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AGEING & SOCIETY : THE INDIAN JOURNAL OF GERONTOLOGY

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This Journal will be devoted to papers on the following aspect of human ageing

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- ★ Biology
- ★ Medicine
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In addition we welcome Abstracts, Book reviews & Interviews with senior citizens

NOTES FOR CONTRIBUTORS

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Journal articles that deal with the biological, medical, psychosocial, service or other aspects of ageing are welcome.

Articles should be original contributions. Redundancy is discouraged. The articles should be written in English are free of grammatical, spelling errors, repetitions etc.

Articles shall contain: A brief introduction (reflecting the context, the review of relevant work and why the present study was planned) : relevant details of plan methodology, sample, (including standardization properties of tools) etc., the results or findings and their discussion and conclusions arrived at. At the beginning of the article the title and names of authors shall be mentioned. (Their affiliation may be given at the bottom of the page). This shall be followed by a brief abstract of the article (not exceeding 100 words) in single space, bold and set off the margins (inset by two spaces). Two or three key words of the article should also be provided at the end of the abstract separately.

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ECONOMIC CHALLENGES OF GREYING POPULATION: PROBLEM OR PREDICAMENT?

T.Lakshmanasamy*

ABSTRACT

A greying population raises the dependency on working age population and health care costs. With shrinking proportion of working age population and the changing consumption patterns of the elderly, the transfers between generations either through public support systems like social security, pensions and fiscal allocations or through private intergenerational transfers becomes critical. Ageing population can also be beneficial in terms of experience and productivity gains. Policy concerns with regard to old age of population are related to the productivity effects, returns to capital, wage rates, consumption, savings and fiscal adjustments. Achieving an overall balance between different macroeconomic parameters in the scenario of population ageing poses many challenges and puzzles that are yet to be resolved. With existing policy perspectives, the issue of population greying is a more a predicament than a problem.

Key words: Population ageing, dependency, consumption, productivity, policy, predicament.

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Introduction

Biologically every living organism continues to grow from birth to death; in between reaches the phase of old age before withering away from this world permanently one day. Ageing is a process that converts an optimally healthy fit organism (to its environment) into a less healthy, less fit organism. Humans are no exception. Human ageing is a pattern of life course that occurs over time. The human physical growth process results in a state of old age. The human life course, and the consequent ageing, is not only a biological process, but importantly shaped by the dynamic changes in physical / physiological, functional, social, economic, and psychological phenomena. Apart from individual dimensions of ageing, the ageing population of a country has many macro aspects that have implications for national and global consequences.

Biologically, ageing is related with the wear and tear of the cells and tissues that make up the body, and increasing susceptibility to diseases, many of them are chronic. The more the body is abused both biologically and physically, the faster is the wear and tear of the body. Ageing makes the autoimmune system less effective in fighting diseases. The problem is aggravated with poor nutrition, unhealthy lifestyle, bad habits and abnormal behaviour. Physically, ageing causes damages to sensory, brain and nerve, heart and circulation, respiratory and digestion systems, and changes skin, bone, muscles, head, urinary tract, heart, lungs, eyesight, hearing, sexual behaviour and body texture, causing bodily pain and discomfort. The most severe and regressive functional damages are the brain impairment, dementia/Alzheimer's disease, cardiovascular disease, cancer and diabetes. Psychologically, ageing causes changes in mind, memory, emotion, stress, intelligence, adaptability, depression and senility. Socially, ageing is primarily related with physical dependency, living arrangements and the support systems. Economically, ageing is concerned more with maintaining income and consumption streams in old age, health care and (social) security. An ageing population imposes costs on the economy in the forms of pensions, social security, medical care and taxes that has fiscal consequences and

impact on economic and policy perspectives (Bloom, Canning and Fink, 2010).

When a sizable number of citizens of a country cross certain age, we say that its population is becoming aged/older/elderly or population ageing. The exact age at which a human being becomes old/aged is not well defined. However, population ageing is reflected in the increasing mean/median (average) age (the age at which 50 percent of the population is older and 50 percent younger.of the population in a country. The increasing number of ageing population shifts the distribution of population towards the older/elderly ages. Alternatively, population ageing is also defined as the transition from a high support ratio (the ratio of population aged 15-59 to population aged 60+) to a low support ratio. Generally, the population above the age of 60 or 65 is taken as the elderly population. Persons aged 80+ are the oldest old, aged 100 years are centenarians, and aged 100+ are supercentenarians.

The principal cause for population ageing is primarily the demographics, the increasing longevity and life expectancy. The unusual increase in longevity, the average age at which people die, made possible by unexpected deceleration of the force of mortality among the elderly has broken the limits to life expectancy. In the Western world more than half the population survive 80+ years, with many centenarians. The extension of the human lifespan has been made possible by the biological cellular and molecular defence mechanisms, including antioxidant defence, and the ageing of the human immune system. An added cause for the growing ageing population is the declining fertility. Population ageing is also caused by non-demographic factors like culture, habits, climate and technology, apart from socio-economic and psychological influences. In recent years, the growing innovations in medical technology such as identification of genetic markers associated with ageing, stem cell technology, nanotechnology, non-invasive surgery, specific drugs, and human organ transplantation are increasingly used to prolong the longevity of the elderly humans.

Ageing of Population

Any number of statistics is available, actual and projections, about population ageing and its causes and consequences, both globally and nationally. The fact is that the world population is ageing. The world is likely to have 2 billion aged persons by 2050, during which time the population aged 60+ will outnumber the 0-14 years of children. In developed countries, there will be two elderly persons for every child. Today 60 percent of older persons live in developing countries; by 2050 that proportion will increase to 80 percent. While just 11 developed countries have a median age of over 40, by 2050, 90 countries will fall into that group, 46 of them in the developing world. India's current population of 1.31 billion, only second to China, is about 17 percent of the world's population, and possibly overtake China by 2028 (United Nations, 2015). In India, the proportion of population aged 60+, 5.63 percent or 24 million in 1961, is expected to increase to 20 percent or 315 million by 2050. The growth rate of this 60+ population is three times higher than that of the population as a whole (Giridhar et al. 2014). While India has a young age structure with median age around 20 years, the projections suggest that India is gradually transitioning away from a young age structure with a steady increase in the median age to 31 years by 2026. While the proportion of population aged 15-59 and 60+ are projected to increase, the proportion of age group 0-14 is projected to decrease rapidly. By 2050, the 60+ will be about 19 percent – more than 324 million – of Indian population, and the share of elderly is projected to exceed the youth, aged 14 or less. Importantly, the proportion of the 80+ or the oldest old is expected to grow significantly. The oldest old (80+) among the elderly in India is expected to grow faster than any other age group in the population. The Indian population census reported 99,000 centenarians in 1961, their number rose to 138,000 in 1991. In absolute terms, it is likely to increase six-fold from 8 million in 2001 to 48 million in 2050, nearly 3 percent of total population in India.

The life expectancy at birth in India has increased from 36.2 years in 1950 to 65 years in 2011, reflecting declines in infant

mortality and survival at older ages in response to public health improvements. By 2050, life expectancy at birth is projected to reach 75.9 years (United Nations, 2015). Notwithstanding this, almost one-half (47 percent) of older Indians have at least one chronic disease such as asthma, angina, arthritis, depression, or diabetes. The 65+ population spend on average 1.5 times on health care compared to those in the 60-64 age, and about 72 percent of health care spending is paid out-of-pocket. The average annual per capita out-of-pocket health spending in India is almost four times as high for older adults (Rs.2,890) as among younger adults (Rs.770) (Bloom et al. 2010). The average medical expenditure per hospitalisation is Rs.24,436 in urban and Rs.14,935 in India. Over 70 percent of ailments are treated in private hospitals. Only 4.2 percent in Tamil Nadu get treatment at public hospitals. While health care costs are rising, fewer than 10 percent of Indians have health insurance from private or public sources; still worse, less than 11 percent of older Indians have a pension of any sort. In India, the pension to GDP ratio has increased for the Central Government from 0.5 per cent (average of 2004-08) to 0.6 per cent only in 2012-13, and the same has increased only marginally, from 1.1 per cent to 1.7 per cent for all states. The old-age dependency ratio - the number of people aged 60+ to per person aged 15 to 59 - is expected to rise from 12 per 100 to 31 per 100 by 2050. This is to be reconciled with the decreasing fertility rates. Fertility rates in India have declined to 2.6 children per women, less than one-half the early 1950s rate of 5.9 children per woman. The country is experiencing declining birth and death rates and the annual rate of population growth is dipping from 1.6 percent in 2001-06 to 0.9 percent by 2021–2026. As fertility started declining in India since the 1970s the share of the working age population (15-64) has been increasing since 1980 and is expected to reach its peak by 2025. Among the working age population, the share of youth segment (15-24) will decrease from now on while mature labour force would be increasing. This is also noted in the rapid decline in the ratio of youth (15-24) to working age population (25-64) from 2010. The proportion of population in the working age group will grow to 68.4

percent by 2026. It is also important to note that the India's most recent census indicates that 42 percent of adults 60 and above and 22 percent of adults 80 and up still participate in the workforce (Government of India, 2011), indicating lack of support for the elderly.

Nearly half of the elderly are dependents mainly due to widowhood, divorce or separation - a large number of these are females - and about two-third of the elderly lived in villages and nearly half were of poor socio-economic status. Although widowhood is increasingly probable for both sexes as age advances, women are of younger age than their spouses. Widowed women are less likely to remarry and they also spend longer in a state of impaired health, and such single women stay with children as old age dependents. About 60 per cent of the elderly depend on others for their day-to-day maintenance. It is also pathetic to note that only less than 20 percent of the elderly belonging to BPL are beneficiaries of the PDS system. More than four out of five (78 percent) Indians aged 60+ live in the same household with their children, while about 14 percent live with only a spouse and 5 percent live alone. A more serious concern to be noticed is that the share of elderly Indians living with their children declines by about 7 percentage points. With little old-age income support and few savings, labor force participation remains high among the elderly Indians (39 percent), particularly high among the elderly in rural India (45 percent), with nearly 95 percent of them self-employed. While majority of elderly males are economically independent, less than 20 per cent elderly women have economic sources for independent living. Majority of the elderly people continue to work not by choice, but for economic necessity. Almost 60 per cent of the elderly are heads of the households that they are living in, thus necessitating economic participation.

Challenges of Ageing Population

The dramatic and massive nature of the current and ongoing demographic shifts in India indicates that the population-ageing challenges are sure to occur on an enormous scale. The growing

proportion of the elderly/aged population poses specific problems to the economy and the associated issues warrant a rather different perspective from the general population policy or programmes. Various measures of demographic changes like ageing index, dependency ratio, potential support ratio, general support ratio, parent support ratio, elderly sex ratio, incidence of elderly widowhood, elderly poverty and illiteracy ratio, elderly rural-urban differential, show varying needs and resources of the elderly and pose very many policy challenges. Further, different segments of the elderly like aged (60+), oldest old (80+) centenarians (100), supercentenarians (100+), with among them single, widowed, lonely, physically and mentally disabled, rural, poor, pose differential challenges and require specific measures. When providing food and shelter itself is considered as drain on resources in this age of consumerism and materialism, expenditures on health care of the old is not generally relished. The most depressing deprivations associated with ageing are poverty, social exclusion, feeling of neglect, isolation, mental and physical illness, vulnerability, and powerlessness. Successful ageing requires avoiding diseases and disabilities, engaging independently in normal activities of daily living, maintaining cognitive and physical functions, ability to cope with physical, social, economic and psychological changes, and a sense of control of one's life.

Because the biological capacities and needs of individuals vary with age, and also for cultural, institutional and behavioral reasons, labor income and consumption vary with age over the life cycle. The oldest old are in need help in daily living almost for everything, and consume medical care and other services and benefits of government and private transfers far out of proportion, compared to the younger elderly. For them, the proportion of individuals leading active daily lives declines and the disability rate increases dramatically with age. Most of the oldest old are widowed, female oldest old are much more likely to be single, mainly because of the sex differentials in mortality as well as age at

marriage. The problem is aggravated for never married or divorced, still worse in rural areas because of rural-urban differentials in mortality and remarriage rates. In almost all countries worldwide, the old age segment of the population contains a disproportionate share of the economically and socially disadvantaged people whose physical frailty increases the economic dependency. The fall rate among the oldest old is high. Hence dependency on others increases. Thus, population aging increases the share of people at the older ages where consumption greatly exceeds labor income, and to varying degrees may reduce the share of people at the younger dependent ages. The net effect of changing population age distribution on overall dependency is measured by the 'support ratio' or the 'dependency ratio'.

With population ageing, the issues of health care, security, and finance, both at the individual and aggregate levels, become prominent (Irudayarajan, Mishra and Sarma, 1999). While health care costs for the elderly rise, medical coverage becomes less adequate. For the elderly, the living arrangements become a problem. The problem is attenuated for the lonely elderly. The growing number of old age homes and home based nursing care of the elderly signifies the increasing loneliness of the elderly. Still living with the spouse, children or relatives is the preferred security of the old aged people. Longer life-spans mean the families of the elderly usually include grandchildren as well as children, and four-generation families are becoming common. It also implies that the children of the elderly are elderly themselves. As the population ageing is related with reduced working age population and increased dependency ratio, the need for old age health care and state benefits increases. With a larger proportion of elderly, more people depend on social security, but less people contribute to the security system as the proportion of young is declining. The availability of social security and pensions implies limited availability of private annuities. As both social security and many private pension benefits are in the form of annuities, the need for other annuities is reduced, because of the crowding out effect.

Apart from the public and private, formal and informal security arrangements for old age security and insurance, households have also been using household demographics itself as income smoothing and risk diversifying strategies. Some of the implicit household level insurance and old age securities are: having more children, having them equipped with education and better health, delayed marriage of children, marriage relations in risk uncorrelated locations, migrating family members to distinct places to avoid covariate risks, gifts to grandchildren, inter- and intra-family relationships, maintaining social networks, using common property resources, crop diversification and distress sale of land in agricultural settings, etc. Thus, the family itself acts as an incomplete annuity and insurance for the elderly,

It is also to be noted that the path of demographic transition is well in place in India. Far from being a problem of population explosion/bomb of the 1950s, the basic concern has changed to population dividend in the 21st century. During this demographic process, there will be a period of window of opportunity where child dependency ratio declines due to decline in fertility as well as increase in the working age population as children born during the high fertility regime move into working ages. This window appears because the growth rate of total population is slower than the growth rate of the working age population. This opportunity would be available for one time only and its length would be determined by the speed of demographic transition. If this window of opportunity is properly exploited, there is a greater potential for demographic dividend/bonus through increased savings and investment for economic growth. The negative demographic bonus in India during the decades 1951–71, as growth rate of total population grew greater than the working age population, has become positive after 1971 with the growth rate of the working age population turning greater than that of the total population. The total bonus derived from the labour supply during the period 2001–2051 would be 1 percent, out of which labour supply effect would be 0.2 per cent and the effect of expected increase in the labour force participation of

women would be 0.8 per cent. The demographic bonus is likely to continue till 2031 and would be negative afterwards. To realise greater demographic dividend, the labour force need to be productively employed, increase savings, and appropriate investments human capital formation. If such productive interventions are not made during the window of opportunity, the demographic patterns would produce negative implications for the economy and society, as the same demographic shifts that create demographic dividend may subsequently lead to a demographic burden, as fertility continues to decline and life expectancy greatly improves.

