



## RESEARCH ARTICLE

### GERONTOLOGY EMBRACING TECHNOLOGY AND SOCIAL MEDIA: ITS IMPACT IN EDUCATION

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#### ABSTRACT

One of the key elements of aging well is to feel meaningful social relationships. Being far geographically from one's relatives, impaired mobility or obligations hinder the older adults from the desire to have satisfying social contact. This study has a dual purpose: one is to examine whether Information and Communication Technology (ICT) use and the Internet has any effect through causing or reducing experiences of loneliness and social isolation among people in independent and assisted living and to examine the perceptions on how Internet use affects communication and social interaction. An axiomatic theory development and qualitative analysis were involved in the various procedures of analysing and interpreting data generated from the examination of documents and records relevant in this study. Theoretical analysis and *data mining* are resorted to, specifically on those data which are related to the purpose of this study. This documentary work involves reading lots of written materials and the researcher utilized the *deductive research approach*. The researcher reflected, analysed and then adjusted the research.

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#### INTRODUCTION

Gerontology is a discipline that studies seniors, prime life, and mature individuals. The term gerontology was first used by a Russian biologist Metchnikoff, the book he published in 1908. However, Victor (2005) states that interest in this ground of learning occurs in an era. As people grows old they often lose connection with their social linkages or associates is due to giving up of work and because they are in their sixties (60s) or seventies (70s), demise of friends and intimate family members, and a person moving far. When communication becomes challenging to sustain due to adjustment in space and time, older adults lose track with affiliates in the past as they journey through retirement. This is frequently associated through the decline in socio-emotional status, like mental state of socially separated or as amplified of being alone. The use of information and communication technology (ICT), adults overcome being emotional when they connect with family, friends, and other important colleagues or age group. In exploring the overall ICT approval, older adults disclosed anxiety as their number one problem in using computer and these common views are blamed on ICT use. There are various identified obstacles seniors often complain on personal disability because they are incompetent and *they lack knowledge on how to use these technologies*.

Seniors have functional issues that are related to inability for memory recall and disorientation in longitudinal and latitudinal abilities. The physical price in possessing the gadget is too costly and coming from their personal point view they say that no one teaches them how to use computer. However, these limitations are of less constrain particularly those who are financially capable and who are *highly educated*. The barriers seen among the people who are older adults are difficult to implement, the use of technical applications and social media may not be the case among those in the younger generations (Leist, 2013; Lee *et al* 2012). The purpose of this study is to establish the gap between their experiences in social isolation and in *educating these seniors who are struggling to use ICT*. Particularly older adults with disabilities identified as having poor eyesight, or suffering from loss of hearing and are using media technology that may not tailor fit to their individual needs. Related Literature. The feeling of social seclusion is intensely sensed in an aided and self-regulated active populations, wherein occupants are alienated out from their linkage of families and contacts. Loneliness and social separation have parallel footholds but are altered in perceptions. When being alone is instinctive, there is disparity among the need of an individual for social dealings and when relationships are not available (Xie, 2003; Cotton *et.al* 2013). It is an emotion related to despair and low-slung optimism or drive to live (Findlay & Cartwright 2007). The identified risk factors are death of a life partner and members of the family, one's work as a caregiver, communication disabilities *i.e.* loss of hearing, living in rural and far flung areas, person who lives

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in the home for the aged or nursing home, inaccessibility for transport ride, male and unmarried. Senior citizens are unable to do activities for daily living and being sick set the limits to participate socially among the older adults. The feeling being an outcast, getting socially discriminated and low self-esteem are experiences of disabilities. Thus, it prevents these older adults to participate in communal activities (Hillier 2007; Anastacio *et al.* 2010). In order to understand how social media technology can support their connectivity, older people need to be more active in the use of communication technology and recommends to use them exhaustively since it is still underutilized. Older adults suffer from night blindness and the like even they use simulated equipment for some scientific devices, still it prevent the persons with disability to stay online. The underutilization is probably because of a number of older adults suffer from functional limitations such as limited cognitive and perceptual abilities, hindering them from using technology, as compared to the *younger adults*. People can also be limited by factors like blindness, despite assistive technology, even prevent the use of online social networks if no further assistance is available (Cibo 2003; Hutto & Bell 2014). *The need to educate these seniors from spending too much time in online networking sites* are of tremendous concerns and needed to be investigated. In the report, older adults often visit these networks like being online (50 – 55 per cent) every time.

