MENTAL HEALTH OF OLDER PEOPLE IN RELATION TO STRESSFUL LIFE EVENTS, ADJUSTMENT AND SOCIAL SUPPORT

Thesis submitted in partial fulfilment of the
requirements for the degree of
DOCTOR OF PHILOSOPHY in PSYCHOLOGY

DERSAK R.

DEPARTMENT OF PSYCHOLOGY
UNIVERSITY OF CALICUT
KERALA, INDIA
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DECLARATION

I, Dersak R., do hereby declare that the work reported in the thesis is original and carried out by me in the Department of Psychology, University of Calicut, under the supervision of Prof. (Dr.) C.B. Asha. I further declare that this thesis or any part of this has not been submitted for any degree, diploma, recognition or title in this or any other University or Institute.

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CERTIFICATE

This is to certify that the thesis MENTAL HEALTH OF OLDER PEOPLE IN RELATION TO STRESSFUL LIFE EVENTS, ADJUSTMENT AND SOCIAL SUPPORT submitted by Mr. Dersak R., to the Department of Psychology, University of Calicut, in partial fulfilment of the requirements for the Degree of Doctor of Philosophy is a bona fide research work carried out by him under my supervision and guidance. The results embodied in the thesis have not been submitted to any other University or Institute for the award of any degree or diploma.

Calicut University Campus

Dr. C. B. ASHA
(Supervising Teacher)

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Chapter I

INTRODUCTION

Aging is an inevitable phenomenon in all biological species. It is a relentless process in life, leading to its extinction. (Venkataraman, 1988) "An old man loved is winter with flowers" says a German proverb. Rare and wonderful, it's rarity lying in numerous socio-economic causes recognised and unrecognised, and it's wonder to be attained through understanding.

Care of the elderly, as a complete science, is yet to emerge in our country. World wide, the rising number of the 60 plus age group is increasing. (O'Leary and D'Alton, 1996) The complexity of life, pressure on family and social relations, the needful adjusting to changes, etc. tax the elderly to a great extent and all the other obvious limitations in finance, mobility and health often add to functional disability, both physical and psychological of the elderly persons.

The elderly constitute one of the most rapidly expanding segments of the population. A marked increase in life expectancy

witnessed by developing countries like India had lead to the projection that in the future, three quarters of the elderly in the world will be in these countries. It is conceivable that the prevalence of adjustment problems of older people in these countries will increase with aging of population.

Criteria of Ageing

The question arises as to what constitutes the aged? Is it chronological age, physical appearance such as greying of the hair or physical impairment or incapacity to work or psychological frame? These questions assume importance in as much as physical and mental status of aging persons vary from society to society. Among different species man is one of the long-lived animals whose longevity depends up on various factors such as climate, health, medical services, education, economic conditions, social status, environment, etc. The maturity gained by experience makes the aged useful for the community, although having accomplished their 'main task' they are no longer part of the mainstreams of society.

The definition of chronological age of the aged, varies from society to society and in different periods of development in a given society. In other words, the chronological definition is linked with life

expectancy. In India, when the average life expectancy was 27 years, the age of retirement under the government service was 55 years of age. A retired person was considered as aged or elderly. With the rise in the expectancy of life, the age of retirement was raised to 58 years. It is 60 years in non-governmental organisations such as public undertakings and autonomous institutions including Universities.

Human life is divided into different stages such as childhood, adolescence, youth, adulthood, old age, etc. Old age is generally the chronological age and it varies for geographical reasons in a country. It also varies at different points of time. Chronological age is generally used as an instrument of power and control. In advanced societies like Japan, the majority of older people continue to work, except when they stop work voluntarily or for health reasons.

Age grading is important as a way of distributing rights and responsibilities. There is also an element of social utility in age-grading. Chronological age and age-grading are therefore, two approaches which need to be reconciled. Biological, psychological and social factors are used in functional ageing. Finger dexterity, greying of hair and opportunity for occupational advancement are the best indicators of biological and social age. Thus, oldness is a state of mind. The famous British philosopher Bertrand Russell in his nineties

participated in a race and a 103 year old woman felt happy over a helicopter ride. Thus, the chronological age does not indicate oldness, if the social utility for the functionality are kept in view.

Aging refers to the regular changes that occur in mature genetically representative organisms living under representative environmental conditions as they advance in chronological age.

Since almost all living organisms pass through a sequence of changes, characterised by growth, development, maturation and finally senescence. Aging, thus, presents a broad biological problem.

Two conflicting views are held today by students of aging. One considers aging as an involuntary process, which operates cumulatively with the passage of time and is revealed in different organ systems as inevitable modifications of cells, tissues, and fluids. The other view interprets the changes found in aged organs as structural alterations due to infections, toxins, traumas, and nutritional disturbances or inadequacies giving rise to what are called degenerative changes and impairments.

Aging may be described as a change in the behaviour of the organism with age, which leads to a decreased power of survival and adjustment. It is the deterioration of a mature organism resulting from

time-dependent, essentially irreversible changes intrinsic to all members of a species, such that, with the passage of time, they become increasingly unable to cope with the stresses of the environment, thereby increasing the probability of death.

Ageing is a normal inevitable and universal phenomenon. Literally it refers to the effects of age. Commonly speaking, it means the various effects or manifestation of old age. In this sense it refers to various deteriorations in the organism. While they have been usually perceived as biological, the deteriorations in mental capabilities and social adaptability is no less important. Ageing has thus three aspects biological, psychological and social. But most of the definitions deal with either of these three aspects, generally the biological aspect. It would be worthwhile to cite here some of the definitions provided by the researchers in the area.

For biologists and medical scientists ageing refers to deterioration in physiological capabilities. Ageing may be defined as a decline in physiologic competency that inevitably increases the incidence and intensifies the effects of accidents, disease and other forms of environmental stress. It occurs as a result of dominant mutation, killings or incapacitating of the somatic cells. The changes of ageing are also the results of accumulated, morbid and pathological

processes that eventually combines to bring about the destruction of the individual. Biological ageing is in fact, the gradual decrease in the adaptation of an organism to its normal environment. This reduced adaptation to carryout various specialised functions. (Sinha, 1989)

Half a century ago India had a strong tradition of younger generation respecting their parents, grandparents, teachers, bosses or those seniors in age. Thus for a variety of factors - social, cultural and economic, the old continued to be respected in Hindu society but today this phenomenon is gradually being weakened by forces of urbanisation and modernisation. Despite the fact that institutionalisation of old people is looked down up on, a slow beginning has been made in recent years by the government and voluntary organisations who have started old age pension schemes, institutions and day-centres for the old and the infirm.

Due to increase in the population of the aged, because of health and medical measures, economic compulsions, modern education, poor housing facilities and existence of programmes of social assistance and welfare, the welfare of the aged is becoming an important area of state intervention.

There has been no systematic study of old age in India till the very recent times. The subject was totally neglected. It is recently that new discipline like Geriatrics and Gerontology have been added to the medical and social sciences. For the first time in 1972, an Encyclopaedia of old age was published. The discipline of social sciences too has contributed precious little to the needs and problems of the aged except in the content of study of the extended family or the generation gap where the aged monopolised power.

Types of Age

The biological age of an individual can be defined as an estimate of the individual's present position with respect to his potential life span.

The psychological age by definition, refers to the adaptive capacities of the individual, that is, how well they can adapt to changing environmental demands in comparison with the average.

The concept of functional age is closely related to psychological age. Functional age is an individual's level of capacities relative to other of his/her age for functioning in a given human society. The social age refers to the roles and social habits of an individual with respect to other members of a society.

Age and Aging

Biological aging is most prominent and has figured widely in common expression and even in scientific literature. With advancement in chronological age, an individual passes through different stages of life cycle. Every one attains old-hood at a particular age. The question is at what minimum age a person should be called aged? There is no uniformity about it. Some may argue for 55, 58, 60 or 62 years keeping in view the age of retirement. A few researchers in India have accepted 55 years as the lower cutting point for the aged or old. (Ramamurti, 1978; Soodan, 1975) It is held that a smaller sample of extreme ages does not give any clue to at what age to start declining. But in the strict sense of the term it differs from place to place. A man living in America might not consider himself old even at the age of 60+, and quite contrary to this, a person living in some developing country or coming from low socio economic status starts becoming old even prior to the age of 55. So it appears that there cannot be a strict demarcation line regarding the age when people should be considered old. It is reported that aging varies from individual to individual. One may lapse old at 50 or still young even as an octagenian. It is here that psychologists and social scientists have their roles to play. One may live a happy youthful life even in

advanced chronological age by developing appropriate attitudes and style of life. Growing old is an inevitable phenomenon and none can stop the wrinkles and greying hair, the gnarled hands and the slow march of years that are not more.

Perception of a person as 'young' or 'old' also depends up on the context in which the individual is perceived. For example, the 48 years old Canadian Prime Minister was perceived as somewhat 'young' to accede to his office, but 'old' for marrying a 23 years old woman. Soodan (1975) has reported that aging has different meanings for the different groups of people. For the politician, the bureaucrat, the lawyer, the doctor, and capitalist it may mean the accumulation of more wealth or the enhancement of power. For those in the middle class, ageing may mean forced retirement and dependence on provident fund or pension, which continue to loose its worth due to inflationary pressures. For the poor and the working class, ageing may mean a state of total dependence and object poverty. This brought the concept of social ageing in the forefront. Accordingly ageing is considered more as a cultural process rather than biological one.

Observations and research reports have, however, shown that ageing is not a problem for all. For many it is a symbol of respect and satisfaction in society. Evidence suggest that the problem is not so

much of 'being old'. The question is who are the persons really affected by old age? It is basically a socio-psychological issue. Some take retirement as a shock and punishment whereas for others it works as freedom from a hectic routine or stereotyped life.

Aging is undoubtedly a very important phenomenon and in all developmental plans for the twenty first century, it should be given priority. Until quite recently, life was short and the fear of death haunted the lives of the people. But with advances in modern medicine and the extension of the health services into the far-flung areas of our country, the life expectancy of our people has increased. This situation has brought with it, its own attendant problems and has also opened up new opportunities. It calls for new services and new outlets for a group of people who did not exist in such large numbers in the past, to use their creative faculties for the betterment of society, and willingness to venture into new area, which are as yet untapped.

Historical Perspective

In the primitive societies, security of the members of the family and clan was very important for which the elders assisted by the young were responsible. Thus, wisdom of the elders and the physical strength of the young combined to guide and continue the family and

the clan. The older members in the family were then looked after in their old age and also provided nursing care. This is considered as the moral and social responsibility of the members of the family, an expression of gratitude of the younger generation towards their elders for what they had done for them in hearing, rearing, educating, training and protecting them. The care of the aged also arouse out of the fact that they had through their hard work and thrift created assets, property and other means of production, leading to employment and income generation for the younger generation to survive.

It is observed that people of advanced age were rare in primitive societies as few people lived to reach old age. This is contrary to the belief that people lived longer in the early days. The average age was probably less than 25 years. It is only during the last two centuries that the average age has started to rise.

The conditions of old age in primitive and prehistoric societies have been described in the writings of both ancient historians and modern anthropologists. Their work, taken altogether, appears at first sight to describe an astonishing diversity. The range of practices seems to have been as broad as the limits of possibility. Herodotus tells us of some tribes who worshipped their elders as gods and of others who

ate them. At one extreme were the Issedoness, who glided the heads of their aged parents and offered sacrifices before them. At the other end, were the people of Bacteria, who disposed of their old folk by feeding them to flesh eating dogs; or the ancient Sardinians, who hurled their elders from a high differential and shouted with laughter as they fell on the rocks below.

Social Customs

The social customs in regard to attitude towards the elders varied from society to society. However, the social customs invariably reflected in the ceremonial occasions and conversation with the elders. The stage beyond elderliness was called the stage of 'over-aged', 'sleeping period', 'already dead', or 'age grade of the dying'.

In societies with collectivist traditions like India the elders were cared for better. Age was power in active politics. The nature of authority depends up on the number of their years; this crowning glory old age was 'power, authority and affluence.' In dying too, old age was considered as a virtue when a person was freed from the material prison of his/her own possessions. In the Mediterranean world, a person was advised death unknown. Medical literature indicates the aged among Greeks and Romans as being honoured.

Indian Society

In India a human being was expected to live a hundred years. Wisdom and maturity was the hallmark of old age. The highest stage of one's life was the stage of Vanaprastha where in a person would serve the society by imparting religious educations and study of *Upanishads*. This was the stage when a person received the highest respect.

Ageing in Socio-cultural Perspective

Impact of socio-cultural factors on ageing has assumed remarkable significance in recent years. At present the psychological problems of old age seem to be a consequence of the democratising effects of personal poverty, social alienation and cultural deprivation. Old people in an affluent society suffer more from isolation because they cannot look to their grown up children even for psychological support. On the other hand, old persons in underdeveloped societies depend more on family members and enjoy greater warmth of family life. Traditionally the aged are given respect in Indian society. But the various facts of advancement have been weakening the psychological bonds between the young and the old. In the changing circumstances life style of the individual has changed everywhere and so in India.

Apart from socio-economic changes like modernisation, industrialisation, price-rise and cost of living, increasing employment of women in offices and in factories implies that they can spend less time in taking care of the older members, specially those who require constant care. Both young and old people look up on old age as a stage characterised by economic insecurity, poor health, loneliness, resistance to change and failing physical and mental powers. Ageing represents one of many aspects of reality by which properties and problems are constructed within the context of shared expectation particular to specific groups. It is regarded as the total effect of all changes which occur in a living being with increasing chronological age and which render it more valuable or less viable. Similarly, according to Birren and Renner (1977) "ageing refers to the regular changes that occur in mature genetically representative organisms living under representative environmental conditions as they advance in chronological age." This definition has the following characteristics:

1. Ageing is a process of regular changes.
2. It occurs in mature genetically representative organism.
3. It is a result of advancement in chronological age.

Although this definition is quite comprehensive, social aspect of ageing has not been indicated clearly in it. Hence the slightly modified

definition that ageing refers to the regular changes that occur in mature genetically representative organisms living under representative environmental conditions including social ones, as they advance in chronological age. Generally changes take place in four main spheres - physical, behavioural, biological and intellectual.

Empirical studies have indicated that definitions relating to ascription of old age as well as the characteristics associated with the aged vary in different social categories. (Blau, 1973) In other words, ageing does not depend only on biological conditions of the individual.

PSYCHOLOGICAL THEORIES OF AGEING

Research in Psychology of aging has been guided by a diverse collection of theories. Historically there are three approaches; the aged, age, and aging: (a) the psychology of the aged focuses on the behaviour of older people. Grounded in a stages of life perspective, most studies of the aged demonstrate a thematic approach and little coherence (e.g., studies of Alzheimer's disease, retirement, widowhood, etc.), (b) The psychology of age studies age differences in behaviour by comparing groups of people of different ages in cross-sectional research. Productive research focuses on identifying the causes and consequences of the processes responsible for age related

differences (e.g., processing speed, attention capacity, etc.) (c) The psychology of aging studies behavioural patterns of change with age, integrating both the psychology of age and the aged in longitudinal research. In this article major but diverse psychological theories of aging will be presented chronologically, to begin with early nineteenth-century theorizing on processes of aging.

Classical Theories

(A) Developmental Tasks /Activity Theory

The theory proposed in 1948 by Robert J. Havighurst emphasizes the concept of developmental tasks in a life span. A developmental task arises at or about a certain period in the life of the individual, successful achievement of which leads to his or her happiness and to success with later tasks, whereas failure leads to unhappiness in the individual, disapproval by the society, and difficulty with later tasks. All of these tasks have biological (physical maturation), psychological (aspirations or values), and cultural (expectations of society) bases. Havighurst has described the six developmental stages or age periods, each with its own developmental tasks namely, infancy and early childhood, middle childhood, adolescence, early adulthood, middle age, and later maturity (beyond age 60). The developmental tasks of later maturity, for instance, can be

summarised as follows: (a) coping with the physical changes of aging; (b) redirecting energy to new roles and activities such as grand parenting, retirement, and widowhood; (c) accepting one's own life; and (d) developing a point of view about death. Later on, the central organising concept of age-related developmental tasks has been named *activity theory*, as opposed to disengagement theory. (Schroots, 1996)

(B) Psychosocial Theory of Personality Development

With the publication of *Childhood and Society* in 1950, Erik Erikson made a major contribution to the understanding of personality development across the life span. Erikson formulated a psychosocial theory of eight stages of life, each with its own characteristic crisis that arises out of the conflict between two opposite tendencies. The developmental task of each age period is to resolve its conflict, which requires the integration of personal needs with the demands of society. The successful resolution of each conflict leads to developmental strength in terms of a new virtue. Failure, however, to deal adequately with a task during its period of ascendancy is damaging to personality development. For example, the last stage of life, Old Age, refers to the opposite tendencies of "Integrity versus Despair". At this point an individual's life either makes sense because

of some cross-cultural, human principles or is marked by a sense of despair, because it seems meaningless. The successful achievement of integrity might lead, eventually, to the virtue of Wisdom. (Schroots, 1996)

(C) Counterpart Theory

James E. Birren, in 1960, presented a general theory of aging as a counterpart of development. The use of the metaphor counterpart is meant to express the idea that there are latent structures of behaviour (emotions, cognitions, and motivations) carried forward from earlier experience that interact with present situations. Aging is viewed as a transformation of a biological and behavioural development of the organism expressed in a counterpart manner in variable ecological contexts.

Observations of old persons suggested that there is a pattern to the changes that occur in late life, which are not merely the consequences of chance. In explanation of these late-life patterns of change, Birren noticed that natural selection as explanatory mechanism is not very obvious because some of the patterns or features in old persons (organisms) do not appear until long after the age of reproduction has passed. He concluded, therefore, that these

regularly appearing features (including longevity) must be a consequence of traits that were selected for at the time of reproduction. Briefly summarised, Birren's counterpart theory states that any biologically based order in late-life characteristics must arise in association from counterpart characteristics of development that were subject to pressures of selection.

Birren has pointed out that behavioural factors can be involved in the counterpart process, that is, that patterning of late-life events could arise via natural selection of long-lived and intelligent persons. For example, although individual differences in longevity do not appear until long after reproduction has been completed, intelligent, long-lived parents are able to provide an environment in terms of food and protection favourable for their young to survive. In other words, counterpart theory advocates indirect selection for positive late-life characteristics that embrace a wide range of complex biological (e.g., potential for a long life) and behavioural (e.g., intelligence) characteristics. As such, counterpart theory expanded the classical hill metaphor of development and aging to include questions about their relationships and how behaviour comes to be organized over the adult years of life, if not over the whole life span. (Schroots, 1996)

(D) Disengagement /Activity Theory

The term *disengagement* refers to the withdrawal of people from previous roles or activities. Starting from the assumption that people turn inward from middle age and on, Cumming and Henry theorized in 1961 that this primary mental process produces (a) a natural and normal withdrawal from social roles and activities, and (b) an increasing preoccupation with self and decreasing emotional involvement with others.

Disengagement theory encouraged the development of an opposing theory of the aged, activity theory, which is based on the concept of developmental tasks. According to its main proponent, Robert J. Havighurst, *activity theory* states that in order to maintain a positive sense of self, elderly persons must substitute new roles for those lost in old age. As such, activity theory presents a more realistic view of older people.

(E) Personality Theory of Age and Aging

In 1968, Bernice L. Neugarten and associates emphasized personality type as a predictor for successful aging. According to them, aging persons have differing capacities for coping with life stress and for coming to terms with their changing life situations.

Eight different patterns of aging have been distinguished, which Neugarten named the Reorganizers, the Focused, the Disengaged, the Holding-on, the Constricted, the Succorance-seeking, the Apathetic, and the Disorganised. Briefly summarised, aging is viewed as a process of adaptation in which personality is the key element. The aging individual not only plays an active role in adapting to the biological and social changes that occur with the passage of time but also in creating patterns of life that will give the greatest ego involvement and life satisfaction.

(F) Cognitive Theory of Personality and Aging

In 1970 Hans Thomae described briefly a cognitive theory of the aging personality, one that is intended to integrate various biological, sociological, and interactionist perspectives while at the same time focusing upon the psychodynamics of aging. Central concepts in his theory are those of perception, perceived situation, and perceived self. Thomae postulates, for example, that perceived change rather than objective change is related to behavioural change; and that change is perceived and evaluated in terms of the aging person's dominant concerns and expectations. Successful adaptation to age-related changes, then, relates to the maintenance and restructuring of the balance between cognitive and motivational systems; (e.g., the balance

between acceptance of oneself as old or rejection of this perception, which is one of the developmental tasks of aging persons). (Schroots, 1996)

Modern Theories

(A) Life Span Development and Aging

Since the beginning of the 1980s, Paul B. Baltes and his associates have conducted a series of studies on psychological processes of development and aging from a life span perspective. In line with the tradition of life span developmental psychology, development and aging are conceived as synonyms for behavioural changes across the life span. Starting from these studies, Baltes has developed a theoretical framework about the nature of human aging from a psychological point of view.

Based on this framework, a psychological model of successful aging has been devised, named selective optimization with compensation. The central focus of this model is on the management of the dynamics between gains and losses, i.e., a general process of adaptation, consisting of three interacting elements. First, there is the element of selection, which refers to an increasing restriction of one's life world to fewer domains of functioning because of an aging loss in

the range of adaptive potential. The second element, optimization, reflects the view that people engage in behaviours to enrich and augment their general reserves and to maximize their chosen life courses (and associated forms of behaviour) with regard to quantity and quality. The third element, compensation, results also (like selection) from restrictions in the range of adaptive potential. It becomes operative when specific behavioural capacities are lost or are reduced below a standard required for adequate functioning.

The lifelong process of selective optimization with compensation allows people to age successfully, i.e., to engage in life tasks that are important to them despite a reduction in energy. For instance, the pianist Rubinstein remarked in a television interview that he conquers weaknesses of aging (adaptation) in his piano playing in the following manner: First, he reduces his repertoire and plays smaller number of pieces (selection); second, he practices these more often (optimization); and third, he slows down his speed of playing prior to fast movements, thereby producing a contrast that enhances the impression of speed in the fast movements (compensation). (Schroots, 1996)

(B) Reduced Processing Resources

For some time it has been generally accepted that there is an average age-related decline in cognitive performance. Researchers have advanced several explanations for this aging phenomenon, but so far only the resource-reduction view has found wide support. In this view, aging leads to a reduction in the quantity of one or more processing resources, such as attentional capacity, working-memory capacity, or speed of processing.

In a series of experimental studies, Salthouse and his associates have focused on processing speed as the explanatory construct of cognitive aging. Their findings indicate that processing speed is a fundamental construct in human cognition, linked to explicit changes in neural structure and functioning on the one hand and to higher order cognitive processes like reasoning and abstraction on the other. As such, Salthouse hypothesizes that processing speed may well provide the cornerstone for integrative theories of cognitive aging.

The New Theory

(A) Gerotranscendence

In 1989, Lars Tornstam suggested that human aging, the very process of living into old age, encompasses a general potential

towards gerotranscendence, i.e., a shift in metaperspective, from a materialistic and rational vision to a more cosmic and transcendent one, normally followed by an increase in life satisfaction. On the basis of qualitative and quantitative studies, Tornstam developed the theoretical concept of gerotranscendence at three levels of age-related, ontological changes: (a) cosmic level, for example, changes in the perception of time, space and objects, increase of affinity with past and coming generations, changes in the perception of life, disappearing fear of death, acceptance of the mystery dimension in life, and increase of cosmic communication with the spirit of the universe; (b) self, for example, discovery of hidden - both good and bad - aspects of the self, decrease of self-centredness, self-transcendence from egoism to altruism, rediscovery of the child within, and ego integrity; (c) social and individual relations, for example, less interest in superficial relations, increasing need for solitude, more understanding of the difference between self and role, decreasing interest in material things, and increase of reflection.

Tornstam's theory of gerotranscendence is based on limited empirical evidence yet it makes a promising attempt to integrate and further develop some classical and modern psychological theories of aging.

(B) Branching Theory

In 1995 Johannes J. F. Schroots presented a brief outline of a dynamic systems theory of aging, called *gerodynamics*. This comprehensive theory *in statunascendi* is based on general systems theory, notably the Second Law of Thermodynamics and dynamic systems theory (chaos theory). The Second Law states that there is an increase of entropy or disorder with age in living systems, resulting in the system's death. Chaos theory postulates that internal or external fluctuations of dynamic, far from equilibrium systems can pass a critical point - the transformation point - and crate order out of disorder through a process of self-organization, that is, a process by which a structure or pattern of change emerges with the passage of time. From this metatheoretical viewpoint, the aging of living systems can be conceived as a nonlinear series of transformations into higher and/or lower order structures or processes, showing a progressive trend toward more disorder than order over the life span, and resulting in the system's death.

Gerodynamics lies at the root of a new aspect theory of aging, called *branching theory*. The basic principle of this theory is the bifurcation or branching behaviour of the individual at the biological, psychological, or social level of functioning. Metaphorically speaking,

bifurcation means that the fluctuating individual (organism) passes a critical point - the bifurcation, branching, or transformation point - and can branch off into higher and/or lower order structures or processes. Higher and lower order structures can be translated in terms of mortality (probability of dying, life expectancy), morbidity (disease, disorder, disability or dysfunction) and quality of life (well being, life satisfaction). For example, traumatic life events and a healthy life style may result in lower and higher order structures, respectively, and consequently in higher and lower probabilities of dying. It should be noted, however, that lower order bifurcations at the biological or psychological level of functioning (e.g., illness or divorce) do not always result in lower order branching behaviour; i.e., some people are strengthened by illness, and divorce may have a positive rather than a negative effect on mental health in terms of life expectancy and quality of life.

Psychological Perspectives on Successful Aging

One way or another, all gerontologists are implicitly interested in understanding successful aging. Biologists and physicians are interested in understanding why some cells, tissues, and organs decline with age, why others do not. Psychologists are interested in understanding why some individuals adapt more easily to the

challenges of aging than others. Successful aging does not mean "optimal" or "problem-free" or "better than average". For psychologists successful aging implies that individuals are satisfied or contented with their lives - that they have found ways of maximizing the positives in their lives while minimizing the impact of inevitable age-related losses.

One danger that arises about "successful aging" is that it seems to set up the expectation that there are "norms of success", or that we expect all individuals to have a positive old age. For some, a concept like "successful aging seems to set up the expectation that we can have an old age that an old age that is without loss or decline.

More recently, psychologists interested in successful aging have tried to argue that it does not necessarily mean a universally positive, unburdened old age. A single individual may be physically ill but psychologically strong, feel despair about family but contentment about work, and experience great dissatisfaction but a profound sense of meaning in life. Indeed, it is argued that, we cannot predict what any given individual's successful aging will look until we know what are the domains of functioning and goals that individual considers important, personally meaningful and in which he or she feels competent.

In studying successful aging, psychologists generally seem to focus on whether elders' experience life satisfaction and well being. This approach has a long tradition in aging research (Erikson, Erikson, and Kivnich, 1986) and certainly characterizes much of the contemporary scholarship on the topic (for example, Baltes and Baltes, 1990; Brandtstadter, Wentura, and Greve, 1993; Schultz and Heckhausen, 1996; Marsiske, Klumb, Baltes, 1994; Ryff 1991; Whitbourne, 1985). In popular terms, successful aging research can be likened to the cliché, "It's not how old you are, it's how old you feel." Psychologists, thus, focus on the meaning and well being that individuals maintain in the face of objective losses in the body and mind.

It is a fact that elderly's health and health related problems are examined using a multi disciplinary approach. But unfortunately this multidisciplinary attempt has not resulted as a unified conceptualisation of the meanings of stress and social support, their role in well being and mental health, or even how to measure them. In fact, specific theories about the relation among stress, social support and well being/mental health are rare and empirical tests of hypotheses stemming from such theories are rather non-existent. (Beehr and Bhagat, 1985; Fisher, 1989)

MENTAL HEALTH

Mental health is a condition of psychological maturity; a relatively constant and enduring function of personality. It is a condition of personal and social functioning with maximum of effectiveness and satisfaction. Mental health involves the positive feelings and attitudes towards self and others.

The concept of mental health is as old as human being. Ancient Indians had many scholars who authentically defined that concept of mental health and described the ways to promote it. The Adharva veda, the Charaka Samhita, the Susrutha Samhita and Astangha Samgraha have references about mentally healthy persons, diseases of the mental and specific interventions for enhancing mental health.

The notion of mental health is purely subjective and pertains to the inner frame of reference of the individual. Consistency of behaviour is an important characteristic of mental health. It is categorically stated that a feeling of well being cannot be connected as a dependable criteria of mental health. Individuals may be happy under different conditions. But to explain their contentment as mental health is not always valid. Mental health to a large extent is dependent

on sound physical health as is implied by the old phrase 'a sound mind in a sound body'.

A positive attitude towards oneself and other; growth, development and self-actualisation, integration, autonomy, environmental mastery and perception of reality are also considered as significant in defining mental health.

Mental health is considered as the balanced development of the individual's personality and emotional attitudes which enable him to live harmoniously with his fellowmen. It was not exclusively a matter of relation between persons. It was also relation of the individual towards the community, towards the society, institutions, which, for a large part guide his/her life, determine the way of living, working, leisure and the way he/she learns up and spends money, the way he/she sees happiness and stability. (Altschul and Simpson, 1977)

Kornhauser (1965) considered mental health as a combination of psychological and behavioural attributes, some of which the person must possess above a required minimum and others of which signify better mental health, the more they were present.

According to Bhatia (1965) mentally healthy person was one who is self-confident and can live effectively. He lives in the world of

reality rather than fantasy, and capable of tolerating frustration, such a person lives a well-balanced life of work, rest, and recreation.

Caplan (1969) defined mental health as the potential of a person to solve his/her problems in a reality based way within the framework of his/her tradition and culture.

Mental health is said to be a state of mind characterised by emotional well being, relative freedom from anxiety and disabling symptoms, and capacity to establish constructive relationships to cope with the ordinary demands and stresses of life. (Goldenson, 1984)

The term mental health has an interesting history within the general area of occupational psychology. In practice two main uses of the term mental health were evident in the occupational literature. (Murrell, 1978) The first was the notion of positive mental health (Argyris, 1951; Allport, 1958; Jahoda, 1958) which at an empirical level, found its best known expression in the work of Kornhauser (1965). This refers to behaviour, attitudes, and feelings that represent an individual's level of personal effectiveness, success, and satisfaction. However, because of the rather vigue and general nature of positive mental health, thus defined, other authors concerned with this concept have drawn upon a wide range of empirical studies in

order to examine its relevance as a dependent variable in occupational settings. In a review by Kasl (1973), for example, one finds consideration given to studies which other authors would categorise as pertinent to job satisfaction, role ambiguity and conflict, trust, stress and so on.

Mental health is not a representation of any psychodynamic unit but a loose description, designated for an overall level of success, personal satisfaction, effectiveness and excellence of the individual's functioning at present. It is needles to mention that mental health aids the aged in developing moral and disciplined life for their own growth and development and that of other. Higher index of mental health indicates high individual effectiveness, and good individual effectiveness reflects health and well being.

As pointed out by many, mental health is not absence of mental illnesses, nor it is a feeling of well being. But, however the concept of mental health involves these two psychological aspects along with other qualities like positive feeling and attitude towards self to others, consistency of behaviour, absence of emotional and nervous tensions, discords and conflicts. A mentally healthy person has a wholesome, balanced personality and he/she is capable of its full and harmonious functioning which gives satisfaction to the self and others.

A Mentally Healthy Person and Behavioural Patterns

Behavioural pattern of mentally healthy persons may be described as follows:

1. Sense of responsibility: Mentally healthy persons will have a sense of responsibility. They are sensitive to their needs and those of others and attempt to satisfy these needs for their own and others welfare respectively.
2. A sense of self reliance: Mentally healthy persons will have confidence in their judgement and ambitions and view set backs as problems to be solved rather than an occasion for display of anger and emotional outburst.
3. A sense of direction: Mentally healthy persons will have a clear concept of life goals and put their full energy for its attainment.
4. A set of personal values: Mentally healthy persons will have a philosophy of life that is based on convictions, beliefs and goals that contribute to their happiness and that of others around them.
5. A sense of individuality: Mentally healthy persons recognise themselves as separated and distinct from others around. (Chauhan, 1986)

Important characteristics of mentally healthy person include:

- Environmental mastery,
- Undistorted perception of reality including empathy and social sensitivity,
- Integration,
- Autonomy, and
- Self-development/self-actualisation, including conceptions of self, motivational process and investment in living.

