Decalogue for a Senior Citizen's Positive Attitude towards Facebook

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Abstract— This analytical study proposes a Decalogue for the elderly, considering that different investigations around the world, have given beneficial credit to social interaction for the Senior Citizens' quality of life. This Decalogue seeks to shape their attitude towards Information and Communication Technologies, so that they tend to opt for the use of Facebook for social interaction with their loved ones and friends. Each one of the proposed statements of the Decalogue is based on conceptual bases, which derived from documentary research initially carried out with a heuristic perspective, and later with hermeneutical analysis. The process that was carried out in this study matches with that of an inductive approach. It was developed through qualitative research techniques, which coordinately applied in order to approach the research object in a progressive way.

Index Terms— Senior Citizen, Decalogue, Facebook, Quality of Life, Social interaction.

I. INTRODUCTION

THIS study, which belongs to the Social Computing Research Area, resulted in delivering a proposed Decalogue. This Decalogue intends to shape senior citizens' attitude to lead them into social interaction through Facebook so that quality of life's enhancements get to be experienced. The research, that was carried out to obtain the Decalogue, was motivated by the following transcendental events: 1) The newest opportunities and services that Information and Communication Technologies (ICT) offer to people. 2) The current importance of enhancing the quality of life (OoL) of older adults, which might be analyzed through several approaches such as social interaction through Facebook, as it is focused in this study. 3) All the benefits regarding seniors' quality of life that have been credited to Facebook by several research studies around the globe, which may be found on Fig. 1, and are well-founded by publications displayed in Table 1.



Fig. 1. Potential Benefits that social interaction through Facebook can have on Senior Citizens' Quality of Life.

TABLE I
ANALYZED STUDIES THAT ALLOWED THE AUTHOR TO IDENTIFY THE
BENEFITS OF FACEBOOK SOCIAL INTERACTION FOR SENIOR CITIZENS.

	POTENTIAL BENEFITS THAT HAVE				
Dependence	BEEN SUSTAINED				
REFERENCE	1	2	3	4	5
(Age Uk, 2011)	YES	YES	YES		YES
(Ala-mutka et al., 2009)	YES	YES	YES		
(González, Gómez, & Mata, 2012)		YES		YES	
(Haris, Majid, Abdullah, &	YES				
Osman, 2014)					
(Hartnett, Elizabeth; Minocha,	YES	YES	YES		
Shailey; Palmer, Jane; Petre,					
Marian; Evans, Shirley; Middup,					
Christopher Paul; Dunn, Kathryn;					
Murphy, Brendan; Heap, Tania					
and Roberts, 2013)					
(Hendry et al., 2015)	YES	YES	YES		
(Hope, Schwaba, & Piper, 2014).	YES	YES			YES
(Myhre, Mehl, & Glisky, 2016)				YES	
(Moser, Fuchsberger, Neureiter,	YES				YES
Sellner, & Tscheligi, 2011)					
(Prado, 2013)	YES	YES	YES	YES	YES
(Quinn, Chen, Mulvenna, &	YES				
Bond, 2016)					
(Vilte, Saldaño, Martín, &	YES		YES	YES	YES
Gaetán, 2013)					
(Zhang & Kaufman, 2015)	YES	YES	YES	YES	YES

II. RESEARCH PROBLEM

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A. Objective

Establishing ten key messages, based on conceptual bases, for a Senior Citizen (SC) to feel motivated to take advantage

of Social Interaction through Facebook, so that he/she gets to achieve satisfactory interpersonal relationships.

B. Research Questions

What are the messages, which should be established within the Decalogue that can encourage a senior citizen to socially interact through Facebook to achieve satisfactory interpersonal relations?

What are the conceptual bases of the messages that should be established within the aforementioned Decalogue?

C. Defining the Research Context

The research context was initially conformed by the author's closest SCs. In order to shape and sustain the messages of this Decalogue, through conceptual bases, the research context was retargeted towards diverse publications published online by reliable sources. These sources include ITU, CEPAL, and several indexed journals, focused on: Theories of Aging, senior citizens, their quality of life and well-being, and key components that might define the quality of a senior's interpersonal relationships.

D. Research justification

This analytical study presents the conceptual bases that support each one of the messages of the Decalogue. This Decalogue intends to shape the SC's attitude to encourage their interaction through Facebook, in order to achieve the acknowledged benefits that social media has on the quality of life. It also contributes in reducing the deficiency stated in (ITU, 2014): "There has been relatively little data collection and analytical work done on the impacts of ICT access and use by households and individuals." Due to the author's knowledge, resources, and adequate expertise, this study was feasible, letting him comprehend the proposals and facts from the analyzed publications.