Economic Aspects of Population Ageing

Samuelson (1958; 1975) was the early modern economist to pay attention to the economy wide issues arising out of population growth rates, particularly on the old age dependency, capital deepening and intergenerational transfers. Excellent discussion on the macroeconomic issues of population ageing can be found in Hurd (1990) and Weil (1977). At the policy level, much recent discussion of the impact of the population ageing on the economy has focused on the potential effects of ageing on government programmes like pensions, social security, and medical care (Canning, 2007; Horioka, 2010; Bloom and Eggleston, 2014). Such view, although certainly not misplaced, is narrowly focused. Population ageing, and the consequent demographic changes, have broad economic implications not only for government policies, but also for the private sector economics. Population ageing will have, no doubt, pervasive economic impact regardless of the extent of government support for the elderly. There is no rigorous case to be made in theory that the welfare state towards elderly impairs macroeconomic performance, nor is there consensus in the empirical literature on the relationship between the size of transfers to the elderly and the rate of economic growth. There is no compelling evidence to establish the causal effect of population ageing on economic growth and the exact nature and mechanisms of such effect. The few available empirical results show mixed

effects and do not seem adequate for any sort of conclusion on the economic effect of population ageing on the various segments of the economy.

The financial status of the elderly can be summarised in the context of normal life-course patterns of income, consumption and savings. While the consumption levels are more constant than earnings, savings deplete with retirement. Social security changes the life-cycle patterns in several ways. In the absence of social security, the retirement decision, savings, bequests, and consumption are changed. Assets become the single most important source of income during old age. Provision of pension serves a number of benefits to the elderly, like relief from poverty, old age disability, consumption smoothing, health care and insurance. At the aggregate, pension transfers resources from younger generation to older generation. Pension induces elderly to retire and make way for the younger population.

The Western concept of social security relies mainly on the government to provide retirement income, health care and protection against income loss, broadly called social insurance. A Beveridgean pension system is a flat benefit given to the old without work requirements or means test, a partial basic income support. In general, social security system is mainly protective – mechanisms to prevent a sharp decline in income, coping with individual and collective risks, rather than promotive – public action to raise persistently low incomes of the elderly. On the other hand, a Bismarckian pension system links pension benefits to wages, the pension is a certain fraction of the labour income previously earned (saved). Intergenerational redistribution is one of the main objectives of the pension system.

Some of the pertinent economy wide implications of population greying are: changes in labour force, both domestic and global, savings and investment, capital intensity, returns to capital, wages, consumption, pension, income distribution, and open economy aspects (Lee, 2016; Lee and Mason, 2010). Some of the

macroeconomic effects of population ageing are changes in the balance between capital and labour, and between labour supply and demand for consumption. It has effects on the age structure of workers, their labour productivity and the wage structure. The most important aspect is the labour productivity (Skirbeek, 2008). When labour productivity is age dependent, a shift in the age structure will bring about a change in aggregate productivity. The general age-productivity pattern is inverted U shaped with peak productivity at 35–44 years, aggregate labour productivity dropping significantly. Productivity potential continues to increase until around age 40 years, when the productivity reducing effect of lower ability levels outweighs the productivity gains from long experience. In the US, the 55–65 years olds' productivity potential is 0.34 standard deviations lower than that of 25–34 year-olds, although they still have a productivity potential above that of those aged 24 years and younger. Given that experience has a reasonably strong effect on productivity, the peak productivity potential occurs in ages 35–44 years; without labour market experience, productivity peaks for age groups 20–24. The age at which income peaks is between 47 and 49 years in most advanced economies, whereas it peaks between 37 and 43 in poor countries.

As impressive as were the gains in life expectancy in 20th century, the gains in income per capita are very impressive. While increased longevity and the consequent better health induce the elderly to work longer, rising income causes them to retire early. This is accentuated by the expansion of welfare state policies, and public and private old age security and pension arrangements. If economic growth continues to increase the demand for leisure, early withdrawal from labour force by the elderly is to hard press the public support system. But, the fact that even elderly continues to work and accumulate assets is an indication that the old age is still productive. The idea that older workers are less productive than young ones is a myth. The Horndal effect/experience suggests that workforce ageing is not a problem for productivity. Contrary to the age-productivity hypothesis, an ageing workforce was compatible with rapid

increases in labour productivity through a leaning-by-doing effect. In fact, the plant-level Swedish data shows that the plant-level productivity is positively influenced by a high share of prime-aged adults in workforce, whereas within-plants the Horndal pattern dominates (Malmberg, Lindh and Halvarsson, 2008). What older workers lack in dynamism and innovation, they make up in terms of experience, les absenteeism, and low mobility. The labour force ageing would cause the wages of the older workers to fall relative to the wages of the younger workers. Thus, as far as labour market functioning is concerned, important concern for public policy is not the issue of population ageing per se, rather it is the combination of labour force ageing and its shrinkage. The public policy should focus on increasing age-specific labour productivity and promotion of active ageing (Borsch-Supan and Weiss, 2016).

Population growth which was earlier seen as a bane is now seem to be a boon, with great potential gains (Ehrlich, 1968; Clark, 1969; Clark, Kreps and Spengler, 1978; Simon, 1977; 1981; Cutler, Poterba, Sheiner and Summers, 1990; Sheiner, 2014). It may be a problem in the very short run, that too if only appropriate policies are not in place. The view of Julian Simon that 'a large population is a country's ultimate resource' seen now to have been proved right by recent approaches and evidences (Simon, 1981). The main fear underlying the population problem was that all indicators of socio-economic performance would be worsened by rapid population growth. Yet, in the periods of rapid population growth, none of the economic indicators fared worse in India; savings, investments and productivity have indeed increased to boost economic performance. The most enduring myth about the relationship of population growth, wages and poverty was the belief in the existence of vast pools of surplus labour, low real wages, unemployment, and poverty (Borsch-Supan, 2013). In the period of high population growth, total factor productivity accelerated in both agriculture and non-agriculture. Thus, population growth, far from damaging, has probably helped economic performance and fears concerning the effects on wages, employment and poverty proved

to be misplaced.

As regards labour force, public pension reforms should strive to achieve actuarial neutrality - a payroll contribution equal to the present value of additional future benefits at each age if the worker stays in the labour force. The Chilean style capital-reserve-financed defined-contribution pension system that is fully funded - in the sense that the present value of assets equals the present value of liabilities at all points in time, aims to achieve such actuarial neutrality, at the same time eliminating the perverse incentives in existing defined-benefit systems.

As far savings and investment is concerned, age structure of population affects both the supply of savings and the demand for investment, as these two are crucially dependent on income streams and consumption rates. Horioka (2010) presents empirical evidences that show that ageing significantly negatively impacts both household and private savings. The empirical results of the rival camps - the life-cycle hypothesis of savings and consumption and the bequest motive for intergenerational transfers - are mixed (Modigliani and Brumberg, 1954; Kotlikoff and Summers, 1981; Kotilikoff, 1988; Barro, 1974). Possibly population ageing places downward pressure on private savings, but surely ageing exerts increased pressure on government balances. This implies that public pensions crowed out private savings. Therefore, the pay-as-you-go financed pension system, while increasing welfare reduces capital formation. Both Canning (2007) and Horioka (2007) find that excessively generous unfunded pay-as-you-go with early retirement incentives are likely to be counterproductive, reducing labour market participation of the elderly workers and undermine intergenerational equity. The older society will inevitably have a lower savings rate than a younger one because the ratio of consumers to producers is higher. Measures to mandate private retirement savings or to encourage private savings, while having some effect, are subject to substantial offsets elsewhere on the household balance and foregone fiscal revenues respectively.

Coming to income distribution, the intergeneration distribution is to be reckoned with the fact that both the young and the old live in the same period. While the young live on the labour income, and save out of it, the old live on wage based transfers from the young and from income derived from accumulated assets. Thus, once again there is crowding out effect, in addition to debt neutrality: public transfers nullify private transfers, and transfers to elderly that increase their consumption neutralises consumption reduction of young due to taxes, thus zero aggregate effect on the economy. Whatever be the means of pension financing, population ageing is certain to have intergenerational conflict, and the debate will surround rising payroll taxes and shrinking pension benefits. Because of the non-stop bickering between generations, the government has to steer a course between rising pension costs and a return to widespread old age poverty. It is likely that social security will revert to a role much closer to the original Beveridgean ideal of providing basic needs.

With increasing globalisation, and the associated labour and capital mobility and global allocation of retirement savings portfolios, there may be welcome efficiency gains, but its potential to ease the problems of population easing is limited. While capital is more mobile and may flow North to South, labour is less mobile and may not flow so easily from South to North. Therefore, globalisation may add only marginally to the rate of return to the savings of the elderly. The potential beneficiaries of global capital allocations are those who are relatively well-off, who are mobile and well adjust their investment portfolios. The poor who depend on labour income in young and public pensions when old may be the losers from globalisation.

The missing element in the whole exercise of public policy towards pension provisions and social security is the absence of financial literacy. The workers/public have to decide not only how much to save for retirement but also how to allocate their pension wealth. The individual does not engage in retirement planning because of the ignorance of basic financial concepts due to lack of financial

literacy. In recent years, with the opening up of the insurance sector to private sector, the complexity of financial instruments has increased, and hence individuals must use new and more sophisticated financial products. The questions of financial literacy are how well-equipped are Indians to make their own saving decisions and do they even plan for retirement. Planning for retirement may not cause higher wealth, but financial literacy on retirement planning is shown to be an important determinant of wealth. Every financial instruments should have inbuilt planning aids for simulation and stimulation of savings and school/college and work-place delivery of financial education. Financial education programs can result in improved saving behaviour and informed financial decision-making with more complex financial instruments.

Policy Responses to Population Ageing

A welfare state public policy towards population ageing has always been the response of many countries for many years. The social security system, pension system, medicare and subsidies have been the traditional means towards the provision of security of the elderly. Pension is a system of a steady income given to a person, usually after retirement. Pension is typically payments made in the form of a guaranteed annuity to a retired or disabled employee. Some retirement plan designs accumulate a cash balance (through a variety of mechanisms) that a retiree can draw upon at retirement, rather than promising annuity payments. The government sector employees are provided with pension (a defined benefit scheme), gratuity, a second tier of lump sum retirement benefit, and general provident fund, apart from health and medical benefits and insurance and a host of concessions. The organised sector workers are covered under the employee provident fund (defined contribution scheme) and employees' pension scheme (defined benefit scheme), providing for the payment of a member's pension upon the member's superannuation/retirement, disability, and widowhood and children's pension upon the member's death. There is also public provident fund, providing workers with the facility to accumulate savings for old age income security, and many forms of individual and group insurance schemes, with annuity and medicare components.

Till recently the pension system was one of a defined benefit and funded pay-as-you-go scheme where the benefit is defined, inflation indexed, that is financed by taxes, not from the contributions of the employees. With the new pension system (NPS) since 2004, defined contributory system is in place with a defined contribution of 10 percent by the employee that is matched by the government. Employees can exit the system on or after the age of 60 years and at the time of exit it is mandatory for them to invest 40 percent of the pension wealth in annunities to provide for life time pension. The 2001 Old Age Social and Income Security (OASIS) Report of the Department of Social Justice and Empowerment recommends an individual retirement account for each worker that is managed by pension fund managers. A salient feature of the repot is that it suggests no ceiling on the number of pension fund providers and that the pension fund managers should offer the alternatives of (i) safe income (ii) balanced income and (iii) growing income with differential investments of savings in government paper, corporate bonds and domestic equity. This option will greatly benefit the elderly to decide on their income streams and expenditure patterns.

At the policy level, a number of national policies for elderly operate in India, besides many ministerial and departmental plans. With the aim to providing retirement income, the National Pension System (NPS) and Swavalamban Scheme are implemented. An Integrated Programme for Older Person (IPOP) is being implemented since 1992 with the sole objective of improving the quality of life of senior citizens by providing basic amenities like shelter, food, medical care and entertainment opportunities. The National Policy on Older Persons (NPOP) was announced in January 1999 to reaffirm the commitment to ensure well-being of elderly. The National Policy for Senior Citizens discusses about housing, productive ageing, multigenerational bonding, health care and various other schemes. The Insurance Regulatory and Development Authority (IRDA) established in 1999 and the Pension Fund Regulatory and Development Authority (PFRDA)

established in 2003 have been making efforts to improve the insurance and social security for the rising elderly population in India. The Maintenance and Welfare of Parents and Senior Citizens Act 2007, assigns responsibility and obligation on the heirs to provide care and support to the elderly. Accordingly (i) parents have the right for maintenance by adult children, grandchildren and legal heirs, (ii) parents can approach tribunals to claim need-based maintenance, (iii) parents or senior citizens may reclaim property gifted to children or relatives if the latter fail to provide the former with basic facilities and basic physical needs, and (iv) penalty can be imposed on defaulting children.

At the ministerial or departmental level, various schemes and programmes aim at fostering 'healthy ageing' and functional ability of the elderly by aligning health systems with the needs of the ageing population and 'age-friendly' environments, towards improving and maintaining the lives and well-being of the aged. In the sphere of health, there exists the National Programme for Health Care of the Elderly (NPHCE), Rashtriya Swasthya Bima Yojana (RSBY) and some public/private insurance schemes, and with regard to finance for the elderly, there are priority and concessions for the aged, and incentives and tax deductions provided under the income tax act. The ministry of social justice and empowerment provides old-age monthly pension under Indira Gandhi National Old Age Pension Scheme (IGNOPS) and monthly free food grains under Annapurna Scheme. The ministry of rural development implements the Indira Gandhi National Widow Pension Scheme (IGNWPS), National Family Benefit Scheme (NFBS) and the guaranteed 100 days of employment in a financial year under Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA). There is also a separate Department of Pensions and Pensioner's Welfare for the formulation of policies relating to pension and other retirement benefits as well as to redress the grievances of pensioners at the central government level. All the state governments also have many programmes to address the needs of the elderly who are not covered under any kind of pension schemes and are not in the work

force.

The growing social security system and the poor/weakening private/family security system tend to escalate the costs of provisions for the elderly through taxes like income support, pension, medical care and living standards, which ultimately put financial pressure on the fiscal system of the economy. Therefore, government should attempt to shift costs back to families by policy priorities that include revamping the employees' pension scheme to national pension scheme (like Japan), government managed medical and health insurance plans. In this connection, it is pertinent to look into the circumstances for the declining capacity of the families to care for the elderly. The principal reasons are the declines in the ability of the elderly to care for themselves due to lack of income sources and health ailments, coresidence patterns due to widowhood and physical impairment, women participation in the full-time paid employment and work outside the home, weakening values of filial piety, all pointing to a continuing decline in the ability and willingness of the family to support its elderly. Therefore, top priority should be accorded to channelising private intergenerational transfers, home-help services, short-term stay services for bedridden elderly, and paid institutional/nursing home care.

The institutional reforms, apart from demographic and fiscal solutions, involve improving the real, as opposed to the potential, support ratio, moderating the financial burden of the elderly through an improvement in the levels of female work force participation and extended tertiary education, and a move from the state pay-as-you-go pension schemes to diverse sources of old-age support through 'second and third pillar' occupational and private funded pension schemes. Innovative social security systems may include, state systems - security and insurance schemes, transfers and subsidies, market based systems - security and insurance on actuarial calculations, member based organization systems (NPO, SHG, cooperatives, mutual funds) - service to members on a voluntary basis, and private household systems - family members

service on the basis of social norms and values. Any viable security system should have in built incentive systems - in economic and financial position, political environment and state of law, and capacity systems - in financial availability, organizational structure and skills, to allow for more competition among providers and active participation of the population.