STRESSFUL LIFE EVENTS

Life events is a category of environmental measures that happen or perceived to happen to people. Life events are defined as occurrences of disruptions which result in because of the failure of routine methods for managing threats. (Cross, 1970) A stressful life event, depending up on its time of occurrence, duration and disruptiveness is a crucial factor having impact on the physical and mental health and well being of the elderly.

Tension and stress have become the part and parcel of life. The 20th century has been branded as the age of stress and anxiety. Stressful circumstances are encountered everyday and at every stage of human development. From the very moment of birth itself, right

through to adolescence, the young meet unavoidable sources of stress. From weaning and toilet training, as babies, to the process of formal education and learning social skills, stress is encountered in varying degrees. Selecting a job and entering into it is the main developmental task of the adulthood and the source of stress. Role changes, diminishing social and economic status, physical and mental decline etc; cause stresses and strains for the aged.

Definitions of stress have focussed on stimulus - as an external negative force implementing on an individual, response - as an individual's emotional and/or physiological response to external or internal environmental events and interactional elements and as a person - environment problem, resulting from perceptions and appraisals of one's internal and/or external environments. (French, Rodgers and Cobb, 1974)

Selye (1974, 1976), the pioneer of stress research was the first to conceptualise the psycho physiological responses to stress. He considered stress as a non-specific response to any demand made upon organisms. He labelled three phrases of defense reactions that a person establishes, when stressed as the General Adaptation Syndrome (GAS), Selye called the defense reactions 'General' because stressors had effects on several areas of body. 'Adaptation' refers to a

stimulation of defenses designed to help the body adjust to or deal with the stressors. And 'Syndrome' indicates that individual pieces of reaction occur more or less together.

The word stress comes from the Latin word 'stringere' which means 'to draw tight'.

Morgan et al. as cited in Kumar and Rao (1998) defines stress as "an internal state which can be caused by physical demands on the body (disease conditions, exercise, extremes of temperature, and the like) or by environmental and social situations which are evaluated as potentially harmful, uncontrollable, or exceeding our resources for coping."

McGraw as cited in Kumar and Rao (1998) however, held stress occurs when there is a substantial imbalance between the demands of the environment and the response capability of the person. This includes the idea that the person at some point anticipates that he may not be able to cope adequately with the imbalance. This automatically assumes that adaptation is important to the person.

Kimble et al, as cited in Kumar and Rao (1998) held that stress is "a general term which includes situations that threaten the adaptation

of an organism; and the physiological and psychological responses of an individual to a threat to his or her integrity."

According to Schuller as cited in Kumar and Rao (1998), "stress is a dynamic condition in which an individual is confronted with an opportunity, constraint, or demand related to what he/she desires and for which the outcome is perceived to be both uncertain and important."

Lazarus (1971), whilst pointing out that both the environmental stimulus and the reacting individuals were vital elements. His definition refers, then, to a very broad class of problems that differentiates other problem areas as they deal with any demands which tax the system. It may be a physiological system, or a psychological system and the response of that system. He goes on to say that the reaction depends on how the person interprets or appraises (consciously or unconsciously) the significance of a harmful, threatening or challenging event).

According to Holmes and Rahe (1967), stress can be defined as an event that involves a major change in person's ongoing life pattern. It is the product of our times, whereby man is driven to tension and despair. A Person under stress develops a negative attitude to his/her

job, performs his/her job improperly, feels bored and dejected, his/her decision making is impaired and he/she becomes the victim of a variety of psychological and physical illnesses; for temporary solace he/she may even turn to alcoholism and drugs.

Stress is the emotional and physiological reactions to stressors. A stressor is a situation, demand or circumstance which disrupts a person's equilibrium and initiates the stress response. Various factors may serve as stressors for the aged. For e.g. family problems, boredom, role conflict and role ambiguity, poor interpersonal relations, lack of participation in family affairs and lack of respectiveness, financial problems, etc. Chronic stress is a major health problem causing agent in most of the developed countries.

Stress may be referred to as the pattern of specific and non-specific responses individuals make to stimulus events that disturb their equilibrium and exceeds their ability to cope. Stress beyond a minimal level threatens the well being of the individual. Reactions to stress depend on many factors including a person's competencies, level of stress tolerance, supports available and the like. Both personal and environmental conditions are crucial in determining the stress reactions and very often these are the results of interplay of a combination of inner and outer determinants.

Stress occurs as the cumulative effect of many kinds of frustrations, conflicts and pressures associated with every day living. When feelings of personal adequacy and worth are threatened, it leads self-devaluation. Self-devaluation plays a crucial role in the development of mental illness.

Many obstacles, both external and internal, interfere with individuals' need gratification and complicate their efforts to maintain and actualize themselves. Such obstacles place adjustive demands or stress on them and when the stress is excessive it overtaxes their resources and leads to a breakdown of integrated functioning. Frustrations, conflicts or pressures may create stress situations to form serious threats to the welfare of the elderly.

The effects of stress were many and varied. Some effects, of course, were positive, such as self-motivation, stimulation to work harder, and increased inspiration to live a better life. However, many effects of stress were disruptive and potentially dangerous. (Cox, 1978)

The effects of stress depend up on its severity: mild stress seems to improve the performance and functional efficiency of the individuals; severe stress seems to impair integration and

effectiveness and excessive stress results in breakdown of the physiological and psychological functioning.

More and more psychologists, both in India and abroad, are devoting their attention to the area of stress as no one is left untouched by this phenomena in modern times. Stress is causing havoc in all societies. It is viewed as the greatest health risk of modern times. It is known to be the major contributor to coronary heart disease, lung ailments, cancer, accidental injuries, cirrhosis of the liver, suicide and many other ailments. The three most frequently prescribed medications in most of the countries are an ulcer medication, a hypertension drug and tranquilizer - all products of stress.

Stress is responsible not only for our physical illness but also for our mental health. It seems to be a cause of much of our unhappiness, irritability, anxiety, depression, dissatisfaction and psychosomatic ailments.

No issue in the psychology of health is of greater interest and importance than whether and how stress influences adaptational outcome such as well being, social functioning and somatic health. (Lazarus and Folkman, 1984)

The causes of stress can be either pleasant or unpleasant, internal or external, but they all demand readjustment or adaptation. It is an adaptive response, mediated by individual characteristics and for psychological process, that is a consequence of any external action, situation or event that places special physical and psychological demands upon a person.

Review of various definitions of stress brings to the light that stress is a complex structure and has following characteristics: (1) Stress is multifaceted. There are multiple causes and multiple outcomes of stress. (2) Stress involves both physiological and psychological states. However, psychological states can both cause and be caused by physiological states. (3) The stress process evolves and develops overtime. These are both short-term and long-term causes and short-term and long-term effects of stress. (4) The factors that cause stress are called stressors, e.g., physical, environmental and social situations. Once the stress takes place it can manifest itself in various responses. For example, a person may give:

(a) Emotional response - like sadness, anger, irritation, frustration, rage, anxiety, etc.

(b) Behavioural response - like changes in performance, poor concentration, forgetting, lessened productivity, inability to get along with others.

(c) Physiological responses - like head ache, high blood pressure, ulcers, heart diseases, cancer, etc.

(d) Cognitive reactions like lower self esteem, serious forms of depression, tendency to commit suicide, etc.

ADJUSTMENT

Adjustment may be defined as the ability of an individual to adapt to the changing roles, operations and structures of environment. Adjustment is manifest in one's attitudes and behaviour and it is influenced by past and current life experiences.

The search for the key to satisfactory adjustment in old age and its relation to mental health has been one of the challenging topics within the field of psychological and social gerontology. Some of the earliest research are personality and social development in later life addressed the complex issue of identifying the best of the most successful way for the individual to age. The results of such studies suggest successful adjustment to the aging process as involving the ability to maintain a consistent view of the self over time. In addition,

the individual must accommodate the physical changes brought about by aging. These accommodations are facilitated by coping strategies that enhance the individual's emotional state and present the individual with viable ways of making practical changes that can compensate for whatever losses occur in physical and mental functioning. (Whitbourne and Cassidy, 1996)

Contemporary researchers are still directing their efforts to the search for the optimal path to adjustment to the demands and challenges presented by the aging process and in turn to elderly's mental health. It is now recognised that adjustment and mental health in the aged reflects multidimensional influences of biological, psychological and social processes that have operated throughout the individual's life course.

Adjustment means changes in behaviour to confirm to the cultural and social expectations of the environment. The concept of adjustment implies a constant interaction between person and his/her environment, each making demands on the other. That is to say, sometimes adjustment is achieved when the person yields and accepts conditions which are beyond his/her power to change and sometimes it is attained when the environment yields to the persons' constructive activities. In most cases, adjustment is a compromise between these

two extremes and maladjustment is a failure to reach a satisfactory compromise.

Dictionary of behavioural science defines adjustment as a harmonious relationship with the environment involving the ability to satisfy most of one's needs and meet most of the demands, both physical and social that are put up on one. It is the process of trying to bring about a balance between needs, stimulus and the opportunities offered by the environment. It is the process by which a living organism maintain the balance between his/her needs and circumstances that influence satisfaction of needs. It involves reconciliation of personal and environmental demands.

SOCIAL SUPPORT

The Danish proverb "No one is rich enough to do without a neighbour" expresses the idea underlying much of the current thinking about social support that human beings look for. It is a truth that no individual is capable of satisfying all his/her needs and every human life is dependent on some support from others. The need to be accepted and to belong is one of the basic needs of an individual. This is met first within the family and then broadens to include educational and community settings and then finally to occupational context.

In family based societies like India support, whenever and wherever is required, is provided predominantly by family members, be it spouse, children, relatives, friends or neighbours. The primary providers of emotional support for older people are their close friends whose relationship is based on "equal status". (Ishin-Kuntz, 1990) Friends may also provide complementary support for older people who have suffered the loss of a loved one. Religious practices and belief in God also provide support to elderly especially when they feel lonely and rejected. For a lot of people they are source of comfort and for a majority they may also act as a healthy coping strategy to handle problems.

Social support refers broadly to the structure and content of social relations upon which individuals draw for help, advice and understanding when faced with stress. It is reported that among those persons who experience undesirable life events. Social support offers a cushioning effect that reduce their stress.

SIGNIFICANCE OF THE PRESENT STUDY

The world is experiencing an actual demographic aging of the planet. (Galambos and Rosen, 1999) According to US Bureau of Census (2000) the world's elderly population, aged 65 and over, grew

by more than 795,000 people a month, during the year 2000. It is estimated that by 2010, the net increase in this population will be 847,000 per month. In many countries, oldest old group, those aged 80 or over, is the fastest growing portion of the world population. The population of elderly in India, over 60 years, rank second in the world. The absolute population of the aged over 60 years was about 76 million in the year 2001, and expected increase to 137 millions by 2021. It is obvious that as the number of elderly grows the number of those who fall into the various high-risk categories such as physically ill and disabled, emotionally distressed, cognitively impaired, financially disadvantaged, physically and emotionally abused and socially isolated - also grows.

Aging invariably involves losses of health and vitality, social roles and relationships, economic status and positive identity. Even in societies where elderly people were respected and their competence and wisdom valued, the status of elderly is changing. Their skills and experiences are increasingly becoming irrelevant to the fast changing economic and social conditions of their countries. The needs of the elderly in those countries are often viewed as problems of an unproductive minority. Old age is also stereo-typically viewed as

linked to decline diseases, death, depression, disability, dementia, and as such a drag on the society.

Institutionalisation generally occurs as a function of disabilities combined with insufficient social support to maintain the fragile older people in the community. (Shans, 1979) Very often the typical elderly person who is institutionalised is one with problems of in activities of daily living. Empirical evidence suggests that elderly persons are not dumped but placed in nursing homes as a last resort after alternatives have been exhausted and family members have endured severe stress. (Tobin and Lieberman, 1976)

A survey of old age homes shows that more and more institutions will be required in future for the poor, destitute, sick and handicapped elderly. Among the old age homes in India, 88 per cent provides residential facilities for the aged. (Arora and Chadha, 1995) A major handicap of these residential homes is that a majority of them lack the physical environment that functions to maximise the activities of daily living, opportunities for social interaction, individual's choice and independence.

The joint family system and the traditional pattern of living prevailed in Kerala had helped to cushion many of the concomitants

of aging. But modernisation, urbanisation and changing life styles have brought about the breaking down of joint families and diminishing acceptance of family responsibilities toward elderly people and this has lead to institutionalisation of elder people. (Arora and Chadha, 1995)

Worldwide elderly constitute one of the most rapidly expanding segments of the population. Caring for this huge segment and meeting their needs is becoming a great challenge in the new millennium. Maintaining health and quality of life in the aging population has become the greatest concern of many countries.

Research in geriatrics and gerontology in India has attained recognition only recently. Studies in mental disorders, including that of older people has been the focus of investigation for over two decades. One of the first major studies conducted by the Indian Council of Medical Research on the 'Problems of the aged seeking psychiatric help' report that 43% of the study sample suffered from depressive illness, 59 percent showed the prevalence of Mental Morbidity. Several other studies conducted by ICMR, as well as All India Institute of Medical Sciences, New Delhi, also report older people as suffering from mental disorders, depression being the major illness among them. (Shah, 2003)

There is no doubt that health and well being in older age are the result of experiences through out the life span. Hence, people of all ages could be encouraged to take steps to ensure greater health and well being in later years for themselves and their communities. This, however, needs the information about aging and the aged. How life courses and events stress them and how network relations facilitate successful aging. This information and its multifactorial nature are not easy to come by since one requires data to know the extent and distribution of mental health problems among the elderly.

The present study is an attempt in this direction. The present study specifically reads as: MENTAL HEALTH OF OLDER PEOPLE IN RELATION TO STRESSFUL LIFE-EVENTS, ADJUSTMENT AND SOCIAL SUPPORT.

Addressing the issue of mental health in elderly people is not simple. Because mental health of the aged is severely challenged by a number of psychosocial factors. Hence an attempt is made in the present study to assess the role of these factors like stressful life events, adjustment and social support on the mental health of the elderly. Effort is also made to examine the significance of personal demographic factors such as sex, income, education, marital status etc. on their mental health.

OBJECTIVES

The present study is planned among the elderly people with the following objectives:

1. To examine the association of mental health status and its different measures namely, self-evaluation, social orientation, personal integration, independence, environmental mastery and feeling of well being with some psychological factors e.g., life stress, general adjustment and perception of social support.

2. To assess the nature and extend of the influence of these psychological factors in relation to living conditions and sex of the elderly on their mental health status and its related measures.

3. To examine the role of some demographic factors namely, age, locality, education, income, occupation, marital status and family type on mental health and its related measures, and to compare institutionalised and non-institutionalised elderly on relevant factors.

HYPOTHESES

In accordance with these objectives the few general hypotheses were formulated:

1. General mental health status and its different measures are significantly related to life event stress, general adjustment and perception of social support.

2. Living conditions, sex and life event stress of the elderly, independently, as well as in combination, influences their mental health and its different measures.

3. Living conditions, sex and general adjustment of the elderly, independently and in combination, influence their mental health status and its different measures.

4. Living conditions, sex and perception of social support of the elderly, independently and in combination, influence their mental health status and its various measures.

5. Personal demographic factors such as age, education, sex, occupation, income, marital status, type of family, religious background and involvement in leisure activities influence elderly's mental status.

MENTAL HEALTH OF OLDER PEOPLE IN RELATION TO STRESSFUL LIFE EVENTS, ADJUSTMENT AND SOCIAL SUPPORT

Thesis submitted in partial fulfilment of the
requirements for the degree of
DOCTOR OF PHILOSOPHY in PSYCHOLOGY

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CHAPTER TWO

REVIEW OF RELATED LITERATURE

MENTAL HEALTH AND STRESSFUL LIFE EVENTS
MENTAL HEALTH AND ADJUSTMENT
MENTAL HEALTH AND SOCIAL SUPPORT
MENTAL HEALTH / RELATED MEASURES AND PERSONAL DEMOGRAPHIC FACTORS

Chapter II

REVIEW OF LITERATURE

The present chapter provides a brief review of available studies on mental health and related measures in relation to life event stress, adjustment and social support.

Mental Health and Stressful Life Events

The stressful events as causes of illness have a long tradition in human history. In contemporary societies, stresses of one or the other kind have become a common source of threat to mental and physical health and well-being of the people. They have become characteristic features of modern life. This situation has emerged in the context of unprecedented technological change, accompanied by industrialisation and increasing attraction to consciousness as an average urban person has become a constant struggle with pressures, conflicts and limits. The stresses are continuously worked and escape from them has become impossible. These developments have made stress a central phenomenon of interest to the students of many

disciplines namely medicine, psychology, sociology, and anthropology. (Ramalingaswami, 1990) While the context and sources of stress have been studied by different disciplines at different levels, its analysis remained the major concern of psychologists. As a result in the last few decades the nature and dynamics of stress and health have received considerable attention by psychologists around the globe.

The possible influence on social support and stress on well-being (health) and health behaviour has attracted the interest of psychologists, sociologists, anthropologists, and other public health professionals having different perspectives and orientations. (Adler and Mathews, 1994; Beehr and McGrath, 1992; Cohen and Syme, 1985; Sarason, Sarason and Pierce, 1990; Veiel and Baumann, 1992)

How chronic stresses and daily hassles affect the emotional well being of individual has been subject of serious study during the 2nd half of the 20th century. The relationship between life stress and illness onset has been demonstrated by many investigators. (Green Jr. et al, 1956; Fischer et al, 1962; Hawkins et al, 1957; Kjaer, 1959; Rahe et al, 1970; Smith, 1962; Weiss et al, 1957) Individual's perception of life events as problematic for social readjustment also seems to cause illness. (Ramamurti, 1996)

The early phase of stress research had a characteristic emphasis on the prediction of illness rates from knowledge of stressful life events. The role of social environments (Brown and Harris, 1978; Dohrenwend and Egri, 1979; Kruez et al, 1972; and Paykel et al, 1969) and socio-cultural change as stressful and thus precipitating physiological and mental disorders has been stressed in a number of studies. Life events such as change in socio-economic status (Cassel, 1966), change in occupation (House, 1981; Cohen and McKay, 1984) and loss of job (Kasl et al, 1968) have been implicated as illness producing stressors. Johnos et al, (1993) have suggested that many rural elderly experience high levels of stress and strains due to life events and show poor health.

Death of loved ones is found as a stressful event precipitating cause leading to diseases. (Renner and Birren, 1980) Evidences are also indicate relationship between somatic symptoms, depression and life events in elderly males and females. Depression was found to be the most significant factor in the development of somatic complaints. Studies by Rozzine (1996), Schulz and Williamson (1993), Smallegan (1989), Ramamurti (1996), Ramamurti and Jamuna (1984, 1992) reveal that life events are important co-factors in defining well-being of the elderly.

In a significant study Curtis, Groarke, Coughlan and Gsel (2004) examined the extent to which psychological stress, social support and clinical disease indicators predict physical, social and psychological well being in patients with rheumatoid arthritis. The results revealed that higher perceived stress and lower social support did associate with poor emotional adjustment. While social support did not mediate the relationship between psychological stress and adjustment, the use of venting emotions as a coping strategy was a mediator of the association between stress and negative affect. Perceived stress was found as a better predictor of positive and negative emotionality.

Stress is referred as one of the discomforting responses of a person in a particular situation. Stress research indicates that stress experienced as a result of major life events will have a significant impact on physical and psychological health of the elderly, when coupled with functional decline a person's perceptions of the life event became negative and leads to disease and disorders in later life.

A host of studies have suggested a positive relationship between stressful life events and subsequent illness. (Wolf, 1950; Schmale, 1972; Holmes and Rahe, 1967; Grant et al., 1974) A similar though less consistent relationship between the onset of psychiatric illness and life events has been reported. (Brown and Birley, 1968;

Eisler and Polak, 1971; Uhlenhuth and Paykel, 1972; Patrick et al., 1978; Hudgen, 1974; Paykel, 1974)

In the case of elderly women the onset of middle and old age is likely to bring with it several stresses and strains. Age related physical changes and the resulting psychological disturbances may lead to greater maladjustment and mental health problems in the aged people. (Indira and Murthy, 1980a, 1980b; Jaiprakash and Murthy, 1981, 1982; Rangaswamy et al., 1982; Jamuna, 1984)

Mental Health and Adjustment

In Ancient India old age is considered a time for moving towards higher goals of self realisation and wisdom. This philosophy which practiced prepared the aged for a calm, and peaceful period of life. However, in Modern India old age is increasingly being perceived as a period of liability and problem.

Adjustment is the ability to adapt to the changing roles, structures and operations in the environment. The search for understanding successful adjustment in old age has lead to a significant body of work within the fields of psycho-social gerontology. These works points out that successful adaptation to the aging process involves the ability to maintain a consistent view of the

self overtime and to adjust to the changes brought about by the process of aging. It is accepted that adjustment to old age reflects multidimensional influences of biological, psychological and social processes that have operated through the persons' life course. (Whitbourne and Cassidy, 1996) According to Lehner and Kube (1964) and Coleman (1956) adjustment is a continuous process of interaction between ourselves and our environment and it is the effectiveness of an individual's efforts to meet his/her needs.

Adjustment in the aged is a relatively well researched area in psycho-social gerontology. Aging brings about changes not only in physical appearance and functioning, but also in psychological functions and social roles. Old people have to adjust to several loss, loss of physical vigour, loss of job due to retirement (Desai and Naik, 1969), loss of a spouse and often, loss of social states and economic stability due to retirement. Change in roles and lowered status are found to cause distress in old age and adjustment is found to decrease with age. (Paintal, 1991; Shirolkar and Prakash, 1996) Studies show that non-working older people report more adjustment problems than those who have a job or are capable of working. (Jayashree and Rao, 1991; Singh, Singh and Dawra, 1983) Adjustment in old age is correlated with education, occupation, income and social class

(Anantharaman, 1979) and health is found as a best predictor of life satisfaction of the aged. (Hosmath et al, 1993; Prakash, 1992; 1995; 1997; Ramamurti, 1996)

In a study conducted among 150 women retirees Dhillon and Singh (2005) examined the role of health, social support, leisure activities and stress on adjustment. Analysis showed health, social support, leisure activities and experienced stress as contributing significantly to their adjustment. The findings suggested that probably participation in leisure activities and social support from colleagues, friends and family enhances both physical and mental health which in turn buffer the effect of experienced stress and thereby promotes better adjustment.

Life dissatisfaction is a crucial factor leading to poor mental health in the elderly persons. Life dissatisfaction is the internal feeling of unhappiness which results from several deleterious changes associated with old age such as reduced income due to retirement, loss of meaningful roles, reduced social status, abundant leisure time without suitable avenues for spending time, poor social interaction and compromised quality of life, widowhood and dependence increase the vulnerability of women to mental health problems.

Depression, lower life satisfaction and higher psychological distress are more among elderly women.

Ott (2003) found complicated grief in the spousal bereavement process as associated with an increase in mental and physical health problems. Those with complicated grief experienced more additional life stressors, perceived less social support and achieved less clinically significant improvement than those with non-complicated grief.

It is estimated that there are nearly 4 million severely mentally ill among the aged in India, yielding a mental morbidity rate of 89/1000 as compared with 263/1000 in the limited kingdom. There is a prevalence of affective disorders and genetic depression. Increased agitation and restlessness, rarity of ideas on guilt and sin, higher frequency of somatic and paranoid symptomatology are also reported among elderly by Rao (1991). Self destructive and suicide behaviour are common in the elderly. (Rao, 1997) Khandelwal, Ahuja and Gupta (1992) reported behavioural problems such as stealing, delusions of abandonment, delusions of infidelity, suspicion, wandering and aggressiveness in the aged.

Vulnerability of the elderly to mental health problems results from psychosocial factors as much as from biochemical and

morphological changes in the aging brain. A significant finding, having sociological implication, is the high rate of morbidity in the widowed persons. Eswaramoorthy (1991) found adjustment of rural aged as affected by insecurity caused by widowhood. Jamuna (1994) points out that loss of spouse in wound brings about feeling of isolated and low socio-economic status and this in turn causes stress. Women experience more economic and health problems which may be responsible for their poor adjustment. It is observed that predominance of unfavourable events is likely to lead to psychiatric symptoms.

Mental Health and Social Support

Evidence accumulated from a good number of research argues that social support influences mental health and well being of the elderly persons. It seems that general positive feelings from close and important others are likely to promote overall well-being. In the face of specific crisis or events, specific types of support from specific others are likely to be most effective resources.

Substantial evidence has accumulated over the years indicating that people who have larger social networks, more social supports are

better integrated into the social fiber of their community and are less likely to die prematurely. (Antonucci, Sherman and Akiyama, 1996)

Impressive research has documented the association of individual's evaluation, perception of, or satisfaction with, the relationships to mental health. While some studies indicate that size of the network is the best predictor of well being and mental health, other evidence suggests that although objective measures such as social network characteristics are useful, the most predictive measures are those that assesses the individual's subjective evaluation of the social relationships. Studies conducted among American and French elderly representative population indicate that although both objective and subjective measures of support are significantly related to depressive symptomatology, subjective measures, such as satisfaction with the quality of the relationship, have a greater inhibiting effect on depression than more objective measures, such as number of social ties. (Akiyama, Antonucci and Campbell, 1990; Antonucci, 1994; and Antonucci, Fuhrer and Jackson, 1990)

Additional evidence suggests that family and friends may function quite differently, although both play an important role in the well-being of the elderly. Family relationships, under normal circumstances, make an important contribution to well-being. When

conflict is minimal and normal positive relationships are maintained. Under these conditions older people report relatively stable levels of well-being. When such relationships either do not exist or are conflictual, a negative impact on well-being is usually evident. Another long standing finding is that friend, but not family, relations have significant positive effects on the mental health of the elderly. (Johnson and Troll, 1994; Antonucci and Jackson, 1987 and Lee and Sheban, 1989)

In their study, Berkman (1984), Cohen and Willis (1985), Cohen and Syme (1985) reported that social support mediates the effects of life stress on health and well being. Chadha and Kanwara (1998) have also ascertained the effect of social support on the mental of elderly. In their study of institutionalised and non-institutionalised elderly, the authors report that non-institutionalised elderly seem to get more social support and hence are found less depressive and lonely compared to their institutionalised counterparts.

It is proposed that social relations with non family peers are critical and that the confident relationships array may be more important to the quality of life and well being than the quantity of interaction with either family or friends. (Chappell, 1991) Role of social network relates in enhancing well being of the elderly has been

confirmed by a number of earlier studies also. (Chadha and Mangla, 1991; Kahn and Antonucci, 1980)

Research evidence show that presence or absence of family support affects general well being in old age. Institutionalised elderly are found to experience a lower sense of general well being. When compared to those who live with family lack of family support, and poor quality of life are found to lead to mental health problems in the elderly. (Ara, 1997; Arora and Chadha, 1995) Women who are forced to live in old age homes seem to suffer great distress in terms of poor health, more emotional problems, low self conception and less social interaction than older women living with families. (Patel and Kamala, 1995)

There is a dearth of empirical research done in India on relationship of the aged beyond their family. While the core of a person's network will be his/her family. One can assume that there will be important relationships with neighbours, co-workers, friends and various others within the social world of older Indians. Chadha, Aggrawal and Mangala (1990) in a study examined the problems of the elderly using network approach. They concluded that family and friends provide support that are associated with positive changes among older individuals. The elderly who are retired, widowed and

belonging to rural areas, scheduled castes and low socio-economic status constitute the most vulnerable section of the aged population to face mental health, physical health problems and social isolation. (Prakash, 1987)

Significance of family support as a crucial factor for the better psychological well being of elderly is emphasized by Pinto and Prakash (1991) also support networks enable the old person to relate to others in community where they live. (Chadha, 1990; Jamuna, 1987; 1991; Ramamurthi, 1991; 1992; Ramamurthi and Jamuna, 1990; 1992 and 1993)

Cropley and Steptoe (2005) in a study examined whether functional social support buffers the effects of chronic and recent life stresses as physical symptom reporting in men and women and assessed whether perception of support remain stable over time. It was concluded that social support moderates the impact of recent but not chronic life stress on physical symptoms reporting.

Research on social support has shown that supportive relationships are associated with lower illness rates, faster recovery rates and higher levels of health care behaviour. (McIntosh and Shifflett, 1984) Studies on gender differences agree that differences

exist in the social networks and social worlds of men and women. Women have broader social ranges than men (Powers and Bultena, 1976; Antonucci, 1985; Kahn and Antonucci, 1983 and Kohen, 1983) and they turn more to their intimate ties in times of need than men (Powers and Bultena, 1976 and Antonucci, 1985). Women also seem to have larger social networks (Arling, 1987; Depner and Ingersoll, 1982), more frequent social contacts (Antonucci, 1985; Arling, 1987 and Chatters et al, 1985) and greater number of close relationships than men (Depner and Ingersoll, 1982). It is also reported that gender differences in social support are conditional on the events that cause men and women to seek out support. (Krause and Keith, 1989) This leads to the assumption that there is likely to have differences between elderly men and women with respect to the quality of support they receive and its effects and their mental health.

Family, friends and colleagues can help to prevent illness by providing affection and approval, confidence and encouragement, information and advance. Taken together, the benefits that others provide to us in facing the challenges of life are called social support. Social support is particularly necessary in times of stress and crisis. For example Gore (1980) in a study of men who had lost their jobs

found less illness, lower cholesterol levels and loss depression among those men who had supportive marriages and friendships.

Antonucci and Akiyamma (1987) suggested that social relationship in the context of individual, family, and societal development have both a buffering and main effect on well being depending up on situational and developmental characteristics of life episodes.

Social support helps people cope with stress in two ways:

(1) Friends can provide emotional support by helping us to understand and interpret potentially stressful situations in ways that are less threatening. They can help us to relax, to maintain a sense of humour, and to feel more optimistic about the future.

(2) Supportive others can provide information and encouragement that helps us to behave in healthier ways such as to stay on diet or to stay away from cigarettes.

Aging takes place within a social context. At each phase of human cycle, the individual belongs to a variety of kinship and social groups. The extent to which an older person is enmeshed within a social network of kin, friends and neighbours will greatly affect their

experience of aging. This is a critical issue in gerontology that needs to be studied with the changing demographics in our country from public, state and personal levels. Optimisation of the role of informal social supports from family, friends, and neighbours has thus emerged as an important social and public priority.

Antonelli, Rubini and Fossone (2000) in their study, institutionalised and non-institutionalised people show that the institutionalised elderly have mere negative self concept, lower levels of self esteem and restricted interpersonal self as compared to non-institutionalised.

Barrett (1999) examined the role of social support (measured as presence of a confident perceived social support, and frequency of formal interaction) in determining life satisfaction among the never married. Results indicate that age moderates the effect of marital status on social support. In the analysis of life satisfaction, marital status and social support are found to be significant predictors.

Baxter et al. (1998) studied the demographic and social network factors associations with perceived quality of life in a sample of rural Hispanic and non-Hispanic white elderly. The findings suggest that

network size and contact are important social factors that can improve the quality of life for both ethnic groups.

Bowling (1994) studied the implications of social networks and supports among older people and their implications for emotional well being and psychiatric morbidity. The study contents that there is fairly strong empirical evidence of relationship between social-support, network structure and health status mortality and risk of entry into institutional care.

Heidrich et al. (1993) investigated how the self-system mediates for physical health and mental health among the elderly. It was found that social integration and social comparisons mediated the effects of physical health and psychological health.

Johnson et al. (1992) studied the families and social networks of 150 adults (85 years and above) using both structured and open ended questions to determine the extent to which the family functions as a source of support for the oldest old. Subjects with children were significantly more active. 30 per cent of the childless and unmarried were not active providers of support.

Gray and Calsyn (1989) studied 70 subjects (60 + ages) on social support and disengagement and activity theory. The results indicated

that stress has more of a negative impact on the life satisfaction of those under age 75 years than those over 75 years, social support has more of a positive effect on life satisfaction in those under 75 than those over 75 of age, and the buffering effect of social support is stronger in the under 75 age group. The analysis supported the first two hypotheses but the third one did not find any significant support.

