Barriers and Challenges Experienced by Seniors in Using Online Social Networks: A Phenomenological Study

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Abstract

Background: Many studies have indicated that the use of social networks and online communication by seniors can improve their general health and social welfare as well as promote the quality of their lives. However, problems with the use of online social networks may prevent them from using the networks. This study aims to explain the experiences of older adults when facing barriers and challenges of using social networks.

Methods: This qualitative study takes a phenomenological approach and was carried out in 2016 using purposive sampling. We collected the in-depth semi-structured interviews with 9 seniors) 3 males and 6 females) with an average age of 68.3 years. Subjects confirmed to be active members in at least 1 of the online social networks. The data were analyzed using Colaizzi's 7-step method.

Results: Two main themes of "preconditions of use" and "individual concerns" were extracted from the data analysis. A total of 6 relevant subthemes were as follows: "need for equipment and facilities," "adequate income", "need for technical knowledge", "trust in information", "trust in other users", and "security and privacy".

Conclusions: People of older age reported barriers and difficulties using online social networks. It seems that the elderly can be encouraged to use these social networks and improve the quality of their lives through educational planning.

Keywords: Online Social Networks, Elderly, Social Network, Social Media, Phenomenology

1. Background

Nowadays Social networks are an important part of our lives (1) and are considered as a new way of communicating in daily life (2). Besides the growing number of the elderly in Iran (3), we are witnessing the development of social media such as Facebook, Instagram, Telegram, Viber, with usability through cellphones. Today's, individuals aged 50 or over use online social media as a part of their daily life to expand their social relationships (4). The role of social networks and its positive impact on quality of life (5) and subjective well-being (6) has been confirmed. Furthermore, evidence shows the various benefits of seniors' use of technology and online social networks such as reduce loneliness (7, 8), depression,stress, and increase life satisfaction (9,10) as well as establishing an intergenerational relationship of senior members of a family with younger members (children and grandchildren) (11). Another advantage is to reduce isolation through engagement in social interactions (12). However, there are various reasons for social networks not to be used by older adults. Old people do not recognize the value of using online networks, neither do they have the skills to use such technology (13). In another study, various personal reasons (such as functional capabilities), technology-based problems (such as cost and complexity of use), and environmental barriers were among the other reasons introduced for not using social networks by older adults (14).

Given the benefits of using these types of networks, it is necessary to examine the barriers and problems that seniors may encounter when using the social networks. Identifying these difficulties and exploring the challenge experienced by the older generation in surfing social networks can help policy-makers facilitate the sue of such media. Given the existing research gap in Iran, we aim to understand the difficulties encountered by older adults when using online social networks.

2. Methods

Phenomenological method is one of the qualitative approaches. The phenomenological research aims to explicitly explain and identify a phenomenon, as it is perceived in a particular situation (15).

This study was approved by the Ethics Committee of Semnan University of Medical Sciences and conducted in 2016 in Semnan, Iran. The inclusion criteria in this study were as follows: at least 60 years of age; active membership in 1 of the social networks such as Facebook, Instagram or using a messenger service such as Telegram or Skype; subjects should have joined a social network after the age of 60, having active participation for at least 6 months and sufficient experience in using social networks or messenger services; communicating with family members; relatives and friends, and receiving and sending a post or message; being vigilant; having the ability to express experiences regarding the required details and the willingness to express their experiences; speaking Farsi; not suffering from mental disorders and blindness; and having access to smart cellphones.

Participants were selected through purposive sampling and the data were collected from in-depth semi-structured interviews. The interviewees selected a place for the interview sessions to be held, where they felt safe and could easily talk about their experiences, providing that place met the necessary interviewing conditions (e.g., being quiet and relaxing). Some interviews were conducted at the interviewees' house and some at the interviewer's. At the beginning of each interview session, the study objective was explained to each participant. After answering the possible questions posed by the participants and ensuring their willingness to participate in the study, the informed consent forms were collected. Participants were assured of the confidentiality of collected information. We recorded all interviews by a tape recorder and a cellphone. The interview began with a general question: "Please talk about your experience in using social networks." Then, more specific questions were asked to get more thorough information. Two sample questions are as follows: "Can you explain more?" or "Give me an example". In addition, the researcher during the interview sessions also paid attention to the facial expressions and body language of the participants and, if necessary, took some relevant notes. These field notes were also used for data analysis. All participants were instructed for a follow-up meeting where we further discussed the findings. This discussion helped to ensure that our observations best reflect the participant's personal experiences. The duration of each interview ranged from 60 to 110 minutes.

In continuation, the interviews were transcribed verbatim and immediately analyzed. Then, the follow-up interviews were scheduled. In this study, the data were saturated after holding interviews with 9 seniors. The data saturation was confirmed by the researcher and 3 other researchers during data collection.

Data analysis was performed using Colaizzi's 7-step method (1978) (16). Colaizzi's method is an appropriate approach to focus on finding the nature and meaning of membership experience in social networks (17).

