

LANGUAGE IN INDIA

Strength for Today and Bright Hope for Tomorrow

Volume 12 : 8 August 2012

ISSN 1930-2940

Managing Editor: M. S. Thirumalai, Ph.D.

Editors: B. Mallikarjun, Ph.D.

Sam Mohanlal, Ph.D.

B. A. Sharada, Ph.D.

A. R. Fatihi, Ph.D.

Lakhan Gusain, Ph.D.

Jennifer Marie Bayer, Ph.D.

S. M. Ravichandran, Ph.D.

G. Baskaran, Ph.D.

L. Ramamoorthy, Ph.D.

Assistant Managing Editor: Swarna Thirumalai, M.A.

Economics of Ageing: A Study in Coimbatore District, Tamil Nadu

S. Pichaipillai, M.A., B.Ed., M.Phil. and T.S. Kalyani, Ph.D.

Abstract

This paper examines the economics of ageing population in Coimbatore District, Tamil Nadu. The study analysed the problems of the male and female ageing population according to the economic status such as dependent, partially dependent and independent. The quality of life of the aging population differs according to their sex, age, economic status and living arrangements. The quality of life of the ageing population varies between male and female respondents. Moreover, the quality of life of the ageing population differs according to their living arrangements. This results warrant the need for the measures to promote the quality of life of the ageing thorough the introduction of new social welfare measures, widening the existing welfare schemes, involvement of civil societies and NGO's.

Key Words: Economics of Ageing, Quality of Life of Ageing Population.

Language in India www.languageinindia.com

12 : 8 August 2012

S. Pichaipillai, M.A., B.Ed., M.Phil. and T.S. Kalyani, Ph.D.

Economics of Ageing: A Study in Coimbatore District, Tamil Nadu

1. Introduction

The present paper examines economic of ageing population in Coimbatore District, Tamil Nadu. Population ageing refers to shifts in the age distribution of the population in which the relative share of persons at older ages increases, and the share at younger ages decreases. This is distinct from absolute increases in the number of older persons that can occur even if their share does not increase (Leete and Jacobs, 2002)

The increasing ageing population is an important demographic phenomenon in the world today and it is also one of the greatest challenges of the 21st century. The effective implementation of health care policies results the increases in elderly population in various developing countries. The blend of high fertility and declining mortality during the last two decades has rapidly increased the ageing population. Further, the drastic fall in fertility in recent years may lead to raise proportion of the elderly in the future (Liebig and Irudaya Rajan 2003).

The 2001 census has shows that the ageing population of India comprises for 77 million. While the elderly constituted only 24 million in 1961, it increased to 43 million in 1981 and to 57 million in 1991. The proportion of elderly persons in the population of India raised from 5.63 per cent in 1961 to 6.58 per cent in 1991 and to 7.5 per cent in 2001. The same trend is exists in categories of the ageing population in India (Irudaya Rajan, Mishra and Sharma, 1999). In 2001, the world's ageing population is 10 per cent of the total population and it is expected 21.1 per cent in 2050. As per the current situation, the major segment of this growth takes place in developing countries and more than half in Asia, particularly in India and China (Irudaya Rajan, Sharma and Mishra 2003).

In developing countries, nearly 90 per cent of the work forces are employed in the unorganized sectors such as less structured, small scale informal sector in urban areas, or in agriculture and allied sectors in rural areas. They retire from their job without any financial assurance like pension and other benefits. These factors force the ageing population to participate in the labour market. Since, the elderly workforce population is on rise and it is likely to increase at faster rates than expected rates. In India, 40 per cent of the elderly who are 60 and above are working. This has increased up to 61 per cent in the case of males (Bhagat and Unisa, 2006). In this situation, the elderly workforce faces the problems of low wage and increase in wage differentials across different segments of the labour market. The elderly could not take care of their health with low income where they have to depend their family members thereby increases the economic burden of the ageing population (Bloom et. al, 2010 and Sakthivel et.al, 2011).

In this context, the huge and rapid increase in population ageing is an important policy issue for growing economies. In the case of developed countries, ageing problem is managed by old age pension and through various saving schemes during their working period. However, it is more difficult to the developing countries where major segment are ageing population. Further, the changes in economic, social and family amplifies the economic problems of the ageing population. Therefore, population ageing is now considered as a most important development challenge where the social safety nets do not exist, limited institutional and human resource capacity and scarce resources to respond to the health and basic needs of older persons.

The studies on gerontology proved that there is a general lowering of social status of elderly people in India. Increasingly, older people may be perceived as burdens due to their disability or dependence. Rapid changes in the family system, even in rural areas, are reducing the availability of kin support. With modernization of the country, older values are being replaced by 'individualism'. The family's capacity to provide quality care, support and living facilities to older people is decreasing.

