Scion's Care Meliorates Elderly Health: A Study of Differential in the Care and Support and its Impact on Wellbeing of Elderly in India

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Abstract: *According to Intergenerational Flow of Wealth Theory of J.C. Cladwell (1976), the decision of having high fertility in the developing countries is very rational from the point of view of the elderly. They are believed to truly act as a long-lasting support system to their parents when they get old in every aspect of life, but the scenario is changing rapidly. With rapid modernization of our society children are no longer the fixed-deposit of support of elderly even in a country like India. Isolation and helplessness have become the part and parcel of life of elderly even in modern India which adversely impacts their wellbeing. This paper is an effort to quantify the level of care and support provided by the children to the elderly of the country and how this quality of care finally affects their wellbeing through their subjective health. This paper has used the data of the recent large scale project of ageing conducted by ISEC, Bangalore and IEG, Delhi in sponsorship of UNFPA, India, named "Building Knowledge Base on Aging in India". The survey is conducted to develop a knowledge base in regard to the demographic, social and economic conditions, health needs and living arrangements and entitlements. Multinomial logit estimation is used to show the impact of socio-economic factors on the different care and support aspect and also on the wellbeing of the elderly. Marginal effect shows that quality of care and support to elderly is fast decreasing. With the expected bulge of elderly population in the coming decades, government must take some steps in advance to combat with this situation. In the light of empirical results, some policy prescription has been suggested for benefit of the elderly.*

Keywords: *Aging, Care and Support, Subjective Wellbeing, GHQ &SUBI, Marginal effect.*

1. Introduction

Aged population of India is fast increasing and very soon in next few decades India will be placed in the zenith of both having the largest population and highest number of older population in the world. The question is no longer whether that ageing is a prime issue or not but how different pathways can be developed to positively influence the economic, physical, emotional and social well-being of the elderly population. Since most physical, emotional and economic care to the older population has been provided by family members, ageing has been concerned with understanding and modelling kin availability. However modelling of kin availability has been a complicated process by the fact that while demographic forces impose constraint on the family, household and kin structure, these structure are also determined by social and cultural factors that are difficult to measure (Myers, 1992; Velkoff, 2001). Little is known about the complex decision-making process behind transfers of physical, emotional and economic care between family members (Wolf, Freedman, and Soldo, 1997) A majority of the older population aged 60 years and above lives in the less developed countries of the world. For countries undergoing fertility decline, of course it is not merely the size of older population that is growing, but also their relative share in total population (Treas, et al., 1986). Thus care-giving as one of the modality, plays a very influential role in the well-being of the older population. In a case study conducted in Tamil Nadu, about perception of aged people, an currently married man expressed that he would like to die before the death of his spouse to avoid miseries in later life (Rajan, 1999). Ageing of world population is the end product of demographic transition. The study of social lives of the elderly covers a large area, ranging from interpersonal relationships, living arrangement, to retirement, to intergenerational equity, health, care giving, death, bereavement, and the politics of age. It helps us to understand the diverse dimensions of what it is to be an elderly in our contemporary society. Hence the process of demographic transition, industrialization and development affect the status of the elderly (Ganguly, 2001). The tacit traditional intergenerational agreement is that parents raise children and when the children attain adulthood they in turn repay the parents by providing care and support at old age. However, this traditional agreement is undergoing some changes. Older person are living alone and also less older-person (except China) are living with their children and grandchildren. The traditional support base through family and kinship is shrinking due to reduced family size, nuclearization of families as well as both migrations within or outside the country. In addition globalization is adding to the pace at which divide between the attitudes of older and younger generations in widening. Hence the younger may prefer to live independently (Mujahid, 2006).

Care and support are thus unambiguously the utmost need of older generations. So, studying the changing pattern of care and support through actions and perceptions like volume of communication; satisfaction level with the economic support provided; perceptions of the elderly about the

way their children treat them in terms of importance, respect and dignity is one of the key steps towards analysing the subjective health of older population. Happiness and satisfaction with the current lifestyle are the two major components of subjective well-being of human wellbeing and so for the elderly it is no exception. It is also a well proven fact that being happy ultimately adds to overall wellbeing as mental health is one of the key constituents of overall health. So healthy living of an elderly population is very strongly correlated with the care and support which acts through subjective health.

2. A Brief Review of Literature

Overcoming of challenges faced by the ageing of population have become the gruesome most quest for the policy makers and researchers in modern India. According to Ghazy Mujahid, since ageing is a newer phenomenon in the south East Asia, the challenges are both larger and newer and they will face a steeper uphill task in dealing with the consequence of population ageing in next 60 years. While studying the adverse effect of ageing it is more "getting old" portion of population that concerns us .As ageing encompasses all the biological changes that occur over lifetime. "Getting old" on other hand, is a social concept and slightly related to the biological process of ageing (Desai, 1999).To describe old age as a period of social deprivation is to claim that our society is such that social processes compound organically based loss of capabilities among the old rather than compensating them for the loss. The problem of old age, as we commonsensically understand them are therefore them, are not therefore to be seen as derivable from inevitable and universal natural processes, but as being in substantial part, socially produced and hence (in principle) capable of alleviation. Old age is a social as well as natural product (Harris, 1983). A general feeling emerges with regard to the lack of reciprocation from children for all the sacrifices made in their upbringing by the parents. Children are considered to be the main support in old age but this feeling seem to have been materialised only in rare circumstances (Rajan, 1999).

There is a popular belief in Indian society that sons are superior to daughters because they give support to parents at their older age. There is also a belief in Hindu religion that a place in the heaven is only secured by the presence of a son. It is the son who performs the last right after the death of the person. But studies revealed that there is an inverse relationship among higher income group and support from children. In fact it is seen that, regarding support from children aged parents belonging to middle income group is in an advantageous position than those belonging to higher and lower income groups respectively. Also it is revealed that more children to urban woman do not secure greater support at older ages (Srivastava, 2010). With the trend towards nuclear family

setup, the vulnerability of elderly population is considerably increasing. The younger generation has little or no time for the aged because they are in the race to make both ends meet. The elderly expects more support from the younger people and most often they are not fulfilled. As a result there is a friction within the family which often results in abuse and neglect of elderly (Sebastian, Shekher, 2010). More number of children does not mean more comfort to parents at later years of life, as the children would tend to pass the responsibility of taking care of their parents among themselves (Chetna, 2001). Thus the irony remain in the scenario that we live life providing for our children with the hope that they retrieve the same when they are eligible to provide, but in reality only the direction of the transfer of care changes. Thus sometimes instead of getting back to those from whom we have got, it moves on to their progeny having the same notion of old-age provision in mind. Thus many a times in today's generation with the changing family structure perception of providing care and support is unidirectional and this trend will be more and more prevalent in future. There is also an opinion that, obligation for caring for vulnerable population (which include the older population) cannot rest with the family alone. The burden is too great and the resource is too few-not everyone is capable of providing care and not everyone has family members and friends to do so (WHO, 2002). Studies have identified adverse effect of caregiving among Korean American caregivers, including poor physical health (Kim and Knight, 2008; Casado and Sacco, 2012). So the young caregivers may not be likely willing to take that much of stress which may retard their health.

This paper has tried to show how the quality and quantity of care and support received by the older people from their direct family impacts their subjective health. As from literature we can find the find lots of evidences that healthy mind plays an important role in the well being of the individual. First it is important how we define care and support. According to *National Association for Social Workers (NASW)*, in care-giving the term "family" or "family care-givers" refers to family of origin, extended family, domesticated partners, friends or other individual who support an older adult. These individual may cross the lifespan from childhood to advance age together, they constitute the family system. For most part family caregivers support their ageing family members without financial compensation. Thus family does not include those whose primary relationship with the older adults is based on the financial or professional agreement. Family care-giving may include a variety of support or services that enhance or maintain older adult's quality of life (NASW, 2009).

1. Emotional, Social and Spiritual support.
2. Assistance to decision-making with health-care, financial matters and lifespan-planning.

3. Assistance with physical task.
4. Support in navigating and negotiating health and social service system, such as dealing with health and long-term care insurance, communicating with health care professionals or advocating for quality care and services.
5. Assistance with practical matters such as housekeeping, going to medical and other appointment.
6. Financial support includes direct financial assistance and help with bill paying.
7. Shared housing

WHO, states that understanding the complexities of the relationship between decision support and strengthening the foundation of care giving relationship begins with the understanding of the many way in which the term "caregiver" is defined and the many different relationship to the care recipient that it implies. Some of the possible guidelines provided by WHO are:

1. Recipient of care and those providing it should have a voice in decision making that affect them.
2. Though certain cross-cultural differences exist in defining abuse, there is no ethical justification for exploiting an individual's vulnerability.
3. Anyone who need long term care should feel comfortable that those providing it have the required knowledge, training and skills (WHO, 2002).

This paper is specifically dealt with the changing care pattern of the older population which is provided by their direct family members like sons and daughters and spouses. There are various aspects of living which constitutes the care and support frame of an older population. Living arrangement of the families, treating the aged people with respect, providing physical and psychological and economical support to the older population are some of the key dimensions of the care and support provided by the children. Like, what can be said about the impact of the living arrangement on the well-being of older population? Does the fact the older men and women in many developing countries still live with their adult children mean that they are cared by their co-resident children? It is said that living arrangement affect life satisfaction, health, and most importantly for those living in the community, the chances of institutionalization (Velkoff, 2001). Decision about co-residence is made within the family network and the socio-demographic characteristics of the parties involved are important in decision making process (Wolf,

Freedman, Soldo, 1997; Wolf and Soldo, 1988; Velkoff, 2001). Current situation of elderly is reflected in their living arrangements. In fact living arrangements are an important component of general well being of elderly. The most crucial aspect of living arrangement of elderly is co-residence with adult children in extended families or multigenerational households, where kin provide income, personal care and emotional support to elderly. In regard to a study of five villages of Bolinger district of Orissa, results suggest that traditional patrilineal or patrilocal society is still dominant where majority of elderly co-live with their married sons. However the striking part was that one-fifth of the elderly was living alone and further one-tenth living only with spouses without direct support and care from the kin. One of the striking features is that, living arrangement is not homogeneous, but differs significantly in terms of age gender, marital status and economic status (Panda, 1998).