First, all participants' experiences were read several times, until a sense of the whole content was obtained. Then sentences and vocabulary, significant statements, and phrases relevant to the experiences of using social networks were extracted. In the 3rd stage, formulated meanings were extracted from obvious expressions. At this stage, the researcher attempted to deduce the implied meaning from the statements through bracketing and reword them as short phrases and sentences. In the 3rd stage of the data analysis, the researcher assigned to each of the extracted sentences a specific meaning intended by the participants, therefore, these extracted sentences and phrases were then expressed in 112 conceptual terms. Subsequently, the shared concepts were grouped into specific subject categories and each category was encoded in such a way that it included all relevant concepts. After that, some categories of conceptual themes reflecting a particular concept were put together to form a distinct conceptual structure. All concepts were then explained comprehensively. In the next step, the extracted codes and concepts were categorized in a specific category and the main concepts of the research were explained with the combination of conceptual subcategories.

In order to determine the data rigourness, Lincoln and Guba's (1985) (18) metrics were used. This was done through the researchers' prolonged engagement, using member check, taking quick notes, having external check and time triangulation, as well as ignoring the researchers' presumptions in the data collection and analysis process. Additionally, the confirmability was obtained through the researchers' impartiality and consensus on the interviews, concepts, and conceptual categories extracted by the 3 faculty members (peer check). Transferability or fittingness was achieved through interviewing different contributors and providing direct quotations and examples, rich explanation of data, and scientific opinion sharing with the expert professors.

3. Results

The demographic specifications of 9 seniors who participated in this study are shown in Table 1. During the data

analysis, 2 main themes of "preconditions of use" and "individual concerns" were derived from the experiences of the elderly regarding the use of social networks (Table 2).

3.1. Preconditions of Use

This theme contained 3 sub-themes: "Need for equipment and facilities," "Adequate income", and "Need for technical knowledge".

Need for equipment and facilities: for older individuals to use social networks, access to facilities and tools such as computers, tablets, and Internet access was required. This access was provided through the purchase of smartphones, modems, or the cellular Internet.

Participant (P) 5: "I watched all people having new phones doing things that I could not do. I changed my cellphone to install the telegram."

Filtering has made access to some social networks difficult. This makes seniors not to use them or to use anti-filters to access them. Since the installation of software and anti-filters is difficult for the elderly, such a lack of access prevented them to use these networks.

P. 1: "With the arrival of anti-filters, Facebook was blocked and we turned to Viber and Telegram, which need no anti-filter."

Adequate income: One of the difficulties experienced by seniors in using social networks was the cost of providing facilities such as computers, laptops, tablets, and smart phones to have access to social networks.

P. 2: "The tablet or the phone should be provided to the elderly in installments or with bank facilities."

P. 9: "Even if the seniors would like to use cell phones, they are too expensive."

The cost of the internet should also be paid by the elderly in order to be able to use these facilities.

P. 3: "When it gets older, the disease appears, the medical channels have information about diseases, which can be looked at, but because of the cost of the Internet, we are going to get it down."

Need for technical knowledge: To use the social networks, the elderly should have minimum knowledge. This knowledge can be about how to use computers, tablets, and smart phones, how to work, and how to connect to the Internet through various tools, as well as basic information on how to subscribe and use online social networks.

P. 7: "I asked someone with more experience. He taught me for 5 hours. I also learned a little bit by myself."

3.2. Individual Concerns

This theme included 3 sub-themes: Trust in information, trust in other users, security, and privacy.

Trust in information: Using social networks, the elderly face different information in various scientific fields such as issues related to health, nutrition and sports, and non-scientific issues like cooking, sewing. Depending on their relatedness of such information, the percentage of the elderly trust differs. If this information were relevant to medical issues and therapeutic suggestions for specific diseases or physical conditions, the ratio of the senior's trust would be at a lower level. Although the elderly studies these points, they did not apply them without consulting their physician.

P. 1: "I do not trust the information provided by these networks, like suggesting black oil for an abscess. It does not respond to different kinds of abscess."

Trust in other users: Since individuals may not provide their original identity and register with nicknames and initials or even unreal genders in social networks, seniors did not trust the users of these networks.

P. 6: "Some users may not even have their real name. They live in Shiraz, for example, and say that they live in Mashhad."

From the elderly viewpoint, those who do not fully enter their personal names and identities in social networks are seeking to do evil deeds or distort reality.

P. 1: "When I first sign up in the Facebook, I wrote my name and my phone number and other persons blamed me for doing so .... I said, I am saying the reality and I do not want to distort anything."

Security and privacy: Security issues and privacy were important when using social networks by the elderly. They were worried about the personal information they shared, and therefore, were unwilling to share their personal information on these networks.

P. 4: "When I text, there's an option indicating the ones I want to see my text (including my friends, my friends' friends, or special persons). The ones I tag can read my messages".

4. Discussion

The study results indicated that the senior's experiences in using social networks consisted of 2 themes of preconditions of use and individual concerns.

Facilities such as the Internet and computer are the prerequisite of using social networks. Hutto and Bell also suggested that one of the barriers causing seniors lack of willingness to use social networks is lack of access to computers and the anxiety of using technology (19).

