Redefining the role of elderly as facilitator to educate young generation through Information and Communication Technology

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ABSTRACT: The world is experiencing an important demographic transformation: the unprecedented ageing of the population of almost all developed and developing countries. The disintegration of joint family system has led to a vulnerable position of the elderly and left them with a lack of safety, security and self-confidence harboring feelings of social isolation in them. Social engagement and social support are important determinants of successful ageing in later life. This paper focuses on elderly as an asset and not as an issue for future sustainability of the nation**.** This is a group that has acquired a lifetime of skills, knowledge and wisdom which can be shared with the younger generation, contributing to the knowledge capital of the society. Older people are not just recipients, they are contributors, can be providers of social care and childcare for grandchildren. This is an action oriented research paper which explores whether a viable and replicable model to provide quality formal and informal education can be created using remote teaching and interactive learning process (using Internet and Web 2.0 technology) with elderly community at one end and young children at the other end. This paper is based on a wellbeing study of 25 urban elderly in Kolkata which shows the acceptance of the negative stereotypes of elderly being burden and passive units of society by elderly themselves leading to their assumption of disappearing from society. The creation of self-image in media makes the process of ageing a fearful and unhappy one. Physical mobility is a common problem of the aged. But it must not be a hindrance to social involvement among elderly. This can be mitigated by the intervention of the virtual world. This paper thus intends to explore the use of a social media platform aiming *connecting generations* where elderly can play a critical role in shaping up a future if they choose not to withdraw as they age, but to nurture themselves and the community as active elders.

Keywords: Productive Ageing, Wisdom, Knowledge based Development, Perceived Wellbeing, Social Stereotype, Web 2.0

Introduction

Social solidarity is integral to the growth and sustainability of a society which indicates the necessity of a socially inclusive society. A socially inclusive society demands assurance of wellbeing of all ages. But, post modernity has brought with it the issue of ageing along with ever increasing population size. The world is experiencing an important demographic transformation: the unprecedented ageing of the populations of almost all developed and developing countries. Ageing is becoming an issue owing to the rising neglect and dearth of elder friendly environment in almost all societies of the world today. Disintegration of joint/extended family system in India has led to a vulnerable position of the elderly and left them with a lack of safety, security and self-confidence harboring feelings of social isolation in them. Breakdown of joint families have also affected the generational ties in the family leading to equally vulnerable position of the younger generation who were dependent on the older members in a joint family. Future sustainability of the nation seeks an environment where older people can thrive and live life to the full for as long as possible –

contributing to society, rather than being dependent on it. *Wellbeing of a community demands expansion of knowledge based development that intends to strengthen the skills and knowledge of individual leading to social development, eventually making prescribed formal education less needed* (Gonzalez, et.al 2005; Laszlo, K. and Laszlo, A. 2006). A strong and resilient community needs digital connectedness that is often influenced by society and social dynamics. Emile Durkheim's approach of 'social cohesion' and 'integration' to maintain social relationships demand digital inclusion in post-modern era. In this context the paper wishes to provide a replicable model where knowledge can be shared to the younger generation by the otherwise socially isolated elderly by providing social media platform through ICT. The paper is based on a study of wellbeing of 25 elderly from urban parts of South Kolkata.

Digital literacy and connectedness is seen as an essential 'life skill' in the 21st century. The importance of ICT in connectedness can be sited as achieving broader socio-economic goals and a necessity of life in an information based modern world (TariTaiwhenuaTe2011). Information and communication technologies during the 1990s established the infrastructure that enabled the knowledge economy to scale up leading to the future knowledge development in society. Web 2.0 technologies are moving more and more in the direction of becoming a platform for global knowledge accumulation and intelligence gathering (Thomas and Seth, 2011). In this context, the paper explores the possibility of using ICT to help invlove elderly community in activities beneficial to the society.