Conner et al (1979) found that both number and frequency of social ties were unrelated to life satisfaction although kin and children play a central role in the support network of elderly family availability and interaction exhibit little relation to subjective well being.

Blazer and Kaplan (1983) conducted a study to assess social support in elderly community population. The results indicate that role and attachments, frequency of interactions and perception of social network each predicted a change in self-care capacity, i.e., activities of daily living.

According to Shyam and Yadav (2005) life satisfaction of the aged is determined by social and financial support as well as activities of daily living.

Social involvement promote adequate psychological functioning that help individuals face life crises. Many studies in aging emphasize

that interaction with others is important in optimal adjustment. (Neugarten, Havighurst and Tobin, 1961; Maddox, 1963) Social support contributes to well being by meeting the basic needs for affiliation and attachment (Robinson and Garber, 1995) and lessons the distress associates with negative life events (Heller and Swindle, 1983; Kessler and McLeod, 1985; Kessler, Price and Wortman, 1985; Mitchell, Billings and Moos, 1982; Thoits, 1982). Beneficial effects of social support on mental and physical health have been reported by Curtona, Russel and Ross (1986), Subrahmanian and Asha (1991), Fokkema (2002) and Anna and Asha (2006).

Baum and Buxley (1984) compared differences in perceived age and death anxiety in 301 elderly persons for community affiliated, community alienated and institutionalised. It was found that single subjects were poorer in emotional health and had more death anxiety whereas community affiliated ones showed lesser death anxiety.

Chopra and Anand (2001) found that people living in families as compared to old age homes when measured on psychological and social aspects were better. Family residents were fully engaged in social activities and well connected with kith and kin. They had a positive outlook to life and power to fight against the odds.

The review of studies conducted in India and abroad demonstrates that social support network is a key variable in the area of geriatric studies. Provision for social support seems to influence nearly all the aspects of elderly's lives.

Chadha and Kanwara (1998) compared institutionalised and non-institutionalised elderly and found significant differences on social support, depression, and loneliness. The study also returned negative and significant correlation between social support and loneliness.

Chadha and Nagpal (1991) conducted a study to find out differences, if any, between institutionalised and non-institutionalised subjects with respect to social support network and life satisfaction. The results of the study indicate that, social network size of institutionalised group is significantly smaller than their non-institutionalised counterparts; non-institutionalised elderly have higher life satisfaction as compared to the institutionalised; and that social support and life satisfaction are significantly related to each other; males being significantly higher than females.

Kaur and Kaur (1987) carried out a study in Hissar on 60 males, aged 55 years and above. The study revealed that the social support

network of the aged is a major contributor to their general sense of well being in spite of the age related problems.

Desai and Naik (1969) conducted a comprehensive study and found that family support solves health and financial problems adequately. The younger member of the family perceive the need of family support and provide for them. The researchers however do not print a rosy picture of the aged and stressed that family patterns in India are changing.

The association among sources of social support, life events and psychiatric morbidity has been examined by Vaananen, Vahtera, Pintti and Kivimaki (2005). They report that low support from one's partner, co-workers and supervisor is positively related with psychiatric morbidity. The support of friends seems to lower the risk of psychiatric morbidity after death or severe illness in the family and after interpersonal conflict. High post-event network heterogeneity also lowers the risk of psychiatric morbidity after financial difficulty.

In another study by Li, Liang, Toler and Gu (2005) have examined the effects of gender and pre-bereavement social support from three different sources namely, spouse, adult children and friends, on widowhood adjustment among older adults in China.

Multiple regression analysis suggests widowhood as having a negative mental health consequences for older Chinese. Social support from older children seems to buffer the deleterious effect of widowhood, whereas spousal support during the marriage increases one's vulnerability. Support from friends, however, do not appear to have a significant effect.

Giles et al. (2005) examined social networks with children, relatives, friends and confidents predict survival in older Australians over 10 years after controlling for a range of demographic, health and life style variables. The study revealed a smaller effect of greater networks with confidents. The effects of social networks with children and relatives were not significant with respect to survival over the following decade. It was also reported that survival time of the elderly may be enhanced by strong social network.

Mental Health / Related Measures and Personal Demographic Variables

In one of the first major studies by the ICMR on the "Problems of the Aged Seeking Psychiatric Help", it was observed that 43% of the study group suffered from depressive illness, while the prevalence of mental morbidity was observed to be 59 per 1000. In a larger population based study conducted under the ICMR on "Health care of

the rural aged", the prevalence rate of mental morbidity was observed to be 89/1000. This rate of prevalence of mental morbidity in older people is much more when compared to the meta-analysis using 15 epidemiological studies, which calculated the prevalence of mental morbidity to be 73/1000 in the total population. In a study of a community near Chennai, the prevalence rate of mental morbidity in those aged 50 and above was found to be 349 per 1000. In the Severe Mental Morbidity Survey undertaken by the ICMR, it was estimated that a total of 1.2 million elderly were suffering from mental illnesses. In a study on "Gero-Psychiatric Morbidity" conducted by ICMR in Uttar Pradesh, Psychiatric Morbidity was found to be 42.4% in the geriatric group as compared to 3.97% in the non-geriatric group.

Documented research suggests the role of a variety of socio-personal factors in causing higher morbidity and mortality in the aged population.

According to Blazer (2003) depression is the most frequent cause of emotional suffering in later life and it significantly decreases quality of life in older adults. Psychological well being in older adults is also related to factors such as age, education, marriage, race and subjective health. (Levin, 1994)

Hossain (2004) in his study of elderly population in Bangladesh reported that for elucidating and predicting the aged characteristics, age and sex patterns, labour force participation, marital status, retirement age, home for elderly and social support are key factors in aged characteristics.

Jamuna, Lalitha and Ramamurti (2004) in a significant study examined the impact of widowhood on their psychosocial status. They reported that onset of widowhood for most of the older widows, leads to development of psychosocial problems and low self-esteem. The study indicated that the socio-economic status, age, and psychological health were the significant contributants to self-esteem of widows.

Patel (2003) studied the effect of institutionalised living on death anxiety and psychological well being of elderly. The results revealed that institutionalised living did not have any significant impact on death anxiety among elderly people. The institutionalised aged experienced poor sense of psychological well being than non-institutionalised aged. A significant negative correlation was observed between death anxiety and psychological well-being.

Sangeeta (2002) in her study on the Life Satisfaction and Values in Retired Women confirmed that well-adjusted retired women

emphasized values based on 'Personal Growth' as centrality of life satisfaction. Post-retirement work status was not a significant variable in determining the life satisfaction since both groups comprising working and non-working retired women emphasized close relationships and spiritual awareness as the dimensions of adjustment and life style activity. It is concluded that life satisfaction in retired people is a function of close family ties focus on spiritual growth, physical well being and involvement in greater number of social activities.

Srivastava and Sweta (2002) in their study on 'Effect of Living Arrangement and Gender Differences on Emotional Status and Self-Esteem of Older Aged Persons' confirmed the effect of living arrangement and gender differences on emotional states and self-esteem of old aged people. The results indicate that emotional states like anxiety, depression and guilt are more in old people living in institutions/ashrams. Living away from their children, family and relatives, economic insecurity, establishing living conditions or a sense of lost youth and approaching death are the major cause of emotional states in old institutionalised people. Gender differences were also found in this study. Old aged females suffer more from stress, depression, guilt and extraversion feelings. Findings also reveal that

the living arrangement of the aged was significantly related with the self-esteem of these subjects.

Mental health advantage of marriage had been confirmed in the study conducted by Strohschein, McDonough, Monette and Shao (2005). The study also reports that short term effects of moving into and out of marriage on psychological distress are similar for men and women.

The literature on subjective well-being among the elderly population assumes importance considering the fact that it encompasses the life time approach. In spite of the fact that lack of consensus on the definition of the underlying construct of well being has certainly proved to be a hindrance, a few researchers have attempted to explore well being, as a requisite of mental health.

Chen and Silverstein (2000) explored the relationship between intergenerational, 3039 older Chinese parents - findings revealed that providing instrumental social support to children and satisfaction with children directly improved elder parent's well-being. Well-being in late life is also significantly influenced by several externally generated factors such as social resources, income and negative life events. (Fry, 2000)

Gee (2000) examined role of living arrangements in quality of life in community dwelling elders. 830 persons were interviewed on three dimensions of quality of life-satisfaction, well-being, and social support, for living alone, with spouse, and intergenerational. Findings highlighted the importance of living arrangement and quality of life. Few differences were found for married persons but for widows especially females; quality of life want down significantly with decreasing support.

A longitudinal study conducted among older Australian women of the age 70+ (Lee and Russell, 2003) revealed the effects of physical activity on their emotional well being. It is reported that higher levels of physical activity associates with higher scores on emotional well being. Those who had made transition from some physical activity to none generally show more negative changes in emotional well being than those who had always been sedantary while those who maintained or adopted physical activity have shown better outcomes.

According to Oliver, Kolt and Schofield (2006) participation in regular, moderate, intensity, physical activity is related to a multitude of physical and psychological health benefits in older adults. Kalavar and Jamuna (2006) point out that older adults who are physically active have lower morbidity and mortality rates than inactive adults.

In a study on leisure time activities and adjustment among elderly, Asha (2001) reports that leisure activity participation facilitates home, health, self and general adjustment of the elderly people.

The effects of leisure time activities on life satisfaction in the pre-retirement and post-retirement periods for males and females was examined by Bharadwaj and Chadha (2005). The results revealed significant positive correlation between leisure time activities and life satisfaction. Ramamurti (1991) found self acceptance, self perception of health, self rating of ability in activities of daily living, belief in after death and karma philosophy is contributing to life satisfaction of the elderly. Gender is reported to play a significant role in life satisfaction by Chadha (1991).

Leitner and Leitner (2005) also point out that effective use of leisure time has a great impact on the physical and mental health of the individuals.

Chadha (1989) studied the impact of institutionalisation on the psychologicalwell-being. It was found that older people in institutions as compared to others are worse on psychological well-being and their depression level is high as compared to non-institutionalised older persons.

Impact of income, education, religion, family size, location of living etc. on problems of elderly women has been examined in a large number of studies. (Agnihotri, 1976; Atchley, 1976; Paintal, 1979; Ramamurti, 1970; Anantharaman, 1979, 1980; Kessler and Cleary, 1980; Oja, 1984) Sex is reported as having significant effect on elderly's adjustment and elderly males are found as experiencing more health problems, emotional and social problems than elderly females. It is also found that locality of living is not significantly related to elderly women's emotional and health problems as well as problems at home. However, rural elderly women are found to experience more problems of social adjustment than the urban elderly women. (Asha and Subrahmanian, 1990)

MENTAL HEALTH OF OLDER PEOPLE IN RELATION TO STRESSFUL LIFE EVENTS, ADJUSTMENT AND SOCIAL SUPPORT

Thesis submitted in partial fulfilment of the
requirements for the degree of
DOCTOR OF PHILOSOPHY in PSYCHOLOGY

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CHAPTER THREE
METHODOLOGY

SAMPLE

TOOLS USED

1. PERSONAL DATA SHEET
2. MENTAL HEALTH INVENTORY
3. PRESUMPTIVE STRESSFUL LIFE EVENT SCALE
4. ADJUSTMENT INVENTORY (SUBRAHMANIAN AND ASHA, 1989)
5. SOCIAL SUPPORT SCALE (ASHA, 1998)

Chapter III

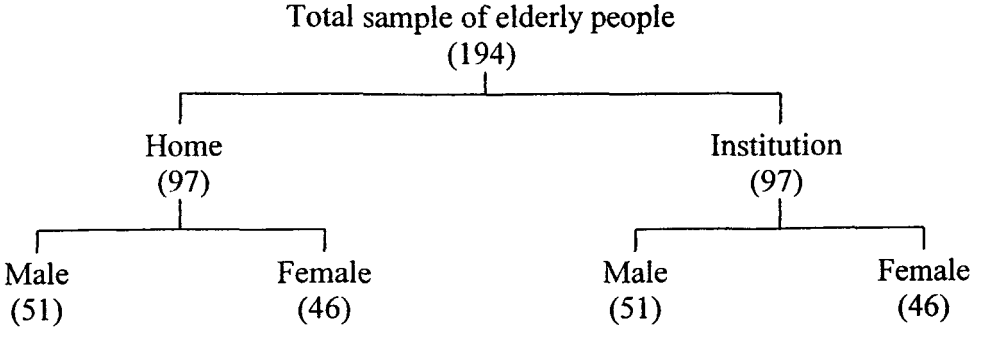
METHODOLOGY

This chapter provides a description of the sample of the study and the tools used for the collection of data. It also describes the standardisation of mental health inventory developed for use with the elderly people who serve as sample for the present study.

Sample

The sample for the present study consists of 194 elderly people of the age range 65 to 80. They include people from three institutions for the aged where they have spent a minimum of 3 to 5 years and homes in and around Calicut and Malappuram districts of Kerala. Institutionalised elderly include 51 males and 46 females and those from homes also include 51 males and 46 females.

Sample break-up



Care was taken to select elderly from rural and urban areas and from various religious groups so as to make the sample representative of the aged population in the districts from which the study sample was drawn.

Non-institutionalised people belong to middle socio-economic status families. To get a more or less matched group of institutionalised elderly, they were selected from old age homes having comparably good facilities and living conditions.

Multistage random sampling procedure was adopted to select the subject of the present study.

Tools Used

The following tools are used in the present study:

1. Personal Data Sheet
2. Mental Health Inventory
3. Presumptive Stressful Life Event Scale (PSLE-scale by Singh, Kaur and Kaur, 2002)
4. Adjustment Inventory (Subrahmanian and Asha, 1989)
5. Social Support Scale (Asha, 1998)

1. PERSONAL DATA SHEET

This is used to collect background information with respect to personal factors such as education, marital status, living conditions, occupation, locality of living, etc.

2. MENTAL HEALTH INVENTORY

Mental health is a condition of having a feeling of well being, a zest for living, a positive appraisal of oneself, a feeling that one has control over his/her environment and the capacity to develop and use one's potentials. Mental health is a crucial factor that influences individual's behaviour, performance and life satisfaction.

The Mental Health Inventory was prepared based on the recent research works carried out in different areas of Gerontology to assess the totality of mental equilibrium. The present scale includes items from six areas of mental health namely, self-evaluation, social orientation, personal integration, independence, environmental mastery and feeling of well being.

Preparation of the Preliminary Form

The present inventory is used as a measure of mental health of the elderly people.

Items for the inventory were constructed based on the information collected from community mental health centres, counselling and guidance climes, reported experiences of elderly as well as from research reports on the problems of elderly people. The items were phrased in such a way that the aged people could easily recognise the feelings described by the items. Thus a total of 65 items were prepared.

These items were given to a group of experts in the fields of Psychology, Sociology, Psychiatry and Geriatric Medicine. They were requested to comment/modify and/or suggest changes or new items as they thought appropriate. After taking into account the modifications/changes suggested by the experts, the result was an inventory containing 60 items. Of these 40 items were positive and 20 items were negative in nature. The positive statements were intermingled with negative statements to reduce the likelihood of response set occurring. An attempt was made to retain approximately the same number of items from each area included in the inventory.

The items in the inventory were written in Malayalam, the mother tongue of the subjects. The subjects were directed to indicate their responses in the five-point scale provided with the inventory. Specific instructions were given on the facing sheet of the inventory

itself. The subjects were requested to mark their responses by putting '✓' marks in the appropriate spaces provided in the five point scale in the inventory. The preliminary form of the inventory as given in appendix I.

Pilot Study Sample

The sample for the preliminary testing consisted of 382 older individuals in the age group of 60+ in and around Calicut and Malappuram districts of Kerala. It included 210 males and 172 females. Care was taken to make the sample representative of the aged population in the districts by including subjects from both sexes of the Hindu, Muslim and Christian communities, from different socio-economic groups as well as from rural and urban areas. A multistage random sampling procedure was employed for the selection of the sample.

Administration and Scoring

The test was administered individually. The subjects were tested from their own home, in most cases. Maximum effort was taken to avoid distraction and presence of others while testing. After establishing good rapport with the subject the bio data were collected as a first step. In the case of educated subjects whose reading and

writing abilities are not affected by aging the test booklets, answer sheets and pen are handed over. Then they were instructed as follows: "This is a test to see how you view the different kinds of statements offered to you. It is to see how far you agree with each statement and thereby to assess your mental health. There are 60 statements in this test. You have to read each statement carefully. If you agree with it, put a '✓' mark in the answer sheet given to you at the appropriate space in the five point scale provided. Please try to mark answers for all the statements and do not waste time pondering over any particular one. Your responses will be kept confidential. Please answer to the statements as you feel for the first instant."

In the case of illiterate subject, the information given by him/her was marked on the answer sheet by the investigator. Here, after establishing good rapport, the general information about the test was given. An interview with a slow and steady way of reading out the statements in the inventory was adopted. The answers were properly recorded.

Scoring of the items was done using scoring keys. There are five alternate responses such as 'always correct', 'often correct', 'occasionally correct', 'rarely correct' and 'wrong' with scores 4, 3, 2, 1, and 0 for each item. Negative items are scored in the reverse order. A

high score indicates good mental health whereas a low score shows poor mental health for the full scale as well as in each measure (sub scale) of the MHI. The sum of scores in all the six-sub scale is considered as the score for general mental health.

Item Analysis and Item Selection

In the present study from among 382 answer sheets a total of 370 answer sheets were taken for item analysis purpose. The extra answer sheets were discarded by picking out answer sheets at random. Then the item analysis was done following the procedure suggested by Ebel (1972). The items having the discrimination index of 0.16 and within the difficulty indices range of 0.25 to 0.80 were included in the final form of the inventory. (Mathew, 1982) Details of item selection are given in appendix II.

Mental Health Inventory - Final Form

44 out of 60 items in the preliminary form were retained in the final form of the Mental Health Inventory (appendix III). A few sample items from the final form are: (1) I have confidence in me, (2) I have good relationship with neighbours.

The 44 items in the final form of Mental Health Inventory are arranged in the six areas of mental health is follows:

(i)	Self evaluation	8 items
(ii)	Social orientation	6 items
(iii)	Personal integration	8 items
(iv)	Independence	9 items
(v)	Environmental mastery	6 items
(vi)	Feeling of well being	7 items

Mental Health Inventory - Sub Scales

Concept Interpretation:

	Sub Scales		**Description**
1.	Self Evaluation	:	Belief in oneself - positive self concept - ability to manage effectively at times of crisis - sense of identity
2.	Social Orientation	:	Social commitment, concern for social and cultural values - ability to maintain warm, rewarding friendships - social sensitivity
3.	Personal Integration	:	Emotional simplicity - ability to deal with and solve problems and make use wise decisions - resistance to stress - having personal values - respectful of facts
4.	Independence	:	Autonomy in thinking and action - ability to manage things on their

			own - regulation from within - sense of individuality
5.	Environmental Mastery	:	Feeling off having control over one's own environment -respectful of rules and ability to adapt changes in the environment - good interpersonal relations - efficiency in problem solving, work and play
6.	Feeling of Well-being	:	Having zest for living - feeling of satisfaction and contentment - not being worried unnecessarily - keeping a well balanced mind amidst life problems - positive feeling and attitude towards self and others.

Reliability

Test-retest reliability, with an interval of two weeks between testing, for 33 older subjects of the age 55.67 is found to be 0.79. Odd-even reliability for a group of 36 elder adults of the age between 55-67 is 0.85.

Validity

Correlation coefficient, when the scores in the MHI, for 30 elderly with a mean age of 62.84, are correlated with their scores in PGI General Well-being Measure (Verma and Verma, 1989) is 0.84.

The reliability and validity coefficients of the inventory indicate that its items are consistent and reasonably dependable for the purpose for which it is used.

3. PRESUMPTIVE STRESSFUL LIFE EVENT SCALE

This scale is a Malayalam translated version of the Presumptive Stressful Life Event Scale (PSLE Scale) by Singh, Kaur and Kaur (2002). It assesses individual's responses to stressful life events.

PSLE Scale consists of 51 items comprising personal, impersonal, desirable, undesirable and ambiguous events.

Administration and Scoring

PSLE sale was administered individually. Scoring was done as per the directions given in the manual. A high score is regarded as an index of high stress.

Reliability and Validity

PSLE scale in English was translated to Malayalam by an expert in both languages. Then the Malayalam scale was re-translated to English by another expert. Further, a third expert had compared the Malayalam and English versions with the original scale. Since no change in the meaning/content was noticed in the translated versions,

it is concluded that the Malayalam version retains the quality of the original sale and hence reliable for use in the present study to assess stress.

Stability coefficient, with an interval of 3 months in between testings, is found to be 0.67.

Efficacy of the scale to differentiate between subjects who are highly stressful and less stressful is taken as an index of its validity. When PGI Health Questionnaire - N2 by Verma and Wig (1976) was used as a measure of health status it was found that subjects with high neuroticism score experience significantly greater stress (mean = 55.30; SD = 20.15) than those with low neuroticism score (mean = 40.00; SD =8.63). Significance of the difference in mean stress scores at 0.01 level with a t-value of 2.78 shows that the scale is capable of discriminating people based on their level of stress.

4. ADJUSTMENT INVENTORY (Subrahmanian and Asha, 1989)

This inventory assesses the nature and extent of day to day adjustment of the elderly. It consists of 66 items related to five areas of adjustment namely home, social, emotional, personal and health adjustment.

Administration and Scoring

The inventory was administered individually. Each subject was tested at his/her residence or at the institution where he/she stays. Scoring was done with the help of scoring keys.

A high score in each area is indicative of good adjustment in that area whereas a low score is indicative of poor adjustment. The total of the scores in all the 5 areas will give a composite score of general adjustment. Here also a high score shows good general adjustment and low score shows poor general adjustment.

Reliability

Reliability of the inventory was found by test-retest as well as split-half method. Test-retest reliability is 0.95. Split-half reliability reported is 0.77.

Validity

Validity was ascertained by correlating the scores in the Adjustment Inventory with those in the English version of Adjustment Inventory by Ramamurti (1978). The correlation coefficient obtained is 0.73.

5. SOCIAL SUPPORT SCALE (Asha, 1998)

Social support scale is used to measure perceived social support. It assesses seven relational provisions, namely, attachment, social integration, reassurance, reliable alliance, guidance and opportunity for nurturance as identified by Weiss (1974) and provision for psychological safety.

All these provisions are needed for individuals to feel adequately supported and to avoid loneliness, although different provisions may be most crucial at different stages of life cycle. Each of these provisions may be obtained from a particular kind of relationship, but multiple provisions may be obtained from the same source. The seven relational provisions in social support scale are;

1. Attachment: A sense of emotional closeness and security usually provided by a spouse or lover.
2. Social integration: A sense of belonging to a group of people who share common interests and recreational activities - usually obtained from friends.
3. Reassurance of worth: Acknowledgement of one's competence and skill - usually obtained from co-workers.

4. Reliable alliance: The assurance that one can count on others for assistance under any circumstances usually obtained from family members.
5. Guidance: Advice and information usually obtained from teachers, masters, or parent figures.
6. Opportunity for nurturance: A sense of responsibility for the well being of another - usually obtained from one's children.
7. Psychological safety: A sense of belief in God or divine power.

Administration and Scoring

The SS Scale can be administered individually or in group. The measure asks the subject to rate the degree to which they perceive their social relationships are currently supplying each of the provisions. Each provision is assessed by four items, two that describe the presence and two that describe the absence of the provisions. The subjects are to indicate on a 4-point scale, ranging from 'completely true' to 'not at all true', the extent to which each statement describes their current relationships.

For the scoring purposes the negative items are reversed and summed together with the positive items to form a score for each social provision. Total social support perception score is derived by summing the seven individual provision score.

Reliability and Validity

The internal consistency for the total score was fairly high ranging from 0.81 to 0.90 across a variety of samples tested.

Odd-even reliability of the full scale was established as 0.86.

Validity coefficient of the full scale was assessed by correlating the scores on the Social Support scale with those on Perception of Community Support Inventory (Subrahmanian and Asha, 1989) The correlation coefficient was found as 0.90.

MENTAL HEALTH OF OLDER PEOPLE IN RELATION TO STRESSFUL LIFE EVENTS, ADJUSTMENT AND SOCIAL SUPPORT

Thesis submitted in partial fulfilment of the
requirements for the degree of
DOCTOR OF PHILOSOPHY in PSYCHOLOGY

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CHAPTER FOUR
RESULTS AND DISCUSSION

PART A

Mental Health Measures in Relation to Life Event Stress, General Adjustment and Perception of Social Support

PART B

Mental Health Measures by

(i) Living Arrangement, Sex, Life Event Stress
(ii) Living Arrangement, Sex, General Adjustment, and
(iii) Living Arrangement, Sex, Perception of Social Support

PART C

Mental Health Measures and Personal Demographic Factors

Chapter IV

RESULTS AND DISCUSSION

The hypotheses formulated are tested applying different statistical techniques such as correlational analysis, analysis of variance (3 way) and t-tests. Data are analysed using Statistical Package for Social Sciences (SPSS).

The results are interpreted and discussed in the following pages. The results are presented in three parts:

Part A : Mental Health measures in relation to Life Event Stress, General Adjustment and Perception of Social Support.

Part B : Mental Health measures by (i) Living Arrangement, Sex and Life Event Stress, (ii) Living Arrangement, Sex and general Adjustment, and (iii) Living Arrangement, Sex and Perception of Social Support.

Part C : Mental Health measures and Personal - Demographic Factors.

PART A

As a first step in the analysis the association between dependent variables i.e., mental health status and related measures and independent variables like Life Event Stress, general Adjustment and Perception of Social Support are tested through correlation. The data collected from the total of sample of 194 elderly are used for this purpose. The results are presented in Table 1.

Table 1
Showing the correlated coefficients of Mental Health and its related measures to Life Event Stress, general Adjustment and Perception of Social Support

Dependent Variables	Independent Variables		
	Life Event Stress	General Adjustment	Perception of Social Support
Self evaluation	-0.08	0.22**	0.20**
Social orientation	0.02	0.20**	0.27**
Personal integration	-0.15*	0.06	0.17*
Independence	-0.10	0.21**	0.26**
Environmental Mastery	-0.02	0.26**	0.31**
Feeling of well being	-0.11	0.35*	0.34**
Mental Health	-0.11	0.30**	0.36**

** Significant at 0.01 level * Significant at 0.05 level

The results given in Table 1 show that none of the correlations between each of the mental health measures and life event stress except that between stress and personal integration are significant. Positive but negligible correlation is seen between stress and social

orientation. Correlations are low and negative with respect to general mental health, self evaluation, independence, environmental mastery and feeling of well being. The results reveal that high stress lower personal integration significantly. The results also show that high level of stress leads to poor mental health. Though not significant, the negative correlations obtained suggest that as the stress increases elderly's self evaluation, and social orientation are adversely affected. Increased stress seems to reduces elderly's ability to think and act independently, ability to deal with problems and feeling of well being. This ultimately may result in a number of mental health problems.

The correlation coefficients obtained between mental health measures and general adjustment indicate positive and significant relationship of mental health to general adjustment. Personal integration does not seem to relate to general adjustment. But, the results show significant relationship of general adjustment to general mental health and other measures of mental health like self evaluation, social orientation, independence, environmental mastery and feeling of well being. This suggests that good adjustment is a potent factor that leads to improvement in mental health status of the elderly.

The results in Table 1 reveal perception of social support as positively and significantly related to general mental health and other related measures namely, self evaluation, social orientation, personal integration, independence, environmental mastery and feeling of well being. The results suggest that better the elderly's perception of the social support they receive, the better will be their general mental health. As they perceive the social support as good, their self evaluation, social orientation and personal integration improves. This is also likely to lead to improvement in independence, environmental mastery as well as feeling of well being.

From the results it may be inferred that mental health of elderly is significantly and positively related to general adjustment and perception of social support. Good adjustment and better perception of social support are likely to facilitate mental health. However, high level of stress is a factor detrimental to the mental health of the elderly people.

The first hypothesis that 'general mental health status and its different measure are significantly related to life event stress, general adjustment and perception of social support' is partially accepted.

The results are in line with the findings reported by Curtis et al. (2004). They emphasize that higher perceived stress and lower social support associate with poor psychological well being. Studies by Rozzine (1996), Schulze and Williamson (1993), Smallegan (1989), Ramamurti (1996), Ramamurti and Jamuna (1984, 1992) are supportive of the present results. Studies by Asha (1991), Fokkema (2002) and Anna and Asha (2006) also support the findings and they suggest beneficial effects of social support on mental health.

PART B

After establishing the relationship of mental health and its different measures to elderly's life event stress, general adjustment and perception of social support, the next step in the analysis of data is to further substantiate this relationship and to assess the status of general mental health and related measures among different groups of elderly. For this purpose the total sample is divided by living conditions, sex and each of the psychological variables namely life event stress, general adjustment and social support. Then analysis of variance (3-way) was performed to test independent effect of living conditions, sex, life event stress, general adjustment and perception of social support as well as combined effects of these factors on mental health and each of its sub-scales such as Self Evaluation; Social

Orientation, Personal Integration, Independence, Environmental Mastery and Feeling of Well Being. In cases where F-ratios are significant, t-test for independent samples is applied to examine the significance of difference in the mean scores of the groups compared.

The results of analysis of variance (3-way) are presented and discussed in three sections (i), (ii) and (iii).

(i) ANOVA (3-way) of the scores on different mental health measures by living arrangement, sex and life event stress,

(ii) ANOVA (3-way) of the scores on different mental health measures by living arrangement, sex and general adjustment, and

(iii) ANOVA (3-way) of the scores on different measures of mental health by living arrangement, sex and perception of social support.

Mental Health by
Living Arrangement
Sex
Life Event Stress

Summary of ANOVA presented in Table 2 show that living arrangement has no significant effect on self evaluation of the elderly people. Male-female status also does not influence self-evaluation. A similar trend is seen with respect to life event stress also. Stressful life events also have no significant effect on self evaluation of the elderly.

Table 2
Summary of ANOVA (3-way) of the scores on Self Evaluation

Source of Variation	Sum of squares	df	Mean sum of squares	F value
Living arrangement	9.56	1	9.56	0.38
Sex	10.51	1	10.51	0.42
Life event stress	24.78	2	12.39	0.49
Living arrangement X sex	0.49	1	0.49	0.02
Living arrangement X Life event stress	2.27	2	1.13	0.05
Sex X Life event stress	3.66	2	1.83	0.07
Living arrangement X sex X Life event stress	133.19	2	66.59	2.66
Residual	4561.41	182	25.06	
Total	**4743.81**	**193**	**24.58**	

Combined effects of living arrangement X sex, living arrangement X life event stress as well as that of sex X life event stress are also not significant on self-evaluation of the elderly people.

Similarly effect of living arrangement X sex X life event stress is also found as not influencing self-evaluation of the aged people.

The results show that different groups of elderly are homogeneous with respect to self-evaluation. Institution dwelling and home dwelling elderly do not differ in self-evaluation. Similarly males and females do not differ. Again elderly with high stress, moderate stress and low stress also do not differ among themselves with respect to their self-evaluation. Different combinations of these three factors also do not influence self-evaluation of the elderly group.

Table 3
Summary of ANOVA (3-way) of the scores on Social Orientation

Source of Variation	Sum of squares	df	Mean squares	F value
Living arrangement	21.70	1	21.70	1.37
Sex	27.57	1	27.57	1.74
Life event stress	53.19	2	26.60	1.68
Living arrangement X sex	14.44	1	14.44	0.91
Living arrangement X Life event stress	16.33	2	8.17	0.52
Sex X Life event stress	49.40	2	24.70	1.56
Living arrangement X sex X Life event stress	40.85	2	20.42	1.29
Residual	2887.58	182	15.87	
Total	**3122.06**	**193**	**16.18**	

Summary of ANOVA (Table 3) shows that living arrangements (institution/home), sex and life event stress have no significant effect on social orientation of the mental health scale.

2-way interaction effects for living arrangement and sex, living arrangement and life event stress as well as that of sex and life event stress are also not significant on social orientation.

The results also indicate that combined effect of living arrangement, sex and life event stress is also not significant on social orientation.