It has also been said that objective measure of well-being should not alone be used to infer the content of the structure of subjective well-being of elderly population (Hermalin, 1997; Velkoff, 2001). For this purpose other aspect of care and support are also needed to be considered to draw a clear picture of the subjective health of older population. There has been substantial impact on relations, as the younger generations have been staying away from their parents. Interaction with elderly in such circumstances cannot merely be interpreted on bonds of affection but also on the basis of several other constraints. This aspect of keeping contact with elderly can be assessed in terms of the frequency of visits of the children to the parents. Also how frequent the elderly visits their children should be taken in consideration. Assessment of land ownership and degree of economic sufficiency indicates the proportion of elderly enjoying dual status of household head and household owner, shows a differential trend. It is also stated that if the elderly person wants to live a peaceful life, he or she should not divide his or her property and distribute amongst children before death (Rajan, 1999). On working at later ages of life, often older people feel that they are compelled to work for subsistence, self-respect and self-maintenance. The present educated young elite express a greater degree of discomfort in presence of elderly. They also have a large negative feeling about the behaviour, nature, way of living and outlook of the elderly (James, 1994).

A happy person who is young, healthy, well educated, well paid, extroverted, optimistic, worry-free, religious and married with high self-esteem and job morale, modest aspiration of either sex and of a wide range of intelligence is what can be termed as subjective well being (SWB) (Wilson, 1967). Human well-being both at physical and mental level is the ultimate goal of development. While there have been attempts to track physical well being through measuring aspects like health and nutrition status, anthropometric data and mortality rates, mental well-being has been relatively neglected as an important aspect of quality of life. The

empirical literature does show it to be sensitive to psycho-social stress. There is also a clear evidence of gender difference in the nature and extent of psychological stress (Sonpar, 2001). According to World Bank (1993), many condition like poverty, exploitation, discrimination, unemployment and violence, account for about 42 percent of the disability adjusted life-year loss. Psychopathology is at least two and a half times more prevalent in the lower social class than in highest (Neuegebauer et al., 1980; Sonpar, 2001). The association between poverty and mental health is not surprising as poverty imposes considerable stress on people while at the same time undermining many potential sources of social support. Factors such as social status and power and the effects of social comparison are also quite significant for the mental wellbeing (Sonpar, 2001). Higher psychiatric morbidity is found consistently among women across various backgrounds like rural/urban, religious and caste affiliation and socio-economic class. Depression is also found higher in women all over the world and India too (Nandi et al., 1980; Kapur and Singh, 1983; Nolen-Hoeksema, 1987, Sonpar 2001). Also a study in Madurai, finds loss of self-esteem and personal power accompanied by lack of employment leads to geropsychiatric morbidity in adult men (Venkobarao, 1989). Thus in all this perspective, it is very clear that subjective health of and elderly is very much associated to the social and economic factors and at old age care and support received by the elderly if the major path of achieving all the components of social and economic satisfaction. Thus it would be quite interesting to study the linkage between various dimensions of care and support and its impact on subjective health. This will also clear the picture of gap between the receipt and expectation of care and support of older people from the children. For this purpose, the GHQ (General Health Questionnaire) is a well established screening instrument for psychiatric disorders that measures psychological distress. Nagpal and Shell for WHO developed the subjective wellbeing inventory (SUBI) which used to measure subjective wellbeing of the subject. Also the general health questionnaires (GHQ) are a measure of current mental health and since its development by Goldberg in 1970s it has been extensively used in different setting and different cultures. Each item is rated in four-point scale. GHQ-28 is an instrument for measuring minor physical distress and gives an indication of mental health and quality of life (Gupta, et al., 2012). The total positive and negative scores are compared between different aspects of care and support to study the subjective wellbeing of elderly.

3. Objectives

- To examine the differential in the care and support provided and perceived by elderly with respect to different demographic, social and economic factors.

- To study the variation in the subjective wellbeing with respect to the difference in care and support and also by various socio-economic factors.
- To establish a relationship between subjective wellbeing and overall wellbeing of the elderly population.

4. Data and Methods

This paper has used the data of the recent large scale project of ageing conducted by Institute for Social and Economic Change, Bangalore and IEG, Delhi in sponsorship of UNFPA, India, named "Building Knowledge Base on Aging in India". The survey is conducted to develop a knowledge base in regard to the demographic, social and economic conditions, health needs and living arrangements and entitlements. The main objective of the study is to create a knowledge base on different aspect of aging in India, through a series of thematic studies. For sampling, data is collected from household of states with higher proportion of elderly. The survey is conducted in seven states, Kerala, Tamil Nadu, Maharashtra, Himachal Pradesh, Punjab, Orissa and West Bengal. A sample of 1280 household was selected from each states and it has been equally split between rural and urban, irrespective of the rural and urban proportion. Also 80 PSUs and 16 household per PSU have been covered. Two sets of questionnaires, one household questionnaire eliciting demographic, socio-economic detail and another individual questionnaire eliciting information from all the elderly member of household is used. There are four types of questions in the survey, questions that have pre-coded response with single choice, multiple choices, do not have pre-coded response and finally questions that are open ended.

In our study we have firstly tried to create a sound base before divulging into a detail analysis of estimation using multinomial logit model between the dependent and explanatory variable. As per our conceptual framework, the care and support are sub-categorised in the groups' namely physical social and economic support respectively. Suitable questions from the survey have been picked up and arranged as per our need to make the model. To substantiate the reason for the questions we have picked from the survey for modelling our support crosstabs of those questions with the various socio-economic variable have been carried out. Highly significant chi-square values have substantiated our cause of picking them as variable for showing the care and support base of older population from the family. Background variables like age, sex, marital status, religion, and caste, place of residence, living arrangement, education and wealth-quintile have been

considered to cover all the aspect of the life of elderly. Our social support index is a weighted average of three questions asked in the survey to the elderly, which signifies three dimension of social life of elderly. They are "feel about present living arrangement", "change of role in decision-making with age', "perception about importance of oneself in the family". Equal weightage have been given to the all three aspects while creating the index which consists of three categories, namely "good", "average" and "bad". For economic support we have used the data about what percentage of the sample elderly population thinks children, spouse and others as their first choice of economic support. In this case the proportions of elderly sample that are not at all dependent on anybody are not considered and hence it has resulted in reduction of the sample to some extent. But through thorough examination it was revealed that this was the best aspect of showing economic support and also the sample is still quite satisfactory for carrying out multinomial estimation. And for physical support, the question of proportion of sample elderly population expressing spouse, children and others as physically accompanying them for ailments is taken as a proxy for providing physical support to the elderly. Also similar estimation is carried out with same explanatory variable as in other case. It must also be stated that all cross tabulations results given the have highly significant chi-square. In our framework we have first tried to estimate the impact of socio-economic factors on the care and support dimension of the elderly sample population. For this purpose multinomial logit model is carried out. Then we have tried to estimate the effect of this care variable on the subjective well being on the elderly be estimating the impact of care and support on the GHQ and SUBI scores and reflecting the impact of care and support on the well being of the elderly. The scores of GHQ and SUBI have been broadly categorised in three divisions of equal weight. In every question the most optimistic answer is given the least score and the least one the worst score. Since there are 12 questions in GHQ, getting a score of 12 reflects the best state and getting a score of 48 the worst state. The same is applied to SUBI question, where there are 3 options given to each question to choose from. So best scoring is 9 while least scoring is 27. This study being a study of social science and not of medical field, the index has been grouped in three categories of "good" (ranging from 12 to 24 in GHQ, and 9 to 15 in SUBI); "average" (ranging from 25-36 in GHQ, and 16 to21 in SUBI) and "bad" (ranging from 37-48 in GHQ and 22 to 27 in SUBI) so as to fulfil the objective of showing how the differential in the social, economic and physical support impacts the GHQ and SUBI scoring, and not critically studying the mental health of elderly of the sample population in medical terms.

The framework of the model of estimation of care and support to the elderly used for this purpose is the Multinomial Logit Model (MNLM) can be written as,

$$ln\Omega_{m|b}=ln\frac{Pr(y=m|x)}{Pr(y=b|x)} = x\beta_{m|b} \text{ for m=1 to J}$$

Where, b is the base category, which is also referred to as the comparison group.

As $\ln\Omega_{b|b} - \ln 1 - 0$, it must hold that $\beta_{b|b} = 0$. That is, the log odds of the outcome in comparison to itself is always 0, and thus the effects of any independent, variables must also be 0. These J equations can be solved to compute the predicted probabilities.

$$Pr\ (y=m|x)=\frac{exp\ (x\beta_{m|b})}{\sum_{j=1}^{J}exp(x\beta_{j|1})}$$

Although the predicted probability will be the same regardless of the base outcome, b, changing the base outcome can be confusing since the resulting output from the mlogit appears to be quite different. Here we have three outcomes and fit the model with the alternative one as the base category. Probability equation would be

$$Pr(y=m|x)= \frac{exp\ (x\beta_{m|2})}{\sum_{j=1}^{J}exp\ (x\beta_{j|2})}$$

and obtain $\overline{\beta_{1|2}}$ and $\overline{\beta_{3|2}}$, where $\overline{\beta_{2|2}}=0$. Although estimated parameters are different, they are only different parameterization that provides the same predicted probabilities. The confusion arises only if it is not clear which part of the parameterization we are using. But STATA is a very helpful package in this format and hence we are using it for this purpose (Long et.al, 2006). Finally the marginal effect and the relative odds ratio of the multinomial logit model are being used to explain the impact of all the explanatory variables of the regressed one. This is the way in which the whole setup has been module.

