Role of Membership in Scientific and Specialized Groups of Virtual Social Networks in Increasing Knowledge, Professional Skills and E-Learning: A Case Study

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Abstract

Instant messages applications are a type of media social networks, which provides private communications between individuals. One of instant messaging between people in the world today, especially Iranians, is telegram App. The served experts have launched virtual changes and groups for the beneficial use of this tool Academic and professional groups and virtual channels, which have been launched with the aim of sharing knowledge and useful. this study was conducted evaluate the impact of these networks on the ability of professionals to join a virtual expert groups in 2015. The population in this survey included all members of expert groups Virtual Library and Information Science in telegram program. Cochrane statistical formula was used to calculate sample size and a total of 185 individuals were selected randomly. The survey instrument was a questionnaire consisted of 21 items that their validity was confirmed by several experts of information and its reliability were obtained for each of the aspects using statistical tests. The data shows that membership in professional and scientific groups in Telegram App, had highest impact Virtual learning 6/54, then it was 54.2 for increase of knowledge and 37.3 for increase of professional skills. The results showed that membership in scientific expertise virtual groups in telegram and exchange of information with this type of groups increase the ability of people.

Keywords: Social network, instant messaging, telegram App, virtual groups, share information.

Introduction

The social network is a set of web-based services that allows people to create their own public or private descriptions in virtual environment, or to communicate with other members of the network, share their resources with them, and search among other public testimonials to create

new connections. Social networks are also online services that allow individuals to have their own profile in a specific and certain system, share their knowledge, information and communicate with others. In this way, individuals can maintain their relationship with others and also form new social connections. Since the creation of the first virtual social network, thousands types of these websites have been created globally(Ellison, 2007), and now they have become one of the most important communication tools at the community and world level and are very popular (Pempek, Yermolayeva, & Calvert, 2009). For many, the use of these networks has become one of the routine tasks (Ellison, 2007). These websites are potentially capable of making fundamental changes to each person's social life, both at the level of interpersonal relationships and social relationships(Ellison, Lampe, & Steinfield, 2009). In most cases, the most important impact of these websites is to maintain and upgrade past relationships (Hampton, & Wellman, 2003). the role of these websites in shaping new interpersonal relationships should not be forgotten(Walther, & Parks, 2002).

On the other hand, although activity in these networks facilitates the communication of friends (Pempek, Yermolayeva, & Calvert, 2009), but the decrease in students' study time disrupts their education procedure (Kirschner, & Karpinski, 2010). One of the important negative effects of such sites, especially among students, is to increase anxiety and stress among them (Farahani, Kazemi, Aghamohamadi, Bakhtiarvand, & Ansari, 2010). But social networks have not only negative effects and can be used optimally for educational purposes by using them in the educational process(Yedidia & et al., 2003; Teclehaimanot, & Hickman, 2011).

There are several types of social networks like blogs, wikis, instant messaging programs, multimedia file sharing networks, and so on. Instant messaging programs are a kind of multimedia social network that allows for private communication between individuals or a group of people. Viber, WhatsApp and Telegram are from this category of programs (Shao, & Seif, 2014). One of the instant messengers that are popular today among the general public, especially the Iranians, is telegram software. Telegram is a messaging application that focuses on the speed of message transfer and security. This application has much features while is free. The features of this software include sharing photos, video, text and any file either privately to friends and acquaintances, or grouped in discussion groups. Different people have set up scientific groups and virtual scientific and specialized channels for useful deployment of this tool, including specialized librarianship and information channels and groups that have been set up with the aim of sharing scientific and useful information. In this regard, this study aims to study the impact of librarians' involvement in specialized telegram groups in increasing knowledge, job skills and e-learning.

Related Work

Looking at former researches, we find that most people engaged in social networking with an incentive of entertainment and communication with friends and family(Al-Daihani, 2010; Erfanian, Javadinia, Abedini, & Bijari, 2013; Grosseck, Bran, & Tiru, 2011; Madge, Meek, Wellens, & Hooley, 2009). While there is a huge potential for social networks to create scientific environments and to increase and share knowledge, and there is a need for libraries and librarians to use these tools for co-thinking and sharing knowledge. Being librarians in social networks and exchanging information, virtual social networks can be used to share and exchange information and knowledge among librarians, students and librarianship masters.