The results reveal that elderly from old age institutions and home do not differ in social orientation. Male and female elderly show a similar trend. Life event stress levels experienced by elderly also do not influence their social orientation. Different sub groups of elderly people, based on their combined standing on living arrangement, sex and life event stress, are found homogeneous with regard to social orientation.

Table 4

Summary of ANOVA (3-way) of the scores on Personal Integration

Source of Variation	Sum of squares	df	Mean squares	F value
Living arrangement	210.42	1	210.42	6.50*
Sex	41.33	1	41.33	1.28
Life event stress	15.97	2	7.98	0.25
Living arrangement X sex	393.49	1	393.49	12.16**
Living arrangement X Life event stress	9.88	2	4.94	0.15
Sex X Life event stress	9.19	2	4.59	0.14
Living arrangement X sex X Life event stress	3.82	2	1.91	0.06
Residual	5888.02	182	32.35	
Total	**6575.34**	**193**	**34.07**	

** Significant at 0.01 level * Significant at 0.05 level

The results (summary of ANOVA 3-way) given in Table 4 indicate significant effect for living arrangement on personal integration of the mental health scale. However sex and life event stress have no significant effect on personal integration.

With respect to 2-way interaction living arrangement and sex seem to have a significant effect on personal integration. But combined effects for living arrangements X life event stress and that for sex X life event stress are not significant on personal integration. Further, effects for living arrangements X sex X life event stress is also not significant on personal integration of the elderly people.

The results show that male-female status and stress levels have no influence on elderly's personal integration. The results also suggest that institutionalised males and females as well as male and female elderly from home having high, moderate, and low stress level do not differ among themselves with respect to their personal integration.

Table 5

Means, SDs and t-values of the scores on Personal Integration of the different groups of elderly (main effects and 2-way interaction effects of living arrangement X sex)

Sl. No.	Groups	No	Means	SDs	Groups compared	df	t-value
1.	Home	97	18.53	6.02	1 & 2	192	2.54*
2.	Institution	97	20.63	5.48			
1.	Home - male	51	20.31	5.81	1 & 2	100	1.65
2.	Home female	51	16.54	5.68	3 & 4	90	2.23*
3.	Institution - male	46	19.76	5.18	1 & 3	95	0.50
4.	Institution - female	46	21.59	5.70	2 & 4	95	4.25**

** Significant at 0.01 level * Significant 0.05 level

The results of t-test presented in Table 5 show that elderly people from home and institution differ significantly at 0.05 level with respect to their personal integration. Elderly males are found to be more personally integrated than their female counterparts.

A comparison of elderly women from home and institution show that the two groups differ significantly (0.01 level) on personal

integration. Institutionalised women are found to have more personal integration than those from home.

A similar trend is evident in the case of elderly men from home and institution. The t-value obtained is significant at 0.05 level. Institutionalised males are found better personally integrated than elderly from home.

However, groups of elderly men from home and institution do not seem to differ from each other in personal integration. Similarly elderly men from home and women from home also do not differ in personal integration. These groups of elderly are similar with respect to their ability to deal with problems and stress and in emotional maturity.

The results suggest that elderly living in old age institutions are better personally integrated than those from home i.e., institutionalised elderly show more emotional stability, ability to deal with stress, solve problems and manage things in a better way than the elderly living with their families. This result may be interpreted in terms of the environmental demands put on the elderly. In institutions the elderly people are expected to manage their affairs on their own so long as they are capable of it. This is likely to make them self reliant

and able to face and solve problems independently and thus helps them to become more integrated personally.

Table 6
Summary of ANOVA (3-way) of the scores on Independence

Source of Variation	Sum of squares	df	Mean squares	F value
Living arrangement	182.83	1	182.83	4.78*
Sex	27.47	1	27.47	0.72
Life event stress	36.76	2	18.38	0.48
Living arrangement X sex	0.59	1	0.59	0.02
Living arrangement X Life event stress	96.33	2	48.16	1.26
Sex X Life event stress	13.27	2	6.34	0.17
Living arrangement X sex X Life event stress	5.74	2	2.87	0.08
Residual	6966.18	182	38.28	
Total	**7342.74**	**193**	**38.05**	

* Significant at 0.05 level

The summary of ANOVA (3-way) is presented in Table 6. The results show that there is significant effect for living arrangement on independence of the elderly. But sex and life event stress have no effect on this measure of mental health.

No significant effect is obtained for the interaction of living arrangement and sex, living arrangement and life event stress and sex and life event stress on independence.

Combined effect of living arrangement X sex X life event stress is also not significant on independence.

The results reveal that institutionalisation does influence independence of the elderly. But male-female status does not influence this mental health measure. Level of stress also has no influence on independence.

Further, interrelatedness of living arrangement, sex and life event stress also do not contribute to independence of elderly people.

Table 7

Means, SDs and t-values of the scores on Independence of the different groups of elderly from home and institution (main effects)

Groups	No.	Means	SD	df	t-value
Home	97	22.65	6.87	192	2.26*
Institution	97	24.63	5.23		

* Significant at 0.05 level

The results of t-test for independence sample (Table 7) indicate that the difference in mean scores of independence between groups of elderly from home and institution is significant at 0.05 level. The mean scores show that elderly from old age institutions show more independence in thinking, action and in managing their affairs and show a sense of individuality and more self-regulation compared to their counterparts from home. One possible reason for this may be the demands of the environment in which they live. Institutional life

requires skills to manage themselves. This might have contributed to autonomy found among the institutionalised elderly.

Table 8

Summary of ANOVA (3-way) of the scores on Environmental Mastery

Source of Variation	Sum of squares	df	Mean squares	F value
Living arrangement	4.76	1	4.76	0.21
Sex	76.66	1	76.66	3.35*
Life event stress	27.57	2	13.79	0.60
Living arrangement X sex	13.93	1	13.93	0.61
Living arrangement X Life event stress	79.13	2	39.57	1.73
Sex X Life event stress	97.52	2	48.76	2.13
Living arrangement X sex X Life event stress	63.39	2	31.69	1.39
Residual	4161.82	182	22.87	
Total	**4527.61**	**193**	**23.46**	

* Significant at 0.05 level

Summary of analysis of variance (ANOVA 3-way) is presented in Table 8. The results indicate significant effect of sex on environmental mastery. Effects of living arrangement and life event stress are not found significant on environmental mastery.

The results also show that interaction effects of living arrangement X sex, living arrangement X life event stress as well as that for sex X life event stress are not significant on environmental mastery. Further, it seems that combined effects of living arrangement, sex and life event stress on environmental mastery is also not significant.

Table 9

Means, SDs and t-values of the scores on environmental mastery for elderly men and women (main effects)

Groups	No.	Means	SD	df	t-value
Male	102	14.20	4.59	192	1.71***
Female	92	15.38	5.06		

*** significant at 0.10 level

Form the Table 9 it is evident that male-female status of the elderly influences their environmental mastery to some extent. The t-value obtained is found significant only at 0.10 level. The elderly females seem to have a higher mean score compared to elderly males. This shows that females are more able to adapt to changes in the environment and have better interpersonal relations and feeling of having some control over their environment than the elderly males.

Table 10

Summary of ANOVA (3-way) of the scores on Feeling of Well Being

Source of Variation	Sum of squares	df	Mean squares	F value
Living arrangement	303.68	1	303.68	10.55**
Sex	16.16	1	16.16	0.56
Life event stress	3.53	2	1.77	0.06
Living arrangement X sex	0.03	1	0.03	0.00
Living arrangement X Life event stress	10.18	2	5.09	0.18
Sex X Life event stress	12.74	2	6.37	0.22
Living arrangement X sex X Life event stress	1.51	2	0.75	0.03
Residual	5238.10	182	28.78	
Total	**5585.94**	**193**	**28.94**	

** Significant at 0.01 level

The results in Table 10 reveal significant effect for living arrangement on feeling of well being. But effects for sex and life event stress are not found significant on feeling of well being.

No significant effect for interaction of living arrangement and sex, living arrangement and life event stress as well as sex and life event stress is evident in the present results.

Interaction effects for living arrangement X sex X life event stress is also not significant on feeling of well being of the elderly people.

Table 11
Means, SDs and t-values of the scores on Feeling of Well Being of elderly from home and institution (main effects)

Groups	No.	Means	SD	df	t-value
Home	97	18.56	5.92	192	3.33**
Institution	97	21.06	4.47		

** Significant at 0.01 level

The means, SDs and t-values of the scores on feeling of well being for elderly from home and institution (Table 11) show that the two groups of elderly differ significantly on this measure of mental health. Mean scores show that elderly from institution have a higher score than those from home. This indicates that institutionalised elderly have a better feeling of well being than elderly living with

family. The institutionalised elderly seem to have a positive feeling towards themselves and others, a zest for living and not worried unnecessarily. The findings may be interpreted in terms of the conditions prevailing in modern families. Grown up children having their own families, looked up on their aged parents as a 'burden'. Elderly in such families consider themselves as unwanted and rejected by their children. This adds to their misery and adversely affects their feeling of well-being. Unlike these people, those in institutions may be more relaxed and less worried and this may enhance their feeling of well being.

Table 12
Summary of ANOVA (3-way) of the scores on general Mental Health (Mental Health - Total Scores)

Source of Variation	Sum of squares	df	Mean squares	F value
Living arrangement	3118.95	1	3118.95	6.36**
Sex	23.99	1	23.99	0.049
Life event stress	302.63	2	151.31	0.31
Living arrangement X sex	876.19	1	876.19	1.79
Living arrangement X Life event stress	495.77	2	247.88	0.51
Sex X Life event stress	324.34	2	162.17	0.33
Living arrangement X sex X Life event stress	807.69	2	403.85	0.82
Residual	89207.44	182	490.15	
Total	**95227.51**	**193**	**493.41**	

** Significant at 0.01 level

Summary of ANOVA (3-way) of the scores on general mental health (Total Score for Mental Health) is presented in Table 12. The results indicate significant effect at 0.01 level for living arrangement on general mental health. Effects for sex and life event stress are not significant on general mental health.

Combined effects for living arrangement and sex, living arrangement and life event stress, sex and life event stress as well as for living arrangement, sex and life event stress are not significant on general mental health of elderly people.

Table 13
Means, SDs and t-values on general Mental Health scores of elderly from home and institutions

Groups	No.	Means	SD	df	t-value
Home	97	108.06	24.90	192	2.58*
Institution	97	116.17	18.41		

* Significant at 0.01 level

The results suggest the influence of living arrangement on general mental health of the aged. The means, SDs and t-values given in Table 13 show that group of elderly from home and institution differ significantly on general mental health. It is found that institutionalised elderly are more mentally healthy than those from home.

The results obtained with respect to measure of mental health such as personal integration, independence and feeling of well being bear evidence for better standing of institutionalised elderly on these measures when compared elderly living with their family. As they are more integrated personally, more autonomous to manage things, and having a zest for living and positive attitude towards life, it may be assumed that they are more able to face and deal with stresses and strains in life. This might have contributed to and facilitated their general mental health.

The second hypothesis that 'living conditions, sex and life event stress of the elderly, independently as well as in combination, influence their mental health and its different measures' is partially accepted.

The present findings are contrary to the findings reported by Srivastava and Sweta (2002), Patel (2003) and Chadha (1989). Srivastava and Sweta report more anxiety, depression, guilt and low self-esteem in institutionalised aged. Patel (2003) in contrast to the present findings, report that institutionalised aged experience poor sense of psychological well being than non-institutionalised aged. According to Chadha (1989) institutional dwelling elderly are worse in psychological well being and high in depression.

Section (ii)

Mental Health by
Living Arrangement
Sex
General Adjustment

Results of analysis of variance of the scores on mental health measures by living arrangement, sex and general adjustment are discussed in the following pages.

Table 14
Summary of ANOVA (3-way) of the scores on Self Evaluation

Source of Variation	Sum of squares	df	Mean squares	F value
Living arrangement	14.49	1	14.49	0.60
Sex	9.51	1	9.51	0.39
General adjustment	149.06	2	74.53	3.08*
Living arrangement X sex	8.37	1	8.37	0.35
Living arrangement X general adjustment	42.94	2	21.47	0.89
Sex X general adjustment	31.89	2	15.95	0.66
Living arrangement X sex X general adjustment	77.16	2	38.58	1.59
Residual	4409.12	182	24.23	
Total	**4743.81**	**193**	**24.58**	

* Significant at 0.05 level

The summary of ANOVA (Table 14) show no significant effect for living arrangement and sex on self-evaluation measure of mental health. But, significant effect for general adjustment at 0.05 level is observed with respect to self-evaluation of the elderly.

Two way interactions for living arrangements and sex, living arrangements and general adjustment as well as sex and general adjustment are not significant. Combined effects for living arrangement, sex and general adjustment are also not significant on self evaluation.

Table 15

Means, SDs and t-values of the scores on Self Evaluation of the different groups of elderly (main effects)

Sl. No.	Groups	N	Means	SDs	Groups compared	df	t-value
1	Less adjusted	37	17.19	4.52	1 & 2	159	0.58
2	Moderately adjusted	124	17.71	4.92	1 & 3	68	2.24*
3	Better adjusted	33	19.82	5.28	2 & 3	155	2.16*

* Significant at 0.05 level

The results of t-test presented in Table 15 indicate that there are significant differences between better adjusted and moderately adjusted as well as between better adjusted or less adjusted elderly people on self-evaluation. Better adjusted group of elderly seems to have a more positive self-evaluation than the moderately adjusted and less adjusted groups. However, no difference is noted between poorly adjusted and moderately adjusted groups. This shows the similarity of these two groups with respect to their self-evaluation.

The results suggest that as a group better adjusted elderly have positive self-concept, belief in themselves and sense of identity and they are able to manage themselves more effectively in the times of crises than the moderately and less adjusted groups.

Table 16
Summary of ANOVA (3-way) of the scores on Social Orientation

Source of Variation	Sum of squares	df	Mean squares	F value
Living arrangement	27.43	1	27.43	1.71
Sex	24.36	1	24.36	1.52
General adjustment	55.16	2	27.58	1.72
Living arrangement X sex	33.94	1	33.94	2.12
Living arrangement X general adjustment	15.87	2	7.94	0.50
Sex X general adjustment	14.28	2	7.14	0.45
Living arrangement X sex X general adjustment	26.59	2	13.30	0.83
Residual	2914.87	182	16.02	
Total	**3122.06**	**193**	**16.18**	

The results given in Table 16 reveal no significant effects for living arrangement, sex and general adjustment on social orientation of the elderly .

Again, there is no significant effect for living arrangement and sex, living arrangement and general adjustment as well as for sex and general adjustment on social orientation measure of mental health.

Further, combined effects for living arrangement, sex and general adjustment are also not significant on social orientation.

Table 17
Summary of ANOVA (3-way) of the scores on Personal Integration

Source of Variation	Sum of squares	df	Mean squares	F value
Living arrangement	245.86	1	245.86	8.32**
Sex	53.98	1	53.98	1.83
General adjustment	78.55	2	39.28	1.33
Living arrangement X sex	294.11	1	294.11	9.95**
Living arrangement X general adjustment	149.77	2	74.88	2.53
Sex X general adjustment	171.81	2	85.91	2.91
Living arrangement X sex X general adjustment	92.57	2	46.29	1.57
Residual	5381.38	182	29.57	
Total	**6575.34**	**193**	**34.07**	

** Significant at 0.01 level

Table 17 presents the results of analysis of variance (3-way) of the scores on personal integration measure of mental health in relation to living arrangement, sex and general adjustment of the elderly people. The results indicate that living arrangement has a significant (0.01 level) effect on personal interaction. However, no significant effects for sex and general adjustment is obtained for personal integration.

The interaction effects for living arrangement and sex on personal integration are found significant at 0.01 level. But, no significant effects are seen for living arrangement and general adjustment as well as for sex and general adjustment.

Table 18

Means, SDs and t-values for the scores on Personal Integration for the elderly from home and institution (main effects)

Sl.No.	Groups	No.	Means	SDs	df	t-value
1.	Elderly - Home	97	18.53	6.02	192	2.54*
2.	Elderly - Institution	97	20.63	5.48		

* Significant at 0.05 level

The Table 18 shows interaction of living arrangement and sex as significant on personal integration. An examination of the results indicate that groups of elderly female, from home and institution differ significantly from each other on personal integration. Elderly females from institution seem better in personal integration than their counterparts at homes. Again, males and females from home seem to differ significantly on personal integration. Compared to females, group of males appear as more personally integrated. All the other groups such as males from home and institution, males and females from institutions are found homogenous with respect to personal integration.

Table 19

Means, SDs and t-values of the scores on Personal Integration of the different groups of elderly (2-way interaction of living arrangement and sex)

Groups	No.	Means	SDs	Groups compared	df	t-value
Home - Male	51	20.31	5.81	1 & 2	100	0.50
Institution - Male	51	19.76	5.18	2 & 4	90	4.25**
Home - Female	46	16.54	5.68	1 & 3	95	3.23**
Institution - Female	46	21.59	5.70	2 & 4	95	1.65

** Significant at 0.01 level

From the results it is evident that institutionalized elderly women as well as elderly men residing with family are able to resist stress, are emotionally more stable, capable of making wise decisions and more able to deal with and solve problems.

Table 20

Summary of ANOVA (3-way) of the scores on Independence

Source of Variation	Sum of squares	df	Mean squares	F value
Living arrangement	240.85	1	240.85	7.33**
Sex	25.93	1	25.93	0.79
General adjustment	491.67	2	245.84	7.49**
Living arrangement X sex	2.73	1	2.73	0.08
Living arrangement X general adjustment	419.27	2	209.63	6.38**
Sex X general adjustment	42.82	2	21.41	0.65
Living arrangement X sex X general adjustment	214.70	2	107.35	3.27*
Residual	5976.99	182	32.84	
Total	**7342.74**	**193**	**38.05**	

** Significant at 0.01 level * Significant at 0.05 level

Summary of ANOVA (3-way) in Table 20 shows that there are significant effects for living arrangement and general adjustment on independence of the elderly. Sex seems to have no significant effect for this mental health measure. This indicates that type of elderly's living arrangement and level of their general adjustment are likely to influence independence measure of mental health.

Table 21
Means, SDs and t-values of the scores on Independence of the different groups of elderly (main effects)

Sl. No.	Groups	No	Means	SDs	Groups compared	df	t-value
1.	Elderly - Home	97	22.65	6.87	1 & 2	192	2.26*
2.	Elderly - Institution	97	24.63	5.23			
1.	Less adjusted	37	22.43	6.72	1 & 2	159	0.61
2.	Moderately adjusted	124	23.13	5.97	1 & 3	68	3.07**
3.	Better adjusted	33	26.91	5.31	2 & 3	155	3.31**

** Significant at 0.01 level * Significant at 0.05 level

The results provided in Table 21 reveal that groups of elderly from homes and institutions differ significantly with each other on independence. Institutionalized elderly are found as more independent than those residing with family at their homes.

When less adjusted, moderately adjusted and better adjusted groups of elderly are compared on independences, it is found that better adjusted groups differ from moderately adjusted and less

adjusted groups. In both instances the better adjusted group of elderly is found superior to the other two groups in independence.

No significant difference is seen between less adjusted and moderately adjusted groups, indicating homogeneity of these two groups with respect to independence.

The results suggest better adjusted elderly as autonomous in thinking and action and able to manage things on their own.

Summary of analysis of variance (Table 20) indicates 2-way interaction effects for living arrangement and general adjustment on independence. The results of t-test are presented in Table 22.

Table 22

Means, SDs and t-values of the scores on Independence of the different groups of elderly (2-way interaction of living arrangement X general adjustment)

Sl. No.	Groups	No	Means	SDs	Groups compared	df	t-value
1	Home - Less adjusted	21	19.00	5.87			
2	Home - Moderately adjusted	56	22.27	6.49	1 & 2	75	2.02*
					1 & 3	39	4.50*
3	Home - Better adjusted	20	27.55	6.31	2 & 3	74	3.15**
					4 & 5	82	2.08*
4	Institution - Less adjusted	16	26.94	4.93	4 & 6	27	0.64
					5 & 6	79	1.33
5	Institution - Moderately adjusted	68	23.84	5.45	1 & 4	35	4.36**
					2 & 5	122	1.47
6	Institution - Better adjusted	13	25.92	3.23	3 & 6	31	0.86

** Significant at 0.01 level * Significant at 0.05 level

The means, SDs and t-values show the significance of difference in mean scores of the different groups of elderly in terms of the combined effects of living arrangement and general adjustment. The results show highly significant difference in mean independence scores of better adjusted and moderately adjusted groups of elderly from homes. In both cases the former seems more independent than the latter groups. Less adjusted elderly from home also differ significantly from their moderately adjusted counterpart in independence and the moderately adjusted groups is found more independent than the other groups of elderly.

Less adjusted institutionalized elderly seem to differ significantly from the moderately adjusted institutionalized elderly, the former group being more independent than the latter group. However, no significance is noticed in the difference in mean independent scores between better adjusted and less adjusted as well as between better adjusted and moderately adjusted groups of institutionalized elderly people.

A similar trend is observed in the mean scores of moderately adjusted groups from home and institutions and those of better adjusted from home and institution. These groups are found more or less similar with respect to independent measures of mental health.

The results also reveal that less adjusted groups of elderly from home and institution seem to differ significantly in independence. Comparison of mean scores show that those from institution have a higher score of independence suggesting their superiority with respect to autonomy in thinking and action, sense of individuality and ability to manage things on their own.

Results of t-test in respect of 3-way interactions effect for living arrangement, sex and general adjustment are shown in Table 23. An examination of the t-values indicate that better adjusted elderly males from home differ significantly (0.01 level) from moderately adjusted and less adjusted males from home in independence. Better adjusted group seems to have a higher mean score revealing a better standing of this group on independence than the other two groups.

In the case of females from home, better adjusted group is found as more independent than the moderately adjusted and less adjusted groups. The results show groups of better adjusted male and female elderly as better with regard to independence in thinking and action, capacity in managing their affairs and sense of individuality.

Table 23

Means, SDs and t-values of the scores on Independence of the different groups of elderly (3-way interaction of living arrangement X sex X general adjustment)

Sl. No.	Groups	No	Means	SDs	Groups compared	df	t-value
1.	Home - Male Less adjusted	13	20.00	3.61	1 & 2	41	0.56
					1 & 3	19	6.16**
2.	Home - Male Moderately adjusted	30	21.07	6.47	2 & 3	36	3.73**
					4 & 5	32	2.27*
3.	Home - Male Better adjusted	8	30.00	3.63	4 & 6	18	2.41*
					5 & 6	36	0.98
4.	Home - female Less adjusted	8	17.38	8.43	1 & 4	19	1.00
					2 & 5	54	1.51
5.	Home - female Moderately adjusted	26	23.65	6.34	3 & 6	18	1.46
					7 & 10	14	0.88
6.	Home - female Better adjusted	12	25.92	7.29	8 & 11	66	0.64
					9 & 12	11	1.42
7.	Institution - Male Less adjusted	3	24.67	8.62	1 & 7	14	0.92
					2 & 8	67	2.15*
8.	Institution - Male Moderately adjusted	39	24.21	5.39	3 & 9	15	2.91*
					4 & 10	19	3.17**
9.	Institution - Male Better adjusted	9	25.11	3.26	5 & 11	53	0.19
					6 & 12	14	0.74
10.	Institution - Female Less adjusted	13	27.46	4.05	7 & 8	40	0.09
					7 & 9	10	0.09
11.	Institution - Female Moderately adjusted	29	23.34	5.58	8 & 9	46	0.69
					10 & 11	40	2.53
12.	Institution - Female Better adjusted	4	27.75	2.63	10 & 12	15	0.17
					11 & 12	31	2.64

** Significant at 0.01 level * Significant at 0.05 level

The results in Table 23 also show that among the home dwelling males moderately adjusted and better adjusted groups differ significantly from their counterpart in institution on independence. Between moderately adjusted groups those from institutions are found more independent where as between better adjusted groups those

from home are found more independent. In the case of females less adjusted from home and institution differ significantly from each other in independence. Again elderly females from institution are comparably more independent than those from home. All the other groups compared show no significant difference with respect to independence.

Table 24

Summary of ANOVA (3-way) of the scores on Environmental Mastery

Source of Variation	Sum of squares	df	Mean squares	F value
Living arrangement	9.85	1	9.85	0.46
Sex	77.99	1	77.99	3.64*
General adjustment	380.18	2	190.09	8.87**
Living arrangement X sex	23.19	1	23.19	1.08
Living arrangement X general adjustment	17.54	2	8.77	0.41
Sex X general adjustment	42.89	2	21.44	1.00
Living arrangement X sex X general adjustment	85.91	2	42.96	2.01
Residual	3898.42	182	21.42	
Total	**4527.61**	**193**	**23.46**	

** Significant at 0.01 level * Significant at 0.05 level

Results of analysis of variance (3-way) (Table 24) for the scores on environmental mastery show significant effect for sex on this measure of mental health. Effect for general adjustment is also significant for environmental mastery. This shows that male-female

status and level of general adjustment of the elderly influence environmental mastery significantly.

Table 25

Means, SDs and t-values of the scores on Environmental Mastery

Sl. No.	Groups	No.	Means	SDs	Groups compared	df	t-value
1.	Male	51	14.20	4.64	1 & 2	95	1.62
2.	Female	46	15.72	4.60			
1.	Less adjusted elderly	16	14.19	4.67	1 & 2	82	0.37
2.	Moderately adjusted elderly	68	14.66	4.67	1 & 3	27	1.77***
3.	Better adjusted elderly	13	17.15	4.26	3 & 4	79	1.78***

*** Significant at 0.10 level

Table 25 presents the results of t-test. Males and females do not differ in environmental mastery. The results indicate better adjusted elderly as slightly superior to the moderately adjusted and less adjusted elderly. The difference in mean scores between the better adjusted and moderately adjusted as well as between the better adjusted and less adjusted groups of elderly is only at 0.10 level. The results suggest that compared to moderately and less adjusted groups, the better adjusted group of elderly slightly better in their ability to adapt to changes in their environment, to solve problems at work and play.

Table 26

Summary of ANOVA (3-way) of the scores on Feeling of Well Being

Source of Variation	Sum of squares	df	Mean squares	F value
Living arrangement	336.42	1	336.42	14.55**
Sex	21.45	1	21.45	0.93
General adjustment	561.96	2	280.98	12.15**
Living arrangement X sex	2.01	1	2.01	0.09
Living arrangement X general adjustment	174.76	2	87.38	3.78*
Sex X general adjustment	67.68	2	33.84	1.46
Living arrangement X sex X general adjustment	203.99	2	101.99	4.41*
Residual	4208.83	182	23.13	
Total	**5585.94**	**193**	**28.94**	

** Significant at 0.01 level * Significant at 0.05 level

Summary of ANOVA (3-way) presented in Table 26 show significant effects for living arrangement on feeling of well being. General adjustment also has significant effect on feeling of well being of elderly people. But sex of the elderly does not seem to have significant effect for this mental health measure.

With respect to 2-way interaction living arrangement and general adjustment seem to influence feeling of well being. The results also indicate that combined effects for living arrangement, sex and general adjustment is significant on feeling of well being.

The results of t-test are presented in Table 27. An examination of the means, SDs and t-values show that elderly from home and institution differ significantly in the mean scores on feeling of well being. The results suggest that institutionalized elderly are better than those from home with respect to feeling of well being. Institutionalized elderly seem to be more satisfied and having a zest for living, keeping a well balanced mind and positive feeling, in comparison with their peer group at home.

Table 27

Means, SDs and t-values of the scores on Feeling of Well Being of the different groups of elderly (main effects for living arrangement & general adjustment)

Sl. No.	Groups	No	Means	SDs	Groups compared	df	t-value
1.	Elderly - Home	97	18.56	5.92	1 & 2	192	3.33**
2.	Elderly - Institution	97	21.06	4.47			
1.	Less adjusted	37	17.43	6.49	1 & 2	159	2.34*
2.	Moderately adjusted	124	19.70	4.72	1 & 3	68	3.89**
3.	Better adjusted	33	22.88	5.04	2 & 3	155	3.39*

** Significant at 0.01 level * Significant at 0.05 level

Results in respect of combined effect for living arrangement and general adjustment are given in Table 28.

Table 28

Means, SDs and t-values of the scores on Feeling of Well Being of the different groups of elderly (2-way interaction for living arrangement and general adjustment)

Sl. No.	Groups	No	Means	SDs	Groups compared	df	t-value
1.	Home - Less adjusted	21	14.29	5.42			
2.	Home - Moderately adjusted	56	18.84	5.01	1 & 2	75	3.47**
3.	Home - Better adjusted	20	22.25	6.21	1 & 3	39	4.38**
4.	Institution - Less adjusted	16	21.56	5.48	2 & 3	74	2.45*
5.	Institution - Moderately adjusted	68	20.41	4.37	4 & 5	82	0.90
6.	Institution - Better adjusted	13	23.85	2.19	4 & 6	27	1.41
					5 & 6	79	2.76**
					1 & 4	35	4.03**
					2 & 5	122	1.87
					3 & 6	31	0.89

** Significant at 0.01 level * Significant at 0.05 level

The results show that better adjusted group of elderly from home differs significantly from the moderately adjusted (at 0.01 level) and less adjusted (at 0.05 level) groups from home in feeling of well being. In both instances better adjusted elderly are found as having better feeling of well being than the other two groups. Significant difference in the mean well being scores is seen between moderately and less adjusted elderly from home also. Less adjusted group appears to have low feeling of well being compared to their moderately adjusted counterparts from home. In the case of institutionalized elderly the difference in mean well being scores is found significant only between better and moderately adjusted groups. Better adjusted

and moderately adjusted as well as moderately adjusted and less adjusted do not seem to differ form each other in feeling of well being, showing homogeneity with respect to this measure of mental health.

The results in Table 28 again show that in the case of institutionalized elderly the difference in mean scores of well being is significant only in the case of better adjusted and moderately adjusted groups. The t-value being 2.76, the difference is found significant at 0.01 level. The mean scores of the group show that better adjusted institutionalized elderly are having high feeling of well being when compared to moderately adjusted group.

When better, moderate and less adjusted elderly from home and institution are considered significant difference in feeling of well being is observed only between less adjusted groups from home and institution. Between them less adjusted group from institution seems as having better feeling of well being than those from home. The results suggest that institutional dwelling improves feeling of well being.

Table 29

Means, SDs and t-values of the scores on Mental health of the different groups of elderly (3-way interaction of living arrangement X sex X general adjustment)

Sl. No.	Groups	No	Means	SDs	Groups compared	DF	t-value
1.	Home - Male Less adjusted	13	14.77	4.49	1 & 2	41	1.86
					1 & 3	19	6.31**
2.	Home - Male Moderately adjusted	30	17.87	5.23	2 & 3	36	3.96**
					4 & 5	32	3.08**
3.	Home - Male Better adjusted	8	25.38	1.85	4 & 6	18	2.05
					5 & 6	36	0.11
4.	Home - female Less adjusted	8	13.50	6.95	7 & 8	40	1.30
					7 & 9	10	2.43*
5.	Home - female Moderately adjusted	26	19.96	5.58	8 & 9	46	1.94
					10 & 11	40	1.42
6.	Home - female Better adjusted	12	20.17	7.26	10 & 12	15	1.06
					11 & 12	31	2.00
7.	Institution - Male Less adjusted	3	17.33	6.81	1 & 4	19	0.51
					2 & 5	56	1.58
8.	Institution - Male Moderately adjusted	39	20.56	3.95	3 & 6	18	1.97
					7 & 10	14	1.55
9.	Institution - Male Better adjusted	9	23.22	2.22	8 & 11	66	0.33
					9 & 12	11	1.64
10.	Institution - Female Less adjusted	13	22.54	4.93	1 & 7	14	0.82
					2 & 8	67	2.44*
11.	Institution - Female Moderately adjusted	29	20.21	4.94	3 & 9	15	2.15*
					4 & 10	19	3.50**
12.	Institution - Female Better adjusted	4	25.25	1.50	5 & 11	53	0.19
					6 & 12	14	1.36

** Significant at 0.01 level * Significant at 0.05 level

The results in table 29 show that there is significant difference between better adjusted and less adjusted as well as between better adjusted and moderately adjusted groups of elderly males from home in feeling of well being. The better adjusted group seems to experience

better feeling of well being than the moderately adjusted and less adjusted groups.

