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Internet and Aging Population

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Abstract: The use of the internet and its' providing information enables the elderly also known as the aging population to face in more easy way all the problems and complications of contemporary lifecycle, invading the restrictions of the emotional besides social loneliness, therefore, accomplishing a more worth life. The main of this article is to discover how the aging population were conversant with the internet, the reasons that reduce the familiarly of the aging population with the internet, and identifying strategies to improve the usage of the internet by the elderly (Arning & Ziefle, 2007). The study sample comprised of 300 people ranging from 65 to approximately 85 years old. The data collection was led by completing a questionnaire (anonymous). Also, the data analysis is being achieved using the one-way ANOVA x2 -test and the SPSS 15 statistical package and, there was the application of *t*-tests for the process of statistic (Aldridge, 2004). The results Of the 300 people that were considered, 166 are women than 134 men. 80% are between the age of 65 and the age of 74 years. All the responses stated low or no daily usage of the internet. In detail, 60% of women had a smartphone and/or access to a computer, but only 30% of women were conversant with using the internet while 80% of men have a smartphone and/or access to a computer yet 45% of them were conversant with using the internet. Females confronted further worries compared to men with a statistic important variance (Carpenter & Buday, 2007). It is a normal procedure for aging to occur. Deduction in all mental and biology functions takes place, resulting in losing patience and exhaustion. The elderly regularly experience through the oppositions of current actuality as the active knowledge and technology. Therefore, elderly require suitable guidance with big support with the aim of adaptation to the problems and difficulties of daily life.

Keywords: *Elderly people, aging population, technology, internet, computers, smartphones, quality of life (Chung, Park, Wang, Fulk, & McLaughlin, 2010)*

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INTRODUCTION

Information and Communication Technologies (ICTs) are growing as they become a key of social and economic innovation and modernization. Organizations in Europe, in 2008 dedicated that around 20% of their returns to Information and communication technologies is responsible for about 26% of comprehensive study spending (Cotten, Anderson, & McCullough, 2013). The inclusion of the elderly in the digital age can absolutely affect the financial and public welfare (Xie, 2007) and on their value of lifestyle (Fingerman, Berg, Smith, & Antonucci, 2010). Technology can result in the development of an energetic elder people, lowering the degree of social isolation and marginalization (Anderson, Perrin, & Jiang, 2019). However, public institutions and companies have systematically forgotten the aging population (Bureau, 2018), though they are an interesting and increasing category of consumers who have been

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presently requesting for utilizing information and communication technologies. On the whole, there is an increasing interest in the elderly, not merely for researchers who are defining different obstacles for the activities of marketing (Blaschke, Freddolino, & Mullen, 2009) but additionally, for Europe's political forces which are concentrating their efforts on this group.

In the expeditiously aging population, the elderly are requested to adapt to advancing technology and the demands of contemporary society. This one seems extensively believed that senior persons exhibit lower change thru the invention of new skills in comparison to the earlier generations, since they either lack the scientific practice and involvement or due to the present healthiness. Moreover, this is because they need the technical understanding or because of their current wellbeing. Furthermore, while trying to use advanced technologies, they normally face many difficulties because of their demographic characteristics including education, geographical location, possible disabilities, income, as well as the difficulties connected to how complex new technology is (Botella et al., 2009; Dyah, Apriliyadi, Saparita, & Abbas, 2017; Xiaoyun & Siqi, 2018). Other contributing factors for the reduced adjustment include a lack of digital skills, incentives, appropriate training, and economic obstacles (Cotten et al., 2013). A commonly held perspective is that the global market is not presently investing adequately on innovations for the aging population including user-friendly and comprehensive services for improved and healthier living conditions. Moreover, the majority of goods and service area are frequently unsuitable to the wants and requirements of the elderly, exacerbating a sense of frustration resulting in depending on other people (Berner, Rennemark, Jogréus, & Berglund, 2012).

The Digital Usage and the Elderly One

The utilization of the computer, smartphones, and new technologies presents a lot of benefits for the elderly. It has a helpful and good impact on determining problems and autonomy, preventing them from intellectual failure by augmenting autonomy and day-to-day operating (Pan & Jordan-Marsh, 2010). Several researchers have examined the users of the ICT by the old persons by studying many criteria including innovation, insolence, demographic situation (Satariano, Scharlach, & Lindeman, 2014), proneness, risk aversion, nostalgia, and innovativeness (Shapira, Barak, & Gal, 2007) recreation participation, leadership, leisure, health and well-being (Sum, Mathews, Pourghasem, & Hughes, 2009) or the dominant explanations for failing to use the ICTs (Tun & Lachman, 2010). Nevertheless, limited studies challenge the rise of the practicality. Consequently, user creates a necessary understanding to overpower all obstacles to the ICTs as a method wherein various insights on ICTs play a significant part. As an example, Vicente and Lopez (2010) identify main criteria in the route and propose a modeling where there are trust, age, usefulness, and comfort explaining the meaning of involvement in Electronic Media Use by the aging population.