Language in India www.languageinindia.com

12 : 8 August 2012

S. Pichai Pilli, M.A., B.Ed., M.Phil. and T.S. Kalyani, Ph.D.

Economics of Ageing: A Study in Coimbatore District, Tamil Nadu

At this juncture, the ageing population faces a number of problems and these problems are due to insufficient income to support themselves and their partner. Further, they suffer because of ill health, non availability of social security schemes, societal failure to support the ageing population and unhealthy living arrangements. In particular, these factors severely affect the quality of life of the ageing population. However, the quality of life of the ageing population may differ according to their gender, age, economic status and living arrangements. Thus, this paper analyses the economics of ageing in terms of quality of life of the ageing population.

2. Quality of Life of the Ageing Population

Quality of life is a subjective and multidimensional concept that is recognized as a useful tool to measure the welfare of the society. The World Health Organization has defined the quality of life as “an individual’s perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns.” Further, the idea of quality of life includes the aspects of health status, lifestyle, life satisfaction, mental health and well-being. Quality of life is a holistic approach that not only emphasizes on individuals’ physical, psychological, and spiritual functioning but also their connections with their environments; and opportunities for maintaining and enhancing skills (Nilsson et.al., 2006). In this context, quality of life of the ageing population is important during the situation of functional decline, economic dependence, and societal failure.

Due to the demographic transitions, socio-economic and political changes, the ageing population faces the problem of isolation and lacks the resources for a better quality of life. Today, the aged not only demand the society to ensure their independence and participation, but also to grant them a life full of care, fulfillment and dignity. But a

limited understanding of factors influencing their quality of life is largely responsible for the elderly being denied a dignified existence.

The ageing population in urban often unable to meet their needs due to the industrialization, urbanization and the changing trends in society. As a result, these factors force the ageing population to live in unhealthy living arrangements which are characterized by inadequate physical conditions, crime, elderly abuse and disparity in familial care. Besides, the ageing population in urban areas experiencing the problem of total or partial lack of public and community facilities such as drinking water, sanitation, planned streets, drainage systems and access to affordable healthcare services.

The co-residency with children does not always assure care and love for the ageing population. On the other hand, independent living also has its problems, particularly in cases of ill health and disability. It excludes the ageing population from participation in many activities in the society (Shankardass, 1998). The question of space and accommodation has consequences for the quality of life of the ageing population.

3. Methodology

In order to analyse the quality of life of the ageing population, this study incorporates scientific approach in identifying the study region and the details are discussed under four stages.

The first stage of the sampling design is to identify the study district. As per the Indian Census 2001, the old age dependency ratio is 13.66 in Tamil Nadu. Regard to districts, the old age dependency ratio in Coimbatore (13.51), Virudhunagar (13.53), Pudukottai (13.25), Thanjavur (13.63) and Thiruvarur (13.24) shows similar picture towards the state level. In case of potential support ratio, Coimbatore (7.31), Villupuram (7.29), Salem (7.22) and Vellore (7.29) districts are closer to the Tamil Nadu State (7.32).

In this context, based on the old age dependency ratio and potential support ratio, Coimbatore district is selected for the study (see table 1).

The second stage of the sampling design attempts to select study region. The NSSO 52nd round survey entitled “Morbidity and Treatment of Ailments, July, 1995 - June, 1996” and 60th round survey entitled “Morbidity, Health Care and the Conditions of the Aged” categories the ageing population based on the economic status namely economically independent, partially dependent and fully dependent. But, the economic status of the ageing population shows only meagre difference between the rural and urban regions (see table 2).

However, the studies on ageing found that the elderly people living in rural areas are much healthier as compared to those in urban areas. This factor permits rural aged to involve in the economic activity (CSO, 2000). Thus, the economic problem of ageing is more vulnerable for urban elderly than the rural elderly (Irudaya Rajan, 2006). The study on content analysis reports that crimes against the elderly are much higher in urban areas as compared to rural areas.