Process of Ageing and the Ideal Role of Elderly in Society

Throughout history older adults have been valued for their insights, wisdom and experience they can share with others. In Industrial societies the elders are less valued than that in preindustrial societies. The breakdown of intergenerational ties in industrial societies and developing nations like India has led to disvaluing of elderly roles in communities. Basset (2009) says wisdom as a form of informal knowledge is present in older people. Wisdom is acquired through experiences and regulating emotions in various stages of life. Informal knowledge can be acquired from the old members of a joint family system. The older members of the extended family act as teachers who guide the young members to choose correct path in life and also try to ingrain in them values, modes, cultures and norms of the society (Ahuja, 1993; Bisht&Sinha, 1981; Muttalib, 1990). But these days family ties are under strain leading to lack of attention to children in the nuclear family. In nuclear families, the child is more independent as he/she is no more under the surveillance of the adult members of the extended family. However in nuclear families, children living with their parents often feel deprived of the affection from their parents owing to their stressful professional life. Affection from a grandparent can to some extent mitigate their feeling of deprivation.Elderly can feel more socially included by way of interacting with younger generation vise- versa. They can play an important role in contributing to the knowledge capital of the society, by imparting their wisdom and knowledge to those deprived of it. In this context the paper aims to look at the possible ways of redefining elderly roles in facilitating the needs of younger generation.

Negative Image of Elderly in Society

Despite the ideal roles of elderly, we tend to exclude them from society. They are considered incompetent and are denied any responsibilities. Young people consider them pessimistic,

conservative, and petulant (Hernandez and Gonzalez, 2008). Commercial culture backed by mass media misrepresents ageing as an undesirable and demeaning phenomenon. Commercial advertisements in mass media preoccupied with youthful body image create negative language about and images of later life (Bradley and Longino, 2001). These misrepresentations of elderly by media has led to the societal stereotype of aged as weak, frail, and disabled.

This negative stereotype has ignited the feeling of depression and less productivity among elderly. Older people are surrounded by the preconceived notion that when you are older you lose faculties. There are various proposals for a change in attitudes in old age such as an active and independent life-style for the elderly rather than sedentary aging (Hernandez and Gonzalez, 2008).

Productive Ageing and Wellbeing of Elderly

National Seniors Productive Ageing Centre (NSPAC) defines productive ageing as: "…the promotion and organisation of a lifestyle which enables seniors to participate actively in the economic and social advancement of the nation in a manner that will ensure they are contributors rather than dependants, while having the added benefit of enhancing their own health and wellbeing." This definition raises the status of older persons as significant contributors to society and not solely as consumers of resources.We should be focusing on them as an asset and not as an issue. This is a group that has acquired a lifetime of skills, knowledge and wisdom, and we need to think of creative ways of harnessing and sharing this precious resource.

Traditionally, wellbeing has been identified with a single objective dimension: material progress measured by income or GDP. However, it is now widely accepted that the concept of wellbeing is multidimensional encompassing all aspects of human life. Another approach is through subjective measures: asking people to report on their happiness and life satisfaction. In general, wellbeing measures can be classified into two broad categories: objective and subjective measures.The first category measures wellbeing through certain observable facts such as economic, social and environmental statistics. People's wellbeing is assessed indirectly using cardinal measures. On the other hand, subjective measures of wellbeing capture people's feelings or real experience in a direct way, assessing wellbeing through ordinal measures (McGillivray and Clarke, 2006; van Hoorn, 2007; Conceição Pedro and Bandura Romina, 2008).

Empirical Understanding of Productive Ageing

Reflecting on the negative stereotype and the sense of wellbeing of elderly, a study has been conducted to assess the productive wellbeing of elderly. 25 elderly from southern parts of urban Kolkata were part of the study.