Though it must be accepted that that data used in the study is a national level data and state wise variation in the care and support couldn't be observed from the study. Also due to the use of secondary data, it questions used to study care and support were not as direct and straight forward as it would have been if primary survey would have been conducted. Unfortunately primary survey couldn't be conducted due to limitation of time and hence there might be little discrepancy in the interpretation of the data, although the variable for the study have been selected with utmost caution and or high relevance to our theme.

5. Socio Demographic Characteristics Of BKBAI

Aging is a natural process of life span. Just because one turns 60, necessarily doesn't mean one will automatically become sick and useless. Keeping both mind and body healthy, keeping our interest and talent alive

and keeping our social relationship fresh are the keys of enjoying the process of aging. One should understand that aging in itself is not the only reason for the problem we encounter (Prakash I.J, 2012). Thus we can justify that better care and support to elderly directly impacts the quality of health and also the perception about it. In other words having a health body is definitely backed by good care from the family members as one of the critical factor, especially in old ages. While analysing, age groups 60-69, 70-79 and 80+ are sometimes defined as young-old, old-old and oldest-old. It is seen that oldest-old have mostly faced poorer health which is pretty reasonable as at such age physical retardation is much more and the care is the utmost need. Almost 32 per cent of the oldest-old have poor health as compared to 13 per cent of the young-old. Similarly young-old are the healthiest. In case of the marital status among the group consisting of widowed, divorced and separated almost two-third of the population is on not-so-good health state, giving a gloomy picture of the care and support scenario of this section and also reflecting the high unmet demand need for care of the vulnerable section of population. There exist a high differential be in all aspect between sex and it is more prominent in the aged population. Wealth quintile and education gives the same picture as we see the educated and richest are well cared of as compared to the poorer and illiterate people. Here the lack of ability to provide support by the care-givers is another criterion for this difference.

Comfort or discomfort about the current living arrangement is strongly linked with the fact that how good we are taken care off. It is observed the around 13 per cent of the elderly population is in all age group is uncomfortable in the current living arrangement which can be combined with economic instability and disrespect, lack of care and other discomforts they face from the current living arrangement. There is a negative relation between the wealth and the perception about the current living arrangement. Regarding perception about of the current living arrangement, economic support plays the most important role. Old age is truly prone to misery. The more aged one becomes, the more vulnerable one gets. Frequent changes in living area are more difficult to adjust by the elderly than the younger population. Thus regular shifting between children (if more than one children) at older ages can sometimes be cited as sign of lack of care and support from the children. Overall quite a substantial portion of the older sample population that is around 10 per cent move between children which can be attributed to the vulnerability of aged population. 10 per cent of the higher educated population and only seven percent of the less educated people are subjected to vulnerability of mobile living setup. Caution must be taken while interpreting as other factors like stronger self-preference of the higher educated play a substantial role in the choice of their living. Social values play a dominant role in citing the fact that agricultural workers mainly belonging to rural areas are ready to take responsibly of their parents single-handedly much more than their counterparts living working in secondary and tertiary

sector with high education and income compared to them like technicians, professionals, clerical and others.

The elderly were asked to rate the satisfaction with the level of satisfaction with the meeting and communication they had with their children. Quite a substantial portion of the population, i.e. around one fourth of the elderly in all age group says that they were partially or not at all satisfied with the level communication or meeting they have with their children. And this pattern prevails over all age group, which is quite a matter of concern. Education has a positive relationship with satisfaction derived by elderly from level of interaction with children. With more education come more economic stability and mostly quiet a few among the elderly of this category are self sufficient at least to some extent adds to the fact that they are taken well care of by their children. This case is quite reverse for the poor and elderly population with low level of education, leading to greater dissatisfaction. One of the very important of social care and support can be identified from the reason why older population are living alone or with spouse. in all ages children living away is the most dominant factor for living alone while family-conflict increases with age, i.e. around 22 per cent of the oldest-old state family-conflict to be the reason for living alone whereas only 14 per cent of young-old group says so. This is very crucial finding which can say that with more age the older population face greater adversity in terms of care and support from their family members. Migration of children in urban area is much more common because of various social and economic purposes, especially sons. Moreover urban families have less number of children as compared to rural families. So unlike rural area urban aged population are more likely to stay alone. Most striking result is only 10 per cent of urban population only states family-conflict to be the reason to be living alone or with spouse at old age, while almost double the number in the rural population so. This seriously pose a very striking outcome as many sociologist still believes rural India still holds more traditional values of care and support to older population as compared to urban area. Probably low level of economic stability and lower education can be stated as a reason for higher level family conflict especially in association of older population, who are many a time not capable of participate in providing actively economic support to the family. Higher education leads to greater economic and social freedom, as we also see that family-conflict has been stated as the least important reason by richest quintile of the society for living alone.

Economic support has been define on the basis of proportion of dependent elderly sample population ranking the person on whom they depend the most. Undoubtedly still the biggest source of support irrespective of any socio-economic background criteria, although the level of support by children varies intra-class between the variables. In the matter of sex men are more supported by children than woman, as most

literature explicitly supports the situation of older woman to be much worse than men (Cornman, 1996). United Nation advocates that "The situation of older woman must be a priority of policy actions (UN 2002). The plan denotes over 40 statements in the document to stress the vulnerability of older woman with respect to virtually every major aspect of well-being (Knodel et al., 2003). Here also the same picture is reflected. Next section explains the situation with detail econometric analysis.

6. Econometric Estimates

The highlights of the results of multinomial logistic estimates are given as follows.

6.1. Estimates of Care and Support

Multinomial logistic regression has been ran to estimate the marginal effect of the various socio-economic factors on the three types of care and support, namely social, physical and economic. For this analysis refer to Table 6.

6.1.a Social Support

Examining the pattern of social support of social care we find the marginal effect of age (young and old) is very significant and substantial, i.e., around 13.5 per cent and six per cent in case of average support and is negatively related to bad social support, i.e., 16.2 and eight per cent for two categories of age. The negative marginal effect between bad social care and age is pretty expected. Although marital status is not significant with good social care but it has a significant relationship with average and bad social support. This can also be supported from the fact that odds of having a bad or average social support relative to good are 1.75 times and 1.2 times higher for widowed, divorced and separated elderly than current married ones, holding ceteris paribus.(appendix A) While studying the odds ratio it is a common fact that impact of all the other explanatory factors are held constant, so henceforth it won't be repeated again. Hindus and Muslims have a significant negative marginal relationship with good and average social care. This describes the picture of woeful social care provided by children to their elderly of there to social groups. To validate the fact, the odds show 5.3 times and 4.1 times higher chance of having bad care in to good care among the Hindus and Muslims in respect to other religions (except Christians)(appendix A). Being from a rural area in comparison to urban locality do have a significant marginal effect on the various categories of social care. So does the level of education on average and bad social care. It can be said that higher the education higher is the quality of social care and support for elderly. As the marginal effect of middle and high education are more and more negatively related, i.e.,

minus four and minus nine per cent respectively, with respect to bad social support. So says the odds, where the odds of having bad to good social care decrease as education level increases, i.e., 1.2 time (in primary) to 0.6 times (in high). In case of locality, the odds of bad to good is 1.64 times greater for rural than urban area, which substantiates the fact that marginal effect to rural relative to urban is six per cent in case of bad social care. Economic stability reflected through wealth quintile plays a significant role especially in the poor categories for average and bad support section. Odds of having bad to good social support drastically falls from 41 times to 2 times as we move from the poorest to rich category (in reference to richest category). So we can conclude that economic status plays the biggest in having better social care and support. And the predicted probability of receiving bad social support is about 30 per cent of the among the total elderly sample population.

6.1.b Physical Support

Marginal effect of age on the section of population giving physical care reflects the genuine concern of the paper. While it is positively related to none or spouse but it is negatively related to children, it is seen that there is a decrease in marginal effect with increase in age by about 10 per cent for none or spouse. As with older age it get more difficult for own self or the older companion to take care of each other. Although the negative coefficient of marginal effect of children decreases with rise in age, but still it has a strong negative relationship. This is also clearly shown by the odds which states that chances of getting physical support is by none or spouse is 5 times and 3 times higher in both age-groups 60-69 and 70-79 compared to the oldest age-group of 80+, holding others constant (appendix B). Elderly women are more vulnerable in terms of physical care. Odds of no support or support from spouse in respect of children are 2.2 times higher in the elderly women than men. But a positive picture comes out form the fact that children takes 13 per cent more care of the widowed, divorced and separated elderly in comparison to currently married ones. The result of odds ratio also shows that chances of getting support from children for not currently married section are 2.2 times higher. The odds for locality show a tendency of receiving 1.2 times more zero support or support from spouse than children in rural area as compared to urban. And children provide 5.3 times more support compared to no support or support from spouse when elderly are living with them. Compatible to this is the marginal effect of 37 per cent of children's support for elderly living with them. Higher educated elderly takes less physical support as compared to others as they are mostly self-sufficient which is reflected by the fact that a negative marginal effect of 17 per cent with respect to support from children exists. Unfortunately for the elderly in India, it is predicted that in old age around 38 per cent of elderly will remain with no support or old spouse as the only source of support.

6.1.c Economic Support

It is unanimously acclaimed fact that children are the biggest source of support irrespective of any background. But how much is the picture changing is our point of interest? Compared to male, marginal effect of female are nine per cent more in case of support from children. The odds also state 8 times more economic support by children with respect to spouse for female in comparison to male, holding other things constant. In the case of single elderly the odds of providing economic support by children in respect to spouse is mammoth 60 times greater than currently married elderly. It also has a significant marginal effect of 24 per cent of support by children for them. This pattern remains unchanged in case of living with children, where odds for children support is 5 times more and marginal effect being 27 per cent (Appendix C). Among all religion group Muslim and Christian young generation provide the largest share of economic support compared to spouse with odds of around 2.5 times higher as to 1.5 times of Hindus. The marginal effect of Muslims on children as a source of support is also significant and is around five per cent. So overall it is predicted that 87 per cent of economic support is provided by children to the elderly.