Table 1 Details of Total Population, Ageing Population, Working Population, Old Age Dependency Ratio and Potential Support Ratio in the Districts of the Tamil Nadu State

Sl. No.	Districts	Total Population	Ageing Population	Old Age Dependency Ratio	Potential Support Ratio
1.	Thiruvallur	2754756	198251	10.96	9.12
2.	Chennai	4343645	350826	11.78	8.49
3.	Kancheepuram	2877468	233860	12.57	7.96
4.	Vellore	3477317	296324	13.71	7.29
5.	Dharmapuri	2856300	224075	12.89	7.76

Language in India www.languageinindia.com

12 : 8 August 2012

S. Pichai pilli, M.A., B.Ed., M.Phil. and T.S. Kalyani, Ph.D.

Economics of Ageing: A Study in Coimbatore District, Tamil Nadu

6.	Tiruvannamalai	2186125	205050	15.20	6.58
7.	Viluppuram	2960373	250144	13.72	7.29
8.	Salem	3016346	268793	13.85	7.22
9.	Namakkal	1493462	154945	15.68	6.38
10.	Erode	2581500	287089	16.72	5.98
11.	The Nilgiris	762141	51211	10.00	10.00
12.	Coimbatore	4271856	391497	13.51	7.31
13.	Dindigul	1923014	175032	12.88	7.76
14.	Karur	935686	96910	15.96	6.27
15.	Tiruchirappalli	2418366	218034	13.87	7.21
16.	Perambalur	493646	45180	14.64	6.83
17.	Ariyalur	695524	63633	14.71	6.80
18.	Cuddalore	2285395	181559	12.53	7.98
19.	Nagapattinam	1488839	132079	14.10	7.09
20.	Thiruvarur	1169474	99242	13.24	7.55
21.	Thanjavur	2216138	194163	13.63	7.34
22.	Pudukkottai	1459601	122264	13.25	7.55
23.	Sivaganga	1155356	114974	15.76	6.35
24.	Madurai	2578201	217829	12.95	7.72
25.	Theni	1093950	100022	14.39	6.95
26.	Virudhunagar	1751301	151809	13.53	7.39
27.	Ramanathapuram	1187604	103539	14.08	7.10
28.	Thoothukkudi	1572273	151714	15.35	6.52
29.	Tirunelveli	2723988	262854	15.29	6.54
30.	Kanniyakumari	1676034	164498	15.05	6.64
	Tamil Nadu	62405679	5507400	13.66	7.32

Source: Census on India, 2001.

Note: Old Age dependency Ratio = The number of persons in the age-group 60 or

Language in India www.languageinindia.com

12 : 8 August 2012

S. Pichaipilli, M.A., B.Ed., M.Phil. and T.S. Kalyani, Ph.D.

Economics of Ageing: A Study in Coimbatore District, Tamil Nadu

more per 100 persons in the age-group of 15-59.

Potential Support Ratio = The number of working population per ageing population.

Further, the study entitled “Situation Analysis of Elderly in India” (Ministry of Statistics and Programme Implementation, Government of India, 2011) reveals nearly 40 per cent of the aged (60 years and above) are working. In rural areas, 66 per cent of elderly men and 23 per cent of aged women are effectively participating in economic activity, while only 39 per cent of elderly men and about 7 per cent of elderly women in urban areas. This infers the level of economic dependency and severity of economic problem of the ageing in urban areas. As a result, the urban region of the Coimbatore district is selected for the study.

Table 2 Percentage of Ageing Population by Economic Status according to 60th and 52nd NSSO Surveys on Ageing

Sl. No.	Population Group		NSSO Survey	Percentage of Elderly Persons			Total
				Independent	Partially Dependent	Fully Dependent	
1.	Rural	Male	60 th 2004	51	15	32	100
			52 nd 1996	49	18	31	100
		Female	60 th 2004	14	12	72	100
			52 nd 1996	12	15	71	100
		Total	60 th 2004	33	14	52	100
			52 nd 1996	30	16	51	100
2.	Urba	Male	60 th 2004	56	13	30	100

n		52 nd 1996	52	17	30	100
		60 th 2004	17	10	72	100
	Female	52 nd 1996	12	11	76	100
		60 th 2004	36	11	52	100
	Total	52 nd 1996	31	14	53	100

Source: National Sample Survey, 60th Round (January – June 2004)

National Sample Survey 52nd Round (July, 1995- June, 1996)

The Coimbatore district comprises of three municipalities (Pollachi, Mettupalayam and Valparai) and one corporation (Coimbatore Corporation). Since the study analysis the economics of ageing, the researcher has chosen Coimbatore Municipal Corporation where population is high as compared to municipalities. This is carried out in the **third stage**.

The Coimbatore Corporation includes four administrative zones namely East zone, North zone, West zone and South zone. In order to identify the economically independent, partially dependent and fully dependent of the ageing population, the researcher has conducted focus discussion in each of the administrative zone with the help of NGOs. Finally, stratified random sampling method is adopted to identify 40 male and 40 female ageing population in each category of economically independent, partially dependent and fully dependent. In total, 240 ageing respondents are surveyed with the help of pre-tested structured interview schedule, which is the **fourth stage** (see table 3).