Puzzles of Population Ageing

The issue of population ageing is complex, multifaceted, and ill-defined; and existing solutions are partial, uncertain, and largely ineffective. That is, ageing is not a problem that can be surmounted in so much as it is a predicament, neither well-defined nor well-measured just as the issue of economic development itself. As the quest for the determinants of economic growth remains elusive, there are no quick fix solutions to the ageing predicament. The changing nature and dimension of the issues faced by the elderly, population ageing will continue to be an unprecedented economic burden, and the current solutions in terms of pension and health programmes may become unsustainable and obsolete. Even, the suggested alternative solutions like longer working lives, greater labour supply by non-elderly, raising more children and endowing them with more human capital, encouraging family support, saving more for old age, etc. seem do little to improve the ageing predicament.

Ultimately, the public policy should strive to improve the status of the elderly so that they achieve economic parity with the rest of the population. At the most, the policy can aim at providing adequate standard of living in the old age by inducing individuals voluntarily allocate more of their lifetime resources through private pension plans, thus reducing the pressure on both the public pension and government medical programmes built in the social security system. Whatever steps the policy can take, younger generation are going to pay higher taxes (out of higher incomes), and older people are going to get by on pensions lower than they were promised and assets likely worth less than they had expected.

Therefore, policy changes are imperative not only to manage social security and pension programmes, but also to augment income streams and human resource potential of the elderly. This requires a scientific population management policy as against the current piece-meal and ad hoc adjustment policies. The elderly population should not be viewed as a burden to the young and the society, rather it is to be recognised as an asset, in fact (experienced) human capital of the economy. The management perspective needs to focus on the experience/productivity and innovative/risk taking abilities of the older and youth populations respectively so that there will continue to be a sustained economic development. The better management of population dynamics and its structure thus requires a scientific approach away from the current practice of population control and providing simple health care and old age support. The population management perspective need to recognise the potential contributions of different age groups rather than simply concentrating on the working age population's earnings and savings, and satisfying the needs of the elderly It should also recognise the shifting patterns of future age structures and their implications for development. The population management policy also needs to sharpen the international competitiveness of the population structure and should strive to maximise the resources allocated to the care of the elderly. In short, a strategic management approach will bring out a holistic picture of the dynamic interaction between ageing population and their contributions and security. The ageing scenario in the coming years is so dire that we better start the management approach for the care of elderly,the sooner the better.

Yet some of the unresolved puzzles that need closer and deeper investigation are: estimating the causal effect of population ageing on economic growth; estimating the impact of demographic changes, particularly the shifts in age structure, on economic development; estimating the extent of demographic dividend/bonus and its effects on economic growth; estimating the differential needs of the different segments of the old age

population; estimating the impact of new medical technologies on economic resources for the elderly care; estimating the consumption, savings and investment behaviour of the elderly; estimating the economic costs of health care provision for the elderly; estimating the effects of living arrangements for the elderly care; estimating the productivity and productivity effects of both the elderly and the working age population; estimating the impact of savings of the elderly on the savings of the workers; estimating the relationship between the savings of the elderly and the taxes on the working population, estimating the impact of the provisions for the elderly on the investments in the schooling and health of the child age population estimating the distributional impact of social security and pension provisions, estimating the crowding out effect of private provisions on public provisions; estimating the effects of globalisation on fiscal resources for the elderly; estimating the effects of capital and labour mobility on the resources for elderly care and savings; estimating the quantity-quality tradeoff in the provisions, costs, and returns to the elderly; estimating the effects of infrastructural developments on the demands of the elderly; estimating the effects of populist expenditure on the economic dependency of the elderly; estimating the impact of financial literacy

Conclusion

At this juncture in history, India faces unprecedented greying population as a result of lengthening lifespans (longevity) due to advances in medicine, public health, nutrition, and sanitation, and declining fertility as a result of improved access to contraceptives, increasing age at marriage, particularly among women, as well as declining infant mortality. This Indian demographic shift poses massive and complex challenges to Indian economy in the form of a rising fiscal burden and inadequate social safety net. The greatest challenge in the coming decades is to adjust not only the institutions but also the cultural, social and psychological perceptions as rapidly as the population experiences not only the age-related (chronological) aging but also the physiological and psychological

ageing. Successfully addressing these challenges, while certainly far from impossible, will require equally complex and ambitious changes and innovations in health, fiscal, and social policies.

In this context rapidly growing elderly population in India, macro level policy responses need to have two pronged strategy. One way is to address the size and productivity of the labour force so that enough savings is available for meeting the requirements of the elderly population. This means ways and means of increasing the size and productivity of the labor force are to be addressed. A possible policy option may be raising the retirement age, and the plausible means is in investing more in children to increase the quality and productivity of the future labor force. At the same time, efforts are needed to reduce benefits and/or raising taxes for public transfer programmes for the elderly, with concern for dead-weight loss and the fair distribution of costs across socioeconomic classes. As net upward public transfers are pervasive, population aging will be costly and will require adjustments which could take various forms. Either way, the task is daunting and any further delay will only compound the burden of population ageing.

The issue of greying population is complex and multifaceted, and the so-called currently conceived solutions are only partial and largely ineffective. Ageing population is not only a challenge to the macroeconomic management of public finances and political systems, but also has a unique micro side of the human living and their activities. Population ageing, like other apparently looming challenges to humans, may have a possible solution, as the humanity has many a times demonstrated against all odds throughout history. In as much as a predicament, resolution to population greying is a mission impossible that demands unconventional and uncommon extraordinary human ingenuity that is not forthcoming. As MacKellar (2000) observes “There is no solution, which is why aging is a predicament, Not a solution” (p.389). Problems have solutions, predicaments do not.

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PERSONALITY, HOPE, AND RESILIENCE AMONG COMMUNITY DWELLING AGED

Dr. Rajendra S. Mhaske*

ABSTRACT

The purpose of this study was to examine the relationship between personality, hope, and resilience among the aged living in community but away from their families. The sample for the study consisted of 100 aged community dwellers (Male 50, and Female 50) from the different areas from Pune (India) city. All were middle-class aged between 60 to 85 years (Mean age = 71.97) and staying separate from their family members since last one year and free from any psychopathological conditions. The tests used for this study were NEO-FFI (McCrae and Costa, 1992), Connor-Davidson Resilience Scale (Connor-Davidson, 2003), and Adult Hope Scale (Snyder et el., 1991) translated in Marathi. The product-moment correlation method was applied to see the relationship between personality, hope, and resilience. Results shows that neuroticism was found significantly and negatively correlated with hope ($r = -.298$, $p < .01$) and resilience ($r = -.205$, $p < .05$). Conscientiousness was found significantly and positively correlated with hope ($r = .337$, $p < .01$), and resilience ($r = .523$, $p < .01$). Extraversion ($r = .455$, $p < .01$), and agreeableness ($r = .198$, $p < .05$) were found positively correlated with resilience. Hope was found significantly and positively correlated with resilience ($r = .550$, $p < .01$) among aged. Regression analysis shows that conscientiousness and extraversion emerged as the predictor of resilience explaining 33% of the total variance.

Key words: Personality, Hope, Resilience, Hope and Aging, Positive Psychology, Community Dwelling.

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Introduction

As aging is common phenomenon, population aging is increasing all over the world. As per 2011 census, India's current aged (60+) population is almost 104 million. Better medical care and low fertility have made elderly a growing section of the society. Due to demographic and social changes many elderly have to live separate from their family/spouses and most of the aged are living in old age homes/institution, as well as at apartment which is especially for aged. Recent finding in Asia suggested that there is only a modest trend toward a reduction in cohabitation with children (cited in, Silverstein & Schaie, 2004).

Aging and Personality

The aging is 'the process of systematic deterioration with time' (Masoro & Austad, 2006). Basic pattern of personality set in earlier life and become more set with advancing age (Neugarten, 1973; Slater & Scarr, 1964). 'Personality is a pattern of unique characteristics and relatively permanent traits, which are individuality and consistency to an individual's behavior' (Feist & Feist, 2009), personality appears quite stable over time (Costa & McCrae, 1994).

Neuroticism declines up to age of 80, and extroversion, openness, agreeableness and conscientiousness increase up to the age of 70 (Terracciano et al., 2005). In one US study, 68 years old aged were rated lower on neuroticism and extraversion, and rated higher on openness, agreeableness and conscientiousness as compared to young aged (Cited in, Wayne et al., 2012). Older adult were found more agreeable and more conscientious than middle-aged and young adult (Mathias et al., 2008). Therefore, as age increases negativity get decrease and positivity increase.

In gender differences, old-age men were found to be more introverted than old-age women (Eysenck & Eysenck, 1985), but young women were found to be high in neuroticism, openness, and agreeableness than elderly women, and aged women were found to be more agreeable than young women, while aged men were found

to be more agreeable compared to aged women (Weiss et al., 2005).

Resilience and Personality

Resilience refers to a class of phenomena characterized by patterns of positive adaption in the context of significant adversity or risk (Masten & Reed, 2002). Resilience considers as a potential factor which maintain well being in old age. There is an association between good physical health and high resilience in older adult (Wells, 2009). The older adult found more resilient than younger ones with respect to emotional regulation ability and problem solving (Gooding et al., 2012).

Resilience found negatively associated with neuroticism, and positively with extraversion and conscientiousness (Campbell et al., 2006). Extraversion, agreeableness, conscientiousness and openness found positively correlated to resilience and negative with neuroticism (Shi et al., 2015). Big-Five personality research showed that resilience was found negatively associated with neuroticism and positively with extraversion, openness, and conscientiousness dimension (Nakaya et al., 2006). Resilience was found positively associated with extraversion, agreeableness, and conscientiousness and negatively associated with neuroticism among college going students (Womble et al., 2013).

In adult study, Kinnunen et al., (2012) investigated association between personality and resilience and they found low neuroticism among high resilient people. Other study found that resilience acted as moderated variable between personality and emotional exhaustion, and significant interaction found between resilience and conscientiousness (Leon et al., 2009), resilience also found associated with high optimism, extraversion, openness to experience, conscientiousness and lower with neuroticism (Laura et al., 2002).

Hope and Resilience

Older person relies on different methods of maintaining hope than younger person (Duggleby & Wright, 2005), perception of hope influenced by place of residence, age, energy level, functional ability and health status (Herth, 1993). Hope is one psychosocial resource which older person use to cope with life adversities (Westburg, 2003). Hope buffers individuals against psychopathology (Erickson, et al., 1975), and contributes to better outcomes in a variety of negative situation (cited in, Huen et al., 2015). Hope was found positively associated with life satisfaction and negatively with stressful life events (Valle et al., 2006).

Researchers studied how hope play mediator between personality and life satisfaction, result showed that hope acts as a partial mediator between neuroticism, conscientiousness and life satisfaction and a full mediator between extraversion and life satisfaction (Peter, 2010). Hope theory indicated that higher hope individuals experience less depression and anxiety than individuals with lower hope (Cheavens, 2000; Lewis & Kliewer, 1996). High hopelessness found associated with low resilience (Hjemdal et al., 2012), and low hopelessness scores predicted greater resilience among young and old aged (Gooding et al., 2011). People with high hope are capable of understanding their weaknesses and strengths, and they are found able to handle negative emotions more effectively than lower hope (Snyder, 2002). The present study tried to understand the association between personality, hope and resilience among the aged who are staying away from their family members due to some family problems.

Significance of Present Study

As per 2011 census, India's current aged (60+) population is 104 million and the estimated population of the Indian aged (60+) would be 14 per cent by 2050 (www.censusindia.gov.in/2011). Due to changing socio-economic structure, many adult have to stay at old age homes or separate from families, therefore the aged are facing

lot of problems in adjusting and coping with physical and mental health problems. As research found that personality play as major role in resilience and hope, and resilience and hope play mediator between personality and life satisfaction. As people with high hope are capable of understanding their weaknesses and strengths, and they are found able to handle negative emotions more effectively than people with lower hope. Therefore, the present study is planned to understand the relationship between personality, hope and resilience among community aged and would also help to understand the gender differences in personality, hope and resilience among the community dwelling aged.

Objectives of the study

The purpose of this study was to explore the relationship between personality, resilience and hope among community dwelling aged.

Hypotheses

The following hypotheses were formulated keeping in mind previous studies and the objectives of the study.

1. Neuroticism will be negatively associated with hope and resilience among aged.
2. Extraversion, openness, agreeableness and consciousness will be positively associated with hope among aged.
3. Extraversion, openness, agreeableness and consciousness will be positively associated with resilience among aged.
4. Hope will be positively associated with resilience among aged.

Methodology

Sample

The sample for the study was consisted of 100 aged (60+) (50

males and 50 females) who were staying in separate apartment and old age homes which were build only for the aged in Pune city. 60+ aged data were collected from middle class socioeconomic status of aged and all were free from any psychopathological problems, purposive sampling method was used to collect the data.

Tools used in the study

1. Neo-Five Factor Inventory (NEO-FFI) (McCrae and Costa, 1992) It consists of five 12- item scales, a total of with 60 items, which measure five domains, namely, Neuroticism (N), Extraversion (E), Openness (O), Agreeableness (A), and Conscientiousness (C). The individual responds to each item on a five-point scale, ranging from "Strongly Disagree" to "Strongly Agree." The reliability coefficient (alpha) for domain scales range from.86 to .95. The convergent and discriminant validity is found high on all facets.

2. **Connor – Davidson Resilience Scale**, (CD-RISC; Connor and Davidson, 2003).

The CD-RISC is a 25-item scale that measures the ability to cope with stress and adversity which is based on summing the total of all items, each of which is scored from 0-4 (0 "not true at all" and 4 "true nearly all the time"), with higher scores reflecting greater resilience. Test-retest reliability for the full CD-RISC is found .87.

3. Adult Hope Scale (Snyder et al., 1991).

The adult hope scale contains 12 items. Four items measure pathways thinking, four items measure agency thinking, and four items are fillers.Participants respond to each item using 6-point scale ranging from "definitely false" to "definitely true" and the scale takes only a few minutes to complete. Internal consistency of the total score is (Cronbach's alpha range of .74 to .84), the agency component (Cronbach's alpha of .71 to .76) and pathways component (Cronbach's alpha of .63 to .80) indicated that all items on the scale were measuring the same construct. Test-retest reliability was found .80.

Procedure

At the start of study, researcher has taken some basic demographic information from participant, such as age, sex, marital status, and type of education. The older participants were given the option of reading and filling in questionnaire themselves or having researcher read out the questionnaire and record responses of them. Confidentiality of data maintained and data is not shared with anyone.

Result

Table-1, Correlation matrix of personality, hope and resilience among aged (N = 100).

Personality Factors	Hope	Resilience
Neuroticism	-.298**	-.205*
Extraversion	.182 (NS)	.455**
Openness	.083(NS)	.198*
Agreeableness	.173(NS)	.127(NS)
Conscientiousness	.337**	.523**
Hope	---	.550**

** = p < .01 level, * = p < .05 level. NS=Not significant.

Results showed that the first factor of personality, neuroticism was found negatively correlated with hope (r = -.298, p < .01 level) and resilience (r = -205, p < .05 level), meaning that high score of neuroticism associated with low score of hope and resilience among aged. The first hypothesis, 'neuroticism will be negatively associated with hope and resilience among aged' was accepted.

Extraversion was found positively but not significantly correlated with hope (r = .182, NS), openness was found positively but not significantly associated with hope (r = .083, NS), agreeableness was found positively but not significantly associated with hope (r = .173, NS). The fifth personality factor, conscientiousness was found to be significantly and positively correlated with hope (r = .337, p < .01). Therefore, second hypothesis stated that 'extraversion, openness, agreeableness and consciousness will be positively associated with hope among aged' was partially accepted.