The results indicated that the elderly who use online social networks, in addition to Internet access, should be equipped with tools such as tablets, laptops, and up-to-date smartphones. Due to their high prices, it is not possible to make them available to the elderly. High price along with ergonomic barriers and lack of interest is one of the

Table 1. Demographic Specifications of Participants

No.	Age	Sex	Level of Education	Participants' Past Jobs	Marital Status
1	62	Male	Associate degree	Employee	Divorced
2	71	Male	Bachelor	Teacher	Married
3	75	Female	Diploma	School manager	Married
4	65	Female	Master's degree	Teacher	Widow
5	67	Female	Bachelor	High school manager	Married
6	74	Female	Physician	Gynecologist	Divorced
7	65	Female	Diploma	Housewife	Widow
8	65	Female	Associate degree	Teacher	Married
9	71	Male	Diploma	Employee	Married

Table 2. Retrieved Themes, Sub-Themes, and Cluster Codes

Themes	Sub-Themes	Cluster Cods
Preconditions of use	Need for equipment and facilities	Features and equipment required, such as a computer, laptop, tablet, cellphones
		Internet access
		Need to anti-filter
	Adequate income	Creating facilities to buy the necessary equipment
		The cost of purchasing equipment
		The cost of purchasing the Internet
	Need for technical knowledge	Get help from others to install the app
		Participate in training classes
		Getting advice from others for use
Individual concerns	Trust in information	Not having confidence in received information
		Assessment of received information
	Trust in other users	Distrust of strangers
		Worry about abuse
		Feeling of danger
		Uncertainty and anxiety
	Security and privacy	Unwilling to share personal photos
		Worried about seeing photos
		Feeling insecure

main obstacles for the elderly in not using new technologies (20). In some studies, having access to information technology and Internet tools such as tablets and smartphones has been reported to be of low cost (1, 4). Older Iranians, mostly retired, often have no earnings but a pension. With regard to living expenses, there is no saving to buy computers or portable devices for using social networks. Paying attention to the elderly income level and livelihoods can help them prepare the necessities of using social networks so that they can take advantage of the benefits of using these types of networks. Economic variables seem to be a factor influencing the use of social networks. According to the results of this study, the elderly needs basic knowledge to use computers, internet, and subsequently social networks. For the successful use of social networks, a web-based skill is essential. That is, the elderly needs to understand some of the special concepts, such as the server, search, browser, and search engine to have access to the current websites and applications. Furthermore, having specific knowledge is essential for the use of

social media (21). Leist found that sufficient functional capacity to use computers and social media, information and communication technology (ICT) knowledge, and appropriate attitudes toward social media is necessary for the elderly to use social networks (22).

The present study also indicated that the elderly used the Internet and social networks to have access to different information; however, they do not trust all received information. Most older individuals use the internet to follow news and search for information (23). Similarly, Leist (2013) believes that the potentials of social networks can be employed to search and distribute health-related information on various diseases and treatments. This can have a positive impact on improving the elderlys' quality of life; however, the potential risk is that the shared information may contain inaccurate or even harmful details, especially concerning chronic and life-threatening conditions (22). On the other hand, the elderly in social networks have the ability to persuade each other to treat and adhere to medical treatments, which shortens the recovery period (24). This can be used in social networks and aging can be accompanied by more health through elaborating such networks and uploading the correct, reliable, and authentic information. If these networks are established, supported, and updated by health service providers such as the ministry of health and social security, they can help the elderly find the right information on aging and their medical needs and problems. This can also enhance the quality of life for this growing group of people.

Trusting in other users is one of the subcategories of individual concerns. The participants did not trust in other users, therefore, they were reluctant to become familiar with new persons through social networks, and would prefer to communicate online with non-strangers. Trust is defined as a person's confidence in the trusted features of members or programs (25). The elderly may face harmful behaviors when using social networks or their personal information may be abused by criminals (21). This makes them uncertain about the intentions of other users (26). They are concerned with the risks of sharing personal information (7), which creates a sense of distrust when using social networks.

Security and privacy is the other subcategory of individual concerns in using social networks by the elderly. Privacy in social networks controls the flow of personal information, including the transmission and exchange of information (27). Participants used to review the messages sent by other users and their friends, though, were not reluctant to share personal materials when concerning privacy. Other studies have also pointed to older individuals' concerns about privacy and sharing personal information on social networks (7, 28), which are in line with the findings

of the current study. The existence of various privacy settings affects the dissemination and disclosure of personal information by users (29). Some social media such as Facebook currently contain settings, through which the users can impose restrictions on the visibility of personal pages by other users. Familiarizing and educating the elderly about how to use these settings, in order to protect privacy, can assist them to use this type of network.

In this study, the limitation was sampling participants who met the inclusion criteria. According to other qualitative studies, the findings are less likely to be generalized. Considering that the present study was the first qualitative phenomenological research to explain the elderly experiences in using social networks, the study results could be the basis for other quantitative and qualitative studies. Further research on the use of social networks in the elderly is recommended.

4.1. Conclusion

The elderly have problems with the use of online social networks. In order to use the theme and benefit from social networks, it is necessary to address their problems through providing access to equipment and the Internet at a lower cost, developing social networks for the elderly and embedding features to control Privacy to ensure them that their information is not publicly available.

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