Table 3 Details of Sample Selection according to the Economic Status and Gender of the Ageing Population in Coimbatore Corporation

Sl. No.	Gender	Economic Status			Total
		Economically Independent	Partially Dependent	Fully Dependent	
1.	Male	40	40	40	120
2.	Female	40	40	40	120
All		80	80	80	240

4. Quality of Life Index of Ageing Population (QLIAP)

In general, the quality of life index is framed by using the factors such as with the material wellbeing, health, political stability and security, family life, community life, climate and geography, job security, political freedom and gender equality. Though, the quality of life index for the ageing population may considerably differ from the general quality of life index. Thus, based on the past studies on ageing the parameters for quality of life of ageing population are identified. The parameters are economic status, level of dependency, family parameters, social factors, Health factors, psychological factors and environment factors. By using the five points Likert scale the satisfaction of the elderly population measured. In order to framing the quality of life index, the Composite Index Method is applied to attain to the single value. For constructing the index, minimum and maximum values have been fixed for each of the indicators. The QLIAP fixed a minimum and a maximum values for each dimension such as economic status, dependency, family, social, health, psychological and environment. The minimum and a maximum values are between 0 and 1. The following composite index equation used to calculate QLIAP.

$$Index = \frac{Actual\ Value - Minimum\ Value}{Maximum\ Value - Minimum\ Value}$$

Sl. No.	Dimension	Variable
---------	-----------	----------

1.	Economic status	<ol style="list-style-type: none"> 1. Stable Financial Situation 2. Ability to meet the basic needs 3. Freedom to spend 4. Able to meet health care expenditure 5. Satisfy the wants 6. Capacity to help the children 7. Capacity to borrow money
2.	Dependency	<ol style="list-style-type: none"> 1. Economic dependent 2. Lack of Money 3. Physical dependent 4. Financial aid from the children 5. Financial aid from friends 6. Financial aid from relative 7. Financial aid from neighbors
3.	Family	<ol style="list-style-type: none"> 1. Harmony within the family 2. Moral support in the family 3. Importance given in the family 4. Participation in Decision making 5. Care taken by the family 6. Help from the family members 7. Visiting relatives and others
4.	Social	<ol style="list-style-type: none"> 1. Respected by the Society 2. Participating in the social functions 3. Participating in public works 4. Participation in organizations 5. Free from ill treatment 6. Free from violence 7. Social security measures

5.	Health	<ol style="list-style-type: none"> 1. Satisfied with your health 2. Access to medical services 3. Awareness about the health 4. Family support at the time of ill health 5. Having good nourishment 6. Free from physical disability 7. Free from visual disability
6.	Psychological	<ol style="list-style-type: none"> 1. Free from worries 2. Free from depression 3. Free from burden 4. Having peace of mind 5. Having satisfaction in life 6. Satisfaction in family environment 7. Satisfaction in societal environment
7.	Environment	<ol style="list-style-type: none"> 1. Peaceful living environment 2. Hygienic environment 3. Having recreation options 4. Pollution free environment 5. Opportunities for spiritual activities 6. Opportunities for friendship and discussion 7. Opportunities for senior citizen's associations

Example

Economic status

$$Economic\ Status = \frac{Actual\ Value - Minimum\ Value}{Maximum - Minimum\ Value}$$

This calculation is made on each variables of the economic status of the ageing population and the values are aggregated and divided by seven. This method of

Language in India www.languageinindia.com

12 : 8 August 2012

S. Pichai pilli, M.A., B.Ed., M.Phil. and T.S. Kalyani, Ph.D.

Economics of Ageing: A Study in Coimbatore District, Tamil Nadu

calculation gives single value for economic status of the ageing population. Likewise, the single values all parameters are incorporated and divided by seven and the attained single value. The final value is treated as the value for quality of life index value for ageing population.

$$\text{Economic Status} = \frac{\text{Finance} + \text{Basic needs} + \text{Spent} + \text{Health} + \text{Wants} + \text{Help children} + \text{Borrowing}}{7}$$

$$\text{QLIAP} = \frac{\text{Economic} + \text{Dependency} + \text{Family} + \text{Social} + \text{Health} + \text{Psychological} + \text{Environmental}}{7}$$

= QLIAP Value

5. Age-wise Classification of the Ageing Population

The type of ageing is one of the factors to determine the economic status and quality of life of the ageing population. The ageing-wise classification of surveyed ageing population confirms that the economically independent ageing populations are huge in young old followed by middle old and old old categories (see Table 4). At the same time, the partially dependent and dependent positions are predominantly occupied by the middle old and old ageing categories. The same trend could be seen both genders such as male and female. Though, concentration of partially dependent and dependent are high in female aged population as compared to male aged population in the study region. This result shows that increase in age leads the problem of visual and disabilities. Therefore, ageing populations are needed help of their spouse, children, relatives and neighbors for accessing the needs.