The third hypothesis, 'extraversion, openness, agreeableness and consciousness will be positively associated with resilience among aged' was accepted, because as result showed that extraversion was found positively and significantly correlated with resilience (r = .455, p < .01), and openness was found significantly and positively associated with resilience (r = .198, p < .05) in old aged, agreeableness was found positively but not significantly associated with resilience (r = .127, NS) among old aged, and conscientiousness found significantly and positively associated with resilience (r = .523, p <.01) among old aged, that means high scores of extraversion, openness, agreeableness and conscientiousness is associated with high scores of resilience.

Result also showed the significant and positive correlation between hope and resilience (r = .550, p< .01) among aged population, therefore, the fourth hypothesis, 'hope will be positively associated with resilience among old aged' was accepted.

Table-2, shows multiple step-wise (forward) regression analysis with personality factors as a predictor of resilience and hope as the predicted variables among aged (N = 100)

Predicted Variable	Predictors	Adjusted R Square	df	F	Sig. Level	Beta	Sig. Level
Resilience	Conscientiousness	.27	98	37.94	.000	.523	.002
	Extraversion	.33	98	25.67	.000	.401	.000
Hope	Conscientiousness	.10	98	12.90	.001	.337	.001
	Neuroticism	.15	98	9.82	.000	-2.32	.015

The table-2 shows the results obtained when multiple step-wise (forward) regression analysis was carried out with the personality factors as the predictor variables and resilience and hope as predicted variables for aged. For the resilience the obtained value for conscientiousness was the adjusted R^2=.27, F = 37.94, p < .001, and beta value was .523, p< .002, and for extraversion the adjusted R^2 = .33, F = 25.67, p < .001, and beta value was .401, p< .001. The result indicated that conscientiousness and extraversion jointly predicted 33% of the resilience, while independently 27% was predicted by conscientiousness and 6% by extraversion.

Conscientiousness and neuroticism were found to be predictor of hope. The obtained value shows that for conscientiousness the adjusted R^2 = .10, F = 12.90, p< .001, and beta value was .337, p< .05, for neuroticism the adjusted R^2 = .15, F = 9.82, p< .000, and beta value was -2.32, p< .05. The result indicated that conscientiousness and neuroticism jointly explained 15% of the hope, while independently 10% was predicted by conscientiousness, 5% by neuroticism.

Discussion

The first hypothesis stated that 'neuroticism will be negatively associated with hope and resilience among aged' was confirmed. The findings of the present study were supported by Nakaya et al., (2006) that showed that resilience was negatively associated with neuroticism.

In present study, the second hypothesis was stated that 'extraversion, openness, agreeableness and consciousness will be positively associated with hope among aged and was partially confirmed; previous studies (Peter, 2010) showed that hope acts as a partial mediator between neuroticism, conscientiousness and life satisfaction and a full mediator between extraversion and life satisfaction is supporting the previous findings.

In another study researcher found positive association between resilience and extraversion, agreeableness and conscientiousness (Womble et al., 2013), this finding is supported the third hypothesis which was stated that 'extraversion, openness, agreeableness and consciousness will be positively associated with resilience among aged'

The fourth hypothesis was stated that 'hope will be positively

associated with resilience among aged' which was confirmed and previous finding also supporting the present findings such as daily hope provided protective benefits by keeping negative emotions low and adapting recovery from stress (Ong et al., 2006). Other studies also supported that high hopelessness was found associated with low resilience (Hjemdal et al., 2012), and low hopelessness scores predicted greater resilience among young and old aged (Gooding et al., 2011).

In regression analysis, table-2 shows that conscientiousness and extraversion emerged as the predictor of resilience explaining 33% of the total variance; beta values indicated positive relationship between two personality factors and resilience. As conscientiousness and neuroticism found jointly predictor of hope explained by 15% of the total variance, as beta value indicated positive association between conscientiousness and hope and negative association between neuroticism and hope. Resilience found negatively associated with neuroticism, and positively with extraversion and conscientiousness (Campbell et al., 2006). As previous finding (Kinnunen et al., 2012) stated negative association between neuroticism and resilience among old age population which supporting present study findings.

Conclusion

After studying the obtain results, the following conclusions may be drawn:

1. Neuroticism found negatively correlated with hope and resilience among old age.

2. Extraversion is positively associated with resilience among elderly.

3. Openness is positively correlated with hope and resilience among aged.

4. Conscientiousness is positively correlated with hope and resilience among old aged.

5. Hope is positively correlated with resilience among old aged.

Limitation of the present study

The following are limitations of the present study:

1. The sample size was very small and restricted to only old aged male and female.

2. It was limited to 60 to 85 years.

In this study data was taken from old age people who were not living with their children's and family members.

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THEORETICAL APPROACHES TO THE STUDY OF AGING FROM PSYCHOLOGICAL PERSPECTIVE

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ABSTRACT

The aging process is of course a biological reality which has its own dynamic, largely beyond human control. However, it is also subject to the constructions on the basis of which each society makes sense of old age. Old age basically is the closing period of life span. There are many theories through which aging processes can be explained and psychological aspect is one of them. The aim of the present study is to highlight aging from psychological perspective through eastern and western theoretical approaches. In this study both classical and modern approaches are adopted. The viewpoints of two dimensions are also different. Classical theories describe the structural aspects of aging, whereas modern theories emphasize, how aged individuals adapt social and personality changes into their core frame of mental structure. Life is basically another name of struggle. From the moment of conception to the end of life the individual has to overcome different shades of psychosocial conflict and it depends on the way how society and culture influences the personality pattern of the individual and also how the individual perceives the world and how he/she finds the meaning of his/her existence. Level of activity and the nature of engagement are the two main dimensions through which one can enjoy the fragrance of successful aging. In modern scenario psychological modification strategies are also found to be prosperous in achieving the goal of well-being for aged individuals.

Keywords: Psychosocial conflict, Phenomenology, Successful aging, Personality, Psychological Intervention.

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INTRODUCTION

The word 'life' is the mirror of the world in terms of both inner and outer aspects. The changes in the world be it objective or subjective, initiates new ripples in the life floor. The desire to have a life, the incidence of zygotic conceptions- the birth of a child, introduces so many changes in the ontogenic process for the given child that alterations in inner and outer realities are possible to a great extent in any moment. All these imply that a small word like 'life' is not a simple thing at all; it is pregnant with multidimensional facets to indicate or maintain a continuum of its own. The starting point of it is zygote formation in prenatal state, birth in the postnatal process, having its terminating point at death. Nothing is predictable in 'life', but the average functions present a norm. This norm pinpoints major life phases or periods being ornamented by distinct bio-behavioural growth/ developmental processes. Each major period has a landmark, revealing psychological implications of various sorts. Hence, each deserves special attention and analysis.

The focus of the present era is aging, being the second major developmental phase of life, the reason being available techno-medico advancements resulting in stretched longevity span. In the second half of life, how 'we,' the human beings of advanced world, are behaving and causing changes in the outer reality, has become a matter of concern to be analyzed and understood properly. Being accustomed with comparatively more negativities than the first half in terms of declined socio-biological and psychological components, what type of psychological problems are endangering our adjustment pattern, has proved to be an important issue in the specific parlance of 'gerontology'.

The Concept of Aging

The aging process is of course a biological reality which has its own dynamic, largely beyond human control. However, it is also subject to the constructions on the basis of which each society makes sense of old age. The age of 60 or 65, roughly equivalent to retirement ages in most developed countries is said to be the beginning of old age. In many parts of the developing world, chronological time has little or no

importance in the meaning of old age. Other socially constructed meanings of age are more significant such as the roles assigned to older people; in some cases, it is the loss of roles accompanying the physical decline which is significant in defining old age. Thus, in contrast to the chronological milestones which mark life stages in the developed world, old age in many developing countries is seen to begin at the point when active contribution is no longer possible (Gorman, 1999).

Age classification appeared to vary between countries and over time, reflecting, in many instances, social class differences or functional ability related to workforce, but more often than not, it hinted at a reflection of current political and economic situation. Many times the definition is linked to the retirement age, as has been mentioned before. This translation in livelihood became the basis for the definition of old age which occurred between the ages of 45 and 55 years for women and between the ages of 55 and 75 years of men (Thane, 1978).

While aging impacts on everyone and (virtually) everything in society, politics and the economy, its impact differs greatly by country and by policy-area. Aging is a pervasive phenomenon in that it affects everyone, not only the older parts of the population, and global in that it affects all regions of the world. As a result, aging has important implications for inter-generational, intra-generational and also international equity. The study of aging involves examining it from three perspectives, namely**,** individual aging, population aging and qualitative changes in ageing **(**OECD, 1996**).**

As an individual approaches the end of life's last stage, the future holds a given outlook for many. They are termed as “senior citizens” and “chronologically gifted” and are respected for their values and knowledge. Older adults are an important, growing segment of the population. They are the survivors, at their highest level of maturity and thus they have much to teach us regarding their experiences during their turn in society's roles of power and responsibility of leadership. Their angle of acceptance is obvious in this matured

age. They are the first to face a number of problems that may have been unrecognized and become dominant social and economic issues of the next half century. They can be the role models in terms of the values and practiced behaviour patterns.

Old age is synonymous with wisdom, values and a host of positive things that are desirable in a community. Changed norms of society can be appraised by them and people may feel accepted and relaxed.

Aging is not an obsession in India, and death itself not so final an event due to the belief in reincarnation. Death is taken in a more philosophical sense and with greater resignation, and acceptance of fading away. We should try to help them to be peaceful in terms of having less pain at the end period of their life.

Age, aging and aged are the three words frequently used in gerontological discussion. Sometimes they are used interchangeably; sometimes they are used to argue for theoretical advances. Basically age, aging and aged are neither interchangeable nor mark theoretical advancement. As work towards a more sophisticated body of knowledge in gerontology, one must recognize that age, aging and aged are indeed three windows into the phenomena in the present concept highlighted in this paper.

Age: Theories about age are the theories about cultural and social phenomena. It has already been mentioned that the connections between the time and life course are variable on a cross-cultural and perhaps on intra-cultural basis. Generations, age classes, and staged life courses based on chronological norms are at least three ways in which age is understood. Each conceptualization has its causes and consequences for the people who define their lives through respective cultural models. Basically this approach of psycho-gerontology falls within the psychology of age, which studies the age differences in behaviour by comparing groups of different ages in cross-sectional research. Productive research focuses on identifying the causes and consequences of the processes

responsible for age-related differences.

Aging: Theories about aging are theories about living. These theories are organized around a life span perspective and life courses. The psychology of aging studies behavioural patterns of change with age, integrating both the psychology of age and the aged in longitudinal research. It also includes questions about aging and changes in health and functionality, changes in participation in the division of labor, changes in family roles, cultural values etc.

Aged: Theories about aged are theories of old age. It focuses on the later life culminating in age and aging. It is the realization that lives, life changes and the consequences of how age is understood are all culturally constructed. Historically, with industrialization and urbanization, old age has been defined as a problematic state. Old age is seen not only as a medical and economic problem but also as a social problem, especially in terms of social support and care giving.

Theories about the aged become relevant for social policy, legislation and political action. In politics and policy there are winners and losers. Thus, any theory about old age must account for the diversity in the cultural contexts in which older adults who are classified as problematic are actually experiencing their old age. The reasons are straightforward: (1) is what we see as problematic really a problem? (2) Are there any strength in the context that can be improved or supported? (3) Are there any weaknesses that can be reduced? (4) Because old age is the culmination of aging, is there any way for preventing the future old from experiencing what is seen as problematic?

Time is not complex; time is elementary. Age, aging and the aged are a complicated part of the human experience because they are subject to cultural interpretations. Culture is always perplexing. As a design for living, culture is central to the way humans comprehend, negotiate and manipulate their natural and social

worlds. Culture is not a property of the universe like space or time. Although theoretical unification and parsimony are scientific goals, culture and what happens in time may not be amenable. Any theory explaining the age, aging and the aged is likely to be multifaceted and eclectic. At the same time, if one is trying to arrive at scientific explanations of age, aging and the aged, theory is essential ingredient. Explicit theory is a tool that enables us to separate cultural inventions from more general explanations. Explicit hypotheses relating study variables in a specific way not only clarify our thinking about phenomena but lead to the appropriate methods for evaluation of relationships. The cost of relying on implicit theory is to potentially perpetuate "home grown" cultural models as scientific generalizations.

In order to understand the manifold implications of such stretched life span in direct reality; we need to go through several dimensional achievements in different theoretical framework. Hence, the following fold deals with a detailed sketch of the theoretical perspectives of ageing from psychological perspectives:

Theories of Aging:

Researchers in the field of aging have aimed to analyze adult aging and have formulated several theories which aim to explain the complexities embedded in aging process and its related changes.

It may be relevant here to discuss what a theory is. All scientific theories have their origin in observation and are evaluated ultimately in terms of observation. From causal situations in everyday life, from clinical studies and field surveys, and from controlled experiments, there gradually emerges a collection of observations. Associated with these observations, is a group of ideas that attempt to interpret these observations. A scientific theory deals with the objects, events or situations that are found in nature and that, as natural phenomena, belong to a particular class as specifiable characteristics. The scope of theory is directly related to range of phenomena encompassed.

In short it can be said that, the psychology of aging studies the regular changes in behaviour after young adulthood (Birren and

Renner, 1977). Basically, the psychology of aging is grounded in a two-stages-of life perspective, development and aging, which are usually described as a two successive processes of change in time, with the transition point or apex at maturity. It also highlighted on an unresolved issue that is, what changes are typical or normal psychological processes of change in the individual, and what changes are atypical, abnormal or pathological patterns. The boundaries between these phenomena are often indistinct. Sometimes psychological theories of aging are labelled as "psychosocial"; at other times they are conceived as bio-behavioural, behavioural genetic or neuropsychological, with the emphasis on biological substrate. In either case aging individual falls into the trap of biological and social reductionism. But also within the field of psycho-gerontology there is a question of reductionism, because of the unidirectional emphasis on cognition and information processing, to the neglect of affective and conative processes of change over the life span (Schroots, 1996).

The following overview illustrates the different viewpoint of psychological theories of aging from ancient period to modern period.

Classical Theories:

This theory first appeared in 1941 in an article by Snygg and later was elaborated by Combs and Snygg (1959), which contained the basic notion that human behaviour is best understood in light of his perceptual world. The basic assumption behind this theory is that to understand human behaviour one must understand the individuals' perceptual world. The major idea is that through life experiences and socialization, individuals develop a perceptual framework through which they selectively perceive and interpret the world. Thus different individuals perceive the same phenomenon differently, and respond differently to experiences of retirement, health changes, or death of a spouse. This perceptual framework is developed through a variety of experiences and also as a result of the socialization process which helps the individual in interpreting

the world around him. It perhaps becomes apparent that the phenomenological theory is born from the concept of socialization. However, the theory does not consider age as the single determinant of behaviour. The phenomenological theorists suggest that in order to explain behaviour, one must make use not of age but of the perceptual framework of the individual in question. The age at which a particular event does take place is not considered of any importance by this group of thinkers. Once again, it must be noted that, it is not the event that is important, but the individual's interpretation of the event is considered of greater importance than anything else.