6.2 Subjective health

In this section the analysis of multinomial logit estimates of the care and support and socio-economic factors of the GHQ and SUBI score, which are the proxy for level of subjective wellbeing are being presented.

6.2.a General Health Questionnaire (GHQ)

Two different set of regression had been executed taking GHQ scores as the dependent variable, to show them the impact of care and support and socio-economic factors on the subjective wellbeing through GHQ scores.

The first sets of multinomial logit estimates have considered various ranges of social, physical and economic care and support as explanatory variable. Through this we observe that bad quality of social support have a very strong negative marginal effect on the good and average GHQ scores of elderly, which is 74 and 26 per cent respectively. So it can be said that social care and support is the most important factor that impacts the GHQ score which is a proxy for mental health. Odds ratio also supports the stand. It is also predicted that around 43 per cent of the elderly will be on average score of GHQ, with in only a moderate state of subjective health with given level of care and support.

We find that GHQ score are significantly related to the various socio-economic factors like age, sex, marital status, higher education. Wealth

quintile has a very strong marginal effect on the wellbeing of elderly is studies through scores of GHQ. It is positively related to average and bad scores of GHQ and its effect decreases as we move up the orders of wealth quintile, which has been a consistent symptom throughout our analysis. In respect to the various socio-economic backgrounds it is predicted that around 57 per cent of the elderly will be in the category of bad in GHQ score. And it again stresses the utmost need of these people be properly cared by the care-givers.

6.2.b. Subjective Well-being Inventory (SUBI)

The original version consists of 40 item questionnaire. For each item there are three responses. It is validated through factor analysis. This short version is a nine item questionnaire and the factors are general wellbeing-positive effect, expectation achievement congruence and confidence in coping (Mohamed et al., 2002). Social care plays a very significant role in good and bad SUBI score and has a negative effect of 18 per cent and positive effect of 19 per cent respectively in both the categories. While we find economic support significant with good score in SUBI but not others. So it gets clear to social care and support (through importance and social respect) is the most essential item in case of good SUBI score and hence to inculcate higher confidence and positive attitude towards life than any other form of care or support. It is also predicted that majority of the elderly of the sample is around average SUBI score i.e., around 63 per cent and around 22 per cent of elderly is very pessimistic about life, which play a very big role in the in their ill-health and is hence a gruesome cause of concern.

7. Conclusion and Policy Suggestion

The demographic profile depicts that between 2000-2050, the overall population of India will grow by 55 per cent whereas the population in the 60 years and above age group will increase by 362 per cent, i.e., India will have one-eighth of the world's total older population. In the earlier stages when mortality levels were high, an adult child may not reside for long with their older parents. As adult parents may not live to a very old age, so the possibility of co-residence was not long (Cornman, 1996). But with increasing in longevity the situation is very different, as older people live long and in their rather larger 60 year and above life they need support to live. Our study has already shown the true extent if importance of having good care and support from the family and its impact on the wellbeing of elderly. Especially social support, in the form of providing respect, dignity to the older person and also economic support through at least fulfilment of minimum requirement for the healthy life of older person are of utmost need. Also article 47 of the Constitution provides that the state within the limit of its economic capacity and development, make effective provision for securing the right to work, to education and to public assistance in case

of unemployed, old age, sickness and disablement and in other cases of undeserved want.

Initially the National Policy for Older Persons (NPOP), 1999 had the objective to encourage individual to make provision for their own and as well as for their spouse. It also encourages family members to take care of the old people in the family. So does the draft of the National Policy for Senior Citizens (NPSC), 2011, which states institution care to the older people as last resort, while the main responsibility will remain vested to the family, which would partner the community, government and private sector. It also promotes the concept of "Aging in place" i.e., with own home, housing, income security and homecare services, old age pension and access to health-care insurance and other programmes and services to ensure dignity in old age. A right step to this direction was taken with The Maintenance and Welfare of Parents and Senior Citizen Act, 2007, which makes maintenance of parents and older population by children and relatives obligatory and justiciable by the tribunal, penal provision for abandonment of senior citizen, adequate medical facility and security for senior citizen. As a policy suggestion, the NPSC should stress on the more and more effective implementation of Maintenance and Welfare of Parents and Senior Citizen Act, 2007 (CSO GOI, 2011).

Although the Central Sector Scheme of Integrated Programme for Older Person, 1992 exists, and it is being made flexible to meet the diverse needs of older persons including reinforcement and strengthening of the family, awareness generation on issues pertaining to older population, but still the results of these schemes are far from desired. Our analysis clearly shows the growing concerns of the lack of care and support towards the older population especially from the children. Though there are policies and programmes to take care of the elderly in the society, in reality these policies are not working efficiently to meet the needs of the elderly, there are needs to have new approach and plan for their implementation (Bansod, 2011).

To summarize the finding we can say that, in India older population's wellbeing is significantly affected by the actions of the children of their family. So there is an urgent need to imbibe value in the younger generation of today's India. It is also true that it is very tough for the government to take care of such a huge older population in the coming years. In that case it can be stated that family, especially the children has to play the master-role of caregivers to the old. So the value education as a part of schooling in the initial years may help them to realise the contribution made by their elders in their growing up and path of success and help them develop the feel of responsibility in themselves to genuinely take-up the role of caregivers to them in their old age.

Another suggestion is made from the study of the subjective wellbeing of the elderly that, in hospitals like any other specialised ward, a geriatric ward needs to be promoted to deal with the diseases mostly faced by elderly and the number of doctors and medical professional specialised in geriatric need to increase in coming years. This will truly help in providing better physical support to the elderly and also combat with the mental health problems of the elderly of the country. This will not only directly impact in the improvement of the health of older people, but will also help in enhancing the care and support to them provided by their children, as it would be then much more convenient to provide. But it should be kept in mind that, these special care units should be opened not only in private medical centres but also in government hospitals, CHCs, and PHCs, in large scale. Then only it will be truly meaningful for the large section of poor elderly, who will be able to derive the utility from them in large extent.

Since lack of economic support has the most gruesome impact on the wellbeing of elderly, some handsome and realistic action needs to be taken to solve the problem. Although there are various schemes like, Indira Gandhi Vrudha Shetmajur Mahila Yojana, Sanjay Gandhi Niradhar Yojana, Sravanbal Niradhar Yojana, Old age Pension Scheme etc, most elderly are generally ignorant about these schemes and even those who are aware are not very satisfied with the schemes, because of the delay in availing promised benefit (Bansod, 2011). So there is a need to restructure the schemes to increase their efficiency and also to choose the "vulnerable elderly" group among all the older people who are the worst hit of aging, so that they can be provided with some respite.

So the three main policy recommendations that can be provided from the study are:

1. To enhance value education in the schooling years so as to make the youth of the country realise the importance of providing care and support to the older people.
2. Promotion and expansion of geriatric department in the hospitals and other medical centres, especially Govt. Hospitals and medical centres, so as to provide more support to the older population in dealing with their illness.
3. Making the social security and pension schemes more efficient and active, in the upcoming National Policy for Senior Citizen, so that many poor people can get the benefit out of it and are able to live a life of dignity in old age.

As India continues to experience demographic and health transitions, it will be critical to monitor the ways in which the informal social networks

from both family and friends will continue to support Indians well into old age (Berkman, et al, 2012). For sure, essence of care of progenitors will substantially impact health of elderly more and more in coming days.

Acknowledgement

Table 6.1.a
Social Support of Elderly: Multinomial Logit Estimates

Social Support									
	Good			Average			Bad		
variable	marginal effect	z	P>z	marginal effect	z	P>z	marginal effect	z	P>z
age1*	0.028	4.29	0	0.135	7.62	0	-0.162	-9.39	0
age2*	0.024	2.3	0.021	0.058	3.33	0.001	-0.082	-5.13	0
sex*	0.011	2.86	0.004	0.003	0.29	0.77	-0.015	-1.25	0.212
marital*	-0.011	-2.73	0.006	-0.067	-5.55	0	0.079	6.52	0
religi~h*	-0.053	-6.76	0	-0.113	-6.66	0	0.166	10.18	0
religi~m*	-0.025	-6.51	0	-0.143	-4.59	0	0.168	5.31	0
religi~c*	-0.025	-6.05	0	-0.066	-1.54	0.125	0.090	2.08	0.038
castesc*	0.006	1.08	0.278	-0.027	-1.81	0.071	0.021	1.42	0.155
castest*	-0.003	-0.23	0.815	0.062	2.8	0.005	-0.059	-2.86	0.004
casteobc*	-0.006	-1.39	0.164	-0.041	-3.36	0.001	0.046	3.82	0
locality*	-0.011	-3.08	0.002	-0.049	-4.45	0	0.060	5.46	0
primary*	-0.010	-1.95	0.051	0.052	3.55	0	-0.042	-2.92	0.004
middle*	-0.003	-0.74	0.46	0.047	3.51	0	-0.043	-3.31	0.001
high*	0.005	1.06	0.29	0.092	5.97	0	-0.098	-6.37	0
wpoorest*	-0.055	-16.22	0	0.384	-19.7	0	0.439	22.57	0
wpoorer*	-0.042	-12.44	0	-0.235	-11.84	0	0.278	13.9	0
wmiddle*	-0.029	-8.71	0	-0.101	-5.2	0	0.129	6.6	0
wrich*	-0.019	-5.62	0	-0.005	-0.28	0.778	0.024	1.27	0.203
liv_arr*	0.000	-0.06	0.953	-0.020	-1.59	0.112	0.020	1.63	0.102
Number of obs		9845							