Table 4 Age-wise Classification of the Surveyed Ageing Population

Sl. No.	Details	Economic Status						All	
		Dependent		Partially Dependent		Independent			
		Male (n = 40)	Female (n = 40)	Male (n = 40)	Female (n = 40)	Male (n = 40)	Female (n = 40)	Male (N = 120)	Female (N = 120)

1.	Young Old (60 - 69)	6 (15.0)	11 (27.5)	15 (37.5)	23 (57.5)	21 (52.5)	22 (55.0)	42 (35.0)	56 (46.7)
2.	Middle Old (70 - 79)	12 (30.0)	9 (22.5)	16 (40.0)	7 (17.5)	12 (30.0)	10 (25.0)	40 (33.3)	26 (21.7)
3.	Old Old (80 +)	22 (55.0)	20 (50.0)	9 (22.5)	10 (25.0)	7 (17.5)	8 (20.0)	38 (31.7)	38 (31.7)

Source: Computed

Note: Figures in

parentheses are percentages to sample

6. Living Arrangements of the Ageing Population

Living arrangements of the ageing population facilitates access to basic necessities, familial care and health care amenities (see Table 5). The study found that the own family, children's family and relative's family are the major source for the living arrangements of the surveyed ageing population in Coimbatore district. The sources of living arrangements are differ according to the economic status of the ageing population. The economically independent are mostly living with their own family, the children's family and relative's family are the major sources of living arrangements to the partially dependent and dependent. Of the sources of living arrangements, ageing population with their own family is prime followed by followed by children's family and relative's family. It is comparatively high in male population as compared to female population. Due to the expired of the life partner the female aged populations are need to live with their children's family. On the other hand, the ageing population living with relative's family is highly prevalent in male population. This due to the expired of their spouse and non-availability of children's support the male aged population loss their care taker and

Language in India www.languageinindia.com

12 : 8 August 2012

S. Pichai pilli, M.A., B.Ed., M.Phil. and T.S. Kalyani, Ph.D.

Economics of Ageing: A Study in Coimbatore District, Tamil Nadu

231

facilitators. As a result, the male aged population forced to live with their relative's family

Table 5 Details of Living Arrangements of the surveyed Ageing Population

Sl. No.	Details	Economic Status						All	
		Dependent		Partially Dependent		Independent			
		Male (n = 40)	Female (n = 40)	Male (n = 40)	Female (n = 40)	Male (n = 40)	Female (n = 40)	Male (N = 120)	Female (N = 120)
1.	Own Family headed by Respondents	26 (65.0)	22 (55.0)	34 (85.0)	31 (77.5)	35 (87.5)	34 (85.0)	95 (79.2)	87 (72.5)
2.	Children's Family	6 (15.0)	13 (32.5)	3 (7.5)	7 (17.5)	5 (12.5)	6 (15.0)	14 (11.7)	26 (21.7)
3.	Relative's Family	8 (20.0)	5 (12.5)	3 (7.5)	2 (5.0)	0 (0)	0 (0)	11 (9.2)	7 (5.8)

Source: Computed

Note: Figures in

parentheses are percentages column total

7. Quality of Life Scores and Economic Status

Based on the above mentioned methodology, the quality of life index for the ageing population is calculated. The scores of the variables according to economic status of the ageing population are listed below (see Table 6). In all the factors, the ageing population those are independent has achieved high scores as compared to partially dependent and dependent ageing population. It is homogenous in both the genders. However, the male population has better situation as compared to female population.

Table 6 Details of Quality of life Factors and Scores of the surveyed Ageing Population

Sl. No.	Details	Economic Status						All	
		Dependent		Partially Dependent		Independent			
		Male (n = 40)	Female (n = 40)	Male (n = 40)	Female (n = 40)	Male (n = 40)	Female (n = 40)	Male (N = 120)	Female (N = 120)
1.	Economic Freedom	0.03	0.03	0.41	0.33	0.77	0.57	0.40	0.31
2.	Non-dependency	0.19	0.19	0.51	0.36	0.85	0.60	0.52	0.38
3.	Familial Care	0.25	0.24	0.59	0.42	0.75	0.62	0.53	0.43
4.	Social Status	0.22	0.22	0.57	0.34	0.71	0.57	0.50	0.38
5.	Health Status	0.23	0.22	0.57	0.44	0.84	0.73	0.55	0.46
6.	Psychology	0.26	0.25	0.66	0.62	0.90	0.73	0.61	0.53
7.	Living Environment	0.23	0.22	0.51	0.44	0.73	0.52	0.49	0.39
	QLIAP	0.20	0.20	0.55	0.43	0.79	0.62	0.51	0.41