Phenomenological theory mainly emphasizes on the individual's perceptual framework. By doing so, they feel, predicting and explaining individual behaviour becomes easier than before. In many ways, the phenomenological theory seems to be satisfactorily complete because there are few, if any, exceptions. In other theories, researchers consider the majority of the individuals. Phenomenological theory, on the contrary, claims that if one is able to understand a particular individual's perceptual frame, then one can successfully explain and predict behaviour.

Stage theories:

These theories suggest that all human beings, no matter where or when they live, move through an orderly progression of different stages in their development**.** Piaget's (1965) theory of cognitive development and Freud's (1905) stage theory fall under this group. Erikson (1987) proposed that development proceeds through a series of distinct stages, each defined by a specific crisis. This crisis results from the fact that as individuals grow older, they confront new combinations of biological drives and societal demands. The biological drives reflect individual growth and physical change, while the societal demands reflect the expectations and requirements of society for people at different ages. Erikson's perspective of old age relates to the stage of Integrity versus Despair where Integrity results from feeling that life was worth-living as it happened, while old people

who are dissatisfied with their lives fear death.

Erikson (1987) termed that late adult development chiefly involves the main psychosocial conflict of “integrity versus despair” where the adult looks back or adopts a retrospective glance towards life in general and evaluates whether his/ her life was a satisfied one, had meaning and was worth it. If the answer is yes, and they feel they have reached many of their goals, they attain a sense of integrity, otherwise they may experience despair. Successful resolution of this crisis can have positive effects on how the person comes to accept his own mortality, and also his/ her physical and psychological health during the final year of life. According to the developmental process, Gould (1987) has stated the stage of later adulthood (classified by stage VI which is from 45-53 years), where the main developmental tasks are settling down, and accepting one's own life. Stage VII ranges from 53-60 years, where the major developmental task involves increasing tolerance, acceptance of past life and decreased negativism to general mellowing. Levinson (1978) classified middle adulthood (40-60 years) where 50 to 55 years was considered by him to be transition years, and 55-60 years were stated as culmination of middle adulthood. Late-life transition according to him was 60 to 65 years, and 65 years onwards was regarded to be late adulthood. In Levinson's studies where he focused more on adolescence and early adulthood, he stated four major developmental tasks, namely:

- finding a mentor,
- developing a career
- establishing intimacy and defining a dream of adult accomplishment

Developmental Task/Activity Theory:

In 1948 Havighurst, said that a developmental task arises at or about a certain period in the life of the individual, successful achievement of which leads to his happiness and success with later tasks, while failure leads to unhappiness of the individual,

disapproval by the society, and difficulty with the later tasks. All of these tasks have biological and cultural bases. Havighurst described six developmental stages or age periods in total, each with its own developmental task.

Psychosocial Theory of Personality Development

The developmental task of each age period is to resolve its conflict, which requires the integration of personal needs with the demands of society. Erikson's psychosocial stages of development are not tied closely to specific age periods. This division reflects the increase in psychosocial variability with age: the developmental tasks of an infant are relatively universal, but the tasks in later life are dependent as much on personal experiences as on general principles.

Counterpart Theory

In 1960 Birren presented a general theory of aging as a counterpart of development. The term "counterpart" is meant to express the idea that there are latent structures of behavior (emotions, cognition, and motivations) carried forward from earlier experience that interact with present situations. 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 behavioral (e.g., intelligence) characteristics.

Disengagement/Activity Theory:

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. Although the disengagement theory professes to explain general psychological and social processes of aging, it offers in fact a one-sided view of the aged, given the significant proportion of older people who do not lose interest in life and do not withdraw from society. Disengagement theory encouraged the development of an opposing theory of the aged, activity theory, which is based on the concept of developmental tasks.

Personality Theory of Age and Aging

Starting in the 1950s, Neugarten (1968) and associates studied the life cycle with two theoretical emphasize. The first emphasis is on the timing of transitional events in the lives and roles of individuals. The second emphasis is on the study of personality type as predictor for successful aging. Aging is viewed as a process of adaptation in which personality is the key element. Eight different patterns of aging have been distinguished. The successfully 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 him or her greatest ego involvement and life satisfaction. Neugarten and Moore (1968) defined three age groups, namely, young adulthood (20's & 30's), middle adulthood (40's and 50's), and senescence (65 and seventy's). Santrock (1985) used the label of early, middle and late adulthood, where late adulthood extends approximately from 60 to 70 years until death. According to him it is a time for adjusting to decreased health and strength and to retirement. Establishing affiliations with members of one's group and adapting to social role are important during this period.

Cognitive Theory of Personality and Aging:

In 1970, Thomae described briefly a cognitive theory of the aging personality, one which 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.

Considering the different viewpoints of classical theories, it can be commented that these dimensions of aging basically highlighted on the structural aspects and the social and personality changes that occur during the processes of aging.

Modern Theories

Life-span Development and Aging (Baltes, 1987; Baltes, Reese,

and Lipsitt, 1980;

Baltes, Smith, and Staudinger, 1992): 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 to fewer domains of functioning because of an age-related loss in the range of adaptive potential. The second element, optimization, reflects the view that people engage in behaviors to enrich and augment their general reserves and to maximize their chosen life courses (and associated forms of behavior) 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 behavioral capacities are lost or are reduced below a standard required for adequate functioning.

Contextual Theories

They focus on developmental process on the basis of the specific response(s) which the individual gets from his environment, i.e., – ideas, views and approach towards that age in that particular society or culture that influence the process of development itself. These theories suggest that as life events and conditions may vary from culture to culture and over time, adult development must be viewed against this backdrop of social and historical factors. Under this group falls Neugarten's (1987) theory of ***social age clocks*****,** or internalized calendars telling individuals when certain events should occur in one's lives and what one should be doing at certain ages. According to Neugarten, these clocks vary greatly depending on the environment, i.e. our occupation, socio–economic status, or the cultural bindings in that particular society. The ***transactional*** view-point comes under the contextual theories where successful ageing is defined as the point of intersection between the developing person and the changing societal context.

Reduced Processing Resources:

It has been generally accepted that there is an average age-related decline in cognitive performance. Researchers have advanced several explanations for this phenomenon of aging, 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. According to Salthouse (1985, 1988, 1991) — a typical exponent of this view since the eighties — processing resources are characterized by three properties: (1) they are limited in quantity, with a measurable aspect such as quantity or effectiveness of allocation increasing up until maturity and then decreasing across the adult years; (2) they enable or enhance cognitive processing so that performance in many cognitive tasks is improved when greater amounts of the resources are available; and (3) they are not local or specific in the sense that they are restricted to a small number of highly similar cognitive tasks, but instead are relevant to a broad range of cognitive processes. Salthouse hypothesizes that processing speed may well provide the cornerstone for integrative theories of cognitive aging. It should be noted, however, that the resource-reduction view leaves unanswered the fundamental questions of why the reduction in resources occurs, and how that reduction results in lower levels of cognitive performance (Birren and Fisher, 1995).

Personality and Aging:

Studies of personality and aging reflect the concept of personality behind them, here defined as the set of characteristic dispositions that determine emotional, interpersonal, experiential, attitudinal, and motivational styles. Generally speaking, two theoretical traditions can be distinguished in this field, trait and developmental stage models. In both traditions, the central issue concerns the extent and nature of personality stability and change over the life span; or, to put it differently, the extent to which aging processes per se are responsible for personality change (Erikson, 1950;

Levinson, 1978; Costa and McCrae. 1988, 1992).

Personality Theory:

This is a psychological theory that aims to explain certain contradictions noted in the disengagement theory. It can loosely be termed as the personality or psychological theory of aging. Havighurst (1968), one of the major proponents of this theory, holds that disengagement and activity theories are inadequate to explain the process of aging quite successfully. According to him both the theories have inappropriately focused on the amount of activity as the major variable in determining life satisfaction. In Havighurst's opinion different levels of activity need to be ascribed to different personality types for high life satisfaction. For example, the 'recognizers' try to remain middle aged by finding new roles to replace lost roles. In so doing, they maintain high activity as well as high satisfaction levels. Therefore, it can be said that the recognizers support the activity theory but not the disengagement theory. In contrast, the “disengaged”, according to Havighurst, are those who voluntarily give up most of their activities and roles. The group of people seems to enjoy 'rocking chair' approach to life and have low levels of activity but high levels of life-satisfaction. Thus, the disengaged ones support the disengaged theory and contradict the activity theory.

Behavioral Genetics and Aging

Behavioral geneticists of aging are concerned with the extent to which hereditary factors influence age-related changes over the life span of the individual. Here, heritability is defined as a descriptive statistic referring to the portion of observed, phenotypic variation in the population that can be accounted for by genetic differences among individuals; the rest of the variation, the non-genetic portion, is called environmental. Thus, change in heritability over the life span indicates that the relative roles of genetic and environmental influences can change with age in terms of their effects on biological and behavioral differences among individuals in the population

(Plomin and McClearn, 1990).

Modern theories of aging emphasize on both structural and the functional changes of aging process and how an aged individual perceives or receives these changes in their subjective world of mind. Moving our glance from the western perspective, we can find the same traditional changes in the eastern perspective also.

Psycho-social theories however, help in identifying the degree and the nature of psycho-social factors associated with change across the adult life course as well as measures the extent frustration and contentment of these change agents at various stages of the life cycle of the individual. The Indian version of Disengagement theory is known as the 'Ashrama theory' or the notion of the four-stage ideal life course (Bhatia, 1983). This cultural version emphasizes the traditional Hindu view of life and delineates four 'Ashrams' or distinct stages or phases of human life and development. The first stage that every individual goes through is the 'Brahmcharya' stage, which is a stage of learning skills and receiving an education and lasts roughly for the first 25 years of life. This stage is followed by the 'Grihasthashram', roughly coinciding with the domestic phase involving performing the duties of a householder as well as raising and maintaining a family, lasting from age 26 to age 50. 'Vanaprastha' represents a stage of gradual withdrawal, without reducing responsibilities and is roughly between 51 and 75 years. The last stage, 'Sanyasa', is one of total renunciation of all attachments and submission of oneself to the pursuit of spiritual freedom. Essentially this stage represents retirement from the mundane and routine activities of life. The third and fourth stages are often combined to represent the present retirement phase of over 65 years. These stages are not rigid or mandatory or even obligatory on the part of any individual, but they have been suggested as a means of ensuring a smoother transition in life and are well known and accepted by the members of the society. This theory however, views social disengagement with regards to age stratification, age based roles and social sanctions. This theory however has been criticized since the amount of Disengagement or

involvement is now seen more as a function of past life patterns and socio-economic factors rather than being an inherent process (Palmore, 1969).

Traditionally, the informal support systems of family, kinship and community are considered strong sources of providing support to the older adults in the society in India. Older adults typically enjoy an “ascribed” status providing them with authority, wisdom, maturity, prestige and power in the society. In general, in Asian societies, the elderly remain integrated with the family and the community. The older people in urban areas to a large extent still enjoy a fairly high status in their families and are generally well respected by their children. Desai and Naik (1971) reported that in the advice of the elderly is usually taken in all family affairs. In addition, recent studies indicate that the attachment between children and their parents as well as the commitment to care of the elderly is an essential element in Indian culture (Ramamurthi and Jamuna, 1993). This includes providing emotional, financial as well as socio-cultural support and assistance in varying degrees.

Healthy Aging, active aging, aging with confidence, happy Aging are today's concepts of aging. They are considered as the goal of life by the United Nations and the World Health Organization (Bagchi, 2003). It implies that if 90 yrs is regarded as the approximate target terminal age for older persons, in order to keep a person healthy, inspite of the continuing biological decline, healthy ageing has to be objective or slogan. In ancient Indian society aging is considered as a stage of giving up all the worldly pleasures and preparing themselves for the next world. Those were the days when the individual accepts aging as part of the growth. Today aging is contextual and viewed differently by the society and individuals do not want to give up their 'life' during this stage.

Keeping in mind the structural and functional contributions of several theories from different perspectives, the most significant implications that illuminates our mind is that during the closing period of life span aged individuals have started to establish their

identities in a new way. But, unfortunately only a handful are able to reach their goals through meaningful pathways and enjoy their ages as successful. 'Successful aging' or 'graceful aging' basically depends on the way, how individuals with their subjective frame of reference interpret their closing period of life span. Psychological intervention strategies in today's world have become one of the most beneficial strategies for reaching towards the goal of well-being both subjective and objective directions for aged persons.

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UNDERSTANDING HEALTH AND MULTIPLE HEALING BEHAVIOURS: A STUDY AMONG ELDERLY PEOPLE FROM PARTS OF NORTH 24 PARGANAS DISTRICT OF WEST BENGAL

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ABSTRACT

Health is one of the prime concerns of mankind. The concern to maintain a sound state of health and to achieve a healthy aging has remained one of the major intentions for elderly people. In order to maintain and to lead a healthy life, individuals seek multiple healing behaviours that often pervade the boundary of medical treatment especially the hegemony of allopathic form of treatment. These multiple healing behaviours being used are found to have been related with multiple understanding and multiple discourses of health. The understanding and conceptualising the notion behind health and these multiple healing behaviours remains the prime interest in this paper. Sometimes these different healing behaviours are found to exist together and are used synchronously which have also been highlighted in the study keeping in view the idea of medical pluralism. The present work is the outcome of first hand data being collected from elderly urban residents of a central metropolitan locale and its surrounding periphery so as to unravel the existence of multiple healing behaviour among these elderly. The work is a combination of both qualitative as well quantitative data. On one hand descriptive statistical figures have been used and on other hand the results have been substantiated by relevant narratives.

Keywords: Health, multiple healing behaviours, elderly participants , medical pluralism

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INTRODUCTION

Health is one of the prime concerns of mankind. Health is a pre-requisite for human development and is essentially concerned with the wellbeing of the common man. Health is not only related to medical care but also an integrated factor for the development of entire human society. (Nanjunda, 2013). The present definition of health was originally created during framing a permble to the aims and objectives of the World Health Organisation (WHO) in 1946. According to the WHO definition “Health is a state of complete physical, mental and social well being and not merely the absence of diseases or infirmity”. (WHO, 1946) In 1986, the WHO said that health is “a resource for everyday life, not the objective of living. Health is a positive concept emphasizing social and personal resources as well as physical capacities” (WHO, 1986). Not only biological factors but health is also determined by both social and cultural environment .Some of the social variables like income or poverty, occupation, educational status, social network etc play a vital role in determining the health behaviour of a community. Throughout the course, social determinants influence health at multiple ways.(Nanjunda ,2013).

Despite the fact that addressing health issues and maintaining a sound state of health remains a matter of great concern for all individuals , the concern increase manifold for elderly people. In India, there has been tripling the population over 60 years of age (i.e. the elderly) (Government of India, 2011). This pattern is poised to continue. It is projected that the proportion of Indians aged 60 and older will rise from 7.5% in 2010 to 11.1% in 2025(United Nations Department of Economic and Social Affairs, 2008). Elderly people owing to their old age , are likely to suffer from much severe physical complications sometimes chronic ailments , which warrant immediate attention from medical specialists. Apart from formal institutionalised medical treatment, elderly people pay much more attention to other healing techniques especially when it comes to the question of mental well being. In India as well as in many other parts of the worlds, depending on the nature of diseases and ailments,

people use various healing techniques apart from medical ways of treating them which exemplify multiple understanding to health. The term medical pluralism in the context of anthropological discourse may be defined as the synchronic existence in a society of more than one medicine systems grounded on different principles or based on worldviews. (Bhasin, 2007) . Medical pluralism thus can be roughly defined as using a number of culturally different health care systems or the overlapping of several different medical practices. (Dessecker, 2014). The understanding and demonstration of medical pluralism tries to counter the ultimate hegemony of biomedicines or allopathic form of treatment bringing to light local knowledge, the existence of multiple medical realities and the associated 'power' in each of the respective healing techniques, the alternative and complementary form of medicines, faith on indigenous healing under the domain of medical pluralism that forms the basic theoretical premise for the study.