LR chi2(38)	1845.66
Prob > chi2	0
Pseudo R2	0.1142
Log likelihood	-7156.388

Table 6.1.b. Physical Support of Elderly: Multinomial Logit estimates

	None or Spouse			Children			Others		
variable	M.effect	z	P>z	M.effect	z	P>z	M.effect	z	P>z
age1*	0.374	7.07	0	-0.297	-5.59	0	-0.077	-3.33	0.001
age2*	0.266	3.78	0	-0.209	-3.13	0.002	-0.056	-3.69	0
sex*	0.195	5.06	0	-0.165	-4.26	0	-0.030	-1.74	0.082
marital*	-0.197	-5.28	0	0.130	3.37	0.001	0.067	3.42	0.001
religi~h*	0.026	0.4	0.69	0.072	1.13	0.259	-0.098	-2.62	0.009
religi~m*	-0.030	-0.38	0.71	0.078	0.97	0.33	-0.048	-3.15	0.002
religi~c*	0.185	1.49	0.14	-0.126	-1.02	0.307	-0.059	-3.86	0
castesc*	0.135	2.72	0.01	-0.111	-2.29	0.022	-0.024	-1.48	0.138
castest*	0.145	1.61	0.11	-0.110	-1.25	0.213	-0.036	-1.65	0.099
casteobc*	0.032	0.77	0.44	-0.023	-0.57	0.569	-0.009	-0.52	0.603
locality*	-0.022	-0.59	0.56	0.037	0.99	0.321	-0.015	-0.96	0.335
primary*	0.055	1.08	0.28	-0.012	-0.23	0.817	-0.044	-2.64	0.008
middle*	0.067	1.4	0.16	-0.086	-1.82	0.069	0.019	0.75	0.455
high*	0.128	2.03	0.04	-0.171	-2.86	0.004	0.043	1.09	0.276
wpoorest*	-0.171	-2.99	0	0.035	0.5	0.616	0.136	2.07	0.039
wpoorer*	-0.131	-2.4	0.02	0.034	0.54	0.588	0.097	1.7	0.089
wmiddle*	-0.140	-2.6	0.01	0.053	0.84	0.4	0.086	1.5	0.134
wrich*	-0.213	-4.38	0	0.072	1.03	0.302	0.141	1.98	0.048
liv_arr*	-0.368	-	0	0.369	9.33	0	-0.001	-0.06	0.953

	8.62				

Number of obs	1119
LR chi2(38)	373.63
Prob > chi2	0
Pseudo R2	0.1824
Log likelihood	-837.21418

Table 6.1.c. Economic Support of Elderly: Multinomial Logit estimates

	Spouse			Children			Others		
variable	M.effect	z	P>z	M.effect	z	P>z	M.effect	z	P>z
age1*	0.05	4.38	0.00	-0.05	-3.42	0.00	0.00	-0.53	0.59
age2*	0.02	1.43	0.15	-0.01	-0.38	0.70	-0.02	-2.08	0.04
sex*	-0.13	-14.81	0.00	0.09	7.98	0.00	0.04	5.63	0.00
marital*	-0.31	-31.93	0.00	0.24	19.53	0.00	0.08	10.35	0.00
religi~h*	-0.02	-1.86	0.06	0.04	2.78	0.01	-0.02	-1.94	0.05
religi~m*	-0.04	-5.80	0.00	0.05	3.57	0.00	-0.01	-0.44	0.66
religi~c*	-0.03	-3.46	0.00	0.05	2.59	0.01	-0.01	-0.75	0.46
castesc*	0.01	1.11	0.27	-0.01	-0.69	0.49	0.00	-0.21	0.84
castest*	0.01	0.68	0.50	0.02	0.88	0.38	-0.03	-2.70	0.01
casteobc*	-0.02	-3.21	0.00	0.04	4.41	0.00	-0.02	-2.87	0.00
locality*	-0.02	-2.83	0.01	0.00	0.40	0.69	0.01	2.20	0.03
primary*	-0.01	-1.78	0.08	0.01	1.19	0.23	0.00	0.03	0.98
middle*	0.01	1.35	0.18	-0.02	-1.79	0.07	0.01	1.12	0.27
high*	0.00	-0.45	0.65	-0.01	-0.75	0.46	0.01	1.21	0.23
wpoorest*	-0.05	-6.59	0.00	0.00	0.11	0.91	0.05	2.98	0.00
wpoorer*	-0.04	-5.99	0.00	0.01	1.00	0.32	0.03	2.05	0.04
wmiddle*	-0.04	-5.92	0.00	0.02	1.81	0.07	0.01	1.24	0.22
wrich*	-0.02	-3.08	0.00	0.01	0.52	0.60	0.01	1.25	0.21
liv_arr*	-0.15	-9.40	0.00	0.27	14.98	0.00	-0.13	-8.53	0.00

Number of obs	7118
LR chi2(38)	3017.92
Prob > chi2	0
Pseudo R2	0.2947
Log likelihood	-3610.5651

Average Predicted Probability of Social Support
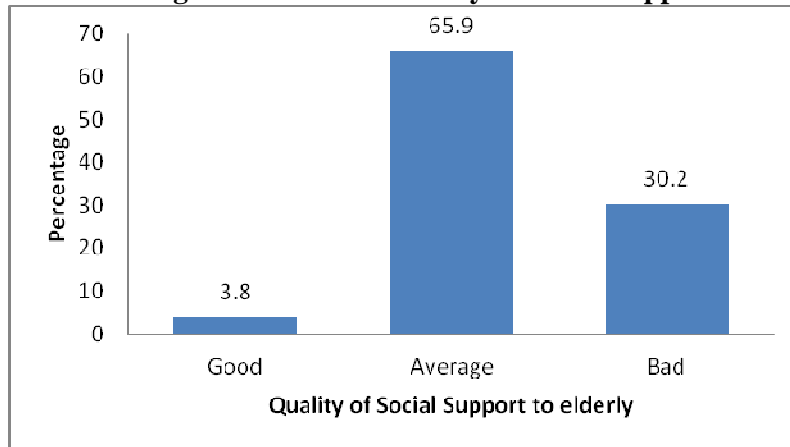
Average Predicted Probability of Physical Support
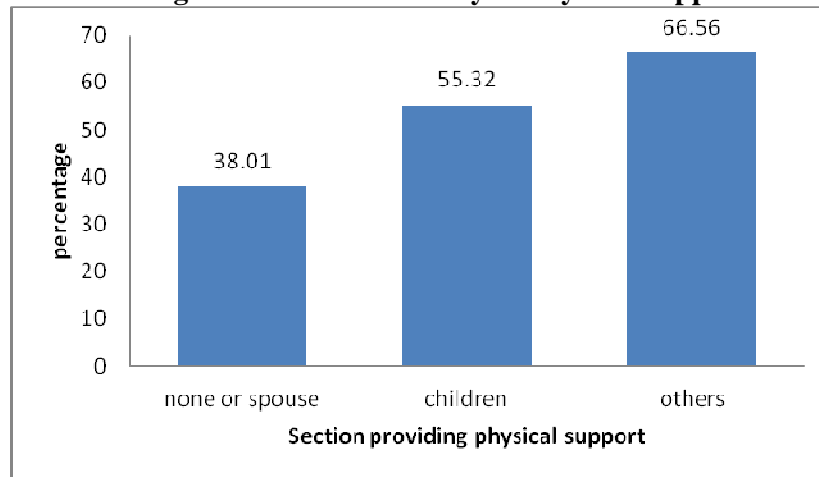
Average Predicted Probability of Economic Support
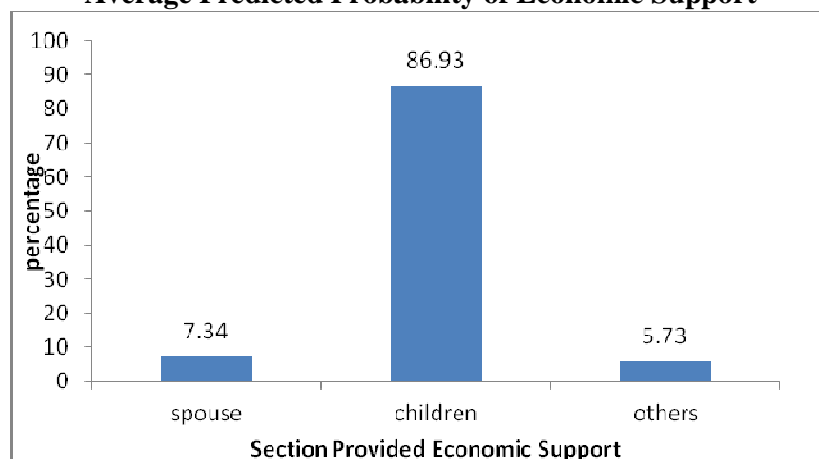
Table 6.2.a. GHQ: Multinomial logit estimates (with support)

GHQ									
	Good			Average			Bad		
variable	M.effect	z	P>z	M.effect	z	P>z	M.effect	z	P>z
soc~tavg*	-0.67	-37.48	0.00	-0.29	-15.75	0.00	0.96	437.46	0.00
socia_~d*	-0.74	-78.01	0.00	-0.26	-26.95	0.00	1.00	240000.00	0.00
physic~e*	-0.07	-2.41	0.02	0.06	2.28	0.02	0.00	1.13	0.26
physic~n*	-0.16	-6.32	0.00	0.14	5.95	0.00	0.01	2.93	0.00
eco_sp~e*	-0.06	-3.20	0.00	0.06	3.20	0.00	0.00	0.12	0.91
eco_ch~n	-0.07	-11.58	0.00	0.07	11.59	0.00	0.00	0.88	0.38
Number of obs	9828.00								
LR chi2(12)	2200.01								
Prob > chi2	0.00								
Pseudo R2	0.13								
Log likelihood	-7605.46								