Source: Computed

8. Results and Discussions

The quality of life of the ageing population may differ according to their gender, age, economic status and living arrangements. Therefore, the Multi – variate ANOVA

Language in India www.languageinindia.com

12 : 8 August 2012

S. Pichaipilli, M.A., B.Ed., M.Phil. and T.S. Kalyani, Ph.D.

Economics of Ageing: A Study in Coimbatore District, Tamil Nadu

Model was applied to analyse the variation in quality of life of the ageing population in Coimbatore district.

8.1 Multi – variate ANOVA Model for Quality of Life of Ageing Population

The conditions for applying Multi-variate ANOVA model permits to analyze the variation in quality of life of the ageing population. In this analysis, the quality of life index is considered as a dependent variable. On the other hand, sex, age, economic status and living arrangements are treated as fixed factors. From the results of ANOVA model, the computed ‘F’ values are found to be statistically significant. It confirms the variation in quality of life of the ageing population due to sex (131.77), age (17.56), economic status (649.94) and living arrangements (16.07). The computed values are higher than the table value of ‘F’ at 5 per cent level. The significant parameters are compared pair wise. Pair wise comparison of parameters results is drawn below.

Table 7 Compared ‘F’ Ratios of Quality of Life: Multivariate ANOVA Model

Sl. No	Source of Variation	Sum of Squares	d.f	Mean Sum of Square	‘F’
1.	Variations due to Sex	0.32	1	0.32	131.77*
2.	Variations due to Age	0.09	2	0.04	17.56*
3.	Variations due to Economic Status	3.17	2	1.58	649.94*
4.	Variations due to Living Arrangement	0.08	2	0.04	16.07*
Error		0.48	196	8.44	-
Total		60.52	240	-	-
\bar{R}^2		0.94*			
F-value		3.38*			

Source: Computed

Language in India www.languageinindia.com

12 : 8 August 2012

S. Pichai pilli, M.A., B.Ed., M.Phil. and T.S. Kalyani, Ph.D.

Economics of Ageing: A Study in Coimbatore District, Tamil Nadu

Note: *Significant at 5 per cent level

8.2 Sex-wise Comparison of Quality of Life of the Ageing Population

In this model, the 'F' values for quality of life of the ageing population by gender are found significant at 5 per cent level. The student 't' value for testing variation in quality of life due to genders is also found to be statistically significant at 5 per cent level. The result indicates that the quality of life index value is the maximum for male ageing population to the extent of 0.49 whereas 0.37 for the female ageing population. In general, the male population has more improvement in society and family than the female population. This factor helps the male population to attain a high score in quality of life. At the same time, prevalence of male domination, societal heritage and economic dependence adversely affect female ageing population to achieve betterment in quality of life.

8.3 Age-wise Comparison of Quality of Life of the Ageing Population

According to the age, the surveyed respondents are grouped into three categories such as young old, middle old and old old. The quality of life score is higher for middle old to the extent of 0.47 followed by young old 0.45 and it is least in old old to the extent of 0.39. The student 't' test indicates significant difference between young old, middle old and old old (see Table 8).

The results of age - wise comparison confirms the variation between age groups. In the study area most of the old are economically dependent and they have purely depended their family members and relatives for their daily needs. At the same time the level visual and physical disabilities are acute for old old as compared to middle and young old. These factors prevent them to actively participation in family, social, and senior citizen's organization. On the other hand, young old have the responses such as

Language in India www.languageinindia.com

12 : 8 August 2012

S. Pichai Pilli, M.A., B.Ed., M.Phil. and T.S. Kalyani, Ph.D.

Economics of Ageing: A Study in Coimbatore District, Tamil Nadu

children marriage, education and family welfare. The responsibilities of young old lead the financial, psychological and health problems and affect the quality of life. However, there is no much variation between middle and young old ageing population.

Table 8 Ageing-wise Comparison of Quality of Life of the Ageing Population

Sl. No	Ageing (i)	Ageing (j)	Mean Difference	't' Value
1.	Young Old (0.45)	Middle Old (0.47)	- 0.02	2.85*
2.	Young Old (0.47)	Old Old (0.39)	0.06	4.20*
3.	Old Old (0.39)	Middle Old (0.47)	- 0.09	1.25 NS

Source: Computed

Note: * Significant at 5 per cent level, N.S represent the Not Significant.