They feel the need to log on the whole day and these participants are guilty of wasting their time on these social media networking platforms. At around 70 – 75 per cent of the participants spent not longer than two hours of each day in social media sites. There are only a few of who stopped from using online social media network due to the events described as bad experience. Those who do not access these sites stayed up perplexed on the negative impact of participating in social networking sites. In particular, many older adults have limited knowledge of what information to disclose, their personal information. Older adults tend to divulge too much personal information, further, uploading pictures that could present danger on details like address and these are occasions that lead to robbery. Since mass media is public and said to have these new forms of criminality, are grievous threats. In order to overcome these challenges, the solution is to provide fresh users, awareness by *educating* or giving them information on how to be cautious on their personal information online (Australian Psychological Society, 2010). The guidelines and approach are common sense that must enable the web designer to give more details to help in its use. This study deals with the use of social media and the older adults' mental, emotional, physical limitations as well as the *need for education on how to use new and updated technology*. This is for the web designers to create a functional ICT that seniors could fully understand.

**Objective:** This study aims to examine whether one type of Information and communication technology (ICT) use, specifically Internet use, is related to the experiences of loneliness and social isolation among people in an independent and assisted living and to examine the perceptions of how Internet use affects communication and social interaction.

**Theory Generation:** A qualitative study was engaged in this search and it refers to the various procedures of analysing and interpreting data generated from the examination of documents and records relevant to a particular study.

This documentary work involved reading lots of written material (scanning these documents in a computer using a qualitative analysis package). Document analysis and data mining are those that can be read and which relates to the different facets of the social world. The organizational documents is to be read as objective accounts of fact but are socially produced. This is based on *deductive theory approach*, and informative. It is to produce deductive novel theory based ideas or hypotheses from facts. So new theories ascend out of the data which are supported by the data. An extensive search was conducted for literary materials through the databases of refereed and cited journals. Studies were included if they: (a) contain qualitative data (b) made mention its procedural forms (c) are inspirations for practice (d) have the personalities of users (e) are negative outcomes of use, and (e) obsessive in its character. Numerous qualitative studies were identified from the literature, and were specifically assessed social network linkages for internet addiction.

This methodology is used to develop an axiomatic deductive theory. A theory is deductive when it is gathered in a systematic manner and runs through careful analyses. A theory develops during the research development and a creation of uninterrupted interaction between examination and data gathering. It involves analysis as the framework and evidences should be regarded as both loaded with theory and value. A methodology is an indispensable and is frequently utilize in order to come up with a theory wherein less is known and it provides a new slot in the current facts. Axioms are usually recognized values which are the major models of this method.

This research utilizes the *deductive research approach* and deductive cognitive mechanism from the more broad to the more detailed. This is informally called a 'Top-down' approach and the conclusion follows rationally from principles of the presented truths. The researcher went through carefully chosen approaches of inquiry. It is imperative that these have an intense power on processes of scrutiny and interpretation. Document gathering in the field takes a long time, however, the investigator reflected, analysed and then adjusted the research. Sections of records are cautiously categorized and systematized for comfort in going through the analytical procedures. This process of study involved the document slogged in text and image layouts; (1) Organized and arranged evidences for data analysis (2) Read through all the facts and evidences. Increased an overall sense of information and reflected on the general implication. (3) Steered an analysis based and definite hypothetical method (content, grounded theory, archival and analysis procedures). (4) Created explanation of the location or individuals and recognized subjects through coding and explored for theme links. (5) Embodied the facts within an examination report. 6. Deduced the larger implication of the data (Bass, S., Provost, 2014). A theory is a logical explanation of how the world or part of it works; it is too comprehensive, having a number of significances or explanations, maybe not all can be verified as a lone study but directs the academician in how possessions or notions in the study activate. Thus, a theory agrees one to foresee and postulate. (Durkheim 1997). A proposition is a sole theoretically testable element of a theory and a number of propositions can be derived from it (Lynch, 2013). An axiom is a prescribed structure that incorporates a set of axioms and does not dispute with one another. Axioms are designated and administered by other interconnected standards (What is axiom, 2014).