Table 7.2.b. GHQ: Multinomial Logit estimates (with socio-economic factors)

GHQ (with socio-economic backgrounds)	Good			Average			Bad		
variable	M.effect	z	P>z	M.effect	z	P>z	M.effect	z	P>z
age1*	0.18	9.63	0.00	-0.12	-6.82	0.00	-0.06	-7.15	0.00
age2*	0.06	2.90	0.00	-0.04	-1.83	0.07	-0.02	-4.47	0.00
sex*	0.05	3.88	0.00	-0.05	-4.08	0.00	0.00	0.18	0.86
marital*	-0.02	-1.65	0.10	0.00	0.39	0.70	0.02	3.12	0.00
religi~h*	-0.19	-10.69	0.00	0.15	8.72	0.00	0.04	5.75	0.00
religi~m*	-0.29	-12.71	0.00	0.25	9.28	0.00	0.04	1.80	0.07
religi~c*	-0.06	-1.48	0.14	0.02	0.40	0.69	0.04	1.31	0.19
castesc*	-0.02	-1.48	0.14	0.00	0.22	0.83	0.02	2.70	0.01
castest*	0.01	0.35	0.73	-0.04	-1.44	0.15	0.03	2.10	0.04
casteobc*	-0.03	-1.95	0.05	-0.01	-0.53	0.60	0.03	5.12	0.00
locality*	0.00	-0.40	0.69	-0.01	-1.03	0.31	0.02	3.58	0.00
primary*	0.01	0.85	0.39	0.00	0.02	0.99	-0.01	-2.77	0.01
middle*	0.05	3.29	0.00	-0.03	-1.82	0.07	-0.02	-4.48	0.00
high*	0.13	7.51	0.00	-0.10	-5.77	0.00	-0.03	-5.33	0.00
liv_arr*	-0.08	-5.87	0.00	0.08	6.05	0.00	0.00	0.32	0.75
wpoorest*	-0.38	-22.44	0.00	0.26	11.74	0.00	0.12	5.88	0.00
wpoorer*	-0.25	-14.16	0.00	0.18	9.11	0.00	0.07	4.46	0.00
wmiddle*	-0.17	-9.32	0.00	0.10	5.42	0.00	0.06	4.19	0.00
wrich*	-0.07	-3.89	0.00	0.02	1.24	0.22	0.05	3.41	0.00
Number of obs	9827								
LR chi2(38)	1568.36								
Prob > chi2	0								
Pseudo R2	0.0901								
Log likelihood	-7920.359								

Table 6.2.c. SUBI: Multinomial logit estimates (with support)

Subi									

variable	Good M.effect	z	P>z	Average M.effect	z	P>z	Bad M.effect	z	P>z
soc~tavg*	-0.18	-11.11	0.00	-0.02	-0.61	0.54	0.19	5.99	0.00
socia_~d*	-0.24	-24.20	0.00	-0.30	-7.61	0.00	0.53	12.85	0.00
physic~e*	-0.02	-0.97	0.33	-0.04	-1.45	0.15	0.05	2.30	0.02
physic~n*	-0.01	-0.86	0.39	-0.09	-3.88	0.00	0.10	4.86	0.00
eco_sp~e*	-0.02	-1.93	0.05	0.00	0.27	0.78	0.01	0.94	0.35
eco_ch~n	-0.03	-8.75	0.00	0.00	0.16	0.88	0.03	6.67	0.00
Number of obs	9677.00								
LR chi2(12)	1634.13								
Prob > chi2	0.00								
Pseudo R2	0.09								
Log likelihood	-8458.4623								

Predicted impact of Care and Support on GHQ
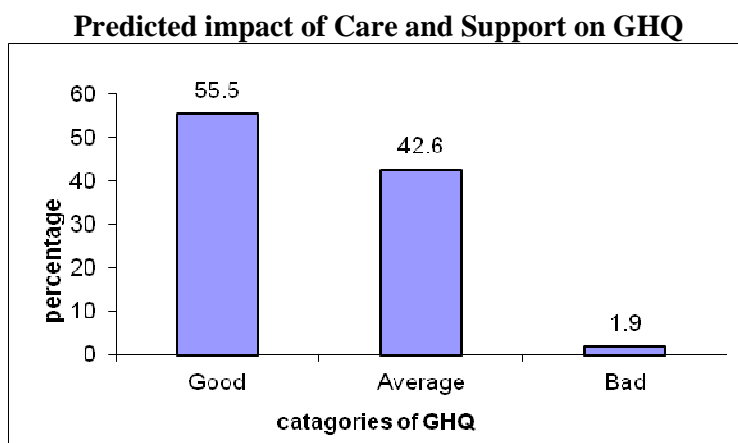
Predicted GHQ for various socio-economic backgrounds
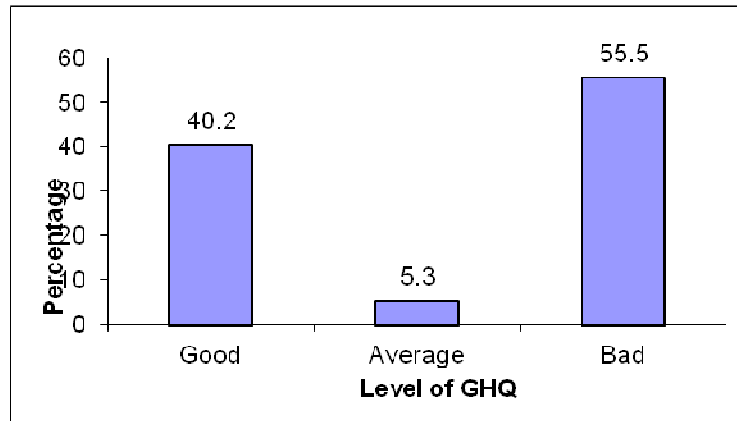
Predicted SUBI of the elderly
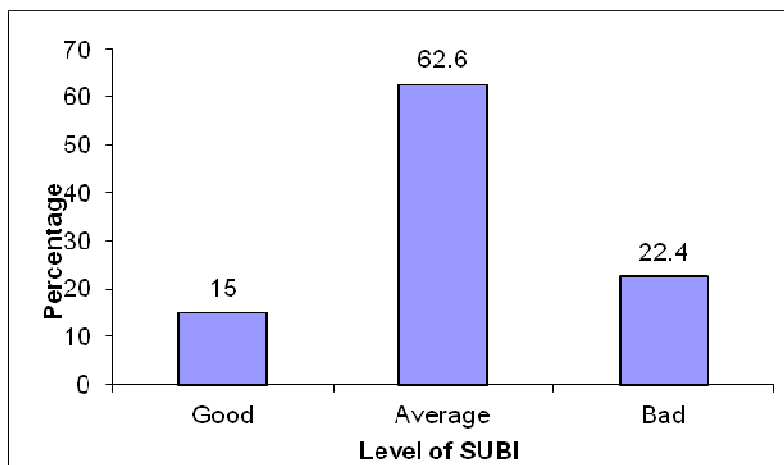
Appendix
Odds ratio: Multinomial Logit Model
Table A

Odds for Social Support

Odds comparing
Alternative 1
to Alternative 2

to Alternative 2	b	z	P>z	odds	b	z	P>z	odds	b	z	P>z	odds	b	z	P>z	odds
	Age(60-69)				**Age(70-79)**				**Locality**							
good -bad	1.31	6.11	0	3.71	0.83	3.7	0	2.30	-0.49	-4.59	0.00	0.61				
good -average	0.59	2.85	0.004	1.81	0.45	2.1	0.037	1.57	-0.22	-2.21	0.03	0.80				
bad -good	-1.31	-6.11	0	0.27	-0.83	-3.7	0	0.44	0.49	4.59	0.00	1.64				
bad -average	-0.72	-9.11	0	0.49	-0.38	-4.5	0	0.69	0.27	5.20	0.00	1.32				
average -good	-0.59	-2.85	0.004	0.55	-0.45	-2.1	0.037	0.64	0.22	2.21	0.03	1.25				
average -bad	0.72	9.11	0	2.05	0.38	4.5	0	1.46	-0.27	-5.20	0.00	0.76				
	Sex				**Marital status**				**Living Arrangement**							
good -bad	0.34	2.99	0.00	1.41	-0.56	-4.42	0.00	0.57	-0.08	-0.56	0.58	0.93				
good -average	0.29	2.72	0.01	1.33	-0.20	-1.68	0.09	0.82	0.02	0.18	0.86	1.02				
bad -good	-0.34	-2.99	0.00	0.71	0.56	4.42	0.00	1.75	0.08	0.56	0.58	1.08				
bad -average	-0.05	-0.96	0.34	0.95	0.36	6.35	0.00	1.43	0.10	1.63	0.10	1.10				
average -good	-0.29	-2.72	0.01	0.75	0.20	1.68	0.09	1.22	-0.02	-0.18	0.86	0.98				
average -bad	0.05	0.96	0.34	1.06	-0.36	-6.35	0.00	0.70	-0.10	-1.63	0.10	0.91				
	Religion(Hindu)				**Religion(Muslim)**				**Religion(Christian)**							
good -bad	-1.67	-11.50	0.00	0.19	-1.42	-6.08	0.00	0.24	-1.25	-4.21	0.00	0.29				
good -average	-0.84	-7.23	0.00	0.43	-0.72	-3.46	0.00	0.49	-0.88	-3.51	0.00	0.42				
bad -good	1.67	11.50	0.00	5.34	1.42	6.08	0.00	4.13	1.25	4.21	0.00	3.48				
bad -average	0.83	8.10	0.00	2.29	0.70	5.35	0.00	2.01	0.37	2.00	0.05	1.45				
average -good	0.84	7.23	0.00	2.33	0.72	3.46	0.00	2.05	0.88	3.51	0.00	2.41				
average -bad	-0.83	-8.10	0.00	0.44	-0.70	-5.35	0.00	0.50	-0.37	-2.00	0.05	0.69				
	Caste(SC)				**Caste(ST)**				**Caste(OBC)**							
good -bad	0.08	0.53	0.59	1.08	0.14	0.43	0.66	1.16	-0.30	-2.45	0.01	0.74				
good -average	0.18	1.39	0.17	1.20	-0.16	-0.50	0.62	0.85	-0.09	-0.76	0.45	0.92				

bad -good	-0.08	-0.53	0.59	0.93	-0.14	-0.43	0.66	0.87	0.30	2.45	0.01	1.35
bad -average	0.11	1.58	0.11	1.11	-0.31	-2.75	0.01	0.74	0.21	3.76	0.00	1.24
average -good	-0.18	-1.39	0.17	0.83	0.16	0.50	0.62	1.17	0.09	0.76	0.45	1.09
average -bad	-0.11	-1.58	0.11	0.90	0.31	2.75	0.01	1.36	-0.21	-3.76	0.00	0.81