E. Methods utilized in this research

The process maintained in this study had an inductive focus, which was developed by following qualitative research methods: direct observation, and documentary research. These methods were applied complementarily and coordinately to approach the research object in a progressive manner.

Direct Observation: In the beginning of the study, this method was applied to the author's immediate surroundings, in order to record the attitudes and reactions of nearby senior citizens, family members and friends, towards the use of Facebook.

Documentary Research: Initially performed with a heuristic perspective, and subsequently followed by a hermeneutical analysis of the aforementioned documentary context.

III. RESULTS

A. From direct observation

After direct observation was performed within the researcher's surroundings, two specific queries appeared:

1. What kind of circumstances allow a SC to feel comfortable when socially interacting through Facebook?

Whilst several SCs, specially the younger ones, proved to be thrilled when socially interacting through electronic devices, there was another group that did not showed any interest in social interaction through Facebook, arguing they already had enough interpersonal relations and a high quality of life.

When analyzing this query, direct observation led to the following concept: The first factor that motivated a SC to handle ICT alternatives, such as Facebook, is the social connection that may be achieved with family members, particularly with those ones living far away.

Being motivated, a SC turns out to feel capable of surpassing any mental barrier related to their age or their gaps of technology knowledge. Consequently, a SC becomes confident to look for help from reliable people, and learn whatever it takes to satisfy that communication interest.

As a result, a second query appeared: Is a SC still capable of learning through digital literacy? The answer has been detailed below.

B. From documentary research

In addition to extracting the impacts that Social Interaction through Facebook might have on a SC's quality of life (displayed in Fig. 1), documentary research allowed to shape the messages of the Decalogue in order for a SC to maintain a positive attitude towards Facebook, and revealed the conceptual bases of those messages.

Decalogue for a senior citizen's positive attitude towards Facebook:

- 1. I am capable of remaining as active as I was in previous periods of my life.
- 2. I am capable of being the architect of my own quality of life.
- 3. Social activity is beneficial and provides me with satisfaction.
- 4. Being in touch with my loved ones is an important part of my life.
- 5. With Facebook, I can avoid the social isolation and loneliness that would affect my general well-being (emotional, physical, and social).
- 6. Facebook is a valid alternative for me to remain as a socially active human being with my loved ones, especially with those living far away from me.
- 7. Facebook allows me to maintain interpersonal relationships with different meaning and intensity.
- 8. I am capable of learning how to use Facebook.
- 9. Facebook has functionalities that, when fully exploited, will provide me with very satisfying virtual social interactions.
- 10. I might find other ways to employ Facebook and the Internet, and they will bring me satisfaction.

Conceptual Bases of the Decalogue:

For message No. 1: Theories related to elderly found in (Aranibar, 2001): Modernity with a Dynamic Vision, Modernity with a Life Cycle Perspective, and Theory of Activity.

For message No. 2: "The QoL is not something that a person can have or not, it is needed to consider it as

something in a scale; a person can have low or high QoL. QoL can be evaluated and increased." (Esteban, Buils, & Curto, 2012) (pag. 4)

"Any stimulus may modify the individual's construction of their quality of life" (Gabriel & Bowling, 2004) (pag. 676)

For messages No. 3 and No. 6: "Social activity is beneficial in itself and results in greater satisfaction in life. Social interaction is important in the development of the concept of self in old age. All decreases in social interaction in old age are best explained by poor health or disability. If retirement or the limitations of age make participation impossible, people will find substitutes for the roles or activities that they have had to renounce." (Oddone, 2013)

For message No. 4: "The networks conformed by Family, friends and acquaintances, not only encourage senior citizens to keep their social identity, but they also provide with services, information and emotional/material support" (Concha, Olivares, & Sepúlveda, 2000)

Within this matter, the concept of social/family inclusion fits perfectly, which is why it was conceived through an adaptation of what was stated by (Simplican, Leader, Kosciulek, & Leahy, 2015): "Social acceptance of the elderly within their familiar environment and their community settings (subjective measurements), in order to get social interaction, relationships, and social networks (objective measurements)."

For message No. 5: The definitions of social isolation, and loneliness found in (Elder & Retrum, 2012).

"Social isolation is the distancing of an individual, psychologically or physically, or both, from his or her network of desired or needed relationships with other persons. Isolation is the experience of diminished social connectedness is measured by the quality, type, frequency, and emotional satisfaction of social ties."