There are seven (7) axioms and seven (7) propositions in this research, and are summarized as follows:

*Axiom 1: Older Adults find their mystic gifts to maintain veracity;* this requires Older Adults to change away from their life's work, their bodies, and emotional strengths, or as Lopez says, they find new mystical gifts to discover and their detached personalities, and surpass, fixing on mental destiny. *Proposition 1:* The life of an older adult is to be part of the spiritual realm. Looking in one's own mirror and to ponder on what is positive. An older adult needs to seek another place away from present life like getting into another activity, different from their past. To become physically detached and to soar into a higher level and to concentrate only on their psychosocial power to move beyond. *Axiom 2: They need to maintain their integrity to prevent them from hopelessness;* where adults have adjusted to predictable victories and dissatisfactions and recognized their importance, and for them to take the tide of life they procured. *Proposition 2:* Seniors are now more attuned to what life has to give and are able to accept unescapable accomplishments and frustrations.

They are susceptible in accepting truths and realities which for them they cannot resist nor escape for what life has to dictate. *Axiom 3: Reaching the ripe age means peaceful living;* Lopez explains as finding an intensified internal tranquillity and enjoyment and added time consumed in silent thinking. *Proposition 3:* Life is more expressed in silent meditation and reflection on what is there to find done's pleasure in life. Older adults seek for inner peace deep within the recesses of their hearts where they don't only feel the calm but to spend more of their hours in silence reflecting on what they are thinking. *Axiom 4: Seniors sustain themselves with a purpose;* when persons sustain a fruitful life, they are able to mature productively. *Proposition 4:* Sustainability enables the older adult to become productive and grows in age- abundant life. Those seniors who were able to sustain productively in their earlier days, most likely they are able to continue having a midlife filled with great things to do, will experience better life in old age, and they still have those people who help them support their way of life as they reach the middle age. Those who lived unhealthily are those who cannot foster in doing what they used to. *Axiom 5: Older adults embrace technology in order to interact with others;* Socialisation is constant with the idea of 'technology generations.' This effect is also presumed for media use; age group may very well progress in specific arrays of mass media use with the young and remain loyal to these forms throughout the rest of their life. Digital Immigrants learn—like all immigrants, some better than others—to adapt to their environs, they always preserve, to some degree, their inflection, that is, their foot in the past. The digital immigrant accent can be seen in such things as turning to the Internet for information second rather than first, or in reading the manual for a program rather than assuming that the program itself will teach us to use it. Today's older folk were 'socialized' differently from their kids, and are now in the process of learning a new language (Madden 2010). *Proposition 5:* The seniors are the digital immigrant who finds happiness in participating in social media platforms like Face Book, YouTube, Instagram, or Messenger. Since they are able to connect with families, friends and acquaintances once they are engaged in a chat box or face-time. Older adults experience depression and overtime it could alter in later life, i.e., leaving one's work because of old age tremendously lead to increase the number of these older adults who are in isolation and with