AIMS AND OBJECTIVES

The main aim of the present research is to understand the existence of multiple healing behaviours among the elderly people residing in a central metropolitan area and surrounding peripheral metropolitan locale along with different concepts and multiple discourses associated with health. The work will also try to explore how these different healing behaviours are sometimes being used synchronously by taking recourse to the concept of 'medical pluralism' from an anthropological point of view.

The paper elaborates the different healing behaviours which the individuals are taking recourse to. The particular healing techniques are expressed quantitatively in terms of absolute numbers and percentages while the scenario is expressed qualitatively as well with the help of certain relevant narratives. Apart from different forms of medical treatment which these participants take to consideration, the work also highlight the astrological and spiritual forms of healing thereby understanding the different notions pertaining to the concept of health. The work will also try to unravel the different perceptions and attitudes

associated with the choice of particular healing behaviours. Further the paper explores the coexistence of different healing behaviours synchronously for understanding the situation of medical pluralism from anthropological perspective.

METHODOLOGY

The present study has been conducted in two portions of North 24 parganas district of West Bengal, India selected purposefully to suit the broad purposes of the study. A central metropolitan area administratively belonging to Barasat subdivision of this district has been chosen for the study. Another area has been selected which is located in the periphery of this 'central metropolitan area' and administratively falls under Barrackpore subdivision. These two areas have been selected because there are certain differences between the lifestyles of the inhabitants of these two areas.

The focus of the present study has been the urban residents of a central metropolitan area and the surrounding peripheral metropolitan area. The work has purposefully selected participants above 60 years of age where each participant is selected out of convenience and snow ball sampling techniques solely among Bengali speaking residents. Altogether 250 participants were selected out of which 113 were from central metropolitan area and 137 from peripheral metropolitan areas. Thus participants below 60 years were excluded and those involved in medical profession were also excluded. For the purpose of selecting 113 participants from central metropolitan areas, 148 were however initially approached. In case of peripheral metropolitan area 153 individuals were approached out of which 137 consented to participate for the study. Among 113 selected participants from central metropolitan areas, 67 are males and 46 are females while there are altogether 91 males and 67 females in case of peripheral metropolis.

A semi structured questionnaire was prepared in Bengali language. Before handing over the questionnaire, the main purpose of the study was explained to the participants They were also assured all

their personal whereabouts will be kept strictly confidential. Questionnaires were filled only for those who were willing to take part in the study. Along with this, in depth face to face direct unstructured and semi structured interviews, sometimes group interviews were undertaken to suit the purpose. All interviews were audio recorded by taking the permission of the informants. The interviews were conducted in Bengali language and roughly lasted for 30 to 45 minutes.

HEALTH AND MULTIPLE HEALING BEHAVIOURS – THE PRESENT STUDY

Understanding the phenomena of health under the purview of Medical Anthropology essentially take to consideration the elaboration of subjective perceptions and experiences pertaining to diseases, ailments and suffering. The theoretical discourse of medical pluralism invokes to take to consideration of multiple techniques of healing as practised by the individuals at the same time. The present study strives to unravel the existence and persistence of multiple healing techniques being practiced by the individuals, the various socio demographic factors, cultural as well as economic forces that enable the individuals to guide this choice of healing behaviours, the various perceptions in these studied areas that influence the choice of availability and accessibility of healing techniques and how multiple technique of healing cohere synchronically. The subsequent section elaborate the different healing behaviours along with the understanding of different perceptions and attitudes behind these healing behaviours.

DIFFERENT FORMS OF MEDICAL TREATMENT

In order to understand the aspects of health, first and foremost we need to address physical issues for which different ways of medical form of treatment remains a matter of utmost interest. Undoubtedly allopathic form of treatment remains a trusted source of medical treatment among a significant portion of elderly people both men and women though homeopathy and ayurvedic from of treatment also prevails.

From table No 01 it is seen that about 33(49.25%) males out of 67 total male participants and 19(41.30%) females out of 46 female participants from central metropolitan area are exclusively dependent on allopathic medicines ; whereas in case of peripheral metropolitan area, there are 26(28.26%) males out of 91 total male participants and 19(41.30%) females out of 46 female participants are found prefer allopathic medicines exclusively. Allopathic medicines are preferred exclusively by a significant proportion of participants as because many of the participants consider this form of treatment as the most effective form of treatment accounting to 37(55.22%) and 47(51.64%) of males in case of central and peripheral metropolitan areas respectively while it is 21(45.65%) and 32(69.56%) of females in case of central and peripheral metropolitan areas respectively as shown in table no 02. From the table no 02 it is also seen that there are 28 (41.79%) males and 31(67.39%) females of central metropolitan areas while there are 13(14.28%) males and 22(47.82%) females of peripheral metropolitan areas, who prefer allopathic medicines because of lack of proper alternative medicines despite side effects. As told by one 68 year old woman from central metropolitan area *"Homeopathic medicines are undoubtedly safer and can work wonder. But here in this city, we won't find proper homeopathic medicines as many laymen are also practising homeopathy without much knowledge. So there is no other way out than to switch to allopathic."*

In case of participants from central metropolitan area, owing to greater availability of private nursing homes and private clinics, and greater affordability because of higher income status, allopathic form of treatment remains the most trusted one. In the peripheral metropolitan area, allopathic treatment too remains a reliable source owing to faster recovery and more effectiveness of such treatment. However there lies a difference in accessibility of such treatments as more of participants prefer visiting government hospitals and primary health care units. Thus economic status remains an important predisposing factor for selecting the source of availability of treatment.

As told by a 71 years old male resident of central metropolitan area *"I am residing in this area for past 25 years. There is a private clinic near my house. Sometimes residents from the area come to consult doctors here especially if we find the matters not getting solved by any general physician or by trying any home remedies. Here I have come to consult a dermatologist. For over a span of one month, I am having certain red rashes on my back, at first I went to a local general physician near my place but her medicine did not work. So I felt the need to consult dermatologist now".* Further 65 year old female from central metropolitan area told that, *"I am having great trouble for a very long time because of tremendous pain in my lower back .Initially; I felt it will not last long and so used to give hot water shake simply on my back at home. But over time, the pain aggravated and it became unbearable. Then I have come to visit this nursing home instead of that local clinic. Here the doctors are much better and they charge a relatively high fee thus proving their efficiency .So myself and my other family members always prefer visiting private doctors of reputed nursing home instead of going to those local clinics."*

Coming to the context of other forms of medical treatment, it appears from the study that there are 18 (26.8%) males and 11(23.95%) females from central metropolitan area are exclusively dependent on homeopathic medicines whereas 21(23.07%) and 11(23.91%) males and females respectively are found to have been exclusively dependent on homeopathic medicines in case of peripheral metropolitan areas. A considerable proportion of elderly people prefer homeopathy because such medicines are cheaper. Such people who prefer homeopathy are significantly higher in case of peripheral metropolitan area giving the percentages to be 52(57.14%) and 38(82.06%) respectively for males and females. However it is also seen, that homeopathic medicines are considered to be safer with relatively less side effects accounting for 20(29.85%) for males and 12(26.08%) for females in case central metropolitan areas and 43(47.25%) for males and females 29(63.45%) in case of peripheral metropolitan areas. As told by a

63 year old man from central metropolitan area *"My father used to give me and my brothers homeopathic medicines since our early childhood days. Till then, I am totally dependent on homeopathy and never have taken allopathic medicines. Even my children and grandchildren prefer homeopathy though my wife takes allopathic often. She never listens to me though I told her that allopathic are harsher."*

Further, homeopathic medicines are also used in conjunction with allopathic medicines accounting for 11(16.41%) among males and 9(19.56%) among females. Interestingly, the participants from peripheral metropolitan areas are found to have used homeopathic medicines along with allopathic more than that seen in central metropolitan areas giving the percentages as 35(38.46%) and 13(28.26%) which is even found to be more than the participants depending exclusively on allopathic as shown in table no 01. From table No 02, it is seen 23(34.32%) males and 14 (30.43%) females from central metropolitan areas and 35(38.46%) and 29(63.04%) males and females respectively from peripheral metropolitan areas prefers homeopathic for minor inflictions like fever, injuries, cough or cold. When explained by a 65 year old man living in the peripheral metropolitan area, *"Allopathic medicines are too harsh and thus we do not prefer consuming such medicines for milder symptoms. Allopathic medicines are associated with serious consequences if taken too much. Therefore, we prefer homeopathy for most of the cases and take allopathic only when absolutely needed."* Some explained that those homeopathic medicines, if used for chronic problems will cure the problem permanently. "*I am having this problem of acidity for a very long time. Initially I was doing allopathic but all went in vain. Then I started taking homeopathy. I heard homeopathy is good for long term ailments but you need to maintain patience as this is 'mata-pita rog' (inherited from parents). Once it gets resolved, it will never recur again"*, said a 62 year old woman from peripheral metropolitan area.

A considerable proportion of elderly people from peripheral metropolitan area prefer to have ayurvedic medicines for long term

chronic illness. This is found to be 11(16.41%) among males and 16(34.78%) for females of central metropolitan areas but a significantly lesser number of people from peripheral metropolitan areas prefer ayurvedic for long term chronic complications which is 12(13.18%) for males and 13(28.26%) for females. Ayurvedic medicines are mostly seen to have been prescribed by allopathic doctors from primary health centre especially for treating long term chronic diseases in cases of places in the outskirts of Kolkata metropolis but private allopathic doctors of Kolkata metropolis however do not prefer prescribing ayurvedic. *"I started having ayurvedic medicines for my high blood pressure as I heard of a friend of mine using such medicines for such medicines are relatively safer. But after few months when I went to consult private doctor from a nursing home, he discouraged me to take ayurvedic medicines and prescribed allopathic medicines"*, recalled a 76 year old man from central metropolitan areas.

HEALING BEHAVIOURS BEYOND MEDICAL FORMS OF TREATMENT

The concept of health according to the well accepted definition by World Health Organisation subsumes to take consideration not only the physical dimension but also the social and mental aspects of health as well. Pertaining to this multiple dimensions of health, there lies myriads of healing behaviour that transcends the mere medical forms of treatment. Quite often , these healing behaviours are not concerned solely with the physical understanding of health, and biological reasons associated with cause of diseases, but people are found to take recourse to those healing behaviours. The reasons for which are no way connected with the cause of the diseases.

ASTROLOGICAL SERVICE AS MEANS OF HEALING

Astrology, as a cosmological narrative system, can also provide a means of healing. A person's horoscope gives him plenty of clues to what makes him sick. It is believed that the signs of a horoscope have their positive and negative qualities. Studies revealed the fact that water signs are considered to be more susceptible to mental

illness. Astrology plays a key role to guide and enlighten the man and his thoughts to get the right approach and put in the best efforts to improve and to achieve the goal. (Chauhan,2014). The present paper highlights this very means of astrology as a healing behaviour among the elderly participants from the studied areas. Astrological service is used for healing long term physical complication as well as for mental peace and solace. As shown in table 03 that there are 31(46.26%) males out of total 67 male participants and 26(56.52%) females out of 46 total in central metropolitan areas. Most of the males of these areas however are dependent on family astrologer and believe in astrology since the childhood. However as explained by many female participants, many of them started believing in astrological service as a means of healing only after marriage under the influence of in-laws. As explained by a 70 year old woman from peripheral metropolitan areas, *"My parents were stern against astrology .But from my teenage days, I thought of believing in astrology .I do believe that there is some supernatural forces working to control our lives. When these forces get unbalanced or not find to working in harmony, we face troubles either in our body which affects our health causing ailments or we face problems in our life .So to control our life, we need to wear certain gems. These gems have certain healing properties. So I started wearing gems after my marriage. My interest in knowing about astrology got heightened even more after marriage. My father-in –law himself used to read palms and provide us with gems. Later on , after my father – in –law's death , me and my husband started consulting an experienced astrologer in our home town Asansol . We also buy gems from jewellery shops there in Asansol".* Astrological service though being used as means of healing mainly by those who conceive of astrology as science but many revealed that they started wearing gems from their early childhood even if they did not perceive any difference much after wearing the gems. *"I am wearing this red coral and the pearl from my childhood. I was too naughty and restless during those days and my mother gave me these gems to calm me down. I never felt any difference but till date I never dare to open these rings as I feel it is associated with my mother's sentiments."*, said a 73 year old

man from peripheral metropolis .

Further the study has also revealed that there is a significant proportion of males and females elderly participants from peripheral metropolitan areas who learnt about astrological healing behaviours from their family and parents accounting for 33(36.26%) among males and 19 (41.30%) among females believe in astrological healing behaviour which is relatively higher in percentages than those from central metropolitan area. Interestingly the study revealed, especially in the context of central metropolitan areas, that a considerably higher proportion of participants started seeking for astrological service for healing especially by getting influenced by television, by watching different channels on astrology. Furthermore many elderly participants are found to get influenced by their favourite actors especially from television serials which they watch regularly and thereafter started wearing gems. Thus in case of central metropolitan areas, 22(32.83%) males and 21(45.65%) females believe in astrology which is more than that of peripheral metropolitan areas.

SPIRITUAL MEANS OF HEALING

Coming to the context of various forms of spiritual healing, it is to be mentioned that this form of healing consider a supernatural cause of diseases and illness unlike the medical or physical causes. Though there remains multiple ways pertaining to this very form of healing, but use of such healing behaviours are found to have been used relatively less for central metropolitan areas accounting 22(24.17%) for males out of 91 selected male participants and 32(69.56%) out of 46 selected female participants.

All over the world people have belief in casting of evil eyes as the cause of diseases. In the present study, there have been significant references to evil eyes explained by many study participants of studied areas. Casting evil eyes or 'najarlaga' appear to have been responsible for ailments; especially for those who find medicines not working, for familial troubles, discontent and mental discomfort.

For them it becomes essential to remove the evil eyes for which certain practices are followed at household levels. The concept of evil eyes evokes from the belief that some individuals cast evil eyes (*ku-najar*)or cast a spell on others by just looking at them. Some do it involuntarily at whatsoever comes across the path; while others do it voluntarily out of jealousy and the desire to possess what other s have. These casting of evil eyes cause serious manifestation which usually cannot be explained properly. For the purpose of countering the effects of evil eyes, there are various techniques. A large number of Hindu families from all areas especially among the urban residents are seen to practice ritual to remove the spell of evil eyes by using ***mustard seeds, salt and dried red chillies***. As told by a 68 year old elderly female from peripheral metropolitan area, *"My grandson has just completed two years. For the past three months, I was really worried to find my son falling ill too frequently. He was having frequent fevers, was falling down frequently and getting injured .I cannot understand why is it so. Then I felt that this might be because of our neighbour who comes to my house frequently and praises my child. I think she has casted some evil eyes on my child. So I used the ritual of salt, mustard seeds and dried red chillies to remove these evil eyes".* Most of the elderly participants however practice this ritual for their grandchildren as children are found to be more susceptible to evil eyes and sometimes for general wellbeing of the family as well. Further elderly people are sometimes found to give black mark of kohl on the forehead of their grandchildren to ward off evil eyes. In many Hindu household, there is yet another practice to ward off evil eyes , is by **suspending lemon and green chillies using cotton threads.**

Many of the elderly participants are found to wear charms and amulets especially Muslim participants living in the periphery metropolitan areas. Many of them are also found to give such charms and amulets to pregnant women of the family and their grandchildren. The Muslim participants regarded wearing of charms and amulets to be essential especially for pregnant women and babies till they turn at least three years of age to guard against the

invasion of jinn, shaitan or farrista (malicious ghosts created by 'Allah'). *"When my daughter in law was pregnant, I took her to the mosque during the third month of her pregnancy. There I met with maulobi sahib; he gave her a 'maduli' and asked her to wear this 'maduli' around her neck. This is mainly meant for the wellbeing of the coming baby and also for reasons of having less pain at the time of delivery. He also told me soon after the baby is born, the baby need to be taken to the same mosque again. So I did after my grandson was born. He gave him a maduli too. These madulis consists of certain 'dua' which is written by the MaulobiSaheb and put inside a metal case and later sealed with wax."* recalled a 64 year old grandmother from peripheral parts of metropolitan area.