8.4 Economic Status-wise Comparison of Quality of Life of the Ageing Population

In this analysis, the economic status of the ageing population has been classified as dependent, partially dependent and independent. The quality of life score is higher for the independent (0.67), followed by partially dependent (0.47) and least for dependent (0.18). The student 't' test is statistically significant between dependent and partially dependent (5.07), between dependent and independent (6.63) and independent and partially dependent (2.30) (see Table 9). The results prove the relationship between economic status and quality of life of the ageing population.

Table 9 Economic Status-wise Comparison of Quality of Life of the Ageing Population

Sl. No	Economic Status (i)	Economic Status (j)	Mean Difference	't' Value
1.	Dependent (0.18)	Partially Dependent (0.47)	- 0.29	5.07*
2.	Dependent (0.18)	Independent (0.67)	- 0.49	6.63*
3.	Independent (0.67)	Partially Dependent (0.47)	0.20	2.30*

Source: Computed

Note: * Significant at 5 per cent level

The stable financial situation helps the economically independent ageing to satisfy their basic needs, access the health care facilities, social status, peaceful living environment, family support and peace of mind. It helps them to achieve a maximum score in quality of life. But those factors are not favourable to the partially dependent and dependent ageing populations.

8.5 Living Arrangement-wise Comparison of Quality of Life of the Ageing Population

Source of living arrangements of the surveyed ageing populations are own family of the ageing population, children's family and relative's family. The quality of life score is higher for the ageing population living with their own family (0.50), followed by living with children's family (0.46) and least for relative's family (0.32). The student 't' test is statistically significant between own and children's family (1.92), between own and relative's family (5.75) and relative's and children's family (3.94) (see Table 10). The respondent living with own family attained high scores in quality of life for the following reasons: The respondents living with own families are enjoying benefits of family care,

Language in India www.languageinindia.com

12 : 8 August 2012

S. Pichai Pilli, M.A., B.Ed., M.Phil. and T.S. Kalyani, Ph.D.

Economics of Ageing: A Study in Coimbatore District, Tamil Nadu

health facilities and other amenities. In the case of living with children's and relative's family are viable to access the above mentioned facilities. Therefore, the quality of life of the ageing population living with children's and relatives family severely affected.

Table 10 Living Arrangement-wise Comparison of Quality of Life of the Ageing Population

Sl. No	Living Arrangement (i)	Living Arrangement (j)	Mean Difference	't' Value
1.	Own Family (0.50)	Children's Family (0.46)	0.04	1.92*
2.	Own Family (0.50)	Relative's Family (0.32)	0.18	5.75*
3.	Relative's Family (0.32)	Children's Family (0.46)	- 0.14	3.94*

Source: Computed

Note: * Significant at 5 per cent level

9. Conclusion

The quality of life of the aging population differs according to their sex, age, economic status and living arrangements. The quality of life of the ageing population varies between male and female respondents. Social and economic empowerment of the male population is greater as compared to female population. It helps male ageing population to achieve higher level of quality of life as compared to female ageing population. Due to the prevalence of domination, societal heritage, culture and economic dependence, the female ageing population is adversely affected.

Among the ageing groups, the middle age groups scores higher value in quality of life as compared to young old and old old. However, there is no such wide variation

Language in India www.languageinindia.com

12 : 8 August 2012

S. Pichai Pilli, M.A., B.Ed., M.Phil. and T.S. Kalyani, Ph.D.

Economics of Ageing: A Study in Coimbatore District, Tamil Nadu

between young old and middle old. The old old are facing the problem of disability and loss of familial care. On the other hand, the young old are facing the problems of children's marriage and education. The family burden affects the quality of life of the young old and old old ageing population.

Of the total respondents, the economically independent ageing population has attained higher level of life than that of partially dependent and dependent ageing population. Due to their economic independent, they are capable to access the basic needs, medical needs, social status, family support and peace of mind. These factors adversely affect the quality of life of partially dependent and dependent ageing population.

Likewise, the quality of life of the ageing population differs according to their living arrangements. Among the different living arrangements, the respondents those head the family enjoy better quality of life as compared to those live with their children's and relative's family. The respondents those head the family are able to enjoy the benefits, protection and services from the family members. On the other hand, the ageing population loving with their children's and relative's are expecting the help from them. Some time the consequences of low family income and loss of family support worsen the living conditions of the ageing population.

The results of the Multi-variate ANOVA model confirm the variation in quality of life due to the sex, age, economic status and living arrangements of the ageing population. This results warrant the need for the measures to promote the quality of life of the ageing thorough the introduction of new social welfare measures, widening the existing welfare schemes, involvement of civil societies and NGO's.