health problems. However, the feeling of loneliness among seniors is lessened by being connected to mass media network sites, the interaction they have among their friends and families in real time in using the internet. Thus, feeling depressed and lonely can be lessened. *Axiom 6: The lower the educational background among older adults, the more they are intimidated to utilize computers.* *Proposition 6:* The older adults who have higher education, living in varied conditions, are most likely to use mobile phones or other gadgets than those who have lower educational levels. Those who have deficient knowledge on how to use technology suffer from what is called technophobia. This is often seen among older adults with seemingly low educational attainment. They suffer from fear from using new technologies. *The levels of education* and their willingness to learn how to use ICT will enable them to become adept in adopting to this current culture. *Education is a tool that gives impact to learning,* how and what in the use of computer, the better they overcome technophobia (Dempsey, K., 2017). *Axiom 7: When seniors join the world of online website, the more they are hooked to the use of tablets and e-books.* *Proposition 7:* Older adults use tablets and e-books, they are owners of these two instead of owning a smart phone. This is common among high income and educated young seniors. The age group from 65 to 69 age are going online while around sixty five per cent owns their home broadband. They are nearing to ninety of the percentile of seniors who are college degree holders and they go online. Furthermore, seventy per cent of them are adopted with their own broadband (Pew Research Centre, 2014).

Attention to media online networks was mostly focused on younger generation and media use. The use of social media sites, in the present survey reveals the age range of 30s to 50s and adults 50 years over are hooked to these networks on social media. There is an increasing concern on the disproportionate use of online social networking as investigated. A bigger percentage of the participants are said to access the sites many times per day. However, they believed to have misused time and there is a quite a number of percentage (75%) of those who use these sites were reported to have spent less than two hours a day. Network links lead to a diverse way to network with others, those previously known people as well as recently formed acquaintances. Apprehensions on reduced face-to-face interfaces and the loss of social skills have transpired. Currently, survey discovered that for a huge percentage of men and women are enjoying social network sites since it gives great chances to get in touch with their friends and family (53%) and such participation gives them time in social activities (26%). The rise to become socially interactive provides welfare to peoples' self-confidence and giving them a better sense in mental health. For some people, taking their time in an online network linkages is likely to produce positive results (The Social and Psychological Impact of Online Social Networking 2010).

In phase two of the collected documents, Diaries of the Psychosocial Group Rehabilitation Leaders, (Source): Loneliness of Older People and Elements of an Intervention for its Alleviation Nina Savikko, 2008; were the diaries of the organizers and used as observations of the researchers based on the free notes from the group consultations. The details of the journals were described in group discussions and how these purposes were attained. A philosophical contemplation was written by the group leaders and was followed by the next step, wherein the head took chances in transcribing the diaries.

The group leaders wrote reflective deliberation of their own role and of the group process. During the course of their deliberations, the leaders took turns in writing these diaries. There were positive results in the impact of the survey particularly in educating the seniors into a meaningful social relationship while they network in the websites.

**The Theory:** The main theory of this research, to maintain societal connections is a principal component of maturity. Mass media, or social media delivers the likelihood to participate in significant collective communication, by linking online social webs and wiredchatmedia. But this use of social media can be *intensified or lessened by low levels of education*, and *low computer literacy* which become obstacles to online contacts by seniors.

## RESULTS AND DISCUSSION

A thorough exploration on the characteristics descriptively helped get a good understanding on how these users reveal their character as social media users in contrasts to non-users among the community of seniors who most of them are within age 50, or over and these are the married, and educated females. While those older adults under 50 are those described as social networking sites (SNS). Furthermore, by exploring the reasons these older adults chose not to use social media technologies; security and privacy issues are perceived as threats to personal information. These complexities are addressed by the technical designers and to address these issues is an endeavour between technology developers and the users. It was found out in the study that seniors are access to social media from their own computer or mobile devices to keep up with the use of technology. Although some of them are intimidated by the 'new technologies' and even resisted using this new technologies. In order to for new designs become effective, it is indispensable to comprehend the factors and through this research, as evidenced by the present study.

## Conclusion

This research found out that there are number of older adults who spend more time in social media but some of them are identified with disabilities like poor eyesight and cognitive functioning. Having a meaningful life is to stay online and be connected to families and friends. *This particular group of older people is a priority among academic investigators and for the expert teachers in ICT, educate seniors who are likely affected and are limited due to their physical problems.* For this reason, to find life with deeper meaning and purpose, older adults must socialize to be happy. Engineers or technology specialist to accommodate these needs of the elderly and understand better the different features and applications of the internet usage. There is a need to create new design so that older adults will continue to utilize what are underutilized primarily because computers are not made accessible to them.

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