Hindu participants too are found to wear charms and amulets as well. Similar to the case of Muslims, elderly Hindu participants too are found to give such charms and amulets especially to pregnant women and their grandchildren. "*At the time of my pregnancy, I was made to wear a maduli which consists of soils from 'pachuthakurer than' ('Pachu' is a Hindu God). These soils are taken and sealed in a case which the expecting mother is to wear from the fifth month of pregnancy. Later after the child is born, he /she have to wear this "maduli" till he/she is two years old. Later on, the "maduli" has to be opened and the soil that was put inside is taken out and preserved safely. Whenever the child faces problems or has any serious physical complications, the mother is expected to take a bit of that soil and rub on his/her forehead as the child is expected to be under the supervision of 'panchuthakur' and is believed to have hailed from that soil. Usually this maduli is given to the would be mother either by mother or mother-in-law and this belief goes on for generations." I have given the same maduli to my daughter and daughter in law as well"*, told a 66 year old woman from peripheral metropolis area.

Wearing of charms and amulets, especially among Muslim participants, are found to have been associated with other practice of spiritual healing like ***panipoora, telpoora, chinipoora, or lobonpora***. Paanipoora/telpoorais [blessed water / oil] which are

given by *moulabis* of a mosque after reading the required 'dua'. The patients are expected to drink that blessed water every day after wearing the charm/amulet. As explained by a 73 year old Muslim elderly woman from peripheral metropolitan area, *"One night, my granddaughter was studying before her exams. The window of her bed room was open. I always used to tell her to let the window closed during nights but one night she slept without closing the window. Early morning, when she woke up, I found she could not move her left hand. It was too stiff and was paining I suspected that 'hawa legegeche' (some evil spirits must have touched the hand) and then took her to moulabisaheb and gave her a maduli and chini(blessed sugar) pora after reading duas to it. She was asked to wear that maduli after taking bath and then asked to taste that sugar a bit. But if dissolve this sugar in any hot drink like water, tea or coffee then the effects will go off"*. Lobonpora is another practice where the spiritual healer or religious preceptor in order to cast of evil eyes by spirits; the person have to take a very small pinch and throw it off in the open.

Practice of jharphook is almost absent in central metropolitan areas but in case of peripheral metropolitan area it is practiced to some extent. *"If you find your child getting ill too often, or if you notice some change in someone's behaviour whose reason you cannot explain or if you find medicines not working on you, you need to go to ojha or pir for jharphook. For the purpose of getting jharphook, I prefer going to a majar nearby where there is a magioco religious healer who practices this every Saturdays"*, said a 71 year old woman from peripheral metropolis . A 65 year old woman from peripheral metropolis further explained *"if you have to understand when to go for jharphook, we have to observe the eye lids of the individuals. If you find them erect and the eye balls are not moving much associated with certain weird behaviours or ailments like high fever, we need to go for jharphok."*.

DISCUSSION

Understanding the concept of health remains a prime issue under the discourse of medical anthropology. The focus of the present study has been on elderly participants of parts of North 24 parganas district of West Bengal. First and foremost, the work has attempted to explore the medical form of treatment which the participants take to consideration whenever they fall ill. Subsequently the work turns to address the other healing behaviours which subsume to consider health not only from physical dimension but throws light on social and mental dimensions of health, thereby justifying the multiple discourses of health. The cause of manifestation of diseases and ailments thereby are found to be different from the biological causes.

The present study has found a significant proportion of elderly participants especially from central metropolitan areas to have exclusive dependence on allopathic medicines. The term 'hegemony' is defined as preponderant influence or authority over others, the social cultural, ideological or economic influence exerted by the dominant group (Weber, 2016). Medical hegemony is the dominance of the biomedical model, the active suppressions of alternatives as well as the corporatization of personal, clinical medicines into pharmaceutical and hospital centred treatments (Baer & Singer, 2004). Western medicine is seen as a powerful construct which tends to dominate the people and this system of medicine is seen as the symbol of 'power'. A large number of people though from central metropolitan area are found to have completely dependent on allopathic medicines owing to its efficiency giving faster recovery, greater availability and affordability yet homeopathy has been accepted as an alternative discourse for a considerable proportion owing to its cheaper price and relatively safer. The concept of medical pluralism which involves the employment of more than one medical system or the use of both biomedicine and complementary and alternative medicines (CAM) approaches (Wade et al, 2008). The study has also shown the simultaneous use of allopathic along with

homeopathic thereby exemplifying partial hegemony. Such proportion is higher for participants of peripheral metropolitan areas which could be because of relatively greater proportion of participants with lower socio economic status Allopathic medicines are also used along with ayurvedic medicines as well synchronously thus justifying the concept of medical pluralism in the present context of use of medical treatments.

Apart from medical from of treatment, astrological service remains an important means of healing among the study participants. Most of the study participants are found to wear gemstones not for physical complications but for avoiding familial troubles and discomfort, accidents, calamities, and for gaining mental peace and solace. As seen in case of some of the participants, gemstones are often worn for chronic ailments or complication for which they have even undergone some form of medical treatment. Interestingly it has been found that female participants from central metropolitan area are having more belief in astrological service as a means of healing while a contrary feature is seen in case of peripheral metropolis. This might be because of the fact that elderly women of the central metropolitan area are exposed more to television and thus learns about astrological healing often by watching astrological channels or by watching their favourite actors of television serials. Astrological service in healing brings about an amalgamation of multiple dimensions of health which is far beyond the sole consideration of health from physical domain. Most importantly such healing behaviour strives to take to account a different perspective of health and regards diseases to be an outcome of imperceptible planetary forces guiding our lives. Finally certain physical complications are considered to have been the manifestation of supernatural causes, most importantly the impact of evil eyes thereby bringing behavioural changes as well for which spiritual means of healing behaviour remains a matter of utmost importance. Such healing behaviours are also taken to consideration even when the medical forms of treatment fail to work.

CONCLUSION

According to World Health Organisation, the concept of health subsumes to take into consideration not only the physical aspects of health but also the social and mental aspects as well. Keeping in view, this notion pertaining to health, multiple healing behaviours coexist among elderly participants. A substantial portion of elderly participants are exclusively dependent on allopathic form of treatment and undoubtedly there remains hegemony of allopathic form of treatment. Allopathic form of treatment as a discourse arose as the most prevalent one owing to its effectiveness, faster recovery, wider availability and wide spectrum of medicines. However, homeopathic arose as an alternative discourse especially for those with relatively lower socio economic status. Some also consider such medication is safer especially for treating prolonged physical complications. Such form of medical treatment however conceives of health only from physical dimension. However astrological service as means of healing seeks to understand health from both physical as well as mental dimension as gems are worn not only for physical complication but too for mental solace and comfort. Astrological and spiritual methods of healing consider the illness, calamities, diseases to have been caused by imperceptible planetary forces and supernatural forces respectively though the manifestation of such causes are usually physical or mental. Thus such healing behaviours undoubtedly brings an amalgamation of spiritual, social, physical and psychological dimensions of health thereby justifying the multiple dimensions of health and how these are associated with health seeking behaviours of the individuals, elderly people in present study of these areas.

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TABLE NO: 01 - DISTRIBUTION OF STUDY PARTICIPANTS ON THE BASIS OF DIFFERENT FORMS OF MEDICAL TREATMENT IN THE TWO AREAS OF STUDY.

Forms of medical treatment	Central metropolitan areas		Peripheral metropolitan areas	
	Males (%)	Females (%)	Males (%)	Females (%)
Exclusively allopathic	33(49.25)	19(41.30)	26(28.26)	19(41.30)
Exclusively homeopathic	18(26.86)	11(23.91)	21(23.07)	11(23.91)
Exclusively ayurvedic	00	00	00	00
Both allopathic and homeopathic	11(16.41)	9(19.56)	35(38.46)	13(28.26)
Both allopathic and ayurvedic	5(7.46)	7(15.21)	9(9.89)	3(6.52)

TABLE NO 02: MULTIPLE PERCEPTIONS ASSOCIATED WITH CHOICE OF MEDICAL TREATMENT

REASONS	CENTRAL METROPOLITAN AREAS		PERIPHERAL METROPOLITAN AREAS	
	MALES (%)	FEMALES(%)	MALES(%)	FEMALES(%)
Allopathic medicines are most effective	37(55.22)	21(45.65)	47(51.64)	32(69.56)
Allopathic medicine have side effects and therefore alternative medicines	20(29.85)	12(26.08)	43(47.25)	29(63.04)
Lack of availability of proper alternative medicines	28(41.79)	31(67.39)	13(14.28)	22(47.82)
Homeopathic medicines works well for minor inflictions	23(34.32)	14(30.43)	35(38.46)	29(63.04)
Homeopathic medicines are cheaper	12(17.91)	14(30.43)	52(57.14)	38(82.60)
Homeopathic medicine are good for chronic problems	24(35.80)	22(47.82)	23(25.27)	21(45.65)
Ayurvedic medicines are safe for chronic diseases	11(16.41)	16(34.78)	12(13.18)	13(28.26)
Ayurvedic medicines used for hormonal problems	5(7.46)	14(30.43)	8(8.79)	19(41.30)

TABLE NO – 03: SOURCES OF INFORMATION AMONG STUDY PARTICIPANTS REGARDING THE ASTROLOGICAL SERVICE OF HEALING

SOURCES OF INFORMATION	CENTRAL METROPOLITAN AREAS		PERIPHERAL METROPOLITAN AREAS	
	MALES (%)	FEMALES(%)	MALES(%)	FEMALES(%)
Parents and family	16(23.88)	11(23.91)	33(36.26)	19(41.30)
Friends	18(26.86)	9(19.56)	26(28.57)	5(10.86)
Neighbours / colleagues	11(16.41)	5(10.86)	17(18.68)	8(17.39)
Television & internet	22(32.83)	21(45.65)	13(14.28)	14(30.43)

TABLE NO : 04 DIFFERENT TYPES OF SPIRITUAL FORMS OF HEALING SEEN IN THE STUDIED AREAS

TECHNIQUE OF HEALING	PURPOSE	PERFORMED/PRACTICED BY
Tying black threads or red strings on waists , feet or hands	Warding off evil eyes casted by humans who are envy	Usually performed by females of the house
Smearing black kajol or kohl on eyes of the babies or giving marks on forehead	Warding off evil eyes casted by humans who are envy	Usually performed by females of the house
Suspending eight or four green chillies and lemons with a help of cotton string at the entrances or corners of the house, shops or even car	Warding off evil eyes casted by humans who are envy	By both males and females of the house
Burning red chillies and mustard seeds	Warding off evil eyes casted by humans who are envy	By both males and females of the house but females are found to practice more
Wearing charms and amulets	(I)To ward off evil eyes (ii) to protect invasions of malicious sprits or other supernatural forces (III) to heal diseases ailments troubles loss suffering or any discomfort (Iv) foe general wellbeing of the individuals (V) to protect the expecting mother and her child for safe delivery	Given by religious preceptors or spiritual healers
Paanipora (blessed water)/telpora(blessed oil)	(I)To heal diseases ailments troubles loss suffering or any discomfort(ii) for early and safe delivery of baby (iii) for curing specially those diseases which are claimed to have been caused by supernatural forces or for which they claim medicines not to work	By magico –spiritual healers by reading spells(dua) on water or oil
Lobonpora/chinipora	I)To ward off evil eyes by malicious spirits like jinn or shaitans (ii) To heal diseases ailments troubles loss suffering or any discomfort (iii) for curing specially those diseases which are claimed to have been caused by	By magico –spiritual healers by reading spells(dua) on sugar or salt
Jharphok	(i) To ward off evil eyes by malicious spirits (ii) Warding off evil eyes casted by humans who are envy (iii) to drive off or to exhort the evil spirit (Iv) for curing specially those diseases which are claimed to have been caused by supernatural forces or for which they claim medicines not to work	By magico –spritual healers

LIST OF FIGURES

FIGURE NO 01: DISTRIBUTION OF STUDY PARTICIPANTS ON THE BASIS OF BELIEF IN ASTROLOGICAL SERVICE AS MEANS OF HEALING IN STUDIED AREAS

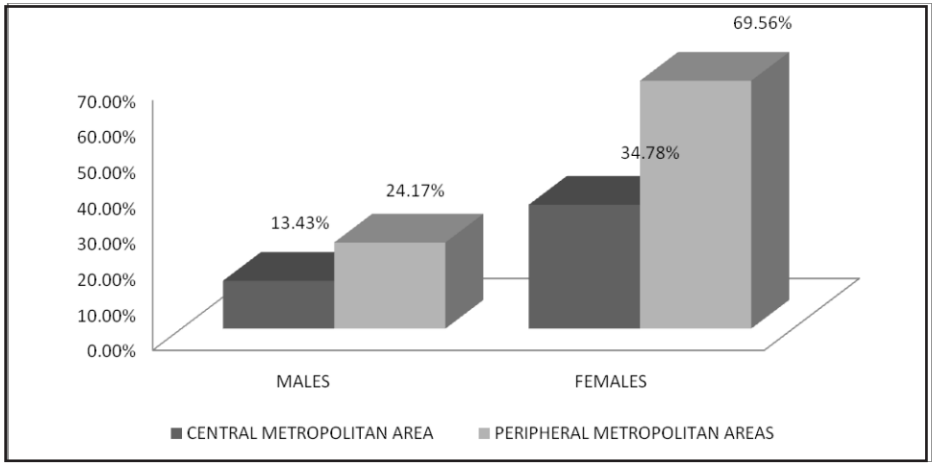
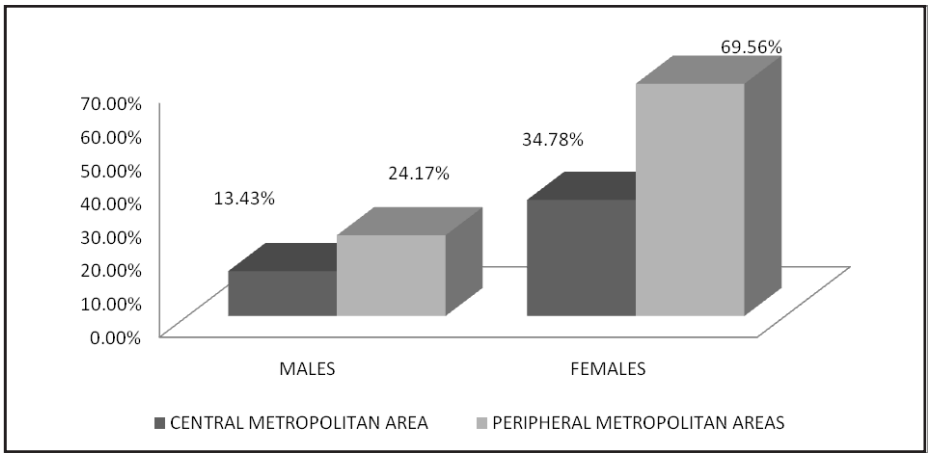


FIGURE NO 02: DISTRIBUTION OF STUDY PARTICIPANTS ON THE BASIS OF BELIEF IN SPIRITUAL MEANS OF HEALING IN STUDIED AREAS



IMPACT OF DEPRESSION ON EVERYDAY MEMORY PERFORMANCE AMONG OLDER ADULTS

K. LALITHA*

ABSTRACT

Depression is an important critical issue in Gerontology that needs to be studied at personal level. Studies reflect that community-dwelling older adults do not have a high prevalence of major depression; especially in comparison to other adult populations. Everyday memory refers to memory operations that routinely occur in one's daily environment. Everyday memory include remembering names, remembering plans for the day, recalling items that one needs to purchase at the grocery store, remembering to take medications, and remembering telephone numbers, directions, or recent newsworthy events. Review reveals that there is a paucity of studies related to depression and everyday memory in the aged. The paper focuses on the everyday memory in the aged (N=120) and its association with depression. The sample of the present study consists of 120 older men and women living in a community in the Kadapa District of Andhra Pradesh. The tools like depression and Everyday memory questionnaire were used to collect the data. The data indicates that there were significant sub group differences in experiencing depression. It was also found that age, education and locality wise sub-group differences were significant. The role of depression is highlighted in relationship with everyday memory performance.