Chow and Chan (2008) surveyed "the relationship between the social network, social trust and common goals with organizational knowledge sharing." According to the findings of this study, respondents did not discriminate between hidden knowledge and obvious knowledge when sharing knowledge. Social networks and common goals significantly influenced their attitude toward voluntary sharing of knowledge as well as mental norms regarding knowledge sharing. Social networks and shared goals had reverse effect on their willingness and desire to share knowledge within the organization.

Aharony (2009) in a research, studied how much the librarianship and information science students use of the Web-2.0 and concluded that there is an appropriate and intermediate inclination between librarianship and information students in using Web-2.0 tools; and also that personality traits and educational facilities have a significant role in acquiring and understanding the librarianship and information students in the use of Web-2.0.

Burhanna, Seeholzer & Salem (2009) investigated the web-2.0 technologies in a college library and focused on undergraduate students at Kent State University using a qualitative approach and a questionnaire. The main goal of this study was to collect student opinions and expectations from Web 2.0 function in the library in order to use its results in designing future services in the library. Research results showed high use of social networks by students, compared to other Web-2.0 tools, their high interest in Web-2.0 technologies and little learning experience through Web-2.0 tools.

In a study entitled "A Study on the Application of Web-2.0 Technologies in Libraries", Chua and Goh (2010) examined the extent of using Web tools in libraries. The results of this study showed that the use of Web-2.0 technologies in academic libraries is more than public libraries. The results of this study also showed that the use of Web-2.0 tools has a positive impact on the improvement of the quality of the libraries' website.

Xu, Kang, Song and Clarke (2015) explored the use of WeChat Mobile Social Media among 39 academic libraries in China. The results showed that almost one-third of these libraries used WeChat as a marketing tool to promote their services and collections to users.

Raymond (2015) conducted a research aimed at examining how the University of New York's University Library, Shanghai branch, used the WeChat application to support students' research and information needs. The results of this study showed that the application could be used in many ways: to support virtual services, interact among students, promote library services, and create an online community of student users.

Kenchakkanavar and Hadagali (2015) carried out a survey on the use of WhatsApp by the social science research scholars of the Karnataka University, Dharwad, Karnataka State. The results of the survey reveal that majority, i.e. 91.36 % respondents are aware of Facebook, followed by Google+ and YouTube; the research scholars are not only using WhatsApp for general use but also for academic / research purpose.

Ali & Kootbodien (2016) carried out a survey on The Effectiveness of WhatsApp as an Interpersonal Communication Medium among Abu Dhabi University Students The objective of this research is to identify the perceptions and trends of Abu Dhabi university students when considering WhatsApp as an effective interpersonal communication medium. Ultimately this study found a positive reaction from the students and has generated the needed results. WhatsApp can therefore be considered an effective interpersonal communication medium. There are a range of various perceptions with regards to the replacement of face-to-face communication, but it is ultimately used as an addition to, not replacement of face-to-face communication.

Methodology

The present study was conducted using a survey method. The community surveyed by this study included members of the virtual specialized groups of librarianship and information technology of the telegram messaging software. The virtual librarianship and information groups used in this study were groups that had their own rules and authorized persons to exchange only scientific information and were authorized to exchange only useful and scientific information and were prohibited from sending other entertainment related messages in these groups, such as the Librarian 2 group and the Iranian Community of Medical Librarian. For calculating the sample size, Cochran statistical formula was used for the mean as follows:

$$n = \frac{Z^2 . \partial^2}{d^2} = \frac{(2.58)^2 \times (0.05)^2}{(0.1)^2} = 185$$

and 185 individuals as sample were randomly selected.