In the case of home dwelling elderly females, less adjusted and moderately adjusted groups are found to differ significantly in their feeling of well being. The moderately adjusted elderly women are found to have better feeling of well being than the less adjusted women. The better adjusted group is found similar to the other two groups with respect to feeling of well being.

Among the elderly males from institution a significant difference in feeling of well being is seen only between less adjusted and moderately adjusted groups. And moderately adjusted group is found to have more feeling of well being than the less adjusted group.

Again, significant difference in feeling of well being is observed between moderately adjusted groups of elderly men from home and institution and institution dwelling males are found superior to home dwelling males in feeling of well being. A similar trend is seen in the case of better adjusted elderly men from home and institution also. A comparison of mean well being scores of these two groups shows that those from home experience better feeling of well being than those from institution. Significant difference in feeling of well being is seen

between less adjusted groups of elderly women from home and institution. Those from institution are found to have better feeling of well being when compared to their peers at home.

The results suggest that for elderly males, who are better adjusted, home is a better place with provisions for well being. But as adjustment decreases institution seems a better place to have feeling of being well and good. A similar trend is seen in the case of females also; less adjusted females in institutions are found as having better feeling of well being than those from home.

Table 30

Summary of ANOVA (3-way) of the scores on Mental Health

Source of Variation	Sum of squares	df	Mean squares	F value
Living arrangement	3833.70	1	3833.70	9.45*
Sex	26.90	1	26.90	0.07
General adjustment	7916.84	2	3958.42	9.75**
Living arrangement X sex	1112.05	1	1112.05	2.74
Living arrangement X general adjustment	3255.97	2	1627.98	4.01*
Sex X general adjustment	1439.16	2	719.58	1.77
Living arrangement X sex X general adjustment	3213.68	2	1606.84	3.96*
Residual	73875.90	182	405.91	
Total	**95227.51**	**193**	**493.41**	

** Significant at 0.01 level * Significant at 0.05 level

The results of 3-way analysis of variance for the scores on mental health are presented in Table 30. The F-ratios obtained indicate significant effects at 0.01 level for living arrangement on mental health of the elderly people No significant effect for sex is seen. Combined effect for living arrangement and general adjustment is also significant on mental health. Again, the results show that interaction effects for living arrangement X sex X general adjustment is significant on mental health of the elderly people. The results provided in Table 31 show that there is significant difference in the mean mental health scores of elderly from home and institution. It is evident from the mean scores that institution dwelling elderly have better mental health than the home dwelling group.

A comparison of better adjusted, moderately adjusted and less adjusted groups of elderly reveal significant difference at 0.01 level between better adjusted and moderately adjusted as well as between better adjusted and less adjusted groups. In both cases the better adjusted group seems as having better mental health than their moderately adjusted and less adjusted peers.

Table 31

Means, SDs and t-values of the scores on Mental Health of the different groups of elderly (main effects for living arrangement & general adjustment)

Sl. No.	Groups	No	Means	SDs	Groups compared	df	t-value
1.	Elderly - Home	97	108.06	24.90	1 & 2	192	2.58*
2.	Elderly - Institution	97	116.16	18.41			
1.	Elderly - Less adjusted	37	105.22	27.12	1 & 2	159	1.37
2.	Elderly - Moderately adjusted	124	110.81	19.86	1 & 3	68	3.39**
3.	Elderly - Better adjusted	33	124.76	20.09	2 & 3	155	3.58**

** Significant at 0.01 level * Significant at 0.05 level

Table 32 shows the means, SDs and t-values of mental health scores of different groups of elderly in relation to 2-way interaction of living arrangement and general adjustment on mental health.

Table 32

Means, SDs and t-values of the scores on Mental Health of the different groups of elderly (2-way interaction for living arrangement and general adjustment)

Sl. No.	Groups	N	Means	SDs	Groups compared	df	t-value
1.	Less adjusted - Home	21	93.38	22.81	1 & 2	75	2.41*
2.	Moderately adjusted - Home	56	107.36	22.66	1 & 3	39	4.46**
3.	Better adjusted - Home	20	125.45	23.23	2 & 3	74	3.04**
4.	Less adjusted - Institution	16	120.75	24.93	4 & 5	82	1.37
5.	Moderately adjusted - Institution	68	113.65	16.87	4 & 6	27	0.37
6.	Better adjusted - Institution	13	123.69	14.81	5 & 6	79	2.00*
					1 & 4	35	3.47**
					2 & 5	122	1.77*
					3 & 6	31	0.24

** Significant at 0.01 level * Significant at 0.05 level

The results show significant difference among home dwelling less adjusted, moderately adjusted and better adjusted groups in mental health. The better adjusted elderly people are found more mentally healthy where as the less adjusted are found less healthy. In the case of institutionalized elderly the difference in mental health status is evident only between moderately adjusted and better adjusted groups/the better adjusted elderly being more mentally healthy. A comparison of the different groups of elderly from home and institution shows that significant difference in mental health status is evident only between the less adjusted groups. No difference is found between moderately adjusted groups from home and institution as well as between better adjusted groups from home and institution.

The results also suggest that in spite of their living arrangement the better adjusted elderly remain mentally more healthy than their less adjusted peers.

Table 33

Means, SDs and t-values of the scores on Mental Health of the different groups of elderly (3-way interaction of living arrangement X sex X general adjustment)

Sl. No.	Groups	No	Means	SDs	Groups compared	df	t-value
1.	Home - Male Less adjusted	13	96.54	14.82	1 & 2	41	1.47
					1 & 3	19	7.71**
2.	Home - Male Moderately adjusted	30	106.57	22.42	2 & 3	36	4.41**
					4 & 5	32	1.93
3.	Home - Male Better adjusted	8	142.75	10.29	4 & 6	18	2.10*
					5 & 6	36	0.70
4.	Home - female Less adjusted	8	88.25	32.59	1 & 4	19	0.80
					2 & 5	54	0.28
5.	Home - female Moderately adjusted	26	108.27	23.35	3 & 6	18	3.39*
					7 & 8	40	0.57
6.	Home - female Better adjusted	12	113.92	22.40	7 & 9	10	0.86
					8 & 9	46	1.19
7.	Institution - Male Less adjusted	3	101.00	37.51	10 & 11	40	1.75
					10 & 12	15	0.69
8.	Institution - Male Moderately adjusted	39	113.49	16.87	11 & 12	31	3.06
					7 & 10	14	1.60
9.	Institution - Male Better adjusted	9	120.78	16.45	8 & 11	66	0.09
					9 & 12	11	1.07
10.	Institution - Female Less adjusted	13	125.31	20.55	1 & 7	14	0.20
					2 & 8	67	1.41
11.	Institution - Female Moderately adjusted	29	113.86	17.18	3 & 9	15	3.34**
					4 & 10	19	2.88**
12.	Institution - Female Better adjusted	4	130.25	8.58	5 & 11	55	1.00
					6 & 12	14	0.33

** Significant at 0.01 level * Significant at 0.05 level

The results of t-test in relation to 3-way interaction of living arrangement, sex and general adjustment are provided in Table 33. Among the three groups of home dwelling elderly males significant difference in mental health is noticed between moderately adjusted and better adjusted groups as well as between less adjusted and better

adjusted groups. Among females, however, the difference in mental health status is significant only between and better adjusted groups. It is also found that among males as well as females better adjusted groups are comparably more mentally healthy than the moderately and less adjusted groups. The findings suggest that good adjustment facilitates mental health of the elderly people.

Mean mental health scores of home dwelling male and female better adjusted elderly also indicate significant difference. Between the two groups the elderly males are found as more mentally healthy than the elderly females.

Difference between home and institution dwelling better adjusted male groups is also found significant. Again less adjusted females from home and institution are also found to differ significantly in mental health status. With regard to the better adjusted male group those from home are found more mentally healthy than those from institution. Further, in the case of females, who are less adjusted, institutionalized elderly seem comparably more mentally healthy than those from home.

The results of analysis reveal that better adjusted elderly are more mentally healthy than less adjusted elderly. This suggests that

good adjustment enhances mental health status of the aged people. Again, in general, the institutionalised elderly are found mentally more healthy than the home dwelling elderly people. But among better adjusted groups, especially among men, those from home show more mental health than those from institution.

The third hypothesis that 'living conditions, sex and general adjustment of the elderly, independently and in combination, influence their mental health status and its different measures' is partially accepted.

Though not directly related to the present findings, the study by Ott (2003) and Dhillon and Singh (2005) emphasize the association between mental health and adjustment. According to them participation leisure activities and social support enhances physical and mental health which buffers the effect of experienced stress and thereby promotes better adjustment.

Section (iii)

Mental Health by
Living Arrangement
Sex
Perception of Social Support

The results of analysis of variance of the scores on different mental health measures by living arrangement, sex and perception of social support are discussed in the following pages.

Table 34
Summary of ANOVA (3-way) of the scores on Self Evaluation

Sl. No.	Source of Variation	Sum of squares	df	Mean squares	t value
1	Living arrangement	26.65	1	26.65	1.13
2	Sex	10.37	1	10.37	0.44
3	Social support	195.38	2	97.69	4.14*
4	Living arrangement X sex	30.17	1	30.17	1.28
5	Living arrangement X social support	40.18	2	20.09	0.85
6	Sex X social support	90.13	2	45.07	1.91
7	Living arrangement X sex X social support	52.34	2	26.17	1.11
8	Residual	4292.01	182	23.58	
	Total	**4743.81**	**193**	**24.58**	

* Significant at 0.05 level

Summary of ANOVA (3-way) presented in Table 34 shows that perception of social support has significant effect on self-evaluation of the elderly. But no significant effect for living arrangement and sex is observed on self-evaluation.

The results indicate no significant effects for living arrangement X sex, living arrangement X social support and sex X social support. Again, 3-way interaction effect for living arrangement, sex and social support is also not found significant for self-evaluation of the elderly.

Table 35
Means, SDs and F-values of the scores on Self Evaluation of the different groups of elderly (main effects)

Sl. No.	Groups	N	Means	SDs	Groups compared	df	t-value
1.	Poor social support	42	17.38	5.07			
					1 & 2	148	0.12
2.	Moderate social support	108	17.48	4.58	1 & 3	84	2.07*
					2 & 3	150	2.59*
3.	Better social support	44	19.73	5.44			

* Significant at 0.05 level

The results of t-test (Table 35) show significant difference in the mean self-evaluation scores of elderly with poorly perceived support and better perceived support as well as elderly with moderately perceived and better perceived support. In both instances the elderly with better perceived support seem to have positive self evaluation when compared to the other two groups of elderly.

The results indicate that better perception of social support leads to positive self-evaluation which is an important aspect of mental health. The better supported elderly seem to have belief in

themselves and are able to manage effectively at times of crisis. This is likely to facilitate mental health in them.

Table 36 presents the results of ANOVA (3-way) of the scores on social orientation measure of mental health in relation to living arrangement, sex and perception of social support. t-values show significant effect at 0.01 level for social support on social orientation.

The results also show that combined effects for living arrangement and sex on social orientation are significant at 0.05 level. However, no significant effect for 3-way interaction of these variables is seen with respect to social orientation.

Table 36

Summary of ANOVA (3-way) of the scores on Social Orientation

Sl. No.	Source of Variation	Sum of squares	df	Mean squares	t value
1	Living arrangement	23.55	1	23.55	1.53
2	Sex	39.18	1	39.18	2.55
3	Social support	169.31	2	84.66	5.51**
4	Living arrangement X sex	65.94	1	65.94	4.29*
5	Living arrangement X social support	16.25	2	8.13	0.53
6	Sex X social support	0.82	2	0.41	0.03
7	Living arrangement X sex X social support	19.77	2	9.88	0.64
8	Residual	2797.16	182	15.37	
	Total	**3122.06**	**193**	**16.18**	

** Significant at 0.01 level * Significant at 0.05 level

Table 37

Means, SDs and t-values of the scores on social orientation of the different groups of elderly (main effects)

Sl. No.	Groups	N	Means	SDs	Groups compared	df	t-value
1.	Poor social support	42	14.67	4.32	1 & 2	148	2.53*
2.	Moderate social support	108	16.47	3.77	1 & 3	84	2.94**
3.	Better social support	44	17.29	3.99	2 & 3	150	1.20

** Significant at 0.01 level * Significant at 0.05 level

The means, SDs and t-values of the scores on social orientation for different groups of elderly reveal that there is significant difference between groups of elderly with poor support and moderate perception of support as well as between poor perception of support and better perception of support. But no significant difference is seen in the mean social orientation scores of moderately and better supported groups. These two groups are found similar in social orientation. The results suggest that elderly with better perceived support are comparably more socially oriented than the other two groups, indicating more social commitment and ability to maintain good relations with others etc. than their peers with moderate and poor support.

Table 38

Means, SDs and t-values of the scores on Social Orientation of the different groups of elderly (2-way interaction of living arrangement & sex)

Sl. No.	Groups	N	Means	SDs	Groups compared	df	t-value
1.	Home - male	51	16.57	3.57	1 & 2	100	0.17
2.	Institution - male	51	16.69	3.22	3 & 4	90	1.45
3.	Home - female	46	15.17	5.17	1 & 3	95	1.56
4.	Institution - female	46	16.57	3.93	2 & 4	95	0.17

The results (Table 38) suggest that the difference in mean scores of the groups compared is not significant. However, in the case of home dwelling elderly males and females the significance of the difference in mean scores is found as 0.12. Males tend to show more social orientation than females.

Table 39

Summary of ANOVA (3-way) of the scores on Personal Integration

Sl. No.	Source of Variation	Sum of squares	df	Mean squares	t value
1	Living arrangement	254.14	1	254.14	8.83**
2	Sex	51.11	1	51.11	1.78
3	Social support	189.79	2	94.89	3.29*
4	Living arrangement X sex	380.63	1	380.63	13.22**
5	Living arrangement X social support	187.17	2	93.59	3.25*
6	Sex X social support	176.71	2	88.36	3.07*
7	Living arrangement X sex X social support	38.56	2	19.28	0.67
8	Residual	5239.62	182	28.79	
	Total	**6575.34**	**193**	**34.07**	

** Significant at 0.01 level * Significant at 0.05 level

Summary of ANOVA (3-way) in Table 39 reveals significant main effects for living arrangement and perception of social support on personal integration. However, no effect is seen for male-female status of the elderly on personal integration.

As for the combined effects, living arrangement and sex seem to have significant effects at 0.01 level, on personal integration whereas

that for living arrangement X perception of social support and sex X perception of social support are significant at 0.05 level.

Effects for living arrangement X sex X perception of social support are not found significant on this measure of mental health.

Table 40
Means, SDs and t-values of the scores on Personal Integration for different groups of the elderly (main effects)

Sl. No.	Groups	N	Means	SDs	Groups compared	df	t-value
1.	Home	97	18.53	6.02	1 & 2	192	2.54*
2.	Institution	97	20.63	5.48			
1.	Poor social support	42	18.45	5.24	1 & 2	148	0.95
2.	Moderate social support	108	19.44	5.95	1 & 3	84	2.09*
3.	Better social support	44	20.98	5.94	2 & 3	150	1.44

* Significant at 0.05 level

The results given in Table 40 show that home dwelling and institution dwelling elderly people differ between themselves in personal integration. And those from institution are found as more personally integrated than their counterparts from homes.

When groups of elderly with perception of poor social support, moderate social support and better support are compared, the difference in mean scores on personal integration measure is found significant only between those having poor and better perception of

social support. Group of elderly with better perception is seen as being better personally integrated than the other group.

Table 41

Means, SDs and t-values of the scores on Personal Integration of the different groups of elderly (2-way interaction, for living arrangement X sex, living arrangement X social support and sex X social support)

Sl. No.	Groups	N	Means	SDs	Groups compared	df	t-value
1.	Male - Home	51	20.31	5.81	1 & 2	100	0.50
2.	Male - institution	51	19.76	5.18	3 & 4	90	4.25**
3.	Female - home	46	16.54	5.68	1 & 3	95	3.23**
4.	Female - institution	46	21.59	5.69	2 & 4	95	1.65
1.	Home - poor social support	25	17.48	5.14			
2.	Home - moderate social support	43	17.28	5.94	1 & 2	66	0.14
3.	Home - better social support	29	21.28	6.12	1 & 3	52	2.44*
4.	Institution - poor social support	17	19.88	5.19	2 & 3	70	2.77**
5.	Institution - moderate social support	65	20.88	5.56	4 & 5,	80	0.67
6.	Institution - better social support	15	20.40	5.74	4 & 6	30	0.27
					5 & 6	78	0.30
					1 & 4	40	1.48
					2 & 5	106	3.21**
					3 & 6	42	0.46
1.	Male - poor social support	26	17.58	5.41			
2.	Male - moderate social support	53	19.77	5.39	1 & 2	77	1.70
3.	Male - better social support	23	23.43	4.05	1 & 3	47	4.24**
4.	Female - poor social support	16	19.88	4.76	2 & 3	74	2.91**
5.	Female - moderate social support	55	19.13	6.48	4 & 5	69	0.43
6.	Female - better social support	21	18.29	6.58	4 & 6	35	0.82
					5 & 6	74	0.50
					1 & 4	40	1.40
					2 & 5	106	0.56
					3 & 6	42	3.16**

** Significant at 0.01 level * Significant at 0.05 level

The results (Table 41) with respect to interaction of living arrangement and sex indicate significant difference in mean personal interaction scores of females from home and institutions as well as of home dwelling males and females.

The results with respect to combined effects of living arrangement and perception of social support suggest significant difference in personal interaction between better supported and poorly supported groups as well as between better supported and moderately supported groups of elderly.

In the case of moderately supported groups those from home and institutions differ significantly in personal integration.

Again, with respect to interaction of sex and social support, poorly supported male group appear to differ significantly from their better supported counterparts in personal integration. Further, significant difference is seen between elderly males with moderately perceived support and better perceived support in personal integration.

The results also show that there is significant difference between males and females with better perceived support. In all the comparisons, groups with better perceived support are found as superior to the other two groups in personal integration. The groups of elderly with better perception of support are found able to deal with and solve problems and resist stresses and strains of life in a better way than the less supported elderly people.

Summary of ANOVA (3-way) presented in table 42 suggests significant effect for living arrangement on independence measure of mental health. Perception of social support also seems as having significant effect on independence. In both cases, F-values are significant at 0.01 level. But sex has no significant effect on independence.

As far as combined effects for the independent variables are considered, effects for living arrangement and perception of social support alone is found significant on independence of the elderly. Effects for living arrangement and sex as well as for sex and perception of social support are not significant.

Table 42

Summary of ANOVA (3-way) of the scores on Independence

Sl. No.	Source of Variation	Sum of squares	df	Mean squares	t value
1	Living arrangement	259.11	1	259.11	8.06**
2	Sex	18.11	1	18.11	0.56
3	Social support	540.57	2	270.29	8.41**
4	Living arrangement X sex	0.42	1	0.42	0.01
5	Living arrangement X social support	480.87	2	240.43	7.48**
6	Sex X social support	109.47	2	54.74	1.70
7	Living arrangement X sex X social support	182.77	2	91.38	2.84
8	Residual	5851.99	182	32.15	
	Total	**7342.74**	**193**	**38.05**	

** Significant at 0.01 level * Significant at 0.05 level

Table 43

Means, SDs and t-values of the scores on Independence of the different groups of elderly (main effects)

Sl. No.	Groups	N	Means	SDs	Groups compared	df	t-value
1.	Elderly - home	97	22.65	6.87	1 & 2	192	2.26
2.	Elderly - institution	97	24.63	5.23			
1.	Poor social support	42	21.57	5.45			
2.	Moderate social support	108	23.39	6.23	1 & 2 1 & 3	148 84	1.66 3.80**
3.	Better social support	44	26.23		2 & 3	150	2.59*

** Significant at 0.01 level * Significant at 0.05 level

The results (Table 43) show significant difference between better supported and poorly supported as well as between better and moderately supported groups of elderly people. The mean scores of the three groups reveal that group of elderly with better perception of support is comparably more independent than the groups with lower perception of support.

Table 44

Means, SDs and t-values of the scores on Independence of the different groups of elderly (2-way interaction of living arrangement and perception of social support)

Sl. No.	Groups	N	Means	SDs	Groups compared	df	t-value
1	Home - poor social support	25	19.00	4.31			
2	Home - moderate social support	43	21.67	7.38	1 & 2	66	1.65
3	Home - better social support	29	27.24	5.38	1 & 3	52	6.15**
4	Institution - poor social support	17	25.35	4.77	2 & 3	70	3.48**
5	Institution - moderate social support	65	24.52	5.08	4 & 5	80	0.61
6	Institution - better social support	15	24.27	6.55	4 & 6	30	0.54
					5 & 6	78	0.17
					1 & 4	40	4.49**
					2 & 5	106	2.38*
					3 & 6	42	1.61

** Significant at 0.01 level * Significant at 0.05 level

From the Table 44, it is seen that better supported elderly from home differ significantly from moderately supported and poorly supported groups of elderly from home. Among these three groups better supported is more independent followed by moderately supported and then by poorly supported groups.

A comparison of institutionalised groups indicates significant difference in independence between poorly supported home dwelling and institution dwelling elderly groups as well as between moderately supported home dwelling and institution dwelling elderly groups. In both instances those staying in institutions are found as more

independent than those from home. The results suggest that community living is likely to foster the development of independence among elderly people.

Table 45

Summary of ANOVA (3-way) of the scores on Environmental Mastery

Sl. No.	Source of Variation	Sum of squares	df	Mean squares	t value
1	Living arrangement	28.67	1	28.67	1.38
2	Sex	60.15	1	60.15	2.89
3	Social support	499.18	2	249.59	11.99**
4	Living arrangement X sex	19.14	1	19.14	0.92
5	Living arrangement X social support	82.24	2	41.12	1.98
6	Sex X social support	60.58	2	30.29	1.46
7	Living arrangement X sex X social support	5.49	2	2.75	0.13
8	Residual	3788.29	182	20.82	
	Total	**4527.61**	**193**	**23.46**	

** Significant at 0.01 level * Significant at 0.05 level

Summary of ANOVA (3-way) given in Table 45 reveals that perception of social support has significant effect on environmental mastery measure of mental health. Living arrangement has no significant effect on environmental mastery. A similar trend is seen with respect to sex of the elderly also.

The results suggest that perception of social support significantly influences environmental mastery of the aged people.

Table 46

Means, SDs and t-values of the scores on Environmental Mastery of the different groups of elderly (main effects)

Sl. No.	Groups	N	Means	SDs	Groups compared	df	t-value
1.	Poor social support	42	13.24	3.98			
2.	Moderate social support	108	14.19	4.89	1 & 2 1 & 3	148 84	1.13 4.81**
3.	Better social support	44	17.59	4.39	2 & 3	150	3.99**

** Significant at 0.01 level * Significant at 0.05 level

The means, SDs and t-values (Table 46) show that poorly supported elderly differ significantly from better supported elderly in environmental mastery. Similarly the group with moderately perceived support differs significantly from better adjusted group. In both instances better supported elderly are found as having more control over their environment than the moderately adjusted and poorly adjusted elderly. The results suggest that better perception of social support is likely to improve environmental mastery in aged people, i.e., better supported elderly are more able to adapt to changes in the environment and are able to keep a balanced mind amidst life problems.

Table 47

Summary of ANOVA (3-way) of the scores on Feeling of Well Being

Sl. No.	Source of Variation	Sum of squares	df	Mean squares	t value
1	Living arrangement	342.12	1	342.12	14.25**
2	Sex	6.35	1	6.35	0.26
3	Social support	538.72	2	269.36	11.22**
4	Living arrangement (sex)	12.63	1	12.63	0.53
5	Living arrangement (social support)	249.82	2	124.91	5.20
6	Sex (social support)	40.03	2	20.01	0.83
7	Living arrangement (sex) (social support)	40.95	2	20.47	0.85
8	Residual	4370.40	182	24.01	
	Total	**5585.94**	**193**	**28.94**	

** Significant at 0.01 level * Significant at 0.05 level

Table 47 shows the results of analysis of variance (3-way) of the scores on feeling of well being by living arrangement, sex and perception of social support. The F-values obtained indicate significant effects for living arrangement on feeling of well being. Effect for perception of social support on feeling of well being is also significant. But no significant effect is seen for sex of the elderly people.

Table 48

Means, SDs and t-values of the scores on Feeling of Well Being of the different groups of elderly (main effects)

Sl. No.	Groups	N	Means	SDs	Groups compared	df	t-value
1.	Home	97	18.56	5.92	1 & 2	192	3.33*
2.	Institution	97	21.06	4.47			
1.	Poor social support	42	17.17	5.19	1 & 2	148	2.95*
2.	Moderate social support	108	19.94	5.16	1 & 3	84	4.37**
3.	Better social support	44	22.02	5.11	2 & 3	150	2.27*

** Significant at 0.01 level * Significant at 0.05 level

The results in Table 48 indicate significant differences among groups of elderly with poor, moderate and better perception of social support. Poorly supported elderly differ from moderately and better supported elderly in feeling of well being. Moderately and better supported groups also differ between themselves in feeling of well being. The mean values show that elderly with better perception of support have better feeling of well being than the other two groups.

Table 49

Means, SDs and t-values of the scores on Feeling of Well Being of the different groups of elderly (2-way interaction of living arrangement and social support)

Sl. No.	Groups	N	Means	SDs	Groups compared	df	t-value
1	Home - poor social support	25	15.12	4.49			
2	Home - moderate social support	43	17.84	5.70	1 & 2	66	2.04*
					1 & 3	52	5.68**
3	Home - better social support	29	22.59	5.08	2 & 3	70	3.62**
					4 & 5	80	0.96
4	Institution - poor social support	17	20.18	4.77	4 & 6	30	0.43
					5 & 6	78	0.31
5	Institution - moderate social support	65	21.32	4.27	1 & 4	40	3.49**
					2 & 5	106	3.63**
					3 & 6	42	1.02
6	Institution - better social support	15	20.93	5.15			

** Significant at 0.01 level * Significant at 0.05 level

Means, SDs and t-values provided in Table 49 show that home dwelling elderly with poor and moderate perception of social support differ significantly in feeling of well being. The difference in mean scores between these two groups are significant at 0.05 level. Poorly supported group also differs significantly at 0.01 level from better supported group in feeling of well being. Significant difference at 0.01 level in feeling of well being is seen between groups with moderate and better perception of support. A scrutiny of the mean scores suggest that better supported group is superior to the other two groups in feeling of well being.

No significant difference in feeling of well being is found among the three groups of elderly from institution. The results show that poorly supported groups from home and institution significantly differ from each other in feeling of well being, those from institution having a better feeling of well being than those from home.

A similar trend is found in the case of elderly having moderate perception of social support. Home dwelling and institution dwelling groups of elderly with moderate perception of social support differ significantly with each other in feeling of well being. Here also institutionalised elderly is superior to home dwelling group in feeling of well being.

Table 50

Summary of ANOVA (3-way) of the scores on Mental Health

Sl. No.	Source of Variation	Sum of squares	df	Mean squares	t value
1	Living arrangement	4427.50	1	4427.50	11.08**
2	Sex	0.08	1	0.08	0.00
3	Social support	11479.51	2	5739.76	14.36**
4	Living arrangement X sex	1963.74	1	1963.74	4.91*
5	Living arrangement X social support	3942.09	2	1971.05	4.93*
6	Sex X social support	880.18	2	440.09	1.10
7	Living arrangement X sex X social support	242.53	2	121.26	0.30
8	Residual	72741.07	182	399.68	
	Total	**95227.51**	**193**	**493.41**	

** Significant at 0.01 level * Significant at 0.05 level

Summary of ANOVA (3-way) presented in Table 50 show significant effects for living arrangement and perception of social support on general mental health of the elderly. But sex seems to have no significant effect on their mental health.

Table 51

Means, SDs and t-values of the scores on Mental Health of the different groups of elderly (main effects)

Sl. No.	Groups	N	Means	SDs	Groups compared	df	t-value
1.	Home	97	108.06	24.89	1 & 2	192	2.58*
2.	Institution	97	116.16	18.41			
1.	Poor social support	42	102.55	20.18	1 & 2	148	2.19*
2.	Moderate social support	108	110.97	21.48	1 & 3	84	4.84**
3.	Better social support	44	124.05	20.97	2 & 3	150	3.43**

** Significant at 0.01 level * Significant at 0.05 level

Means, SDs and t-values (Table 51) show that elderly people from home and institution differ significantly in their mental health status. The results presented in Table 51 also reveals significant difference between poorly supported and moderately supported, poorly supported and better supported as well as between moderately supported and better supported elderly groups in general mental health. Among the three groups the better supported group seems to be more mentally healthy than the other two groups. The results show that good perception of social support facilitates mental health of the elderly.

Table 52

Means, SDs and t-values of the scores on Mental Health of the different groups of elderly (2-way interaction of living arrangement X sex and living arrangement X Perception of Social Support)

Sl. No.	Groups	N	Means	SDs	Groups compared	df	t-value
1	Home - male	51	109.69	24.18	1 & 2	95	0.67
2	Home - female	46	106.26	25.82	3 & 4	95	1.20
3	Institution - male	51	114.04	18.28	1 & 3	100	1.03
4	Institution - female	46	118.52	18.46	2 & 4	90	2.62*
1	Home - poor social support	25	94.76	16.58			
2	Home - moderate social support	43	103.44	24.16	1 & 2	66	1.59
3	Home - better social support	29	126.38	21.82	1 & 3	52	5.92**
4	Institution - poor social support	17	114.00	19.92	2 & 3	70	4.11**
5	Institution - moderate social support	65	115.95	18.03	4 & 5	80	0.39
6	Institution - better social support	15	119.53	19.11	4 & 6	30	0.80
					5 & 6	78	0.69
					1 & 4	40	3.40**
					2 & 5	106	3.08**
					3 & 6	42	1.03

** Significant at 0.01 level * Significant at 0.05 level

The results in Table 52 show that there is significant difference between home dwelling and institution dwelling females with respect to general mental health.

Again, the results indicate that better supported home dwelling elderly people differ significantly from their peers with moderate as well as poor perception of support. Better supported group is found as having better mental health than the moderately supported and poorly supported groups. A comparison among the three groups of elderly

namely, better, moderate and poor perceived support from home and from institution reveal that those poorly supported and staying at home differ significantly from the other groups in mental health. Elderly with poor perception of support from institutions are found to have better mental health than their counterparts from home. A similar trend is evident in the case of moderately supported elderly group from home and institution.

The fourth hypothesis that 'living conditions, sex and perception of social support of the elderly, independently and in combination, influence their mental health status and its various measures' is partially accepted.

The aforementioned results suggest the influence of social support in enhancing the mental health of elderly people. These findings are supported by a host of studies (Antonucci et al, 1996; Johnson and Troll, 1994; Antonucci and Jackson, 1987; Lee and Sheban, 1989; Shyam and Yadav, 2005; Fokkema, 2002, and Anna and Asha, 2006).

PART C

MENTAL HEALTH AND PERSONAL DEMOGRAPHIC FACTORS

The role of demographic factors such as age, education, sex, occupation, income, marital status, family type, rearing background and also leisure involvement is examined using t-test for independent samples. The results are presented and discussed in the following pages.