Hough and Kobylanski (2009) propose a scale for measuring attitude and applying it in the aging population frame. They conclude that the elderly with additional optimistic approaches towards ICTs have a high likelihood in using it. Additionally, Kim (2008) suggests that the attitudes toward the usage of ICTs and the wellbeing position significantly affect together, the total time and movement level using the Internet. Regarding usage of ICTs, the learning of the digital involvement by the aging people is also focused on, however with the use of an excellence methodology. Here the situation of the analyzing performed by Koopman-Boyden and Reid (2009). These two writers analyzed the insights and comprehensions of several aspects, as well as relevance, affordability, and applied significance as gauges of the means of approaches and attitudes by the elderly for the usage of the internet.

RESEARCH METHODOLOGY

The sample of this study comprised of 300 people (166 women and 134 men) aged from 65-85 years from the geographical locations of Thessaly, Attica, Peloponnese, Macedonia, and Central Greece (Bell et al., 2013). The sample had been collected in accordance to random sampling rules, through individual interview of the researcher, and visiting several Open Centers of Protection for the Elderly (Conci, Pianesi, & Zancanaro, 2009). Initially, a pilot study also known as a preliminary study was performed on 30 subjects, by utilizing all required parameters and all the specialized tests and methods to explore the collected data (Dall et al., 2013). Data was collected through completing a questionnaire consisting of 26 items linked to the usage of the internet, the demographic characteristics and the health of the participants (Kwon & Wen, 2010). Additionally, the questionnaire comprised of open and closed-ended questions, and was filled in by the researcher's personal interview, after having delivered the required information, clearly describing the objectives and goals of the study and ensuring the respondents remained anonymous (Cresci, Yarandi, & Morrell, 2010).

Completing these questionnaires lasted from July to September 2017 (Choi & DiNitto, 2013). Statistical Program for Social Sciences SPSS 15 was effected to statistically process of the data. Additionally, the chisquared test was adopted to test the independence' hypothesis between two variables, as well as to test for the distribution' homogeneity for two categorical variables. The Fisher exact test was to be used, whenever the above test was inapplicable, that is with anticipated frequencies of lower than 5. Cronbach's alpha, indicating a scale's internal consistency is $\alpha = 0.9027$ (J. W. Lee, 2010). The *t*-test and ANOVA were used to test equality of means lower than two or over two groups respectively. Finally, all tests are considered significant if the *p*value is lower than 0.05 (Erickson & Johnson, 2011).

RESULTS

Taking time to understand the aging factors that affect the ability of adults in learning computer skills is a good way of teaching and designing computer classes for adults who are older. There is much research and findings done on the challenges that the older adults experience when it comes to learning how to use a computer, including techniques that could be used to reduce the aging effects. Most of the mental processes that is required to assist in learning reduces or becomes worse with age, for example the semantic memory and the processes that are considered automatic. The aging population have different needs and abilities making it difficult to say that you can come up with a formula to help you on training the adults on using the computers. Also each individual have their own challenges in terms of perception towards technology like computers and health resulting in difficulty of finding a typical adult whom you can say is older.

Of the 300 individuals, 71.08% were men which translates to (71.08% X 134) which is approximately 95 men and 79.7% aged 65 to 74 years which translates to (79.7%X134) which give approximately 107 men who are between 65 to 74 years (Bean, 2003). Women indicated the highest percentage in the higher age group of over 85years, with a percentage of 6.77%, in comparison with men at 1.81%.

In regard to using the internet, 60% of women which translates to (60%X166) that is 100 women approximately had a smartphone and/or access to a computer, but only 30% of women were conversant with using the internet which is (30%X166) equals to 50 women while 80% of men have a smartphone and/or access to a computer translating to (80%X134) which equals 107 men yet 50% of them were conversant with using the internet which equals (50%X134) which is 67 men. Almost all respondents answered that they used computers and mobile phones for uses such as calling, texting, and watching, rather than for the internet. This shows that the men were more into technology compared to women and they were also knowledgeable than women as more of them knew how to use a smart phone.