	Education(primary)				**Education(Secondary)**				**Education(High)**			
good -bad	-0.16	-0.84	0.40	0.86	0.06	0.45	0.65	1.06	0.50	3.47	0.00	1.64
good -average	-0.38	-2.11	0.04	0.69	-0.16	-1.23	0.22	0.85	0.00	-0.02	0.99	1.00
bad -good	0.16	0.84	0.40	1.17	-0.06	-0.45	0.65	0.94	-0.50	-3.47	0.00	0.61
bad -average	-0.22	-3.06	0.00	0.80	-0.22	-3.32	0.00	0.80	-0.50	-5.80	0.00	0.61
average -good	0.38	2.11	0.04	1.46	0.16	1.23	0.22	1.17	0.00	0.02	0.99	1.00
average -bad	0.22	3.06	0.00	1.25	0.22	3.32	0.00	1.25	0.50	5.80	0.00	1.65

	Wealth Quintile(poorest)				**Wealth Quintile(poorer)**				**Wealth Quintile(middle)**				**Wealth Quintile(rich)**			
good -bad	-3.71	-14.01	0.00	0.02	-2.43	-13.08	0.00	0.09	-1.36	-8.95	0.00	0.26	-0.65	-4.69	0.00	0.52
good -average	-1.86	-7.23	0.00	0.16	-1.28	-7.30	0.00	0.28	-0.82	-5.97	0.00	0.44	-0.57	-4.75	0.00	0.57
bad -good	3.71	14.01	0.00	40.95	2.43	13.08	0.00	11.40	1.36	8.95	0.00	3.89	0.65	4.69	0.00	1.92
bad -average	1.85	20.02	0.00	6.35	1.15	13.50	0.00	3.17	0.54	6.41	0.00	1.72	0.08	0.98	0.33	1.09
average -good	1.86	7.23	0.00	6.45	1.28	7.30	0.00	3.60	0.82	5.97	0.00	2.26	0.57	4.75	0.00	1.76
average -bad	-1.85	-20.02	0.00	0.16	-1.15	-13.50	0.00	0.32	-0.54	-6.41	0.00	0.58	-0.08	-0.98	0.33	0.92

Table B

Odds for Physical Support

Odds comparing Alternative 1 to Alternative 2	b	z	P>z	odds	b	z	P>z	odds	b	z	P>z	odds	b	z	P>z	odds
		Age(60-69)				**Age(70-79)**				**Locality**						
none_or_ -others	2.21	5.70	0.00	9.14	1.67	4.09	0.00	5.32	0.17	0.60	0.55	1.18				
none_or_ -children	1.67	5.77	0.00	5.33	1.05	3.45	0.00	2.85	-0.13	-0.77	0.44	0.88				
others-none_or_	-2.21	-5.70	0.00	0.11	-1.67	-4.09	0.00	0.19	-0.17	-0.60	0.55	0.84				
others-children	-0.54	-1.74	0.08	0.58	-0.62	-1.91	0.06	0.54	-0.29	-1.12	0.26	0.74				
children-none_or_	-1.67	-5.77	0.00	0.19	-1.05	-3.45	0.00	0.35	0.13	0.77	0.44	1.13				
children-others	0.54	1.74	0.08	1.72	0.62	1.91	0.06	1.87	0.29	1.12	0.26	1.34				
		Sex				**Marital status**				**Living Arrangement**						
none_or_ -others	0.97	3.10	0.00	2.64	-1.49	-4.84	0.00	0.23	-0.76	-2.32	0.02	0.47				
none_or_ -children	0.81	4.78	0.00	2.25	-0.77	-4.49	0.00	0.46	-1.67	-8.04	0.00	0.19				
others-none_or_	-0.97	-3.10	0.00	0.38	1.49	4.84	0.00	4.44	0.76	2.32	0.02	2.14				
others-children	-0.16	-0.54	0.59	0.85	0.72	2.44	0.02	2.05	-0.91	-2.77	0.01	0.40				
children-none_or_	-0.81	-4.78	0.00	0.44	0.77	4.49	0.00	2.17	1.67	8.04	0.00	5.33				
children-others	0.16	0.54	0.59	1.18	-0.72	-2.44	0.02	0.49	0.91	2.77	0.01	2.49				
		Religion(Hindu)				**Religion(Muslim)**				**Religion(Christian)**						
none_or_ -others	1.15	2.85	0.00	3.15	0.92	1.78	0.08	2.51	2.23	1.94	0.05	9.30				
none_or_ -children	-0.07	-0.23	0.82	0.94	-0.22	-0.61	0.54	0.80	0.66	1.29	0.20	1.93				
others-none_or_	-1.15	-2.85	0.00	0.32	-0.92	-1.78	0.08	0.40	-2.23	-1.94	0.05	0.11				
others-children	-1.21	-3.31	0.00	0.30	-1.14	-2.45	0.01	0.32	-1.57	-1.39	0.17	0.21				
children-none_or_	0.07	0.23	0.82	1.07	0.22	0.61	0.54	1.24	-0.66	-1.29	0.20	0.52				
children-others	1.21	3.31	0.00	3.36	1.14	2.45	0.01	3.12	1.57	1.39	0.17	4.82				
		Caste(SC)				**Caste(ST)**				**Caste(OBC)**						
none_or_ -others	0.73	2.09	0.04	2.08	1.07	1.54	0.12	2.91	0.21	0.71	0.48	1.24				
none_or_ -children	0.54	2.61	0.01	1.71	0.55	1.48	0.14	1.73	0.12	0.71	0.48	1.13				
others-none_or_	-0.73	-2.09	0.04	0.48	-1.07	-1.54	0.12	0.34	-0.21	-0.71	0.48	0.81				
others-children	-0.20	-0.60	0.55	0.82	-0.52	-0.79	0.43	0.59	-0.09	-0.32	0.75	0.92				
children-none_or_	-0.54	-2.61	0.01	0.58	-0.55	-1.48	0.14	0.58	-0.12	-0.71	0.48	0.88				

	Education(primary)				Education(Secondary)				Education(High)			
children-others	0.20	0.60	0.55	1.22	0.52	0.79	0.43	1.68	0.09	0.32	0.75	1.09
none_or_ -others	1.00	2.09	0.04	2.71	-0.09	-0.24	0.81	0.91	-0.22	-0.48	0.63	0.80
none_or_ -children	0.16	0.75	0.45	1.17	0.33	1.65	0.10	1.39	0.66	2.50	0.01	1.93
others-none_or_	-1.00	-2.09	0.04	0.37	0.09	0.24	0.81	1.09	0.22	0.48	0.63	1.25
others-children	-0.84	-1.83	0.07	0.43	0.42	1.19	0.23	1.53	0.88	1.95	0.05	2.41
children-none_or_	-0.16	-0.75	0.45	0.85	-0.33	-1.65	0.10	0.72	-0.66	-2.50	0.01	0.52
children-others	0.84	1.83	0.07	2.31	-0.42	-1.19	0.23	0.66	-0.88	-1.95	0.05	0.42

	Wealth Quintile(poorest)				Wealth Quintile(poorer)				Wealth Quintile(middle)				Wealth Quintile(rich)			
none_or_ -others	-1.90	-3.19	0.00	0.15	-1.45	-2.52	0.01	0.23	-1.37	-2.35	0.02	0.25	-2.01	-3.56	0.00	0.13
none_or_ -children	-0.58	-2.08	0.04	0.56	-0.45	-1.74	0.08	0.64	-0.51	-1.99	0.05	0.60	-0.84	-3.10	0.00	0.43
others-none_or_	1.90	3.19	0.00	6.69	1.45	2.52	0.01	4.28	1.37	2.35	0.02	3.94	2.01	3.56	0.00	7.46
others-children	1.32	2.31	0.02	3.74	1.01	1.81	0.07	2.74	0.86	1.53	0.13	2.36	1.17	2.17	0.03	3.22
children-none_or_	0.58	2.08	0.04	1.79	0.45	1.74	0.08	1.56	0.51	1.99	0.05	1.67	0.84	3.10	0.00	2.32
children-others	-1.32	-2.31	0.02	0.27	-1.01	-1.81	0.07	0.37	-0.86	-1.53	0.13	0.42	-1.17	-2.17	0.03	0.31