Table 53

Classification of the sample and the criteria used

Sl. No.	Variable	Groups	Criteria	N
1.	Age	1. Young old	60-69	58
		2. Middle age old	70-79	105
		3. Old old	80+	31
2.	Education	1. High school education		160
		2. College education		25
		3. Professional educated		9
3.	Sex	1. Male		102
		2. Female		92
4.	Occupation	1. Unskilled/unorganised		99
		2. Employees - organised sector		52
		3. Professionals		25
		4. Business people		18
5.	Income	1. Low income	Below Rs. 12,000/-	94
		2. Middle income	12,000 to 40,000	77
		3. High income	Above Rs. 40,000	23
6.	Marital status	1. Married		33
		2. Unmarried		97
		3. Divorced		19
		4. Widowed		45
7.	Family type	1. Joint family		137
		2. Nuclear family		57
8.	Leisure activities	1. High involvement		98
		2. Less involvement		96
9.	Rearing Background	1. Urban		94
		2. Rural		100

Table 54

Means, SDs and t-values of the scores on different measures of Mental Health based on the age of the elderly

Mental Health Measures	Age	No.	Means	SDs	SE of Mean	Groups compared	df	t-value
Self Evaluation	1. 60-70	58	18.14	4.92	0.65			
	2. 71-80	105	17.99	4.91	0.48	1 & 2	161	0.18
	3. 81 +	31	17.58	5.32	0.96	1 & 3	87	0.49
Social Orientation	1. 60-70	58	16.33	4.33	0.57	2 & 3	134	0.40
	2. 71-80	105	16.45	3.75	0.37	1 & 2	161	0.18
	3. 81 +	31	15.55	4.35	0.78	1 & 3	87	0.81
Personal Integration	1. 60-70	58	20.79	5.83	0.77	2 & 3	134	1.13
	2. 71-80	105	19.15	5.83	0.57	1 & 2	161	1.72***
	3. 81 +	31	18.74	5.73	1.03	1 & 3	87	1.59
Independence	1. 60-70	58	24.57	6.80	0.89	2 & 3	134	0.35
	2. 71-80	105	23.26	5.99	0.59	1 & 2	161	1.27
	3. 81 +	31	23.19	5.49	0.99	1 & 3	87	0.97
Environmental Mastery	1. 60-70	58	16.36	5.23	0.69	2 & 3	134	0.05
	2. 71-80	105	13.98	4.52	0.44	1 & 2	161	3.04**
	3. 81 +	31	14.39	4.57	0.82	1 & 3	87	1.77***
Feeling of well being	1. 60-70	58	20.81	5.21	0.68	2 & 3	134	0.44
	2. 71-80	105	19.23	5.50	0.54	1 & 2	161	1.79***
	3. 81 +	31	19.90	5.19	0.93	1 & 3	87	0.78
General mental health	1. 60-70	58	117.22	23.65	3.11	2 & 3	134	0.61
	2. 71-80	105	110.10	21.39	2.09	1 & 2	161	1.96***
	3. 81 +	31	109.35	21.29	3.82	1 & 3	87	1.55
						2 & 3	134	0.17

60-69: young old, 70-79: middle age old, 80+: old old, ** significant at 0.01 level, *** significant at 0.10 level

Table 54 shows the means, SDs and t-values of the scores on different measures of mental health of the three groups of elderly, namely young old, middle age old and old old. The results show that young old and middle age old differ significantly in environmental mastery, the young old having more control over their environment. With respect to personal integration, feeling of well being and general mental health also these two groups seem to differ, but the difference in significant only at 0.10 level. In all the cases the young old groups are found superior to middle age old groups. Similarly, the young old group tends to differ from the middle age old group in environmental mastery at 0.10 level and the former group is found superior to the latter one.

Educational status seems to have some effect on the mental health status of the elderly people. The results presented in table 55 indicate that college educated elderly are more independent, and have better feeling of well being than their less educated peers. Those with professional education are also found to be more independent than those with college and high school education. In all these cases the difference between the different groups compared are significant at 0.10 level. The results show that education, to some extent, tends to improve mental health of the elderly. It may be reasoned that the educated elderly are likely to be more independent in thinking and action as well as are more able to manage things on their own and hence are more contented and happy compared to their less educated counterparts

Table 55

Means, SDs and t-values of the scores on different measures of Mental Health with respect to their level of education

Mental Health Measures	Education	No.	Means	SDs	SE of Mean	Groups compared	df	t-value
Self Evaluation	1. High school	160	17.83	5.04	0.39			
	2. College - non professional	25	18.72	5.07	1.01	1 & 2	183	0.82
	3. Professional	9	18.33	3.08	1.03	1 & 3	167	0.30
Social Orientation	1. High school	160	16.22	4.18	0.33	2 & 3	32	0.21
	2. College - non professional	25	16.76	3.36	0.67	1 & 2	183	0.62
	3. Professional	9	15.78	2.77	0.93	1 & 3	167	0.31
Personal Integration	1. High school	160	19.49	5.97	0.47	2 & 3	32	0.78
	2. College - non professional	25	20.68	5.11	1.02	1 & 2	183	0.94
	3. Professional	9	18.00	5.43	1.81	1 & 3	167	0.73
Independence	1. High school	160	23.14	6.17	0.49	2 & 3	32	1.33
	2. College - non professional	25	25.60	5.98	1.20	1 & 2	183	1.86***
	3. Professional	9	27.00	4.95	1.65	1 & 3	167	1.84***
Environmental Mastery	1. High school	160	14.56	4.85	0.38	2 & 3	32	0.63
	2. College - non professional	25	15.44	5.19	1.04	1 & 2	183	0.83
	3. Professional	9	16.33	3.61	1.20	1 & 3	167	1.08
Feeling of well being	1. High school	160	19.44	5.46	0.43	2 & 3	32	0.47
	2. College - non professional	25	21.44	5.06	1.01	1 & 2	183	1.72***
	3. Professional	9	21.78	3.80	1.27	1 & 3	167	1.26
General mental health	1. High school	160	110.84	22.48	1.77	2 & 3	32	0.18
	2. College - non professional	25	118.76	20.87	4.17	1 & 2	183	1.65
	3. Professional	9	116.22	18.99	6.33	1 & 3	167	0.70
						2 & 3	32	0.32

** significant at 0.01 level, *** significant at 0.10 level

Table 56

Means, SDs and t-values of the scores on different measures of Mental Health of male and female elderly people

Mental Health Measures	Sex	No.	Means	SDs	SE of Mean	df	t-value
Self Evaluation	1. Male	102	18.19	0.50	0.50	192	0.64
	2. Female	92	17.73	0.51	0.51		
Social Orientation	1. Male	102	16.63	0.34	0.34	192	1.31
	2. Female	92	15.87	0.48	0.48		
Personal Integration	1. Male	102	20.04	0.54	0.54	192	1.16
	2. Female	92	19.07	0.65	0.65		
Independence	1. Male	102	23.29	0.58	0.58	192	0.82
	2. Female	92	24.02	0.67	0.67		
Environmental Mastery	1. Male	102	14.20	4.59	0.45	192	1.71***
	2. Female	92	15.38	5.06	0.53		
Feeling of well being	1. Male	102	19.55	5.09	0.50	192	0.71
	2. Female	92	20.10	5.70	0.59		
General mental health	1. Male	102	111.86	21.44	2.12	192	0.17
	2. Female	92	112.39	23.15	2.41		

*** significant at 0.10 level

The results given in table 56 show that elderly males and females do not differ significantly with respect to self evaluation, social orientation, personal integration, independence, feeling of well being and general mental health. In environmental mastery the difference between the two groups is significant at 0.10 level with the females having a comparably higher score. This indicates that elderly females are better than elderly males in environmental mastery, i.e. they are more able to adapt to changes in the environment, have good interpersonal relation etc. than the elderly males. In all the other measures of mental health and in general mental health also the two groups are similar.

Table 57

Means, SDs and t-values of the scores on different measures of Mental Health with respect to their occupational status

Mental Health Measures	Occupational status	No.	Means	SDs	SE of Mean	Groups compared	df	t-value
Self Evaluation	1. Unskilled	99	17.53	5.15	0.52	1 & 2	149	1.23
	2. Govt employees	52	18.62	5.26	0.73	1 & 3	122	0.57
	3. Professional	25	18.16	3.97	0.79	1 & 4	115	0.58
	4. Business	18	18.28	4.34	1.02	2 & 3	75	0.38
						2 & 4	68	0.24
						3 & 4	41	0.09
Social Orientation	1. Unskilled	99	15.92	4.19	0.42	1 & 2	149	0.97
	2. Govt employees	52	16.62	4.23	0.59	1 & 3	122	0.18
	3. Professional	25	16.08	3.17	0.64	1 & 4	115	1.46
	4. Business	18	17.44	3.49	0.82	2 & 3	75	0.56
						2 & 4	68	0.75
						3 & 4	41	1.33
Personal Integration	1. Unskilled	99	19.83	5.88	0.59	1 & 2	149	0.63
	2. Govt employees	52	19.19	5.91	0.82	1 & 3	122	0.68
	3. Professional	25	18.96	5.18	1.04	1 & 4	115	0.22
	4. Business	18	20.17	6.59	1.55	2 & 3	75	0.38
						2 & 4	68	0.59
						3 & 4	41	0.67
Independence	1. Unskilled	99	23.27	6.73	0.68	1 & 2	149	1.16
	2. Govt employees	52	24.52	5.37	0.74	1 & 3	122	0.78
	3. Professional	25	20.52	5.36	1.07	1 & 4	155	0.91
						2 & 3	75	0.09

Mental Health Measures	Occupational status	No.	Means	SDs	SE of Mean	Groups compared	df	t-value
	4. Business	18	21.72	6.07	1.43	2 & 4	68	1.84***
						3 & 4	41	1.68***
Environmental Mastery	1. Unskilled	99	15.24	4.91	0.42	1 & 2	149	0.49
						1 & 3	122	0.68
	2. Govt employees	52	14.83	4.95	0.69	1 & 4	115	0.91
						2 & 3	75	0.27
	3. Professional	25	14.52	4.02	0.80	2 & 4	68	1.94***
	4. Business	18	21.72	6.07	1.43	3 & 4	41	1.70***
Feeling of well being	1. Unskilled	99	19.61	5.22	0.53	1 & 2	149	1.06
						1 & 3	122	0.78
	2. Govt employees	52	2.058	5.62	0.78	1 & 4	115	1.40
						2 & 3	75	0.04
	3. Professional	25	20.52	5.36	1.07	2 & 4	68	1.88***
	4. Business	18	17.72	5.37	1.27	3 & 4	41	1.69***
General mental health	1. Unskilled	99	111.63	23.28	2.34	1 & 2	149	0.70
						1 & 3	122	0.18
	2. Govt employees	52	114.40	22.62	3.14	1 & 4	115	0.67
						2 & 3	75	0.37
	3. Professional	25	112.52	16.29	3.26	2 & 4	68	1.09
	4. Business	18	107.61	22.97	5.41	3 & 4	41	0.82

*** significant at 0.10 level

The results given in table 57 reveal the role of occupation on the mental health status of the elderly. The results show that employees from organised sectors, professionals and business people differ among themselves at 0.10 level with respect to independence, environmental mastery and feeling of well being. Organised sector employees are found as more independent, having more control over their environment, and feeling of well being than the professionals and business people. In all these three measures of mental health, professionals are found to be superior to business people. The results suggest occupational status as having some influence on the mental health of the elderly.

Table 58

Means, SDs and t-values of the scores on different measures of Mental Health with respect to their income level

Mental Health Measures	Income level	No.	Means	SDs	SE of Mean	Groups compared	df	t-value
Self Evaluation	1. Low	94	18.03	5.02	0.52	1 & 2	169	0.11
	2. Middle	77	18.12	4.86	0.55	1 & 3	115	0.69
	3. High	23	17.22	5.17	1.08	2 & 3	98	0.77
Social Orientation	1. Low	94	16.14	4.22	0.44	1 & 2	169	0.66
	2. Middle	77	16.55	3.97	0.44	1 & 3	115	0.33
	3. High	23	15.83	3.31	0.69	2 & 3	98	0.80
Personal Integration	1. Low	94	19.91	5.98	0.62	1 & 2	169	0.64
	2. Middle	77	19.34	5.71	0.65	1 & 3	115	0.66
	3. High	23	19.00	5.84	1.22	2 & 3	98	0.25
Independence	1. Low	94	23.26	6.74	0.70	1 & 2	169	1.06
	2. Middle	77	24.27	5.51	0.63	1 & 3	115	0.11
	3. High	23	23.09	5.85	1.22	2 & 3	98	0.89
Environmental Mastery	1. Low	94	15.12	4.97	0.51	1 & 2	169	0.54
	2. Middle	77	14.70	5.12	0.58	1 & 3	115	1.51
	3. High	23	13.48	2.97	0.62	2 & 3	98	1.09
Feeling of well being	1. Low	94	19.79	5.61	0.58	1 & 2	169	0.39
	2. Middle	77	20.12	5.38	0.61	1 & 3	115	0.73
	3. High	23	18.87	4.57	0.95	2 & 3	98	1.01
General mental health	1. Low	94	112.39	23.60	2.43	1 & 2	169	0.25
	2. Middle	77	113.27	21.69	2.47	1 & 3	115	1.09
	3. High	23	107.09	17.83	3.72	2 & 3	98	1.25

** significant at 0.01 level, *** significant at 0.10 level

Influence of financial status on mental health (Table 58) is also examined. The results indicate that low, middle and high income groups of elderly do not differ among themselves on any of the mental health dimension. Income does not seem to influence the mental health status of elderly people.

The results relating marital status and mental health are presented in Table 59. The t-values obtained show that divorced and widowed elderly differ significantly at 0.10 level with respect to independence. Widowed elderly are found more independent than the divorced. With respect to environmental mastery married group is found to have more control over their environment than the divorced (significant at 0.10 level) and the widowed (significant at 0.05 level) groups. Between the divorced and widowed groups the former is superior to the latter group - the difference significant at 0.10 level in environmental mastery. The results also indicate that married elderly are better than the other groups with respect to feeling of well being.

Table 59

Means, SDs and t-values of the scores on different measures of Mental Health with respect to their marital status

Mental Health Measures	Marital status	No.	Means	SDs	SE of Mean	Groups compared	df	t-value
Self Evaluation	1. Married	33	18.27	5.41	0.94	1 & 2	128	0.30
	2. Unmarried	97	17.95	5.23	0.53	1 & 3	50	0.06
	3. Divorced	19	18.37	4.59	1.05	1 & 4	76	0.60
	4. Widowed	45	17.62	4.23	0.63	2 & 3	114	0.33
						2 & 4	140	0.37
						3 & 4	62	0.63
Social Orientation	1. Married	33	16.12	4.05	0.71	1 & 2	128	0.06
	2. Unmarried	97	16.07	4.21	0.43	1 & 3	50	0.90
	3. Divorced	19	17.16	3.89	0.89	1 & 4	76	0.34
	4. Widowed	45	16.42	3.70	0.55	2 & 3	114	1.04
						2 & 4	140	0.48
						3 & 4	62	0.72
Personal Integration	1. Married	33	20.27	5.68	0.99	1 & 2	128	0.22
	2. Unmarried	97	20.00	6.22	0.63	1 & 3	50	0.62
	3. Divorced	19	19.26	5.60	1.28	1 & 4	76	1.61
	4. Widowed	45	18.29	5.12	0.76	2 & 3	114	0.48
						2 & 4	140	1.61
						3 & 4	62	0.68
Independence	1. Married	33	23.97	5.68	0.99	1 & 2	128	0.30
	2. Unmarried	97	23.58	6.75	0.69	1 & 3	50	1.52
	3. Divorced	19	21.63	4.67	1.07	1 & 4	76	0.31
						2 & 3	114	1.20

Mental Health Measures	Marital status	No.	Means	SDs	SE of Mean	Groups compared	df	t-value
	4. Widowed	45	24.38	5.73	0.85	2 & 4	140	0.69
						3 & 4	62	1.84***
						1 & 2	128	1.21
Environmental Mastery	1. Married	33	16.15	5.06	0.88	1 & 3	50	2.85**
						1 & 4	76	1.61
	2. Unmarried	97	14.99	4.68	0.48	2 & 3	114	2.42*
						2 & 4	140	0.74
	3. Divorced	19	12.16	4.51	1.04	3 & 4	62	1.67***
						1 & 2	128	1.57
	4. Widowed	45	14.33	4.84	0.72	1 & 3	50	1.68***
Feeling of well being	1. Married	33	21.30	5.19	0.90	1 & 4	76	1.41
						2 & 3	114	0.66
	2. Unmarried	97	19.60	5.48	0.56	2 & 4	140	0.05
						3 & 4	62	0.66
	3. Divorced	19	18.68	5.81	1.33	1 & 2	128	0.82
						1 & 3	50	1.53
	4. Widowed	45	19.64	5.08	0.76	1 & 4	76	1.08
General mental health	1. Married	33	116.18	22.42	3.90	2 & 3	114	0.96
						2 & 4	140	0.34
	2. Unmarried	97	112.32	23.60	2.40	3 & 4	62	0.76
	3. Divorced	19	106.79	18.99	4.36			
	4. Widowed	45	110.93	20.24	3.02			

* Significant at 0.05 level ** significant at 0.01 level, *** significant at 0.10 level

Table 60

Means, SDs and t-values of the scores on different measures of Mental Health of elderly people from nuclear and joint families

Mental Health Measures	Family type	No.	Means	SDs	SE of Mean	df	t-value
Self Evaluation	1. Joint	137	17.61	5.02	0.43	192	1.59
	2. Nuclear	57	18.84	4.75	0.63		
Social Orientation	1. Joint	137	15.78	4.03	0.34	192	2.66**
	2. Nuclear	57	17.44	3.79	0.50		
Personal Integration	1. Joint	137	18.54	5.99	0.51	192	2.72**
	2. Nuclear	57	21.32	5.10	0.68		
Independence	1. Joint	137	23.18	6.20	0.53	192	1.63
	2. Nuclear	57	24.75	5.99	0.79		
Environmental Mastery	1. Joint	137	14.16	4.68	0.39	192	2.71**
	2. Nuclear	57	16.19	5.04	0.67		
Feeling of well being	1. Joint	137	19.40	5.52	0.47	192	1.64
	2. Nuclear	57	20.79	4.95	0.66		
General mental health	1. Joint	137	109.14	21.92	1.87	192	2.95**
	2. Nuclear	57	119.26	21.46	2.84		

** significant at 0.01 level

Type of family seems to have a significant influence on social orientation, personal integration and environmental mastery (Table 60). General mental health is also found as affected by the family type. The results indicate that those from nuclear families are more mentally healthy. They are more socially oriented, personally integrated and have more able to adapt to their environment. Nuclear family system appears as likely to facilitate mental health of the elderly. However, in self evaluation, independence and feeling of well being no significant difference is seen between those from nuclear and joint families.

Table 61

Means, SDs and t-values of the scores on different measures of Mental Health of rural and urban elderly people

Mental Health Measures	Leisure activities	No.	Means	SDs	SE of Mean	df	t-value
Self Evaluation	1. Urban	98	17.88	4.69	0.47	192	0.26
	2. Rural	96	18.06	5.24	0.54		
Social Orientation	1. Urban	98	15.57	4.20	0.42	192	2.47*
	2. Rural	96	16.98	3.72	0.38		
Personal Integration	1. Urban	98	19.18	5.71	0.58	192	0.95
	2. Rural	96	19.18	5.97	0.61		
Independence	1. Urban	98	24.01	5.99	0.61	192	0.85
	2. Rural	96	23.26	6.35	0.61		
Environmental Mastery	1. Urban	98	15.23	4.99	0.50	192	1.39
	2. Rural	96	14.27	4.67	0.48		
Feeling of well being	1. Urban	98	19.59	5.34	0.54	192	0.57
	2. Rural	96	20.03	5.44	0.56		
General mental health	1. Urban	98	111.70	22.06	2.23	192	0.26
	2. Rural	96	112.53	22.47	2.29		

* significant at 0.05 level

Table 62

Means, SDs and t-values of the scores on different measures of Mental Health of elderly people in respect of their involvement in leisure activities

Mental Health Measures	Leisure activities	No.	Means	SDs	SE of Mean	df	t-value
Self Evaluation	1. High	94	17.96	5.05	0.52	192	0.03
	2. Low	100	17.98	4.89	0.49		
Social Orientation	1. High	94	15.87	3.49	0.36	192	1.33
	2. Low	100	16.64	4.44	0.44		
Personal Integration	1. High	94	19.79	5.59	0.58	192	0.51
	2. Low	100	19.37	6.08	0.61		
Independence	1. High	94	24.72	5.61	0.58	192	2.40*
	2. Low	100	22.62	6.52	0.65		
Environmental Mastery	1. High	94	14.98	4.77	0.49	192	0.62
	2. Low	100	14.55	4.93	0.49		
Feeling of well being	1. High	94	2.041	4.81	0.49	192	1.53
	2. Low	100	19.24	5.83	0.58		
General mental health	1. High	94	113.71	20.01	2.06	192	0.97
	2. Low	100	110.61	24.10	2.41		

* significant at 0.05 level

The results presented in Table 61 show that urban and rural elderly differ significantly between themselves in social orientation. From the mean scores, it seems that rural elderly are more socially oriented than the urban aged. In all the other measures of mental health as well as in general mental status these two groups do not differ from each other. They are found more or less similar with regard to self evaluation, personal integration, independence, environmental mastery, feeling of well being and general mental health.

The results in Table 62 show the means, SDs and t-values of the scores on general mental health and its different measures obtained by the groups of elderly people in relation to their involvement in leisure activities. Elderly who are involved active in leisure activities seem to differ significantly in independence from those who are less active. This indicates that leisure activities are likely to help elderly to manage themselves, develop a sense of individuality and independence in thinking and action. However, involvement in leisure activities does not influence self evaluation, social orientation, personal integration, environmental mastery, and feeling of well being. General mental health of the elderly is also not affected by their leisure activity participation.

The analyses examining the role of demographic factors on mental health status of the elderly have provided some important findings.

The results show that young old are more mentally healthy, than those who are comparably older. This suggests that mental health deteriorates with advancing age. Level of education also plays some role with respect to mental health. Highly educated and professional groups are found superior to the comparably less educated groups in some measures of mental health. Male female status seems to influence environmental mastery, and females are found as having more control over their environment. Occupational status influences measures of mental health, namely, independence, environmental mastery and feeling of well being. In all these cases employees from organised sectors are better than the other groups of elderly. Income does not seem to affect mental health of the aged. The results also reveal that marital status influences the mental health status of elderly to some extent. Married elderly though do not live with their spouses, show more independence than others. Type of family seems to have a significant effect on social orientation, personal integration, environmental mastery and general mental health of the elderly. Nuclear families are found to facilitates mental health of the aged

people. Again, involvement in leisure activities seems to foster independence. Rearing background also influences mental health. Further, rural elderly are found more socially oriented than the urban elderly.

The fifth hypothesis that 'personal demographic factors such as age, education, sex, occupation, income, marital status, type of family, rearing background and involvement in leisure activities influence eldelry's mental health status' is partially accepted.

The findings regarding the role of involvement in leisure activities in improving mental health is supported by a few studies (Lee and Russell, 2003; Oliver, et al., 2006; Asha, 2001; Bharadwaj and Chadha, 2005). Studies by Anantharaman (1980), Kessler and Cleary (1980), Oja (1984), though not directly, seems to support the results in relation to personal - biographical factors such as income, education, family size and location of living.

Mental health reflects a wholesome balance of mind and body, so that the individual is free from discords and conflicts. Mental Health as a condition of personal and social functioning with maximum effectiveness depends up on an array of social, personal and psychological factors.

The findings of the present study emphasize the role of psychological factors such as life event stress, general adjustment and perception of social support as well as personal - biographical factors in elderly person's mental health.

While increased stress is found as leading to poor mental health, good adjustment and better perception of social support are seen as improving the quality of life of elderly and thus serving to improve their experience as they face psychological challenges of ageing.

Life stress is one of the most common sources of threat to individual's mental health. Aged persons are more vulnerable to life event changes and the resulting stresses and strains. Retirement, spousal death, separation from children and relatives, and a lot of other changes in life are highly stressful and hence precipitate psychological problems leading to poor mental health.

However , the extent to which the stresses and strains incapacitate the elderly persons and account for their ill health and psychological well being, to a large extent, is determined by factors like adjustment and perception of social support.

Adjusted elderly may be more adaptive to the changes that happen in their life and hence may be more effective in meeting and satisfying the newly emerging needs. The readiness to understand and accept the several losses, lowered status and change in roles is shown by the aged who are well adjusted. This may enhance their feeling of well being and satisfaction and this in turn may result in better mental health.

Social support protects the elderly from the deleterious influence of stresses and strains of life. It seems to have a cushioning effect moderating the negative consequences of stressful life events. Elderly's perception of social support provisions as good, rewarding and helpful to deal with the crippling effects of age related changes and losses seems to enhance their feeling of well being. Thus, like good adjustment, good social support also acts as a potent factor in improving elderly's mental health status.

A significant other finding in the present study is that institutionalised elderly persons are comparably better than the non-institutionalised elderly in their mental health status. This may be attributed to the changing social conditions of Kerala.

The breaking down of joint family system and emergence of nuclear families has brought with it a lot of problems for the elderly generation. In traditional society elderly persons were treated with

reverence and affection and looked up on as unending sources of knowledge and wisdom. But, in spite of the material comforts, in many of the nuclear families, the status of the elderly is marginalised and is inferior. They are, very often looked down at, left alone, rejected and misunderstood. In contrast to this, majority of old age homes have provisions for support like facilities for cooperative work, play, reading, exercise, relaxation, religious get together, viewing television and the like. Institutionalised elderly also enjoy the provision for strong social relations. They are not subjected to unwanted restrictions and criticisms as in their family and independence in activities and thinking is encouraged. These conditions might have reduced the negative consequences of aging and related stress and contributed to relatively stable levels of well being. This is likely to facilitate adjustment of the elderly and in turn enhance their mental health.

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CHAPTER FIVE

SUMMARY AND CONCLUSIONS

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Chapter V

SUMMARY AND CONCLUSIONS

Positive psychological functioning in later life has been of interest to social gerontologists for nearly half a century, although philosophers have written about the positive and negative aspects of old age since classical antiquity. The population of Kerala is ageing more rapidly than in other states of India. With around nine per cent of the population already 60+ years old as per 1991 census, when all Indian figures are around 7 per cent, the elderly will form 20 per cent of the state's population by 2021, while the all India figures would be about 14 per cent. In another 10 to 15 years, Kerala will become an "aged society", a status now enjoyed only by the industrialised countries. But while the currently "aged societies" have well developed programmes of social security and protection for their old, Kerala does not have any measure worth mentioning which will ensure the well-being of today's youth when they enter old age.

Currently, around 30 per cent of Kerala's population is under 15 years and 10 per cent over 59 years. This means that these dependent groups are supported by the remaining 15-59 years old. In another 25 years, the proportion of children will be reduced by 10 per cent but that of the old will rise by 10 per cent. Thus, while the total dependency ratio will remain more or less the same as of today, the service needs of the society will require a radical shift from child-care services to services for old age care (less paediatric care and more semantic care and less number of schools and more number of elder care institutions). Apart from that, while the number of children under 15 will be reduced and the years of care needed for them will remain constant, both the number of the old and the number of years of care needed for the old will progressively increase.

Research on psychological mental health of older people in relation to stressful life events, adjustment and social support have not produced consistent evidence or understanding about how the life course accounts for aging patterns. Studies have brought forward so many contradictory findings on the correlates adjustment and social support of the aged. In this context, it is expected that the present study will provide information about how and to what extent life event stress adjustment and social support as well as personal

demographic factors interact with the life course of elderly and determine the status of their mental health.

The present study was carried out to see whether there is any significant difference between groups of elderly with high, moderate and low stress, good and poor adjustment and good, average and poor perception of social support in their self-evaluation, social orientation, personal integration, independence, environmental mastery and feeling of well being and general mental health.

It was also intended to study the influence of demographic variables namely, age, religion, income, type of family, education, marital status, living conditions, occupation, locality of living etc. on elderly's mental health.

METHOD

Sample

The subjects for the present study consists of 194 elderly persons of the age 65 to 80 years. Multistage random sampling procedure was adopted to select the subjects of the present study. The sample includes people from three institutions for the aged where they have spent a minimum of 3 to 5 years and homes in and around Calicut and Malappuram districts of Kerala state. Institutionalised

elderly include 51 males and 46 females and those from home also include 51 males and 46 females.

Description of Tools Used

The following inventories were used in the present study:

1. Personal Data Sheet
2. Mental Health Inventory
3. Presumptive Stressful Life Event Scale (PSLE, Scale by Singh, Kaur and Kaur, 2002)
4. Adjustment Inventory (Subrahmanian and Asha, 1989)
5. Social Support Scale (Asha, 1998)

(1) Personal Data Sheet

This was used to collect background information in respect of each subjects.

(2) Mental Health Inventory

This scale is used to assess the mental health of elderly people. It includes items from six areas of mental health namely self evaluation, social orientation, personal integration, independence, environmental mastery and feeling of well being.

Administration and Scoring

The inventory was administered individually. The subjects were tested from their house after considering the distractions with good rapports.

Scoring of the items was done using scoring keys. In each sub-scale a high score indicate better standing on that measure of mental health. The total of the scores in all the six areas will give an index of general mental health. Here also a high score is an indication of good mental health.

(3) Presumptive Stressful Life Event Scale

This scale (Malayalam version) consists of 51 items and it assesses individuals' responses to stressful life events.

Administration and Scoring

PSLE was administered individually. Scoring was done as directed in the manual. A high score is considered as an index of high stress.

(4) Adjustment Inventory

This inventory consists of 66 items and it assesses the nature and extent of day to day adjustment of the elderly persons.

Administration and Scoring

The inventory was administered individually and scoring was done with the help of scoring keys. A high score shows good adjustment whereas a low score shows poor adjustment.

(5) Social Support Scale

Social support scale consists of 22 items. It assesses the perception of social support from different relational provisions.

Administration and Scoring

Social Support Scale was administered individually. The scoring was done using scoring keys. A high score is indicative of better perception of social support and low score is indicative of poor perception of social support.

Reliability and Validity

The tests and inventories used in the present study are found to have sufficient reliability and validity.

Analysis of Data

The data collected were analysed using correlation, analysis of variance (3-way), and t-test for independent samples. The statistical

package for social sciences (SPSS) was used for the purpose of data analysis.

The following are the major findings of the present study:

1. High stress leads to poor mental health. Good adjustment and better perception of support enhances mental health of the elderly persons.

2. Self-evaluation of the elderly persons is not influenced by living arrangement (home/institution), male-female status or level of stress experienced.

3. Social orientation is not affected by living arrangement (home/institution), sex or level of stress

4. Living arrangement significantly influences personal integration. Institutionalised elderly are more personally integrated than the home dwelling elderly. Among institutionalised elderly people, females are more personally integrated than males. Between female groups again institutionalised females are found more personally integrated than those from home.

5. Independence is affected living arrangement. Institutionalised elderly are more independent than those from home.

6. Sex is found to have significant influence on environmental mastery. Females are better in environmental mastery than males.

7. Living arrangement influences feeling of well being of elderly persons. Institutionalised elderly have better feeling of well being than those from home.

8. Mental health of the elderly is significantly influenced by living arrangement of the elderly persons. Institution dwelling elderly are more mentally healthy than those from home.

9. Living arrangement and sex do not significantly influence self-evaluation of the elderly persons. But general adjustment significantly influences self-evaluation. Better adjusted elderly are found have positive self-evaluation.

10. Social orientation is not affected by living arrangement, sex and general adjustment.

11. Living arrangement as well as interaction of living arrangement and sex influenced personal integration of the elderly.

Institution dwelling elderly are found more personally integrated than those from home. Males from home are more personally integrated than those from institutions. But among institution dwelling elderly, women are found more personally integrated than men.

12. Independence of the elderly is significantly influenced by living arrangement and sex. Institutionalised elderly are more independent than those from home. Again better adjusted are found more independent than less adjusted elderly.

    Combined effects of living arrangement and adjustment as well as living arrangement, sex and adjustment are also significant on independence of the elderly. Among home dwelling elderly persons better adjusted are more independent, but among institution dwelling elderly, less adjusted are more independent.

13. Environmental mastery is influenced by sex and general adjustment. Elderly males have more control over their environment than elderly females. Again, better adjusted elderly are superior to less adjusted elderly in environmental mastery.

14. Living arrangement and general adjustment are significantly influence feeling of well being. Institutionalised elderly experience better feeling of well being. Also, better adjusted elderly have better feeling of well being.

15. Living arrangement influences general mental health of elderly person. General adjustment also has significant influence on their mental health status. Besides, living arrangement and general adjustment jointly influence general mental health.

    Institutionalised elderly are more mentally healthy. Again better adjusted elderly are more mentally healthy.

16. Perception of social support significantly influences self-evaluation. Elderly persons with better perceived support are found to have positive self-evaluation.

17. Perception of social support influences social orientation. Living arrangement and sex in combination, also influences social orientation.