Females were found to encounter more challenges when it came to using technology compared to men, which according to the statistics, there was a significant variance of 20% (Morris, Goodman, & Brading, 2007). Furthermore, all of the participants admitted to experiencing 60-80% difficulty in learning how to use the internet with women having an increased rate of 25% (Agarwal & Karahanna, 2010). The most common factors indicated as reasons for difficulty in learning the internet include health and well-being (50%), difficulties connected to how complex new technology is (30%), affordability (15%), and geographical location (5%) (Ajzen, 1991). In relation to the attitude/willingness to acquire the methods of using Internet, 85% of participants were positive about knowing how to habit with Internet us while 15% were disinterested citing no need for it (Neves & Amaro, 2012).

Table 1 *Chart on Ownership of Smartphone and Usage*

Women with smart phone	60%
Women who know how to use smart phone	30%
Men with Smart phone	80%
Men who know how to use smart phone	50%

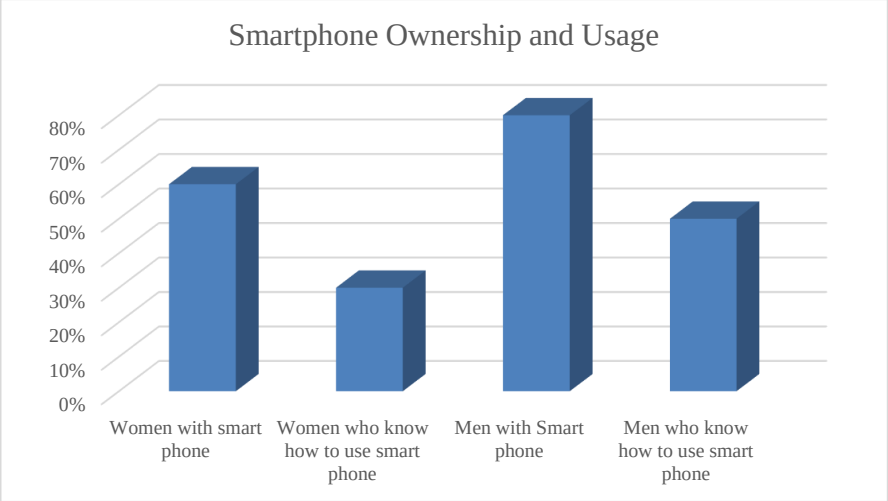

Figure 1 *Chart on Ownership of Smartphone and Usage*

The statistical data shown the chart one can conclude that more men owned smart phones and had an idea on how to use it compared to women.

Table 2 *Chart Showing Factors Affecting Learning Ability*

Health and Well-being	50%
Complexity of technology	30%
Affordability	15%
Geographical location	5%

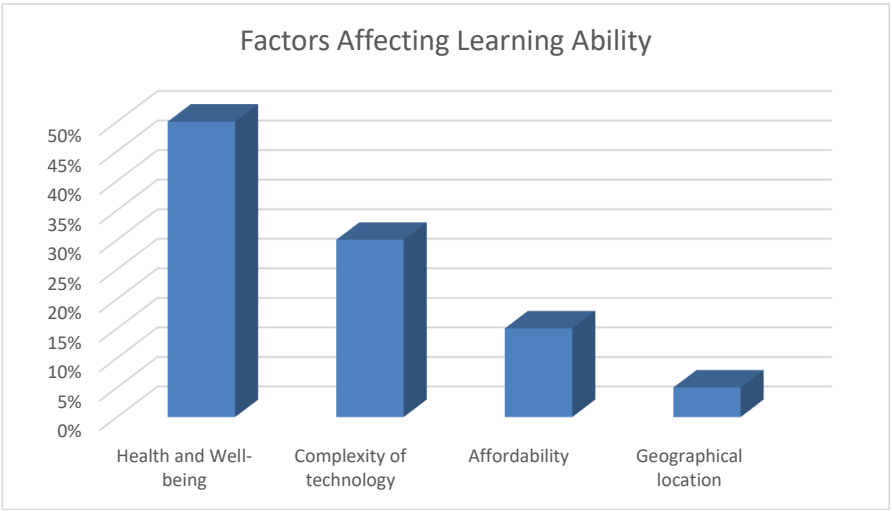

Figure 2 *Chart Showing Factors Affecting Learning Ability*

The ability for men and women to be able to learn computers and to understand technology is mostly or highly affected by their health and well-being, followed by the technological complexity, the ability to pay or availability of resources and lastly least affected by geographical location.