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Introduction

According to Population Census 2011, there are nearly 104 million elderly persons in India; 53 million females and 51 million males. It is interesting to note that up to Population Census 1991, the number of elderly males exceeded the number of females. In the last two decades, however, the trend has been reversed and the elderly females outnumbered the elderly males. This is also a major concern for policy makers as elderly women are more vulnerable on all fronts compared to elderly men. As regards rural and urban areas, more than 73 million persons i.e. 71 per cent of elderly population reside in rural areas while 31 million or 29 per cent of elderly population are in urban areas (Elderly in India, 2011).

Good mental health is not just the absence of mental health problems. Although different cultures have different expectations for health, many of the following characteristics are likely to be present in individuals with good mental health.

Cognitive ageing includes the status of mental processes which will be carried out by an individual. Man's present and prospective activities in his day to day life are organized on the basis of his past experience. Therefore cognitive status plays a critical role in the day to day function of the elderly.Today, India is challenged by several major transitions (demographic, health, socio- technological) since it achieved its independence. As a developing nation, these changes have been quite rapid, compared with experiences of more developed nations undergoing similar changes in their past (Hendricks & Yoon, 2006; Ramamurti, Liebig& Jamuna, 2015).

Many studies corroboroted depressive symptoms are risk factors for memory diseases but the reasons are unclear (Burt, Zembar, & Niederehe, 1995; Jorm, 2000, 2001). Depression may be primary symptom for cognitive decline, which leads to dementia (Gabryelewicz et al., 2007; Jorm, 2000). Furthermore, the depressive symptoms are associated with risk of dementia, the relationship between depression and cognitive decline may be reinforced by differential ability to access or learn compensatory

cognitive strategies (Jorm, 2001). The older proportion of elderly population is more vulnerable to the risk of dementia and initial cognitive impairment (Hebert, et al., 2003). Research suggests that well-being and health declines are due to self-neglect caused by depression and poor health choices (Blazer, 2003). As part of Normal aging, there is a decline in different facets of cognitive ability domains including memory, abstract reasoning, and processing speed (Hedden & Gabrieli, 2004). Studies also revealed that poor mental health influences the memory performance. Poor self-rated psychological health affects performance in many facets (Lalitha & Jamuna, 2004a, 2004b, 2006).

Among cognitive changes due to ageing , decline of memory is considered as one of the primary symptoms. Studies also revealed that not all aspects of memory are affected by either healthy aging or pathological aging. For instance, episodic and working memory abilities may show steep declines with age, whereas semantic and other memory abilities can remain relatively unimpaired. Differences suggest that memory ability is not a singular cognitive phenomenon but a group of interrelated diverse processes. Likewise, memory ability is related with and dependent on other cognitive abilities such as attention and executive functions which are vulnerable to decline in late life (Craik, 2008).

Studying depression in the community dwelling adults is a challenge in Gerontological research . Studies reflect that community-dwelling older adults do not have a high prevalence of major depression, especially in comparison to other adult populations. This situation reflects the prediction that the prevalence of depression is expected to double within the older adult population as Baby Boomers age, making it meaningful to study (Conner et al., 2010). Blazer (2003) found that depressive symptoms decrease with age. Research has also shown that education level is negatively associated with depression and predicts depression over time (Koster et al., 2006). Depression negatively effects older adults' well-being and increases morbidity

(Conner et al., 2010; Penninx et al., 1998).

As the World's population is ageing, there is growing interest in various morbidity patterns among the elderly. Depression and depressive symptoms are common in elder people. When reviewing the literature on memory performance and aging, one thing that becomes apparent is the substantial variability of memory performance. This variability is especially pronounced if the tasks are assumed to tax different memory components (Short Term Memory and Long Term Memory). These two components and their subcomponents are differentially affected by aging (Hoyer & Verhaeghen, 2006). On one hand, performance on tasks relying on semantic memory, the part of Long Term Memory responsible for an individual's cumulative knowledge, is seen as stable at old age or even superior than for younger adults (Park et al., 1996, Park et al., 2002, Verhaeghen, 2003). On the other hand, older adults show a considerable alteration in LTM tasks involving retrieval of specific events located in time and place and/ or context of experienced events (Bäckman et al., 2001; Light et al., 2000; Zacks et al., 2000). This LTM component is referred to as episodic memory and is mostly tested by asking people to learn information explicitly (e.g., a list or story) and recall it after a delayed period. The three aspects of episodic memory include the encoding phase, the storage phase, and the retrieval of the encoded and stored information. These three phases show differential aging effects. Whereas the storage of information is seen as relatively stable, encoding and retrieval are seen as age-sensitive (Castel & Craik, 2003).

The relationship between some of the psychological variables and memory is difficult to study because all the domains are intertwined. But very less work was carried out to see the influence of psycho –social variables on memory. The studies on adult intelligence and personality or self belief variables (e.g., self-esteem, internal and external locus, mental health and social supports) suggest that close or possible inter dependent relationship is obvious (Lalitha, 2000; Lalitha & Jamuna, 2004).

The study of cognitive status, particularly everyday memory and other psychological variable is considered as one of the important and gray areas of Gero-psychological research as evident from the reviews (Birren & Schaie, 1996; Misra, 2010; Ramamurti & Jamuna, 1993, 1995, 2010; Ramamurti, et al., 2015).

Keeping this in view, the study has been taken up with the following objectives:

- To asses the Depression status across age, gender, and educational, family, location status groups of older persons.
- To asses the Everyday Memory status across age, gender, and educational, family, location status groups of older persons.
- To find out the association between Depression and Everyday Memory, other sub-group variables.

SAMPLE OF THE STUDY:

Table – 1: Socio-Demographic details of the sample

Sl. NO	Sub-Group	N	%
1.	**AGE**		
	a)60-65	59	49.2
	b)66-70	30	25.0
	c)70-75	31	25.8
2.	**Gender**		
	Male	71	59.2
	Female	49	40.8
4.	**Education**		
	a)No Education	44	36.7
	b)Primary Education	30	25.0
	c)Secondary Education	35	29.2
	d)Higher Education	11	9.2
5.	**Family**		
	Nuclear	64	53.3
	Joint	56	46.7
6.	**Location**		
	Rural	83	69.2
	Urban	37	30.8

The sample was drawn from different sub groups of age, gender and education, family, location groups (with formal and without formal education-but those who can read and write). Only subjects who were cognitively intact, healthy, community dwelling and those without any marked disabilities were included in the main sample. The socio-demographic details of the sample indicate that age groups of the sample shows that 49.2 percent of the sample was 60-65 age group, 25.0 percent of the sample was 66-70 age group, 25.8 percent of the sample was 70-75 age group. Gender wise the sample shows that 59.2 percent were male, 40.8 percent female. The educational status of the sample shows that 36.7 percent of the sample was without formal education, 25.0 percent with primary education, 29.2 percent secondary education, and 9.2 percent with college education. The family status shows that 53.3 percent belong to nuclear family and 46.7 percent are living in the joint families. The location-wise sample shows that 69.2 percent rural areas, 30.8 percent urban areas.

B. Tools Used In the Study

The standardized tools were used to collect the data on the following variables:

Everyday memory Inventory (An adapted version of Sundarland, Harris & Baddeley, 1983) was developed in regional language i.e., Telugu with 28 items to assess everyday memory among the aged. Depression was assessed by an adapted version of Depression Scale (Beck, 1972 adapted by Jamuna et al., 1997) which consists of 25 statements with 2 responses i.e., Yes or No.

C. Results and Discussion

The obtained data was analyzed to meet the objectives of the study. The results related to depression and everyday memory shows that the mean in different sub-groups are as follows: age group-wise the means are as follows: 60-65 (M= 11.66); 66-70(10.20); 71-75(14.16) and the t-values a-b (t=1.88), b-c (t= 5.41).age-wise statistically significant. The gender wise data shows that the mean for the male subjects is 11.39, compared to the female subjects (M=12.73) and the t-value 2.03 which is statistically significant.

Table. II: Means, S.D's and't' values related to Depression in Different Subjects

Sl. NO	Sub-Group	N	M(⌐)	't'
1.	**AGE**			
	a)60-65	59	11.66(3.90)	1.88(a-b)*
	b)66-70	30	10.20(3.21)	5.41(b-c)**
	c)70-75	31	14.16(2.43)	
2.	**Gender**			
	Male	71	11.39(3.81)	2.03**
	Female	49	12.73(3.34)	
3.	**Education**			
	a)No Education	44	11.39(3.74)	0.10(a-b)@
	b)Primary Education	30	11.30(3.30)	1.96(b-c)*
	c)Secondary Education	35	13.00(3.65)	0.35(c-d)@
	d)Higher Education	11	15.55(3.04)	
4.	**Family**			
	Nuclear	64	11.75(3.92)	0.61@
	Joint	56	12.16(3.39)	
5.	**Location**			
	Rural	83	11.66(3.83)	1.32@
	Urban	37	12.57(3.26)	
@-Not significant ; * Significant at 0.05 level				

The education-wise trends that the subjects with no education (M=11.39); Primary Education (M=11.30); Secondary Education (M=13.0); Higher education (M=15.55) and the t-values (a-b= 0.10; b-c = 1.96; c-d= 0.35) secondary education which is statistically significant. The data related to the family shows that those who are living in nuclear families (M=11.66) reported less depression compared to those in joint (12.16) families and the t-value is (0.61). The Locality-wise data shows that the subjects from rural (M=11.66) areas reported to less depression compared to those who are from urban (M=12.57) and the obtained t-value (t=1.32) is statistically not significant.

Results related to Everyday Memory Performance

Firstly, the results related to everyday memory in different sub-groups were analyzed (vide Table II). The data shows that with

regard to age group, means of different age groups are as follows: - 60-65 (114.42), 66-70(130.26) and 71-75 (128.35), which clearly show that as the age increases the score related to everyday memory increases this indicate that the problems related to everyday memory performance. Age-wise which is statistically significant. And the mean of 66-70 years age group is very high (M=130.26) compared to other age groups (60-65=114.42; 71-85 =128.35) indicates the impact of age on the everyday memory performance. Gender-wise scores (Male=124.97; Female =117.65) shows no significant difference between the male and the female subjects and the mean difference is also statistically not significant (t=1.11).

Table. III: Means, S.D's and 't' values related to Everyday memory in Different Subjects.

Sl. NO	Sub-Group	N	M(r)	't'
1.	**AGE**			
	a)60-65	59	114.42(38.53)	1.89(a-b)*
	b)66-70	30	130.26(36.54)	0.22(b-
	c)71-75	31	128.35(29.95)	c)@
2.	**Gender**			
	Male	71	124.97(38.97)	1.11@
	Female	49	117.65(32.44)	
3.	**Education**			
	a)No Education	44	118.18(38.91)	0.57(a-
	b)Primary Education	30	113.30(33.96)	b)@
	c)Secondary Education	35	135.91(32.16)	2.75(b-
	d)Higher Education	11	116.54(38.32)	c)**
				1.51(c-
				d)@
4.	**Family**			
	Nuclear	64	118.48(38.65)	1.13@
	Joint	56	125.98(33.73)	
5.	**Location**			
	Rural	83	129.62(34.26)	3.60**
	Urban	37	104.83(35.92)	
@-Not significant; *- Significant at 0.05 level; **- Significant at 0.01 level				

The education wise data shows that the mean values of various sub-groups are as follows: no education (M=118.18); Primary education (113.30); Secondary education (135.91) and higher education

(M=116.54) respectively. The t- values of different sub-groups are as follows: the subjects with no education and those with primary education is 0.57; those with primary education and high school educations is 2.75 which is statistically significant indicates and those with high school education and college education is 1.51. Family wise scores show that those who are living in nuclear families (M=118.48); joint families (M=125.98) and the t value is 1.13 which indicates that the sub group difference is statistically not significant. The locality trends indicate that the subjects from rural areas (M= 129.62) are having poor performance compared to those who are living in urban (M=104.83) areas and the t- value is 3.60 which is statistically significant.

Further analysis was carried out to these relationship between Depression and socio-demographic variables. Depression related to socio-demographic variables show that age (r = 0.233*), gender (r = 0.180*), were significantly associated with depression related to socio demographic variables. The other socio-demographic variables like education(r=0.169), family (r = 0.056); location (r = 0.114); everyday memory (r=0.035) were not significantly associated with depression.

Table. IV: Correlation matrix related to Depression and Socio-demographic variables

Sl. No.	Variables	'r' value
1.	Age	0.233*
2.	Gender	0.180*
3.	Education	0.169
4.	Family	0.056
5.	Location	0.114
6.	Everyday memory	0.035
Significant at 0.05 level		

To elucidate the role of depression related to everyday memory performance (See Table. V), the subjects(n=15) with good everyday memory performance and the subjects with poor everyday memory performance were selected and correlational analysis was carried out. The table clearly shows that there is a significant association between depression and those with poor everyday memory (r = 0.291*) where as those with good everyday memory is not statistically significantly with depression. The above data clearly shows role of depression in everyday memory performance.

Table. V: Correlation matrix related to depression and Everyday memory

	Everyday memory	
	Good EVM (n=15)	**Poor EVM (n=15)**
Depression	**0.117**	**0.291***
Significant at 0.05 level		

Important findings and Implications:

- The findings indicate that age-wise differences, gender-wise differences and those with school education differ significantly in experiencing the depression. Female, old, less- educated are more affected.
- Everyday memory status shows that young-old groups, those with school education and locality–wise differences were significant.
- The correlation data clearly indicates that poor everyday memory is significantly correlated with depression.

Concluding remarks: In the recent years, there is an increase in the prevalence of memory problems with the growth of population ageing. Furthermore there is no data on this issue, making it imperative to take up systematic investigations to generate national database on memory problems of the elderly. The affected cognitive domain negatively contributes to the overall mental health of the elderly individual. Last but not the least, that results of this study will hopefully be very useful for social and public health policies for older people.

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