ego function is dependent upon freedom from physical disease or crippling plus it involves the element of hope (30:56). Everyone will be able to endure pain and hardships if there is hope that the suffering eventually will come to an end and the future will be brighter. Hope for a better future, love and approval from others often is lacking for old folks and their life is empty because of lack of interest of friends, neighbors and relatives. Therefore, it is extremely difficult for them to maintain a good emotional equilibrium. It is well-known the paranoid trends become more evident in senile persons, especially if their personality traits have always been of a suspicious kind. Old people often feel unwanted and this realization may be conducive to delusional ideas.

Gerontophobia is a social pathology, an unreasonable fear and/or an irrational hatred of the elderly by society and by the

elderly themselves (6:41). Twenty percent of the population is afflicted with gerontophobia of varying degrees. These have been described as medical gerontophobia, legal gerontophobia, and social gerontophobia. One example of a national policy that influences this state of mind is the Social Security Act. It has been pointed out by some that Social Security supplies too little to live and too much to die.

Bunzel (6:41) suggests a cure for gerontophobia that is not generally recognized. He states that words such as "aging," "leisure time," and "retirement" are value-laden words. His suggestion is to avoid the value-laden words and use others such as "free-time" and "post-employment." According to him, life can be divided into periods referred to as pre-employment, employment, and post-employment. Psychological characteristics of maturity and old age must be seen in the context of the biological and social sciences.

The keynote of progress in the twentieth century is system and organization ----- in other words, "team work."

Doctor Charles H. Mayo

PHILOSOPHICAL PERSPECTIVES

Beatitudes For Friends of the Aged -----
By Esther Mary Walker

Blessed are they who understand
My faltering step and palsied hand.

Blessed are they who know that my ears today
Must strain to catch the things they say.

Blessed are they who seem to know
That my eyes are dim and my wits are slow.

Blessed are they who looked away
When coffee spilled at table today.

Blessed are they with a cheery smile
Who stop to chat for a little while.

Blessed are they who never say,
"You've told that story twice today."

Blessed are they who know the ways
To bring back memories of yesterdays.

Blessed are they who make it known
That I'm loved, respected, and not alone.

Blessed are they who know I'm at a loss
To find the strength to carry the cross.

Blessed are they who ease the days
On my journey Home in loving ways.

What's past is prologue.
William Shakespeare

SUMMARY

It has already been said by Havighurst (1956) in this comment, "In speaking about personal and social adjustment we speak about the goal of living at any age. There is an inner harmony which is personal adjustment, and a harmony with the world around us which is social adjustment. The problem for a science of gerontology is to understand these harmonies, to describe them objectively, to measure them if possible, and to find out how they are related to each other, and to other aspects of human life." The opportunities and challenges to work with the aging are great. It will be the work of centuries to come to continue improving the quality and quantity of services available to all mankind.

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