Table 3 *Chart Showing the Attitude towards Learning*

Participants with positive attitude	85%
Participants with negative attitude	15%

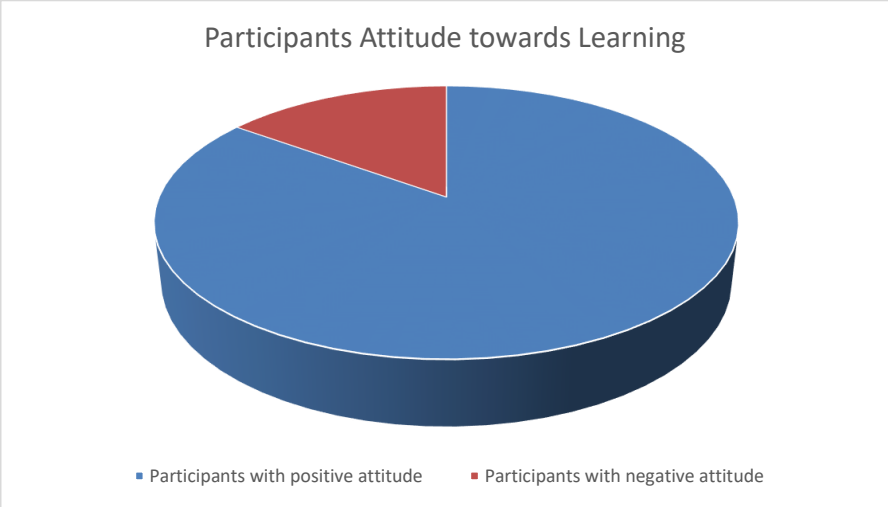

Figure 3 *Chart Showing the Attitude towards Learning*

DISCUSSION, LIMITATIONS, AND FURTHER RESEARCH

The age of customers has been usually deliberated as a significant basis for market segmentation (Delil, 2018; Khvorostianov, Elias, & Nimrod, 2012). However, identifying a homogeneous aging population of consumers might be a difficult insofar since the aging population exhibits a differential sensitivity in how they process information (Gatto & Tak, 2008). This is exhibited in an increased heterogeneity in this category of the population (Gefen & Straub, 1997). Elderly people often get further differentiation in terms of their means and styles (Grimes, Hough, Mazur, & Signorella, 2010). Additionally, their purchasing comportment is completely dissimilar from other persons. As an example, the age has a important effect on the quantity of trademarks and brands they prefer, the amount of sources of information they use, displays an increased change aversion (Hill, Beynon-Davies, & Williams, 2008) and is linked in a negative way with the perception of using ICTs (Ilie, Van Slyke, Green, & Lou, 2005). The older a person gets, the innovativeness lowers with the preference of long-known options rather than exploring novel information (Iyer & Eastman, 2006). Technology anxiety also heightens with age (Febro & Barbosa, 2017; Jensen, King, Davis, & Guntzviller, 2010).

CONCLUSION

However, the elderly must previously appreciate the probable helpfulness and benefits of Internet and digital market. If brands have successfully gotten the elderly to overcome beliefs about cost and difficulty, the aging population with confident involvements will have bolstered the comparative importance of the use of the ICTs (Kalmus, Realo, & Siibak, 2011). The elderly often have no realization of how much their capabilities have altered and how gradually adapting to the internet has occurred (Charness & Boot, 2009). Moreover, in order to progress particular suggestions for the aging population on the Internet, variations in the social perceptions with capabilities that maximum impact effective usage need primarily be assumed (Fisk, Czaja, Rogers, Charness, & Sharit, 2009).

In this sense, the results of this study care about the concept that new resolutions must be dependent on the values of design, chiefly, the joy of using internet, result demonstrability, apparent comfort of usage, and, to a lower extent, usefulness (Czaja & Lee, 2007). These are elements to be comprised in an offer that ought to be right connected to this group (B. Lee, Chen, & Hewitt, 2011). Therefore, supplementary investigation and researches could comprise procedures of the prior experience of the aging population with ICTs platforms including e-mail, word on PCs, games,

calculating, Websites and browsers, etc. (Adams, Nelson, & Todd, 1992). It is good to further distinguish among more experiences of users and create relationships based on genders (Ajzen & Fishbein, 1980).

There is a solution to the age related issue to help in the learning of computer usage among the adults both at a particular levels and globally. For example if we look at the global level the researches that have been done show that to have a successful technique of training is to use the ones with less cognitive demand. The suitable techniques to use for training adults include: making the class relevant as the adults need to relate with what they are learning especially the older ones and this will increase interest in learning, give extra time in accomplishment of simple tasks as this will assist them in practicing the new skill, the eyesight of the older people are not so good so it is important for the tutor to adjust the monitor and its lighting to favor them, speak slowly as with old age higher pitch were what was lost first and also choose a convenient environment for learning that is it should be warm and away from distraction and noise.

The purpose of this study was to find out how older people adopt to technology and their willingness to learn. Our findings are the same as the literature that we had a chance to read in that the adults need special attention to help them learn about computers and technology and there are factors that affects their learning like their health and well-being, availability of resources etc.

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