Method

Both quantitative and qualitative methods were used to analyse the wellbeing of elderly. As mentioned above, to measure wellbeing, one needs to focus on both the objective and subjective indices. So the questionnaire and interview schedule for the assessment of wellbeing of elderly has been divided into several modules such as Socio-Economic background, Life Domains, Grand-parenting, Affect and Computer Knowledge. The modules focus both on the objective criteria of

wellbeing such as material wellbeing, health conditions, household conditions, education, nature of activities etc. and also on the subjective criteria of wellbeing such as emotional conditions and level of satisfaction. The emotions felt and the level of satisfaction of the elderly is taken to be the perceived wellbeing of them. The nature of activities is indicator of productive wellbeing of elderly. The activities are subdivided into active and passive ones. Active activities imply involving in meaningful activities and socialising while passive activities include watching TV, listening to music and all those activities that don't fetch any productivity in the lives of the elderly. In this study economic status is taken as constant where all the elderly respondents are from middle or upper middle economic strata of society.

Data and Findings

The study is based on some hypotheses.

Hypothesis 1: Elderly with high educational qualification are socially more active than those with low educational qualification.

Table: 1 shows 17 of the 25 (68%) respondents are graduates and higher secondary (only one) educated while only 8 respondents (32%) are post graduates and PhDs. Both the group of educated elderly are more passively active and less actively active which means they spend most of their time watching TV, listening to music, reading books, worshipping and exercising rather than socialising and doing meaningful activities. Both highly educated and moderately educated elderly spend a regular day doing activities that are not constructive enough to be called productive. Thus, *one can say education is not a factor to indicate degree of activeness among elderly.* Both less educated elderly along with the more educated ones can be indulged into a more productive activity to ensure their role in society.

Education	No. of elderly	active activity average	passive activity average
Graduates and Higher Secondary educated	17	2.84	4.54
Post Graduate and PHD	8	2.26	4.73

Table1. Dependence of activity profiles on educational qualification
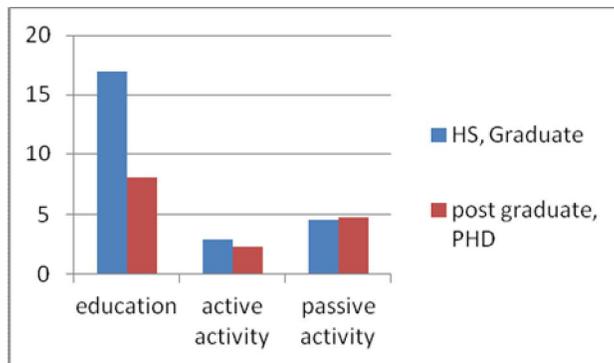

Fig. 1. Activity profiles and educational qualification

Hypothesis 2: Elderly with physical stability are socially more active than those who are not.

Table: 2 shows 13 of 25 (52%) respondents are physically less stable than the 12(48%) respondents who are physically more stable. Findings of the study shows respondents with physical stability and instability both are less actively active which means they are less engaged in meaningful activities. They are mostly active in passive activities which are constrained to their homes and don't contribute to society. Although they are not involved in any meaningful activities, the respondent's level of satisfaction i.e. their perceived wellbeing is much higher. *This shows conflicting perception of wellbeing of the elderly as the level of productive wellbeing which is the intensity of actively active is much less but their perception towards their own sense of wellbeing is way higher.*

	No. of elderly	active activity average	passive activity average	Satisfaction average
Physical instability	13	2.43	4.4	4.20
Physical stability	12	2.88	4.82	4.35