10. Suggestions

Language in India www.languageinindia.com

12 : 8 August 2012

S. Pichai Pilli, M.A., B.Ed., M.Phil. and T.S. Kalyani, Ph.D.

Economics of Ageing: A Study in Coimbatore District, Tamil Nadu

From the above findings and conclusion, few suggestions are given to the policy makers to take care of the well being of the ageing. The suggestions are as follows:

1. The ageing population those are economically dependent and partially dependent face huge economic problems. The government gives monthly financial assistance for those who live alone and without son / daughter. But, the ageing those who live with the children also suffer for their survival. Therefore, the Government has to address those problems by giving monthly financial assistance for the ageing.
2. Particularly, the female ageing faces huge problems as compared to male. The government has to look into this menace by introducing legal measures to secure the female.
3. The Government has to provide employment opportunities for both male and female ageing according to their age. This may end-up the economic problems of the ageing in the long run and income of the ageing may assure economic security.

References

- Bhagat, B. Ram and Sayeed Unisa.** 2006. "Ageing and Dependency in India: A New Measurement." *Asian Population Studies*, 2(2): 201-14.
- Bloom, D. E., Mahal, A., Rosenberg, L. and Sevilla, J.** 2010. "Economic Security Arrangements in the context of Population Ageing in India." *International Social Security Review*, 63 (3/4): 59 - 89.
- Central Statistical Organization.** 2000. "A survey on Economic Activity of Ageing Population in India." New Delhi.
- Government of India.** 2001. "Census Report – 2001". Registrar of Census, New Delhi.
- Government of India.** 2011. "Situation Analysis of Elderly in India" Ministry of Statistics and Programme Implementation. New Delhi.

Language in India www.languageinindia.com

12 : 8 August 2012

S. Pichai Pilli, M.A., B.Ed., M.Phil. and T.S. Kalyani, Ph.D.

Economics of Ageing: A Study in Coimbatore District, Tamil Nadu

- Irudaya Rajan, S, Mishra, US and Sarma, PS.** 2003. “Demography of Indian Ageing,2001-2051.” *Journal of Ageing and Social Policy*, 15(2&3), 11-30.
- Irudaya Rajan, S., Mishra, US and Sarma, PS.** 1999. “*India’s Elderly: Burden Or Challenge?*” New Delhi: Sage Publications and London: Thousand Oaks.
- Irudaya Rajan.** 2006. “Population Ageing and Health in India.” Centre for Enquiry into Health and Allied Themes, Mumbai.
- Leete, Richard and Therese Jacobs.** 2002. “The Older Poor and Excluded in the Developing World.” in *Situation and Voice: Older Poor and Excluded in South Africa and India.* United Nations Population Fund Population Development Strategies Series No. 2.
- Liebig, Phoebe and Irudaya Rajan, S.** 2003. *An Ageing India: Perspectives, Prospects and Policies.* New York: The Haworth Press.
- National Sample Survey Organisation.** 1998. “Morbidity and Treatment of Ailments July, 1995- June, 1996 (NSS 52nd Round).” Report No.441, New Delhi, Government of India.
- National Sample Survey Organisation.** 2004. “Morbidity, Health Care and the Conditions of the Aged, 2004 (NSS 60th Round).” Report No.547, New Delhi, Government of India.
- Nilsson J, Masudrana AM. Naharkabir Z.** 2006. “Social Capital and Quality of Life in Old Age Results From a Cross-Sectional Study in Rural Bangladesh.” *Journal of Age Health*, 18 (3): 419-34.
- Sakthivel, Selvaraj, Anup Karan and S. Madheswaran.** 2011. “Elderly Workforce Participation, Wage Differentials and Contribution to Household Income.” Institute for Social and Economic Change, BKPAI Working paper: 4.
- Shankardass.** 1998. “Challenges of the Changing Socio-Economic and Psychological Status of the Aged.” Keynote Address Delivered at the Regional Conference Organized by Help Age India.

S. Pichaipillai, M.A., B.Ed., M.Phil.
Assistant Professor
Economics Wing
Directorate of Distance Education
Annamalai University
Annamalai Nagar
Chidambaram 608 002
Tamil Nadu
India
murugesancred@yahoo.com

T.S. Kalyani, Ph.D.
Professor of Economics
Economics Wing
Directorate of Distance Education
Annamalai University
Annamalai Nagar
Chidambaram 608 002
Tamil Nadu
India
tskalyani2010@gmail.com

Language in India www.languageinindia.com

12 : 8 August 2012

S. Pichaipilli, M.A., B.Ed., M.Phil. and T.S. Kalyani, Ph.D.
Economics of Ageing: A Study in Coimbatore District, Tamil Nadu