    Better perceived social support leads to better social orientation. Among home dwelling elderly, elderly men tend to be more socially oriented than elderly women.

18. Personal integration is affected by living arrangement and perception of social support. 2-way interactions of living arrangement and sex, living arrangement and perception of social support and sex and perception of social support are significant on personal integration.

Institution dwelling elderly are more personally integrated. Again, those with better perceived support are more personally integrated.

Among home dwelling elderly men show more personal integration. But among institution dwelling elderly women show more personal integration. Among males as well as females, those with better perceived support are found as having better personal integration.

19. Independence is influenced by living arrangement as well as perception of social support. Living arrangement in relation to social support also influence independence. Institutionalised elderly are superior to home dwelling elderly in independence. And those with better perceived support are more independent than those with comparably poor perception of social support.

20. Perception of social support is found to affect environmental mastery of the elderly persons. Those having better perception are found to have more control over their environment.

21. Perception of social support as well as living arrangement seem to influence feeling of well being of the elderly. Institutionalised elderly have better feeling of well being than non-institutionalised elderly. Better perception leads to better feeling of well being. In the case of elderly from home, those with better perceived support have better feeling of well being. But among those from institution elderly with moderate perception of social support have better feeling of well being.

22. Perception of social support tend to influence mental health of the elderly. Living arrangement also influences their mental health. Again, living arrangement in relation to sex influences mental health of the elderly persons.

Better perception of social support leads to better mental health. Institutionalisation also seems to improve mental health of the elderly.

Among the institutionalised elderly females seems to be more mentally healthy than males. Both in the case of home dwelling

and institution dwelling elderly, those having good perception of support are found more mentally healthy than those having poor perception of social support.

23. Young old groups of elderly are superior to elder groups in environmental mastery, personal integration and feeling of well being.

24. Higher educational level tends to improve mental health of the elderly. College educate elderly are more independent and have better feeling of well being.

25. Males and females do not differ in mental health status and mental health measures such as self-evaluation, social orientation, personal integration, independence and feeling of well being.

26. Occupational status influences mental health to some extent, employees from organised sectors are more independent, and have better feeling of well being than professionals and business people.

27. Financial status has no significant influence on elderly's mental health.

28. Married elderly seem better than the divorced and the widowed elderly in environmental mastery and they are better in feeling of well being also. The widowed elderly are more independent than the divorced.

29. Elderly from nuclear families are more mentally healthy than those from joint families. They are more socially oriented and personally integrated.

30. Rural elderly are found more socially oriented than the urban elderly. In self evaluation, personal integration, independence, environmental mastery, feeling of well being and general mental health, rural and urban elderly are more or less similar.

31. Elderly who are actively involved in leisure activities seem to be more independent than those who are less involved. However, leisure activity participation does not influence self-evaluation, social orientation, personal integration, environmental mastery, feeling of well being and general mental health of the elderly persons.

Conclusions

1. High stress results in poor mental health of elderly persons.
2. Good adjustment facilitates mental health of elderly.
3. Better perception of social support enhances mental health of elderly.
4. Institutionalisation improves the mental health of elderly persons.

Implications

The understanding gained from the present study is expected to be useful in planning welfare programmes for elderly persons. The information obtained may provide guidelines to design appropriate intervention strategies to reduce stress, to improve adjustment and to enhance mental health of the elderly, especially for the elderly who are more prone to the delimiting conditions of later life.

Limitations

The sample size selected for the study is small when considered in terms of the analysis used for examining the data. When Analysis of Variance (3-way) technique was used, particularly in 3-way interactions, the number of subjects in some of the cells was reduced to 3 or 4. In

many comparisons using these small groups the t-values obtained were highly significant. But, generalisation of the results could not be possible because of the limited number of the subjects in the groups compared. However, the findings in such cases may be considered as crucial in revealing the trends with respect to the association of elderly person's mental health to stress, adjustment and social support.

Suggestions For Further Research

1. A study may be planned to understand the nature and extent of different provisions of support, provided to the elderly, especially by family and community.

2. An extensive study may be planned to examine the role of coping styles along with stress and mental health of elderly persons.

3. An action-oriented research may be planned. Appropriate psychological interventions may be designed and efficacy may be tested to reduce stress and improve mental health of the elderly.

4. Considering the limitations pointed out, a similar study may be planned using a larger sample, with proportional representation of institutionalised and non-institutionalised groups, of elderly persons.

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MENTAL HEALTH OF OLDER PEOPLE IN RELATION TO STRESSFUL LIFE EVENTS, ADJUSTMENT AND SOCIAL SUPPORT

Thesis submitted in partial fulfilment of the
requirements for the degree of
DOCTOR OF PHILOSOPHY in PSYCHOLOGY

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APPENDICES

1. Personal Data Sheet
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8. Adjustment Inventory Answer Sheet
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Appendix I

PERSONAL DATA SHEET

1. Name :
2. Age : Yrs
3. Gender : ♂ MALE ☐ ♀ FEMALE ☐
4. Religion : Caste :
5. Address

☎ :

:

E-mail :

6. Education :

No formal Education ☐ Knowledge of Reading and Writing ☐
High School Education ☐ College Education ☐ Professional Education ☐

7. Occupation (Specify) :
8. Annual Income :
9. Source of Income :

Paid Employment ☐ Pension ☐ Savings ☐ Supported by Family ☐ Others ☐

10. Marital Status :

Single (Never Married) ☐ Married ☐ Widowed ☐ Divorced ☐ Separated ☐

11. Family Type : Nuclear ☐ Joint ☐
12. Locality : Rural ☐ Urban ☐
13. Living arrangements :

* With Family (Spouse ☐ Parents ☐ Sibling ☐ Offspring ☐ Others ☐)
* With Relatives ☐
* With Friends ☐
* In Old Age Homes ☐
* In Hospital ☐
* Living Alone ☐

14. Leisure Activities :

Appendix II

MENTAL HEALTH INVENTORY

2001

നിർദ്ദേശങ്ങൾ

താഴെ ഏതാനും പ്രസ്താവനകൾ കൊടുത്തിരിക്കുന്നു. ഓരോ പ്രസ്താവനയ്ക്കും നേരെ അഞ്ച് പ്രതികരണങ്ങൾ (വളരെ ശരി; മിക്കപ്പോഴും ശരി; ചിലപ്പോഴൊക്കെ ശരി; അപൂർവ്വമായി ശരി; ശരിയല്ല) കൊടുത്തിട്ടുണ്ട്. ഓരോ പ്രസ്താവനയും വായിച്ചതിനു ശേഷം നിങ്ങളുടെ കാഴ്ചപ്പാടനുസരിച്ച് മേൽപ്പറഞ്ഞ പ്രതികരണങ്ങളിലൊന്നിൽ '✓' എന്ന അടയാളമിടുക. എല്ലാ പ്രസ്താവനയ്ക്കും നിങ്ങളുടെ പ്രതികരണങ്ങൾ രേഖപ്പെടുത്താൻ ശ്രമിക്കുക.

നിങ്ങളുടെ പ്രതികരണങ്ങൾ ഗവേഷണാവശ്യങ്ങൾക്കു മാത്രമേ ഉപയോഗിക്കുകയുള്ളൂ.

നന്ദി.

A

	പ്രസ്താവനകൾ	പ്രതികരണങ്ങൾ				
		വളരെ ശരി	മിക്കപ്പോഴും ശരി	ചിലപ്പോഴൊക്കെ ശരി	അപൂർവ്വമായി ശരി	ശരിയല്ല
1.	എനിക്ക് എന്നിൽ നല്ല വിശ്വാസമുണ്ട്.	( )	( )	( )	( )	( )
2	പ്രതിസന്ധിഘട്ടങ്ങളിൽ തീരുമാനമെടുക്കുന്നതിന് എനിക്ക് കഴിയാറില്ല.	( )	( )	( )	( )	( )
3	പ്രശ്നങ്ങളെ അഭിമുഖീകരിക്കുന്നതിൽ വൈമനസ്യം തോന്നാറുണ്ട്.	( )	( )	( )	( )	( )
4.	എന്നിലും ചഞ്ചലപ്പെടാത്ത ഒരു മനസ്സാണ് എന്റേത്	( )	( )	( )	( )	( )
5	ഞാൻ പെട്ടെന്ന് പ്രകോപിതനാകാറുണ്ട്.	( )	( )	( )	( )	( )
6	ഭാവിയെക്കുറിച്ചോർത്ത് ഞാൻ ഉത്കണ്ഠപ്പെടാറുണ്ട്	( )	( )	( )	( )	( )
7	മറ്റുള്ളവരെ പരിചയപ്പെടുന്നതിന് എനിക്ക് പ്രയാസം തോന്നാറുണ്ട്	( )	( )	( )	( )	( )
8.	നിസ്സാരങ്ങളായ കാര്യങ്ങളെക്കുറിച്ചോർത്ത് ഞാൻ വ്യാകുലപ്പെടുക പതിവാണ്.	( )	( )	( )	( )	( )
9.	കൃത്യതയോടെ കാര്യങ്ങൾ ചെയ്തു തീർക്കാൻ എനിക്കു കഴിയാറുണ്ട്.	( )	( )	( )	( )	( )
10.	സംഭവിക്കുന്നതെല്ലാം വിധിയാണെന്നു കരുതി ആശ്വസിക്കുന്ന സ്വഭാവമാണെന്റേത്.	( )	( )	( )	( )	( )

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11.	എന്റെ സുഹൃത്തുക്കൾക്കും സഹപ്രവർത്തകർക്കും എന്നെക്കുറിച്ച് നല്ല മതിപ്പാണ് ഉള്ളത്.	( )	( )	( )	( )	( )
12.	സമൂഹത്തിന് എന്നെക്കൊണ്ട് ഉപകാരമുണ്ടെന്നാണ് ഞാൻ കരുതുന്നത്	( )	( )	( )	( )	( )
13	അയൽവാസികളുമായി എനിക്ക് നല്ല ബന്ധമാണുള്ളത്.	( )	( )	( )	( )	( )
14.	പ്രധാനപ്പെട്ട സാമൂഹിക കാര്യങ്ങളോട് ഞാൻ പൂർണ്ണമായും സഹകരിക്കാറുണ്ട്.	( )	( )	( )	( )	( )
15.	ആഘോഷങ്ങളിൽ ഞാൻ ഉത്സാഹത്തോടെ പങ്കെടുക്കാറുണ്ട്	( )	( )	( )	( )	( )
16	മൂല്യങ്ങളുടെ അടിസ്ഥാനത്തിൽ മറ്റുള്ളവരിൽ നിന്നും ഞാൻ വ്യത്യാസപ്പെട്ടിരിക്കുന്നു.	( )	( )	( )	( )	( )

		വളരെ ശരി	മിക്കപ്പോഴും ശരി	ചിലപ്പോഴൊക്കെ ശരി	അപൂർവ്വമായി ശരി	ശരിയല്ല
17.	മറ്റുള്ളവരുടെ അംഗീകാരം കിട്ടുന്ന പ്രവൃത്തികളാണ് ഞാൻ സാധാരണയായി ചെയ്യാറ്.	( )	( )	( )	( )	( )
18.	[illegible] കാര്യങ്ങൾ ചെയ്യുമ്പോഴാണ് എനിക്ക് കൂടുതൽ താല്പര്യം.	( )	( )	( )	( )	( )
19.	മറ്റുള്ളവർക്ക് പ്രയാസമുണ്ടാക്കുന്ന പ്രവൃത്തികൾ ചെയ്യാതിരിക്കാൻ ഞാൻ ശ്രമിക്കാറുണ്ട്.	( )	( )	( )	( )	( )
20.	മറ്റുള്ളവരുടെ പ്രതീക്ഷയ്ക്കൊത്ത് പെരുമാറാൻ എനിക്ക് കഴിയാറില്ല.	( )	( )	( )	( )	( )

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21.	ഉത്തരവാദിത്വങ്ങളെക്കുറിച്ചോർത്ത് ഞാൻ വ്യാകുലപ്പെടാറുണ്ട്.	( )	( )	( )	( )	( )
22.	പ്രശ്നഘട്ടങ്ങളിൽ പോലും കാര്യകാരണ സഹിതം ചിന്തിക്കാൻ എനിക്കു കഴിയാറുണ്ട്.	( )	( )	( )	( )	( )
23	ഭാവിയെക്കുറിച്ച് വ്യക്തമായ പദ്ധതികൾ ഞാൻ ആവിഷ്ക്കരിക്കാറുണ്ട്.	( )	( )	( )	( )	( )
24.	വസ്തുതകളുടെയും തെളിവുകളുടെയും അഭാവത്തിൽ ഞാൻ ആളുകളെയും പ്രശ്നങ്ങളെയും വിലയിരുത്താറില്ല.	( )	( )	( )	( )	( )
25	എന്റെ പ്രശ്നങ്ങൾ ഞാൻ സ്വയം പരിഹരിക്കുകയാണ് പതിവ്.	( )	( )	( )	( )	( )
26	ഭാവനാപൂർണ്ണമായ അത്യാഹിതങ്ങൾ എന്നെ വല്ലാതെ ഭയപ്പെടുത്താറുണ്ട്.	( )	( )	( )	( )	( )
27.	വ്യക്തികളും സംഘടനകളുമായിട്ടുള്ള എന്റെ അടുപ്പം പടിപടിയായി കുടന്നതായിട്ട് എനിക്ക് തോന്നാറുണ്ട്	( )	( )	( )	( )	( )
28	ഏതൊരു പ്രവൃത്തിയും തുടർച്ചയായി ചെയ്യാൻ എനിക്കു സാധിക്കാറുണ്ട്.	( )	( )	( )	( )	( )
29.	ഉത്തരവാദിത്വങ്ങൾ എനിക്ക് ഭാരമായി തോന്നാറില്ല	( )	( )	( )	( )	( )
30	ആളുകളെ പരിചയപ്പെടുന്നതിൽ എനിക്ക് തീരെ താല്പര്യമില്ല	( )	( )	( )	( )	( )

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31.	എന്തു ചെയ്യുമ്പോഴും മറ്റുള്ളവരുടെ നിർദ്ദേശം അനുസരിക്കാറാണു പതിവ്.	( )	( )	( )	( )	( )
32.	എനിക്ക് എതെങ്കിലുമൊരു വിഷയത്തിൽ റ്റെയ്ക്ക് ഒരു തീരുമാനമെടുക്കാൻ കഴിയാറില്ല.	( )	( )	( )	( )	( )
33.	എന്റെ സ്വന്തം കാര്യങ്ങൾ പരസഹായമില്ലാതെ ചെയ്യാൻ എനിക്ക് കഴിയാറുണ്ട്.	( )	( )	( )	( )	( )
34.	പ്രശ്നങ്ങൾ പരിഹരിക്കാൻ പലപ്പോഴും എന്റെ ബന്ധുക്കളും സുഹൃത്തുക്കളും സഹായിക്കാറുണ്ട്.	( )	( )	( )	( )	( )
35.	അടുത്ത പടി എന്തു ചെയ്യണമെന്ന തീരുമാനത്തിലെത്താൻ പലപ്പോഴും എനിക്കു കഴിയാറില്ല.	( )	( )	( )	( )	( )
36	പ്രതികൂല സാഹചര്യത്തിലും എന്റെ ജോലി ഭംഗിയായി ചെയ്തു തീർക്കാൻ എനിക്കു കഴിയാറുണ്ട്	( )	( )	( )	( )	( )
37	എതൊരു കാര്യവും ചെയ്യണോ വേണ്ടയോ എന്നു തീരുമാനിക്കാനുള്ള സ്വാതന്ത്ര്യം എനിക്കുണ്ട്	( )	( )	( )	( )	( )
38	എനിക്കു വേണ്ട വസ്തുക്കൾ ഷർട്ട് വസ്ത്രമോ പുസ്തകമോ മറ്റെന്തെങ്കിലുമോ ആവട്ടെ ഏതെന്ന് തീരുമാനിക്കുന്നതിന് ബുദ്ധിമുട്ടു തോന്നാറില്ല.	( )	( )	( )	( )	( )

		വളരെ ശരി	മിക്കപ്പോഴും ശരി	ചിലപ്പോഴൊക്കെ ശരി	അപൂർവ്വമായി ശരി	ശരിയല്ല
39.	ഉത്തരവാദിത്വങ്ങൾ ഏറ്റെടുക്കുന്നത് സന്തോഷകരമായ ഒരു കാര്യമാണ്.	( )	( )	( )	( )	( )
40.	സ്വതന്ത്രമായി ചിന്തിക്കുന്നതിനും പ്രവർത്തിക്കുന്നതിനുമാണ് എനിക്ക് താല്പര്യം.	( )	( )	( )	( )	( )

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41.	സാഹചര്യങ്ങൾക്കനുസരിച്ച് ഞാൻ മാറാറില്ല.	( )	( )	( )	( )	( )
42.	ഞാൻ ദിവാസ്വപ്നങ്ങളിൽ മുഴുകിയിരിക്കുക പതിവാണ്.	( )	( )	( )	( )	( )
43.	എന്റെ ജോലിയിൽ പൂർണ്ണമായും ശ്രദ്ധ കേന്ദ്രീകരിക്കുവാൻ എനിക്കു കഴിയാറില്ല.	( )	( )	( )	( )	( )
44.	നിത്യജീവിതത്തിലെ സാധാരണ പ്രശ്നങ്ങൾ പോലും എന്നെ വളരെയധികം നിരാശപ്പെടുത്താറുണ്ട്.	( )	( )	( )	( )	( )
45.	പ്രതികൂല സാഹചര്യങ്ങളിൽ യാഥാർത്ഥ്യമെന്തെന്നു മനസ്സിലാക്കാതെ ഞാൻ പ്രവർത്തിക്കാറുണ്ട്.	( )	( )	( )	( )	( )
46.	പുതുതായി എന്തെങ്കിലും ചെയ്യുമ്പോൾ മറ്റുള്ളവരുടെ വിമർശനം ഞാൻ കാര്യമായെടുക്കാറില്ല.	( )	( )	( )	( )	( )
47.	സാമൂഹ്യ നിയമങ്ങളുമായി പൊരുത്തപ്പെട്ടു പോകാനാണ് ഞാൻ ശ്രദ്ധിക്കാറുള്ളത്.	( )	( )	( )	( )	( )
48.	എനിക്കിഷ്ടമില്ലാത്ത എന്തിനേയും എതിർക്കേണ്ടതാണെന്ന് ഞാൻ കരുതുന്നു.	( )	( )	( )	( )	( )
49.	പ്രതികൂല സാഹചര്യങ്ങളെ അതിജീവിക്കാനാണ് ഞാൻ ശ്രമിക്കാറുള്ളത്.	( )	( )	( )	( )	( )
50.	സ്ഥിരപ്രയത്നം ജീവിതവിജയത്തിന് ആവശ്യമാണെന്ന് ഞാൻ കരുതുന്നു.	( )	( )	( )	( )	( )

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51.	സുഹൃത്തുക്കളുടെയും ബന്ധുക്കളുടേയും കൂടെയിരിക്കുമ്പോൾ സുരക്ഷിതത്വബോധം തോന്നാറുണ്ട്.	( )	( )	( )	( )	( )
52.	എല്ലാ പ്രശ്നങ്ങൾക്കും എന്തെങ്കിലുമൊരു പരിഹാരം കണ്ടെത്താനാകുമെന്നു ഞാൻ കരുതുന്നു.	( )	( )	( )	( )	( )
53.	ആവശ്യമില്ലാതെ വിഷമിക്കുന്ന സ്വഭാവം എനിക്കില്ല.	( )	( )	( )	( )	( )
54.	സംഭവിക്കുന്നതെല്ലാം നല്ലതിനാണെന്ന പ്രതീക്ഷ എനിക്കുണ്ട്.	( )	( )	( )	( )	( )
55.	ഇന്നത്തെ ബുദ്ധിമുട്ടുകൾ മാറി സന്തോഷകരമായ ഭാവി ജീവിതം ഉണ്ടാകുമെന്ന് എനിക്ക് വിശ്വാസമുണ്ട്.	( )	( )	( )	( )	( )
56.	എന്റേത് പൊതുവെ സന്തോഷകരമായൊരു ജീവിതമാണ്.	( )	( )	( )	( )	( )
57.	തീർച്ചയായും ലക്ഷ്യത്തിലെത്താനാകും എന്ന ചിന്ത എനിക്ക് അത്യധികം ഉത്സാഹം തരുന്നുണ്ട്.	( )	( )	( )	( )	( )
58.	ബുദ്ധിമുട്ടുകളെ സഹിഷ്ണുതയോടെ സമീപിക്കുവാൻ എനിക്കു കഴിയാറില്ല.	( )	( )	( )	( )	( )
59.	സുഹൃത്തുക്കളോട് എനിക്ക് അടുപ്പവും വിശ്വാസവുമുണ്ട്.	( )	( )	( )	( )	( )
60.	പ്രശ്നങ്ങൾക്കിടയിലും ശാന്തമായൊരു മാനസികാവസ്ഥ നിലനിർത്താൻ എനിക്കു കഴിയാറുണ്ട്.	( )	( )	( )	( )	( )

Appendix III

ITEM SELECTION - MENTAL HEALTH

Item No.	Item Discrimination index	Item difficulty index
1	0.22	0.75
2	0.17	0.37
3	0.18	0.34
4	0.21	0.39
5	0.24	0.36
* 6	0.08	0.32
7	0.39	0.64
8	0.35	0.44
9	0.35	0.46
* 10	0.11	0.41
11	0.34	0.64
12	0.31	0.50
* 13	0.16	0.85
14	0.23	0.57
* 15	0.08	0.88
* 16	0.04	0.42
17	0.24	0.36
18	0.18	0.69
* 19	0.17	0.88
20	0.33	0.36
* 21	0.14	0.41
22	0.39	0.48
23	0.25	0.55
24	0.16	0.51
25	0.26	0.54
26	0.30	0.36
27	0.25	0.47
28	0.29	0.40
29	0.24	0.63
* 30	0.12	0.75
* 31	0.08	0.20

Item No.	Item Discrimination index	Item difficulty index
32	0.36	0.43
33	0.26	0.59
34	0.27	0.67
35	0.30	0.39
36	0.48	0.49
37	0.30	0.72
38	0.31	0.73
39	0.29	0.60
40	0.20	0.74
* 41	0.07	0.39
42	0.20	0.56
43	0.30	0.43
44	0.38	0.39
45	0.31	0.44
* 46	0.09	0.29
47	0.35	0.60
* 48	0.08	0.38
49	0.23	0.68
* 50	0.09	0.87
* 51	0.15	0.81
52	0.23	0.83
53	0.42	0.55
54	0.29	0.68
* 55	0.16	0.82
56	0.35	0.62
57	0.29	0.73
58	0.34	0.42
* 59	0.17	0.81
60	0.39	0.54

* Items rejected

Appendix IV

MENTAL HEALTH INVENTORY

2003

നിർദ്ദേശങ്ങൾ

താഴെ എതാനും പ്രസ്താവനകൾ കൊടുത്തിരിക്കുന്നു. ഓരോ പ്രസ്താവനയ്ക്കും നേരെ അഞ്ച് പ്രതികരണങ്ങൾ (വളരെ ശരി; മിക്കപ്പോഴും ശരി; ചിലപ്പോഴൊക്കെ ശരി; അപൂർണ്ണമായി ശരി; ശരിയല്ല) കൊടുത്തിട്ടുണ്ട്. ഓരോ പ്രസ്താവനയും വായിച്ചതിനു ശേഷം നിങ്ങളുടെ കാഴ്ചപ്പാടനുസരിച്ച് മേൽപ്പറഞ്ഞ പ്രതികരണങ്ങളിലൊന്നിൽ ' √ ' എന്ന അടയാളമിടുക. എല്ലാ പ്രസ്താവനയ്ക്കും നിങ്ങളുടെ പ്രതികരണങ്ങൾ രേഖപ്പെടുത്താൻ ശ്രമിക്കുക

നിങ്ങളുടെ പ്രതികരണങ്ങൾ ഗവേഷണാവശ്യങ്ങൾക്കു മാത്രമേ ഉപയോഗിക്കുകയുള്ളൂ.

നന്ദി.

	പ്രസ്താവനകൾ	പ്രതികരണങ്ങൾ				
	A	വളരെ ശരി	മിക്കപ്പോഴും ശരി	ചിലപ്പോഴൊക്കെ ശരി	അപൂർവ്വമായി ശരി	ശരിയല്ല
1)	എനിക്ക് എന്നിൽ നല്ല വിശ്വാസമുണ്ട്.	( )	( )	( )	( )	( )
2)	പ്രതിസന്ധിഘട്ടങ്ങളിൽ തീരുമാനമെടുക്കുന്നതിന് എനിക്ക് കഴിയാറില്ല.	( )	( )	( )	( )	( )
3)	പ്രശ്നങ്ങളെ അഭിമുഖീകരിക്കുന്നതിൽ വൈമനസ്യം തോന്നാറുണ്ട്.	( )	( )	( )	( )	( )
4)	ഒന്നിലും ചഞ്ചലപ്പെടാത്ത ഒരു മനസ്സാണ് എന്റേത്.	( )	( )	( )	( )	( )
5)	ഞാൻ പെട്ടെന്ന് പ്രകോപിതനാകാറുണ്ട്.	( )	( )	( )	( )	( )
6)	മറ്റുള്ളവരെ പരിചയപ്പെടുന്നതിന് എനിക്ക് പ്രയാസം തോന്നാറുണ്ട്.	( )	( )	( )	( )	( )
7)	നിസ്സാരങ്ങളായ കാര്യങ്ങളെക്കുറിച്ചോർത്ത് ഞാൻ വ്യാകുലപ്പെടുക പതിവാണ്.	( )	( )	( )	( )	( )
8)	കൃത്യതയോടെ കാര്യങ്ങൾ ചെയ്തു തീർക്കാൻ എനിക്കു കഴിയാറുണ്ട്.	( )	( )	( )	( )	( )
	B					
9)	എന്റെ സുഹൃത്തുക്കൾക്കും സഹപ്രവർത്തകർക്കും എന്നെക്കുറിച്ച് നല്ല മതിപ്പാണ് ഉള്ളത്.	( )	( )	( )	( )	( )
10)	സമൂഹത്തിന് എന്നെക്കൊണ്ട് ഉപകാരമുണ്ടെന്നാണ് ഞാൻ കരുതുന്നത്.	( )	( )	( )	( )	( )
11)	പ്രധാനപ്പെട്ട സാമൂഹിക കാര്യങ്ങളോട് ഞാൻ പൂർണ്ണമായും സഹകരിക്കാറുണ്ട്.	( )	( )	( )	( )	( )

		വളരെ ശരി	മിക്കപ്പോഴും ശരി	ചിലപ്പോഴൊക്കെ ശരി	അപൂർവ്വമായി ശരി	ശരിയല്ല
12)	മറ്റുള്ളവരുടെ അംഗീകാരം കിട്ടുന്ന പ്രവൃത്തികളാണ് ഞാൻ സാധാരണയായി ചെയ്യാറ്.	( )	( )	( )	( )	( )
13)	സമൂഹത്തിന് ഗുണകരമായ കാര്യങ്ങൾ ചെയ്യുന്നതിലാണ് എനിക്ക് കൂടുതൽ താല്പര്യം.	( )	( )	( )	( )	( )
14)	മറ്റുള്ളവരുടെ പ്രതീക്ഷയ്ക്കൊത്ത് പെരുമാറാൻ എനിക്ക് കഴിയാറില്ല.	( )	( )	( )	( )	( )

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15)	പ്രശ്നപരിഹാരത്തിന് പോലും കാര്യകാരണ സഹിതം ചിന്തിക്കാൻ എനിക്കു കഴിയാറുണ്ട്.	( )	( )	( )	( )	( )
16)	ഭാവിയെക്കുറിച്ച് വ്യക്തമായ പദ്ധതികൾ ഞാൻ ആവിഷ്കരിക്കാറുണ്ട്.	( )	( )	( )	( )	( )
17)	വസ്തുതകളുടെയും തെളിവുകളുടെയും അഭാവത്തിൽ ഞാൻ ആളുകളെയും പ്രശ്നങ്ങളെയും വിലയിരുത്താറില്ല.	( )	( )	( )	( )	( )
18)	എന്റെ പ്രശ്നങ്ങൾ ഞാൻ സ്വയം പരിഹരിക്കുകയാണ് പതിവ്.	( )	( )	( )	( )	( )
19)	ഭാവനാപൂർണ്ണമായ അഭ്യൂഹങ്ങൾ എന്നെ വല്ലാതെ അലട്ടാറുണ്ട്.	( )	( )	( )	( )	( )
20)	വ്യക്തികളും സംഘടനകളുമായിട്ടുള്ള എന്റെ അടുപ്പം പടിപടിയായി കുറുന്നതായിട്ട് എനിക്ക് തോന്നാറുണ്ട്.	( )	( )	( )	( )	( )
21)	എതൊരു പ്രവൃത്തിയും മുടർച്ചയായി ചെയ്യാൻ എനിക്ക് സാധിക്കാറുണ്ട്.	( )	( )	( )	( )	( )
22)	ഉത്തരവാദിത്വങ്ങൾ എനിക്ക് ഭാരമായി തോന്നാറില്ല.	( )	( )	( )	( )	( )

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23)	എനിക്ക് ഏതെങ്കിലുമൊരു വിഷയത്തിൽ റ്റെയ്ക്ക് ഒരു തീരുമാനമെടുക്കാൻ കഴിയാറില്ല.	( )	( )	( )	( )	( )
24)	എന്റെ സ്വന്തം കാര്യങ്ങൾ പരസഹായമില്ലാതെ ചെയ്യാൻ എനിക്ക് കഴിയാറുണ്ട്.	( )	( )	( )	( )	( )
25)	പ്രശ്നങ്ങൾ പരിഹരിക്കാൻ പലപ്പോഴും എന്റെ ബന്ധുക്കളും സുഹൃത്തുക്കളും സഹായിക്കാറുണ്ട്.	( )	( )	( )	( )	( )
26)	അടുത്ത പടി എന്തു ചെയ്യണമെന്ന തീരുമാനത്തിലെത്താൻ പലപ്പോഴും എനിക്കു കഴിയാറില്ല.	( )	( )	( )	( )	( )
27)	പ്രതികൂല സാഹചര്യത്തിലും എന്റെ ജോലി ഭംഗിയായി ചെയ്തു തീർക്കാൻ എനിക്കു കഴിയാറുണ്ട്.	( )	( )	( )	( )	( )
28)	ഏതൊരു കാര്യവും ചെയ്യണോ വേണ്ടയോ എന്നു തീരുമാനിക്കാനുള്ള സ്വാതന്ത്ര്യം എനിക്കുണ്ട്.	( )	( )	( )	( )	( )

		വളരെ ശരി	ഭിക്കപ്പോഴും ശരി	ചിലപ്പോഴൊക്കെ ശരി	അപൂർവ്വമായി ശരി	ശരിയല്ല
29)	എനിക്കു വേണ്ട വസ്തുക്കൾ അത് വസ്ത്രമോ പുസ്തകമോ മറ്റെന്തെങ്കിലുമോ ആവട്ടെ എന്തെന്ന് തീരുമാനിക്കുന്നതിന് ബുദ്ധിമുട്ടു തോന്നാറില്ല.	( )	( )	( )	( )	( )
30)	ഉത്തരവാദിത്വങ്ങൾ ഏറ്റെടുക്കുന്നത് സന്തോഷകരമായ ഒരു കാര്യമാണ്.	( )	( )	( )	( )	( )
31)	സ്വതന്ത്രമായി ചിന്തിക്കുന്നതിനും പ്രവർത്തിക്കുന്നതിനുമാണ് എനിക്ക് താല്പര്യം.	( )	( )	( )	( )	( )
		E				
32)	ഞാൻ ദിവാസ്വപ്നങ്ങളിൽ മുഴുകിയിരിക്കുക പതിവാണ്.	( )	( )	( )	( )	( )
33)	എന്റെ ജോലിയിൽ പൂർണ്ണമായും ശ്രദ്ധ കേന്ദ്രീകരിക്കുവാൻ എനിക്കു കഴിയാറില്ല.	( )	( )	( )	( )	( )
34)	നിത്യജീവിതത്തിലെ സാധാരണ പ്രശ്നങ്ങൾ പോലും എന്നെ വളരെയധികം നിരാശപ്പെടുത്താറുണ്ട്.	( )	( )	( )	( )	( )
35)	പ്രതികൂല സാഹചര്യങ്ങളിൽ യാഥാർത്ഥ്യമെന്തെന്നു മനസ്സിലാക്കാതെ ഞാൻ പ്രവർത്തിക്കാറുണ്ട്.	( )	( )	( )	( )	( )
36)	സാമൂഹ്യ നിയമങ്ങളുമായി പൊരുത്തപ്പെട്ടു പോകാനാണ് ഞാൻ ശ്രമിക്കാറുള്ളത്.	( )	( )	( )	( )	( )
37)	പ്രതികൂല സാഹചര്യങ്ങളെ അതിജീവിക്കാനാണ് ഞാൻ ശ്രമിക്കാറുള്ളത്.	( )	( )	( )	( )	( )
		F				
38)	എല്ലാ പ്രശ്നങ്ങൾക്കും എന്തെങ്കിലുമൊരു പരിഹാരം കണ്ടെത്താനാകുമെന്നു ഞാൻ കരുതുന്നു.	( )	( )	( )	( )	( )
39)	ആവശ്യമില്ലാതെ വിഷമിക്കുന്ന സ്വഭാവം എനിക്കില്ല.	( )	( )	( )	( )	( )
40)	സംഭവിക്കുന്നതെല്ലാം നല്ലതിനാണെന്ന പ്രതീക്ഷ എനിക്കുണ്ട്.	( )	( )	( )	( )	( )
41)	എന്റേത് പൊതുവെ സന്തോഷകരമായൊരു ജീവിതമാണ്.	( )	( )	( )	( )	( )
42)	തീർച്ചയായും ലക്ഷ്യത്തിലെത്താനാകും എന്ന ചിന്ത എനിക്ക് അത്യധികം ഉത്സാഹം തരുന്നുണ്ട്.	( )	( )	( )	( )	( )
43)	ബുദ്ധിമുട്ടുകളെ സമചിത്തതയോടെ സമീപിക്കുവാൻ എനിക്കു കഴിയാറില്ല.	( )	( )	( )	( )	( )
44)	പ്രശ്നങ്ങൾക്കിടയിലും ശാന്തമായൊരു മാനസികാവസ്ഥ നിലനിർത്താൻ എനിക്കു കഴിയാറുണ്ട്.	( )	( )	( )	( )	( )

Appendix V

PSLE SCALE *(ADAPTED VERSION)

R.DERSAK & C.B. ASHA
University of Calicut

2003

Name.....