Table 2. Dependence of activity profiles and level of satisfaction on health
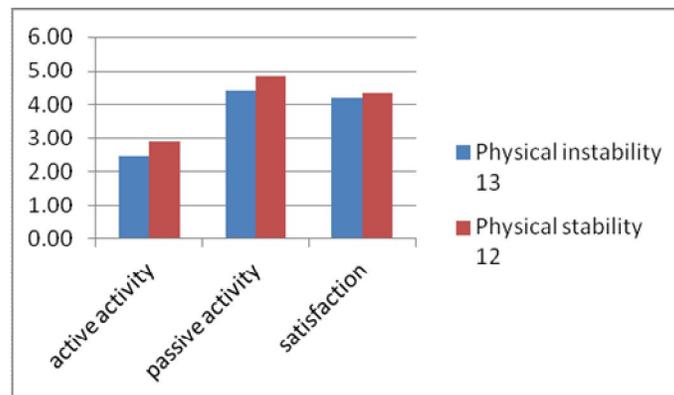

Fig. 2. Activity profiles, satisfaction and health

Hypothesis 3: Elderly who use computer more often are able to stay involved than those who are not users.

Table: 3 observe the relationship between productive engagement and the use of ICT by elderly. Here productive engagement means respondent's active involvement in voluntary services. 16 of 25 (64%) respondents are not ICT users, while only 9 (36%) of them are ICT users. The finding clearly shows that the ICT users are more productively active than the non-users. Thus ICT can help elderly contribute more to society and feel more socially included.

	No of elderly	Productive engagement
ICT non users	16	0.5
ICT users	9	0.89

Table 3. ICT usage vs productive engagement

Hypothesis 4: Perceived wellbeing is not dependent on number of housemates.

As already mentioned perceived wellbeing of elderly includes feeling of emotions (both positive and negative) and the level of satisfaction. 13 of 25 (52%) respondents either stay alone or with a paid person. 12 of the 25 (48%) respondents stay with any of their family members.Comparing the perceived wellbeing of the respondents, we find that the elderly irrespective of their staying alone or with a family member do not affect their sense of perceived wellbeing. Their perceived wellbeing is high with high positive affect, low negative affect and high satisfaction level. *Thus one can say, staying alone is not related to one's feeling of negative emotions and low level of satisfaction.*

	no of elderly	positive affect average	negative affect average	Satisfaction average
Staying alone or with paid personnel	13	3.23	1.72	4.47
Staying with family member	12	3.75	1.3	4.05

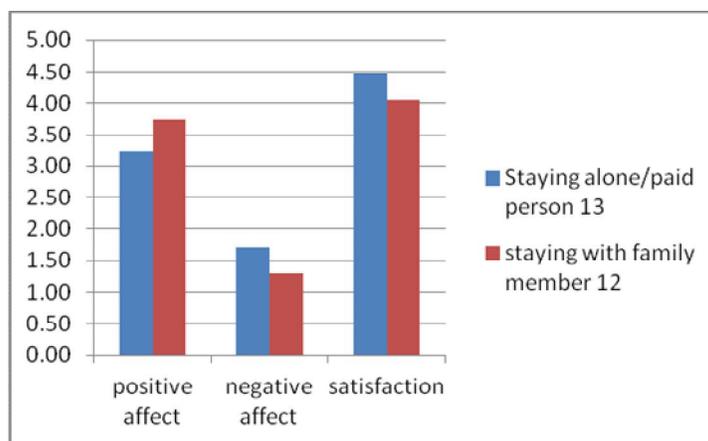Table 4. Dependence of perceived wellbeing on number of housemates.

Fig. 4 Perceived wellbeing and number of housemates

Respondent's interest in interacting with younger generation is measured on a 1 to 5 scale. The finding shows 7 elderly out of 25 are very much interested in interacting with the children while 7 others are moderately interested. Five more are some-what interested and only one individual is not that interested in interacting with children. Five elderly are not at all interested in interacting with younger generation.

Analysis

The study seeks to unveil the varied meaning of 'desire' for individuals at later stage of their lives. Elderly in old age home when asked said they have accepted the Hindu Philosophy of 'Four fold Ashrama' rule and they are leading a life of Vanaprastha which means surrendering material desires of life and leading a life of hermit. This has resulted in their disinterest in doing something productive for themselves and for the society at large. Many of the elderly respondents have accepted their later

life to be a life where they would just wait for their 'end' and not think about productive ways before seeing the 'end'. Desire to socialise and interact is common among elderly, but owing to unavailability of most of the people (because of busy life), elderly have accepted the fact that their desire cannot be fulfilled. So, it's better for them not to hope.