The research instrument was a researcher-made questionnaire consisting of 21 items in a three-aspect al format (knowledge enhancement including 8 items, enhancement of professional skills including 6 items and enhancing virtual education including 7 items). Their

validity was confirmed by several information science experts and its reliability was also obtained by using the statistical test for each aspect (increase in knowledge with Cronbach's alpha coefficient was 0.874, professional skill increase was 0.834, e-learning increment was 0.823).

Findings

From the 185 participants in this study, 138 were men and 47 were women, as well as 34 undergraduates, 134 were masters, and 17 were doctors. The work experience of the participants in the research was shown in Figure 1.
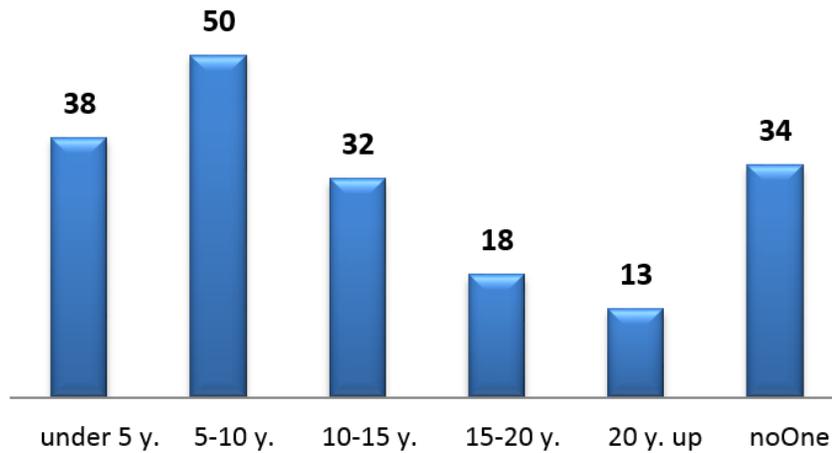

Diagram 1. The work experience of the participants in the present research

Table 1. The view of the members of specialized groups of librarianship and information in Telegram on each aspect of the research

Indicator	Abundance					Percent				
	Very little	Little	Average	Much	Too much	Very little	Little	Average	Much	Too much
Role of Telegram social Network in Increasing knowledge	4	12	69	77	23	2.2	6.5	37.3	41.6	12.6
Role of Telegram social Network in Increasing Professional Skills	6	27	83	58	11	3.2	14.6	44.9	31.4	5.9

Role of Telegram social Network in Increasing E-Learning	4	20	59	79	22	2.2	10.8	31.9	42.7	11.9
Role of Telegram social Network in Increasing Ability (Total)	4	16	67	82	16	2.2	8.6	36.2	44.3	8.6

Table 1 data shows that the views of the members of Telegram group about increasing people e-learning with 54.6% and then about increasing knowledge with 54.2% and about increasing professional skills with 37.3% had a positive impact on academic ability and their professional and scientific abilities.

Discussion and Conclusion

The results of this study indicate that membership in specialized Telegram groups has a positive role in enhancing their e-learning, increasing their knowledge and professional skills, from these groups members' view. Raymond also concludes in this field that library use of WeChat messenger application can be applied to support virtual services, interact with students, promote library services, and create an online community of student users(Raymond, 2015). The results of this research on beneficial and scientific use, as well as the positive perception about the scientific efficiency of messaging software, are in consistent with the results of this research. Past research results have also shown that users with different motives are using from social media.

Aharony pointed out in this regard that there is a good and intermediate willingness among LIS students to use Web-2.0 tools; and that the personality traits and educational facilities in the acquisition and understanding of librarianship and information students have an important role in the use of the Web-2.0(Aharony, 2009). McCarthy also showed that the use of social networks has a positive role in learning and promoting people's education(McCarthy, 2010). Which is in consistent with the results of this study. In general, the results of this research show that from the point of view of the members of scientific and specialized groups of Telegram, membership in the above groups and the exchange of information with these types of groups increase the scientific and professional capabilities of individuals; therefore, individuals can share information and knowledge by joining the specialized groups of social network, as well as the creation of these types of specialized groups and their proper management by bringing together experts from around the world in order to enhance the ability of members of virtual groups.

Acknowledgments

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