Age.....Sex.....Psy. No.....

Diagnosis.....Date.....

INSTRUCTIONS

Given below a list of common 'life-events' which are experienced by almost everyone at some time or other in their life. Kindly put a tick mark (√) against all those events that you may have experienced during the past one year - in column No.1 and those you have experienced at any time prior to that in your life in column No.2.

നിർദ്ദേശങ്ങൾ

താഴെ കൊടുത്തിരിക്കുന്നവ സാധാരണ 'ജീവിത സംഭവങ്ങളാണ്'. ഇവ ഏതൊരാളും അവരുടെ ജീവിതത്തിൽ ഏതെങ്കിലും ഒരു സന്ദർഭത്തിൽ അനുഭവിച്ചിട്ടുള്ളതാണ്. ദയവായി ഇവ സശ്രദ്ധം വായിച്ച് ഏതൊക്കെ ജീവിത സംഭവങ്ങളാണ് കഴിഞ്ഞ ഒരു വർഷത്തിനുള്ളിൽ അനുഭവിച്ചത് (ആദ്യ കോളത്തിൽ), ഏതൊക്കെ ജീവിത സംഭവങ്ങളാണ് ജീവിതത്തിൽ ഏതെങ്കിലും ഒരു സന്ദർഭത്തിൽ അനുഭവിച്ചത് (രണ്ടാമത്തെ കോളത്തിൽ) എന്ന് ടിക്ക് (√) മാർക്ക് ഉപയോഗിച്ച് രേഖപ്പെടുത്തുക. ഇവ വിദഗ്ധ പഠനത്തിനു മാത്രമേ ഉപയോഗിക്കുകയുള്ളൂ എന്ന് ഉറപ്പുതരുന്നു.

S.NO	LIFE EVENTS (ജീവിത സംഭവങ്ങൾ)	PAST 1 YEAR (കഴിഞ്ഞ വർഷം)	LIFETIME (ജീവിതത്തിൽ)
1.	Going on a pleasure trip or pilgrimage. ഉല്ലാസയാത്രക്കോ തീർത്ഥാടനത്തിനോ പോകുക.		
2.	Spouse begins or stops work. ഭാര്യയോ ഭർത്താവോ ജോലി ചെയ്തു തുടങ്ങുകയോ-അവസാനിപ്പിക്കുകയോ ചെയ്തു.		
3.	Change in eating habits. ഭക്ഷണ ക്രമത്തിലുള്ള വ്യത്യാസം.		
4.	Change in social activities. സാമൂഹിക പ്രവൃത്തിയിലുള്ള വ്യത്യാസം.		
5.	Reduction in number of Family Functions. കുടുംബ സമാഗമങ്ങളുടെ എണ്ണത്തിൽ വന്ന കുറവ്.		

* Orginally developed by Dr. Gurmeet Singh ⊕ Dalbir Kaur ⊕ Harsharan Kaur.

S.NO	LIFE EVENTS (ജീവിത സംഭവങ്ങൾ)	PAST 1 YEAR (കഴിഞ്ഞ വർഷം)	LIFE TIME (ജീവിതത്തിൽ)
6.	Gain of new Family member. കുടുംബത്തിൽ ഒരു പുതിയ അംഗത്തിന്റെ വരവ്.		
7.	Birth of daughter / grand daughter. പുത്രിയുടെയോ ചെറു മകളുടെയോ ജനനം.		
8.	Change in sleeping habits.ഉറക്ക ശീലത്തിലുള്ള വ്യത്യാസം.		
9.	Change in working conditions or transfer. ജോലി ചെയ്യുന്ന ചുറ്റുപാടിലുള്ള വ്യത്യാസമോ സ്ഥലം മാറ്റമോ.		
10.	Retirement. ജോലിയിൽ നിന്നും വിരമിച്ചശേഷമുള്ള ജീവിതം.		
11.	Begin or end schooling. പഠിത്തം തുടങ്ങുകയോ നിർത്തുകയോ ചെയ്തു.		
12.	Outstanding personal achievement മഹത്വമുള്ള വ്യക്തിപരമായ നേട്ടം.		
13.	Change or expansion of business. ബിസ്സിനസ്സിലെ വ്യത്യാസമോ വിപുലീകരണമോ.		
14.	Change in residence. താമസ സ്ഥലത്തിൽ വന്ന മാറ്റം.		
15.	Unfulfilled commitments. സാക്ഷാത്കരിക്കാത്ത കടപ്പാട്.		
16.	Trouble with neighbour. അയൽവാസിയുമായുള്ള ശണ്ഠ.		
17.	Getting married or engaged. വിവാഹം കഴിയുകയോ നിശ്ചയം കഴിയുകയോ ചെയ്തു.		
18.	Appearing for examiation or interview. പരീക്ഷ എഴുതുകയോ അഭിമുഖം കഴിയുകയോ ചെയ്തു.		
19.	Failure in examination. പരീക്ഷയിൽ തോൽക്കുന്നു.		
20.	Death of pet. വളർത്തു മൃഗത്തിന്റെ മരണം.		
21.	Major purchase or construction of house. വലിയ മുതൽമുടക്കി വാങ്ങുകയോ ഭവന നിർമ്മാണം- നടത്തുകയോ ചെയ്തു.		
22.	Break up with friends.സുഹൃത്തുക്കളുമായി തെറ്റിപ്പിരിഞ്ഞു.		
23.	Family conflict. കുടുംബ കലഹം.		
24.	Minor violation of law. ചെറിയ നിയമ ലംഘനം.		
25.	Marriage of daughter or dependent sister / or a relative. മകളുടെയോ, ആശ്രയിച്ചു കഴിയുന്ന ബന്ധുവിന്റെയോ വിവാഹം.		
26.	Large loan. വലിയ വായ്പ.		
27.	Lack of son. പുത്ര ദുഃഖം.		
28.	Self or Family member unemployed. തനിക്കോ കുടുംബാംഗത്തിനോ ജോലിയില്ലാത്ത അവസ്ഥ.		
29.	Sexual problems. ലൈംഗിക പ്രശ്നങ്ങൾ.		
30.	Conflict over dowry - (self or spouse). സ്ത്രീ ധനത്തെച്ചൊല്ലിയുള്ള കലഹം- (സ്വയം അല്ലെങ്കിൽ ഭാര്യ / ഭർത്താവ്).		

Dr. Gurmeet Singh
Dalbir Kaur
T. M. No. 458715 Harsharan Kaur

Consumable Booklet
of

P S L E

(English Version)

Please fill up the following :—

Name _____

Age _____ Sex _____ Psy. No. _____

Diagnosis _____

INSTRUCTIONS

Given below is a list of common life events which are experienced by almost everyone at some time or other in one's life. Kindly put a tick (√) against all those events that you may have experienced during the past one year in col. 1 and those you have experienced at any time prior to that in your life in col. 2.

No.	Life Event	Past 1 Year	Life Time
1.	Going on a pleasure trip or pilgrimage.		
2.	Wife begins or stops work.		
3.	Change in eating habits.		
4.	Change in social activities.		
5.	Reduction in number of family functions.		
6.	Gain of new family member.		
7.	Birth of daughter.		
8.	Change in sleeping habits.		
9.	Change in working conditions or transfer.		
10.	Retirement.		
11.	Begin or end schooling.		
12.	Outstanding personal achievement.		
13.	Change and expansion of business.		
14.	Change in residence.		
15.	Unfulfilled commitments.		
16.	Trouble with neighbour.		
17.	Getting married or engaged.		
18.	Appearing for examination or interview.		
19.	Failure in examination.		
20.	Death of pet.		
21.	Major purchase or construction of house.		

No.	Life Event	Past 1 Year	Life Time
22.	Break up with friend.		
23.	Family conflict.		
24.	Minor violation of law.		
25.	Marriage of daughter or dependent sister.		
26.	Large loan.		
27.	Lack of son.		
28.	Self of family member unemployed.		
29.	Sexual problems.		
30.	Conflict over dowry (self or spouse)		
31.	Pregnancy of wife.		
32.	Prophecy of astrologer or palmist etc.		
33.	Trouble at work with colleagues superior or subordinates.		
34.	Illness of family member.		
35.	Financial problems.		
36.	Son or daughter leaving home.		
37.	Major personal illness or injury.		
38.	Broken engagement or leave affair.		
39.	Conflict with inlaws (other than over dowry).		
40.	Excessive alcohol or drug use by family member.		
41.	Robbery or theft.		
42.	Death of friend.		
43.	Property or crops damaged.		
44.	Marital conflict.		
45.	Death of close family member.		
46.	Lack of issue.		
47.	Detention in jail of self or close family member.		
48.	Suspension or dismissal from job.		
49.	Marital separation or divorce.		
50.	Extramarital relations of spouse.		
51.	Death of spouse.		

Estd. 1971 ✆ 364926

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4/230, KACHERI GHAT, AGRA - 282 004

Presumptive Stressful Life Events (PSLE) Scale. English Version.

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Appendix VII

ADJUSTMENT INVENTORY

താഴെ കൊടുത്തിരിക്കുന്ന പ്രസ്താവനകൾ വായിച്ചശേഷം അവ താങ്കളെ സംബന്ധിച്ചിടത്തോളം ശരിയാണെങ്കിൽ '✓' എന്നും 'X' തെറ്റാണെങ്കിൽ എന്നും തന്നിരിക്കുന്ന ഉത്തരക്കടലാസ്സിൽ അതാത് ചോദ്യനമ്പറുകൾക്കു നേരെയുള്ള കോളങ്ങളിൽ രേഖപ്പെടുത്തുക. ദയവായി എല്ലാ പ്രസ്താവനകൾക്കും ഉത്തരം നൽകുക. ഉത്തരം തുറന്നുപറയാൻ വിഷമം തോന്നിയേക്കാവുന്ന തരത്തിലുള്ള പ്രസ്താവനകളൊന്നും ഇതിൽ ഉൾപ്പെടുത്തിയിട്ടില്ല. താങ്കളുടെ ഉത്തരങ്ങൾ രഹസ്യമായി സൂക്ഷിക്കുന്നതാണ്. കൂടുതൽ ആലോചിച്ച് സമയം കളയേണ്ട ആവശ്യമില്ല. ആദ്യം തോന്നുന്നതനുസരിച്ച് ഉത്തരങ്ങൾ അടയാളപ്പെടുത്താവുന്നതാണ്.

ഉദാ: സ്വന്തം കുറവുകളെപ്പറ്റി വിചാരിച്ച് വിഷമിക്കാറുണ്ട്.

അർത്ഥശൂന്യമായ ഒരു ചിന്ത മനസ്സിൽ വീണ്ടും വീണ്ടും വന്നുകൊണ്ടിരിക്കുന്നു.

A

1. മക്കളുമായി അഭിപ്രായവ്യത്യാസം ഉണ്ടാകാറുണ്ട്.
2. വീട്ടിലുള്ളവർ ഇടയ്ക്കിടെ എന്നെ ശകാരിക്കാറുണ്ട്.
3. വീട്ടിലുള്ളവരിൽ ചിലർ എന്നോട് പെട്ടെന്ന് ദേഷ്യപ്പെടാറുണ്ട്.
4. വീട്ടിലുള്ളവരിൽ ചിലർ എന്നിൽ മേധാവിത്വം ചെലുത്താറുണ്ട്.
5. വീട്ടിലുള്ളവരുമായി ഞാൻ മിക്കപ്പോഴും കലഹിക്കാറുണ്ട്.
6. ദൈനംദിന കാര്യങ്ങളിൽ ഞാൻ വീട്ടുകാരെ സഹായിക്കാറുണ്ട്.
7. എപ്പോഴും വിഷമിപ്പിച്ചുകൊണ്ടിരിക്കുന്ന വീട്ടുകാര്യങ്ങൾ എനിക്കുണ്ട്.
8. വീട്ടിൽനിന്ന് എനിക്ക് സ്നേഹവാത്സല്യക്കുറവ് അനുഭവപ്പെടുന്നുണ്ട്.
9. ഇഷ്ടമില്ലെങ്കിൽ പോലും ചില കാര്യങ്ങൾ ചെയ്യാൻ വീട്ടുകാർ എന്നെ നിർബന്ധിക്കാറുണ്ട്.
10. വീട്ടിൽനിന്നും കിട്ടുന്ന പരിചരണങ്ങൾ ക്രമേണ മോശമായി വരുന്നുണ്ട്.
11. ഇപ്പോൾ താമസിക്കുന്ന വീട്ടിൽ എനിക്ക് എപ്പോഴും പ്രശ്നങ്ങളും വീർപ്പുമുട്ടലുകളും ഉണ്ടാകുന്നുണ്ട്.
12. കുടുംബനാഥ(ൻ) എന്ന നിലയ്ക്ക് എന്റെ ജീവിതം ഏറെക്കുറെ സന്തോഷകരമാണ്.
13. ഭർത്താവ്/ഭാര്യയുമായുള്ള എന്റെ ബന്ധം ഏറെക്കുറെ സന്തോഷകരമാണ്.
14. വീട്ടിൽ എനിക്ക് സ്ഥാനമില്ലെന്ന് തോന്നുന്നുണ്ട്.

B

1. മതം, സാമുദായിക കാര്യങ്ങൾ, ലൈംഗികത, ധാർമ്മിക കാര്യങ്ങൾ എന്നിവയിൽ കൂടെ താമസിക്കുന്നവരുമായി എനിക്ക് അഭിപ്രായവ്യത്യാസം ഉണ്ടാകാറുണ്ട്.
2. സ്നേഹിതരെ സമ്പാദിക്കുക എളുപ്പമാണ്.
3. ഉന്നതപദവിയിലുള്ളവരെ കാണാൻ ഞാൻ മടിക്കാറുണ്ട്.
4. തൊഴിലില്ലാത്ത വൃദ്ധജനങ്ങൾ മറ്റുള്ളവരുടെ കണ്ണിൽ മോശക്കാരാണെന്ന് ഞാൻ വിശ്വസിക്കുന്നു.
5. വയസ്സായവർക്ക് ലോകത്തിൽ ഒന്നും ചെയ്യാനില്ലെന്ന് തോന്നാറുണ്ട്.

6. ഞാൻ പൊതുസമ്മേളനങ്ങൾ സംഘടിപ്പിക്കുകയും ചടങ്ങുകളിൽ നേതൃസ്ഥാനം വഹിക്കുകയും ചെയ്യാറുണ്ട്.
7. ഞാൻ ഉൾപ്പെടുന്ന സമൂഹത്തിന് എന്തെങ്കിലും നൽകാൻ കഴിയും എന്ന് എപ്പോഴും തോന്നാറുണ്ട്.
8. പരിചയക്കാരേക്കാൾ കൂടുതൽ ആത്മാർത്ഥസ്നേഹിതർ എനിക്കുണ്ട്.
9. പല സ്നേഹിതരും എന്നെ മനസ്സിലാക്കുന്നില്ല.
10. ജനങ്ങൾ പൊതുവേ ദയയില്ലാത്തവരാണെന്ന് ഞാൻ കരുതുന്നു.
11. ഞാൻ സ്വമേധയാ സാമൂഹ്യഉത്തരവാദിത്വങ്ങൾ ഏറ്റെടുക്കാറുണ്ട്.
12. സ്നേഹിതർ എന്റെ സാന്നിധ്യം വളരെയധികം ഇഷ്ടപ്പെടുന്നു.
13. ബസ്സിലും ട്രെയിനിലും മറ്റും പോകുമ്പോൾ സഹയാത്രികരോട് സംസാരിക്കാൻ ഞാൻ ഇഷ്ടപ്പെടുന്നു.

C

1. എന്റെ മാനസിക ഭാവത്തിൽ അകാരണമായി സങ്കടം, സന്തോഷം, കോപം എന്നിങ്ങനെ മാറ്റം വരാറുണ്ട്.
2. ഇടയ്ക്കിടെ മാനസിക തകർച്ച ഉണ്ടാകാറുണ്ട്.
3. വരാവുന്ന നിർഭാഗ്യത്തെ ഓർത്ത് ഞാൻ ദുഃഖിക്കാറുണ്ട്.
4. പറ്റിയ തെറ്റുകളെക്കുറിച്ച് ദുഃഖിക്കുവാൻ എനിക്ക് അവസരം ഉണ്ടായിട്ടുണ്ട്.
5. ഞാൻ മാനസികമായി പിരിമുറുക്കം അനുഭവിക്കുന്നുണ്ട്.
6. എനിക്ക് മിക്കപ്പോഴും ക്ലേശം അനുഭവപ്പെടാറുണ്ട്.
7. അപകർഷതാബോധം എന്നെ വിഷമിപ്പിക്കാറുണ്ട്.
8. വിഷമകരമായ പ്രശ്നങ്ങൾ ഉണ്ടാകുമ്പോൾ ഞാൻ പെട്ടെന്ന് കരഞ്ഞുപോകാറുണ്ട്.
9. സാധാരണയായി ഉന്മേഷക്കുറവ് അനുഭവപ്പെടാറുണ്ട്.
10. നിരുപദ്രവകാരികളായ ചില ജീവികളെ ഭയമുണ്ട്.
11. മറ്റുള്ളവർ നിന്ദിക്കുകയാണെങ്കിൽ വളരെക്കാലം വിഷമിച്ചു നടക്കാറുണ്ട്.
12. പാമ്പ്, ഭൂമികുലുക്കം, തീ എന്നിവയെക്കുറിച്ചുള്ള ചിന്തകൾ ഭയപ്പെടുത്തുന്നു.
13. ചില പ്രത്യേക ചിന്തകൾ എപ്പോഴും എന്നെ അലട്ടാറുണ്ട്.
14. മറ്റുള്ളവരോടൊത്തിരിക്കുമ്പോഴും ഏകാന്തത തോന്നാറുണ്ട്.

D

1. ഏല്പിച്ച പ്രവൃത്തി ചെയ്യാൻ കഴിയില്ല എന്ന് തോന്നാറുണ്ട്.
2. ചിന്ത ഉറക്കം കെടുത്താറുണ്ട്.
3. വാർദ്ധക്യത്തേക്കാൾ നല്ലത് മരണമാണെന്ന് തോന്നാറുണ്ട്.
4. തീരെ പ്രയോജനകരമല്ലാത്ത കാര്യങ്ങൽ ചെയ്യുന്നു എന്നു തോന്നാറുണ്ട്.
5. ജീവിതലക്ഷ്യം ഏറെക്കുറെ നേടി എന്ന് തോന്നുന്നു.
6. ജീവിതത്തിൽ അഭിമാനിക്കത്തക്കതായ ധാരാളം നേട്ടങ്ങൾ ഉണ്ടായിട്ടുണ്ട്.
7. ഒറ്റപ്പെട്ടവനും സമൂഹത്തിന് ആവശ്യമില്ലാത്തവനുമായ ഒരാളാണെന്ന് എനിക്ക് തോന്നുന്നു.

8. വിശ്രമവേളയിൽ ചെയ്യാൻ പറ്റിയ കാര്യങ്ങളൊന്നും എനിക്കില്ലെന്ന് തോന്നുന്നു.

9. ജീവിതത്തിലെ ചില കാര്യങ്ങൾ വാർദ്ധക്യത്തിൽ മാത്രമേ ആസ്വദിക്കാൻ കഴിയൂ എന്ന് തോന്നുന്നു.

10. മറ്റുള്ളവർ ആഗ്രഹിക്കുന്നു എന്നതുകൊണ്ട് ചില വസ്തുക്കൾ ഉപേക്ഷിക്കാൻ ഞാൻ തയ്യാറാണ്.

11. ധനസ്ഥിതി ഇപ്പോഴത്തേക്കാളും മോശമാണെന്ന ഉത്കണ്ഠയുണ്ട്.

12. മരണചിന്ത എന്നെ വിഷമിപ്പിക്കുന്നു.

13. ഏതു പ്രശ്നത്തിനായാലും, സ്വയം ഒരു പരിഹാരം കാണുന്നതാണ് ഏറ്റവും നല്ലതെന്ന് തോന്നുന്നു.

E

1. എനിക്ക് ത്വക്രോഗങ്ങൾ ഇടയ്ക്കിടെ വരാറുണ്ട്.

2. ജലദോഷം, ചുമ എന്നിവ ഇടയ്ക്കിടെ ബാധിക്കാറുണ്ട്.

3. ഇടയ്ക്കിടയ്ക്ക് തലവേദന ഉണ്ടാകാറുണ്ട്.

4. ശ്വാസകോശസംബന്ധമായ രോഗങ്ങൾ ഉണ്ടാകാറുണ്ട്.

5. ഉദരരോഗങ്ങൾ ഉണ്ടാകാറുണ്ട്.

6. മിക്കപ്പോഴും ക്ഷീണം അനുഭവപ്പെടാറുണ്ട്.

7. ഉറക്കത്തിന് സാധാരണയായി തടസ്സം ഉണ്ടാകാറുണ്ട്.

8. അവയവ വീക്കം, സന്ധിവേദന എന്നിവ ഉണ്ടാകാറുണ്ട്.

9. മുറിവ്/രോഗം എന്റെ ആരോഗ്യത്തെ എന്നെന്നേക്കുമായി ബാധിച്ചിട്ടുണ്ട്.

10. ഇടയ്ക്കിടയ്ക്ക് തലചുറ്റൽ വരാറുണ്ട്.

11. ചികിത്സ മിക്കപ്പോഴും ആവശ്യമാണ്.

12. വർഷങ്ങൾ കഴിയുന്തോറും ആരോഗ്യം മോശമാകുന്നതായി തോന്നുന്നു.

Appendix VIII

ANSWER SHEET - ADJUSTMENT INVENTORY

A		B		C		D		E	
ചോദ്യം	ഉത്തരം	ചോദ്യം	ഉത്തരം	ചോദ്യം	ഉത്തരം	ചോദ്യം	ഉത്തരം	ചോദ്യം	ഉത്തരം
1		1		1		1		1	
2		2		2		2		2	
3		3		3		3		3	
4		4		4		4		4	
5		5		5		5		5	
6		6		6		6		6	
7		7		7		7		7	
8		8		8		8		8	
9		9		9		9		9	
10		10		10		10		10	
11		11		11		11		11	
12		12		12		12		12	
13		13		13		13		**	***
14		**	***	14		**	***	**	***
TOTAL		TOTAL		TOTAL		TOTAL		TOTAL	

GRAND TOTAL SCORE

Appendix IX

SOCIAL SUPPORT SCALE

C.B. ASHA
University of Calicut
1998

കുടുംബാംഗങ്ങൾ, സഹപ്രവർത്തകർ, സുഹൃത്തുക്കൾ, സമൂഹം ഇവ ആളുകൾക്ക് എത്രമാത്രം സഹായകരമായിത്തീരുന്നു എന്നതിനെ സംബന്ധിച്ച് ചില പ്രസ്താവനകളാണ് താഴെ കൊടുത്തിരിക്കുന്നത്. ഓരോ പ്രസ്താവനയും വായിച്ച് താങ്കൾ അതിനോട് യോജിക്കുന്നു എങ്കിൽ 'ശരി' എന്നടയാളപ്പെടുത്തിയിട്ടുള്ളതിന് താഴെ '✓' അടയാളവും വിയോജിക്കുന്നു എങ്കിൽ 'തെറ്റ്' എന്നടയാളത്തിന് താഴെ ' X ' അടയാളവും അതത് പ്രസ്താവനയ്ക്ക് നേരെ കൊടുത്തിട്ടുള്ള വലയങ്ങളിൽ രേഖപ്പെടുത്തുക. ദയവായി എല്ലാ പ്രസ്താവനകൾക്കും ഉത്തരം നൽകുക. താങ്കളുടെ ഉത്തരങ്ങൾ രഹസ്യമായി സൂക്ഷിക്കുന്നതാണ്. കൂടുതൽ ആലോചിച്ച് സമയം കളയാതെ ആദ്യം തോന്നുന്നതനുസരിച്ച് ഉത്തരങ്ങൾ അടയാളപ്പെടുത്താവുന്നതാണ്.

	ഉത്തരം	
	ശരി	തെറ്റ്
ഉദാ:		
എന്റെ മുഖങ്ങൾ ആരും മനസ്സിലാക്കുന്നില്ല.		
ഈ പ്രസ്താവനയോട് യോജിക്കുന്നു എങ്കിൽ 'ശരി' എന്നതിന്		
താഴെ കൊടുത്തിട്ടുള്ള വലയത്തിൽ '✓' അടയാളമിടുക.	(✓)	( )
വിയോജിക്കുന്നു എങ്കിൽ 'തെറ്റ്' എന്നതിന് താഴെ കൊടുത്തിട്ടുള്ള		
വലയത്തിൽ 'X' അടയാളമിടുക.	( )	(X)

	പ്രസ്താവനകൾ	ഉത്തരം	
		ശരി	തെറ്റ്
1.	സുരക്ഷിതത്വ ബോധവും സന്തോഷവും നൽകുന്ന തരത്തിൽ ദൃഢമായ സ്നേഹബന്ധങ്ങൾ എനിക്കുണ്ട്	( )	( )
2.	എനിക്ക് ആരോടും മമത തോന്നാറില്ല	( )	( )
3.	എല്ലാ വിഷമതകളും സഹിക്കാൻ സഹായിക്കുന്ന ബന്ധുക്കൾ എനിക്കുണ്ട്	( )	( )
4.	ബന്ധുക്കളിൽ നിന്ന് വളരെ ഒറ്റപ്പെട്ട ഒരു ജീവിതമാണ് എനിക്കുള്ളത്	( )	( )
5.	അടുത്തിടപഴകാൻ പറ്റിയ ധാരാളം സുഹൃത്തുക്കൾ എനിക്കുണ്ട്	( )	( )
6.	വീടിന് പുറത്തുള്ള ആരുമായിട്ടും എനിക്ക് അടുപ്പമില്ല	( )	( )
7.	എനിക്കും സുഹൃത്തുക്കൾക്കും പൊതുവായ പല താല്പര്യങ്ങളുമുണ്ട്	( )	( )
8.	കൂട്ടുകാരുമൊത്ത് സമയം ചെലവഴിക്കുന്നത് ആഹ്ലാദകരമായ കാര്യമാണ്	( )	( )
9.	സഹപ്രവർത്തകർ എന്റെ കഴിവുകൾ അംഗീകരിക്കുന്നു എന്നത് സന്തോഷം തരുന്ന കാര്യമാണ്.	( )	( )
10.	എന്നെക്കുറിച്ച് സഹപ്രവർത്തകർക്ക് വളരെ മതിപ്പുണ്ട്	( )	( )
11.	കൂടെ ജോലി ചെയ്യുന്നവരെക്കുറിച്ച് എനിക്ക് ഒന്നും തന്നെ അറിയില്ല	( )	( )
12.	സഹപ്രവർത്തകരിൽ പലരോടും എനിക്ക് മോശപ്പെട്ട ബന്ധമാണുള്ളത്	( )	( )
13.	എന്ത് പ്രശ്നമുണ്ടായാലും എന്നെ സഹായിക്കാൻ വീട്ടിലെല്ലാവരും തയ്യാറാണ്	( )	( )

		ഉത്തരം	
		ശരി	തെറ്റ്
14.	പ്രശ്നങ്ങൾ ഏകനായി നേരിടുക എന്നത് എന്നെ ബുദ്ധിമുട്ടിക്കാറുണ്ട്	( )	( )
15.	ഒരു കാരണവശാലും വീട്ടിലുള്ളവർ എന്നെ ഒറ്റപ്പെടുത്തില്ല	( )	( )
16.	വീട്ടിൽ താൻ അധികപറ്റാണെന്ന് തോന്നാറുണ്ട്	( )	( )
17.	ഏത് കാര്യത്തിലും എനിക്ക് വേണ്ട ഉപദേശങ്ങൾ നൽകാൻ ആളുകളുണ്ട്	( )	( )
18.	എനിക്ക് മാർഗ്ഗനിർദ്ദേശം നൽകാൻ വേണ്ടവർ ഇല്ല.	( )	( )
19.	മറ്റുള്ളവർ എന്റെ പ്രവർത്തികൾ മനസ്സിലാക്കുകയും എന്നെ പ്രോത്സാഹിപ്പിക്കുകയും ചെയ്യാറുണ്ട്	( )	( )
20.	നിർദ്ദേശങ്ങളെ അനുസരിക്കുന്നത് എനിക്ക് ഇഷ്ടമല്ല	( )	( )
21.	എന്റെ കാര്യത്തിൽ മക്കൾ ശ്രദ്ധ കാണിക്കാറുണ്ട്	( )	( )
22.	മക്കൾക്ക് ഞാൻ സ്വീകാര്യനല്ല /സ്വീകാര്യയല്ല	( )	( )
23.	മക്കളുടെ കൂടെയിരിക്കുമ്പോൾ പ്രധാനപ്പെട്ട ഒരാളാണ് ഞാൻ എന്ന് തോന്നാറുണ്ട്	( )	( )
24.	മക്കൾ എന്റെ ആവശ്യങ്ങളെപ്പറ്റി അന്വേഷിക്കാറില്ല	( )	( )
25.	ജീവിതം സന്തോഷകരമാക്കുന്നതിന് ഈശ്വരവിശ്വാസം എന്നെ സഹായിക്കുന്നു	( )	( )
26.	ബുദ്ധിമുട്ടുകൾ തരണം ചെയ്യുവാൻ ഈശ്വരൻ ശക്തി തരുന്നു	( )	( )
27.	ഈശ്വരവിശ്വാസം കൊണ്ട് പ്രത്യേകിച്ച് ഗുണമൊന്നുമില്ല	( )	( )
28.	മരുപരമായ ചടങ്ങുകൾ സമയം പോകാനുള്ള ഒരു വഴി മാത്രമാണ്	( )	( )

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