The data collected from the study has clearly shown high perception of wellbeing despite lack of productive activeness. These highly educated elderly from high economic background are not much engaged in any productive activity that has social significance. When asked about their nature of activities, the elderly respondents said, they have left many activities that they used to do earlier owing to old age. Elderly both staying alone and with any other family member have shown equally high perception of wellbeing. Most of the respondents are aware of the importance of use of ICT, but they are scared to use it for their own use. Very few elderly are ICT users and all of them are productively engaged in society. Thus, we can say that ICT can help rest of the respondents engage more actively in society.

More than half of the respondents are interested in interacting with younger generation and also convinced of the fact that this sort of interaction might lead to better sense of wellbeing among elderly. But they are apprehensive of interacting with children owing to the rising generation gap between them.

Social Psychologist Charles Horton Cooley in his concept of the *Looking Glass Self* explored how identity is formed. The concept states that a person's self grows out of society's interpersonal interactions and perception of others. Similarly respondents too have designed their self to be unproductive and static as the society has portrayed. *Notion of wellbeing of the older respondents are structured by the society. Findings from the study re-establish the fact that elderly have accepted the societal notion of old being frail and unproductive in society.*

The Paper aims to explore the possible potential of elderly to be active citizens by freeing them from their false perception of themselves being unproductive. This can be done by re-establishing the roles of elderly as the knowledge providers to the younger generation.

Role of ICT

Pervasive Information Technology or ubiquitous computing can play an important role in providing elderly independence and act productively in society. As per the finding of the study, use of ICT is related to productive engagement. Therefore it is desirable for the elderly to indulge into using the same. Social media platform with Web 2.0 technology make it possible to share the wisdom of elderly in the form of informal knowledge system to the younger generation. Kanayama (2003) in an ethnographic Study on Japanese elderly finds positive response of elderly in using Information and Communication Technology. They have been able to form social relationships via Computer Mediated Communication (CMC). As felt by the author, social participation through communication can enhance well-being of elderly. This idea is proved correct by the further study of elderly on feeling more positive and less isolation after using CMC.

ICT has potential for developing flexible learning approaches where both young and old pursuing different goals and bringing different experiences, could find it rewarding to work and learn together. A Social Media Platform through Web 2.0 technology can play important role in acting as a medium of communication between the two generations (Bandyopadhyay, 2013).

Self-Organised Mediation Environment (SOME), an initiative of Prof Sugata Mitra provides an ICT enabled platform where the elderly grandmothers of UK can teach or interact with deprived young students in India. This initiative brings in the idea of ICT intervention in connecting the two generations.

All in all, more research should be focused on ways of using the knowledge of the older people who could teach each other and younger generations. This could be a rewarding activity for all, for which ICT also provides new potential (KirstiAla-Mutka et al, 2011).

Empirical Stance

The long-term purpose of the project is aimed at developing a sustainable model of remote teaching through ICT leading to a more fulfilling learning experience for the children on one hand and providing a medium of involvement for the deprived elderly in society. A school in remote area of Krishnagar, West Bengal has been selected where education of tribal students are to be improved with the help of remote teaching methods. Knowledge is disseminated by quality teachers in urban parts of Kolkata through virtual platform to the needy students. The ultimate aim is to design a model that not only makes e-learning effective, but to replace the traditional model to save recurring expenses on local teachers and allow for the free permeation of education in ways that might bridge the digital divide amongst students of various socio economic and other geographical barriers.