"Loneliness: is absence of meaningful social connections that are an inherent need that all human beings have"

For message No. 7: The starting point is the definition of interpersonal relationship that according to (Grossetti, 2009) is: "A reciprocal knowledge and commitment based on the interactions that give rise to specific forms of trust."

The intensity of the reciprocal commitment existing in an interpersonal relationship in this study is referred to as the strength of the relation or tie-strength, for which there are important statements such as the following:

"Strength of a tie is a quantifiable property that characterizes the link between two nodes [in a social network]." (Petroczi, Bazsó, & Nepusz, 2007)

"The strength of a tie positive and symmetric is a (probably linear) combination of the amount of time, the emotional intensity, the intimacy (mutual confiding), and the reciprocal services which characterize the tie." "A given tie is strong, weak, or absent (Included in "absent" are both the lack of any relationship and ties without substantial significance)." (Granovetter, 1973)

"Factors that may determine the strength of a personal relation are classified as indicators and predictors." (Marsden & Campbell, 1984)

"Indicators are actual components of tie-strength (closeness, duration and frequency, breadth of topics and mutual confiding)." (Petroczi et al., 2007) (pag. 40)

The indicators will contribute with their weights to define a specific value for the tie-strength, according to the mathematical definition of weighted average for a non-empty data series: $X = \{X1, X2, X3, ..., Xn\}$ to which matches with the weights $W = \{W1, W2, W3, ..., Wn\}$, following the equation (1):

$$\bar{x} = \frac{\sum_{i=1}^{n} x_i w_i}{\sum_{i=1}^{n} w_i} = \frac{x_1 w_1 + x_2 w_2 + \dots + x_n w_n}{w_1 + w_2 + \dots + w_n}$$
(1)

"Predictors are contextual contingencies (neighborhood, affiliation, similar socio-economic status, workplace, and occupation prestige). Predictors are related to tie-strength but not components of it." (Petroczi et al., 2007) (pag. 40)

For message No. 8: "Learning capability lasts, during normal aging, up until 80 years old or even beyond. Learning how to employ and handle ICT systems is one of the skills that might be developed by stimulating cognitive processes... During digital literacy training, SCs tend to show an enthusiastic attitude while handling a computer and accessing the internet." (González, Gómez, & Mata, 2012)

"It has not been proved that elders are incapable of carrying out intellectual activities. According to the American National Institute of Aging, a senior's brain activity is as high and efficient as a young person's brain. Old age keeps a high learning capability, which might be enhanced by wisdom and previous experiences". (Prado, 2013)

For message No. 9: The full use of the features offered by Facebook for social interaction refers to the exploitation of all the characteristics that the social network platform puts at the service of the SCs, to help them establish satisfactory interpersonal relationships: Social Presence, Ubiquity, Usability, unicast, multicast broadcasting, Multimedia communication Services, and Asynchronous / Synchronous Transmission Modes.

For message No. 10: In addition to feeling socially active with loved ones and keeping current friendships (social/family inclusion), a SC will come to realize that Facebook interaction will also allow him to get the benefits displayed on Fig. 1.

IV. DISCUSSION

In order for a SC to successfully interact through Facebook, there are several requisites that should be met, such as:

- 1. A SC should feel motivated.
- 2. A SC should be in the adequate technological environment: budget to cover internet access expenses, technological devices to access social media services, reliable digital literacy or help, and a positive attitude (the proposed Decalogue is expected to have an influence on this particular attribute).
- 3. The SC should live within their own house. In contrast to people residing at a nursing house, seniors living at home may experience several advantages, such as: 1) availability of ICT devices set up within the SC's home

will depend on the SC or their closest relatives. 2) Internet access at home allows a SC to have time flexibility to get online. 3) If the SC does not have enough computer skills, getting reliable help will be easier.

- 4. In addition, the location of the SC residence should guarantee the availability of broadband Internet access provided by ISPs, the existence of technology providers, and the presence of computer training centers.
- 5. Facebook, as a social networking service, should enhance certain usage features. According to senior citizens, they may experience several shortcomings alike (Diaz & Harari, 2014), (Vilte et al., 2013) and (Gomes, Duarte, Coelho, & Matos, 2014) pointed out in addition to irrelevant information or excessive advertisement.

V. CONCLUSION

Facebook is a valid option for a healthy, independent SC to keep active social communication. Furthermore, it turns out to be an inclusive tool that might aid them in maintaining familiar and social inclusion.

The proposed Decalogue constitutes a compendium of previous research focused on theories of old age, concepts and attributes related to SC, which were assembled through this study, in a logical manner in order to sensitize the SCs towards the change of attitude regarding the social interactions through Facebook.

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