Table C

Odds for Economic Support

Odds comparing Alternative 1 to Alternative 2

to Alternative 2	b	z	P>z	odds	b	z	P>z	odds	b	z	P>z	odds	b	z	P>z	odds
		Age(60-69)				**Age(70-79)**				**Locality**						
spouse -others	0.8	3.5	0.0	2.3	0.6	2.3	0.0	1.8	-0.5	-3.4	0.0	0.6				
spouse -children	0.8	4.2	0.0	2.2	0.3	1.4	0.2	1.3	-0.2	-2.7	0.0	0.8				
others -spouse	-0.8	-3.5	0.0	0.4	-0.6	-2.3	0.0	0.6	0.5	3.4	0.0	1.6				
others -children	0.0	-0.1	0.9	1.0	-0.3	-1.8	0.1	0.8	0.2	2.0	0.0	1.3				
children-spouse	-0.8	-4.2	0.0	0.4	-0.3	-1.4	0.2	0.7	0.2	2.7	0.0	1.3				
children-others	0.0	0.1	0.9	1.0	0.3	1.8	0.1	1.3	-0.2	-2.0	0.0	0.8				
		Sex				**Marital status**				**Living Arrangement**						
spouse -others	-2.7	-18.1	0.0	0.1	-5.1	-24.8	0.0	0.0	0.1	0.7	0.5	1.1				
spouse -children	-2.1	-24.2	0.0	0.1	-4.1	-24.7	0.0	0.0	-1.6	-16.0	0.0	0.2				
others -spouse	2.7	18.1	0.0	14.3	5.1	24.8	0.0	169.0	-0.1	-0.7	0.5	0.9				
others -children	0.6	4.6	0.0	1.8	1.0	7.8	0.0	2.8	-1.7	-14.0	0.0	0.2				
children-spouse	2.1	24.2	0.0	7.9	4.1	24.7	0.0	60.2	1.6	16.0	0.0	5.0				
children-others	-0.6	-4.6	0.0	0.6	-1.0	-7.8	0.0	0.4	1.7	14.0	0.0	5.5				
		Religion(Hindu)				**Religion(Muslim)**				**Religion(Christian)**						
spouse -others	0.1	0.6	0.5	1.1	-0.7	-2.5	0.0	0.5	-0.4	-1.1	0.3	0.7				
spouse -children	-0.3	-2.2	0.0	0.8	-0.9	-4.5	0.0	0.4	-0.7	-2.7	0.0	0.5				
others -spouse	-0.1	-0.6	0.5	0.9	0.7	2.5	0.0	2.1	0.4	1.1	0.3	1.5				
others -children	-0.4	-2.3	0.0	0.7	-0.2	-0.6	0.5	0.9	-0.3	-0.8	0.4	0.8				
children-spouse	0.3	2.2	0.0	1.3	0.9	4.5	0.0	2.4	0.7	2.7	0.0	2.0				
children-others	0.4	2.3	0.0	1.5	0.2	0.6	0.5	1.2	0.3	0.8	0.4	1.3				
		Caste(SC)				**Caste(ST)**				**Caste(OBC)**						
spouse -others	0.1	0.8	0.4	1.2	0.7	2.1	0.0	2.0	0.0	0.3	0.8	1.0				
spouse -children	0.1	1.1	0.3	1.1	0.1	0.6	0.6	1.1	-0.3	-3.4	0.0	0.7				
others -spouse	-0.1	-0.8	0.4	0.9	-0.7	-2.1	0.0	0.5	0.0	-0.3	0.8	1.0				
others -children	0.0	-0.1	0.9	1.0	-0.6	-2.1	0.0	0.6	-0.4	-3.0	0.0	0.7				
children-spouse	-0.1	-1.1	0.3	0.9	-0.1	-0.6	0.6	0.9	0.3	3.4	0.0	1.4				

| | children-others | 0.0 | 0.1 | 0.9 | 1.0 | 0.6 | 2.1 | 0.0 | 1.8 | 0.4 | 3.0 | 0.0 | 1.4 |

	Education(primary)				Education(Secondary)				Education(High)			
spouse -others	-0.2	-1.0	0.3	0.8	0.0	-0.1	0.9	1.0	-0.3	-1.3	0.2	0.8
spouse -children	-0.2	-1.7	0.1	0.8	0.2	1.5	0.1	1.2	0.0	-0.3	0.8	1.0
others -spouse	0.2	1.0	0.3	1.2	0.0	0.1	0.9	1.0	0.3	1.3	0.2	1.3
others -children	0.0	-0.1	0.9	1.0	0.2	1.3	0.2	1.2	0.2	1.3	0.2	1.3
children-spouse	0.2	1.7	0.1	1.2	-0.2	-1.5	0.1	0.9	0.0	0.3	0.8	1.0
children-others	0.0	0.1	0.9	1.0	-0.2	-1.3	0.2	0.8	-0.2	-1.3	0.2	0.8

	Wealth Quintile(poorest)				Wealth Quintile(poorer)				Wealth Quintile(middle)				Wealth Quintile(rich)			
spouse -others	-1.5	-6.1	0.0	0.2	-1.1	-4.8	0.0	0.3	-0.9	-3.9	0.0	0.4	-0.6	-2.6	0.0	0.6
spouse -children	-0.8	-5.5	0.0	0.4	-0.7	-5.2	0.0	0.5	-0.7	-5.2	0.0	0.5	-0.3	-2.7	0.0	0.7
others -spouse	1.5	6.1	0.0	4.4	1.1	4.8	0.0	3.0	0.9	3.9	0.0	2.4	0.6	2.6	0.0	1.8
others -children	0.7	3.3	0.0	1.9	0.4	2.0	0.0	1.5	0.2	1.1	0.3	1.2	0.2	1.2	0.2	1.3
children-spouse	0.8	5.5	0.0	2.3	0.7	5.2	0.0	2.0	0.7	5.2	0.0	1.9	0.3	2.7	0.0	1.4
children-others	-0.7	-3.3	0.0	0.5	-0.4	-2.0	0.0	0.7	-0.2	-1.1	0.3	0.8	-0.2	-1.2	0.2	0.8

Table D

Odds of GHQ to different care and support

Odds comparing Alternative 1 to Alternative 2	b	z	P>z	odds		b	z	P>z	odds
	social support (average)					**social support (bad)**			
average -bad	-18.46	-147.09	0.00	0.0	average -bad	-19.75	-126.03	0.00	0
average -good	0.85	6.79	0.00	2.3	average -good	2.43	18.71	0.00	11.33
bad -average	18.46	147.09	0.00	1.04e+087881	bad -average	19.75	126.03	0.00	3.77E+08
good -average	-0.85	-6.79	0.00	0.4	bad -good	22.17	218.40	0.00	4.27E+09
					good -average	-2.43	-18.71	0.00	0.088
					good -bad	-22.17	-218.40	0.00	0
	physical support (self/spouse)					**physical support (children)**			
average -bad	-0.08	-0.45	0.65	0.92	average -bad	-0.21	-1.47	0.14	0.81
average -good	0.26	2.35	0.02	1.29	average -good	0.62	6.02	0.00	1.85
bad -average	0.08	0.45	0.65	1.08	bad -average	0.21	1.47	0.14	1.24
bad -good	0.34	1.78	0.08	1.40	bad -good	0.83	5.14	0.00	2.29
good -average	-0.26	-2.35	0.02	0.77	good -average	-0.62	-6.02	0.00	0.54
good -bad	-0.34	-1.78	0.08	0.71	good -bad	-0.83	-5.14	0.00	0.44
	economic support (spouse)					**economic support (children)**			
average -bad	0.11	0.76	0.45	1.1194	average -bad	0.13	2.60	0.01	1.14
average -good	0.24	3.22	0.00	1.2696	average -good	0.30	11.60	0.00	1.35
bad -average	-0.11	-0.76	0.45	0.8934	bad -average	-0.13	-2.60	0.01	0.88
bad -good	0.13	0.84	0.40	1.1342	bad -good	0.17	3.45	0.00	1.19
good -average	-0.24	-3.22	0.00	0.7876	good -average	-0.30	-11.60	0.00	0.74
good -bad	-0.13	-0.84	0.40	0.8817	good -bad	-0.17	-3.45	0.00	0.84

Table E

Odds of SUBI to different care and support

Odds comparing Alternative 1 to Alternative 2	b	z	P>z	odds	b	z	P>z	odds
	social support (average)				**social support (bad)**			
average -bad	-2.01	-8.62	0.00	0.13	-4.11	-17.08	0.00	0.02
average -good	-1.00	-10.29	0.00	0.37	-1.66	-14.03	0.00	0.19
bad -average	2.01	8.62	0.00	7.47	4.11	17.08	0.00	61.19
bad -good	1.01	4.38	0.00	2.74	2.45	10.65	0.00	11.63
good -average	1.00	10.29	0.00	2.73	1.66	14.03	0.00	5.26
good -bad	-1.01	-4.38	0.00	0.37	-2.45	-10.65	0.00	0.09
	physical support (self/spouse)				**physical support (children)**			
average -bad	-0.33	-1.94	0.05	0.72	-0.48	-3.10	0.00	0.62
average -good	-0.06	-0.39	0.70	0.94	0.05	0.33	0.74	1.05
bad -average	0.33	1.94	0.05	1.38	0.48	3.10	0.00	1.62
bad -good	0.27	2.30	0.02	1.31	0.53	5.31	0.00	1.70
good -average	0.06	0.39	0.70	1.06	-0.05	-0.33	0.74	0.95
good -bad	-0.27	-2.30	0.02	0.77	-0.53	-5.31	0.00	0.59
	ecomonic support (spouse)				**economic support (children)**			
average -bad	-0.20	-1.79	0.07	0.82	-0.38	-9.76	0.00	0.68
average -good	-0.14	-1.64	0.10	0.87	-0.23	-7.26	0.00	0.79
bad -average	0.20	1.79	0.07	1.22	0.38	9.76	0.00	1.47
bad -good	0.06	0.64	0.52	1.06	0.15	5.00	0.00	1.16
good -average	0.14	1.64	0.10	1.15	0.23	7.26	0.00	1.26
good -bad	-0.06	-0.64	0.52	0.94	-0.15	-5.00	0.00	0.86

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