Conclusion

Owing to lack of proper implementation of policies and programmes on elderly wellbeing in India, it becomes the responsibility of the citizens to empower elderly in society. As explained above the perception of wellbeing of elderly is based on the societal conditioning of treating elderly as unproductive segments of society. In the path of development of a nation, it becomes crucial to consider phenomenon of ageing as an asset and not an issue. In restoring the position of elderly in society as productive agents of change the paper wishes to redefine roles of elderly as knowledgeable citizens and act as responsible mentors to the younger generation via web 2.0 technology. In doing so the paper widely focuses on mechanism of social inclusion of generations primarily old and young in the society by providing a social media platform via ICT.

Reference

Bandyopadhyay, Somprakash, et al.(2013). Social Knowledge Management: Use of Social Media for Disseminating Informal Wisdom of Elderly to the Youth, International Conference on Knowledge, Innovation and Enterprise Conference, London, 9th to 12th September, 2013.

Bassett, C. (2009). http://www.secondjourney.org/itin/09_Fall/Bassett_09Fall.htm

Bradley, E. Don and Longino F Charles, Jr. (2001).How Older People Think About Images of Aging in Advertising and the Media. The American Society on Aging.Generations.Volume XXV, Number 3. Pages 17-21

Brossoie, Nancy (2010). Social Gerontology, Chapter 2. Gerontology For Health Care Professionals. Robnett,H Regula, Chop, C Walter. Jones and Barlett Pub

Bundred, Steve (2004). National Report. Older People- Independence and Welbeing. The Challenge for Public Services. Audit Commission. London.

Bundred, Steve (2004). National Report. Older People- A Changing Approach. Audit Commission. London.

Christopher Thomas *, Amit Sheth (2011) Web Wisdom: An essay on how Web 2.0 and Semantic Web can foster a global knowledge society. Computers in Human Behavior.journal homepage: www.elsevier.com/locate/comphumbeh

Conceição Pedro and Bandura Romina. (2008).Measuring Subjective Wellbeing: A Summary Review Of The Literature. UNDP.

Department of Communities, Child Safety and Disabilities. (2002) Ageing Myth and Reality. Queensland Government. http://www.communities.qld.gov.au/resources/communityservices/seniors/publications/ageing-myth-reality.pdf

Donatti, Christina, Moorfoot Lyn, Deans David. (2004). Defining Productive Ageing – Engaging Consumers. National Productive Ageing Centre.

Hernandez,Carmen. Requena and Gonzalez, Zubiaur .Marta (2008).Effects of Intergenerational Interactions on Ageing.Routledge.

Kanayama, Tomoko. (2000). Ethnographic research on the experience of Japanese elderly people online. School of Telecommunications, Ohio University,USA.

Karaiskos, Dimitrisc, (2009). A Predictive Model For The Acceptance Of Pervasive Information Systems By Individuals. Athens University of Economics and Business.

Laszlo, K. and Laszlo, A. (2006). Fostering a sustainable learning society through knowledge baseddevelopment. Proceedings of the 50th Annual Meeting of the ISSS. 9-14 July 2006. SonomaState University, California.

MitraSugata, Remote Presence: Technologies for 'Beaming' Teachers Where They Cannot Go. School of Education, Communication and Language Sciences, Newcastle University.

Mori, Christina Kiomi. 2011. 'Digital Inclusion': Are We All Talking about the Same Thing?.ICTs and Sustainable Solution for Digital Divide.University of Brassila.

TariTaiwhenuaTe 2011.Community Access to Digital Technology.The Department of Internal Affairs.

Thomas, Christophe, Sheth Amit, Kno.e.sisCenter. Web Wisdom: An essay on how Web 2.0 and Semantic Web can foster a global knowledge society. Wright State University, Dayton, OH, USA. journal homepage: www.elsevier.com/locate/comphumbeh

Ward, Lizzie, Barnes Marian, Gahagan Beatrice. (2012). Wellbeing in old age: Findings from Participatory Research . University of Brighton and Age Concern Brighton, Hove and Portslade.