

An Exploratory View on Scholars' Affiliation to Online Knowledge Networks in Academia

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Abstract

The present paper is intended to explore several main factors which correlate with scholars' affiliation to online knowledge networks in academia. In this front, the considered variables are the number of online knowledge networks the scholars are affiliated to, the personal interests of the scholars to join online knowledge networks, the explicit institutional policies and strategies of the universities to stimulate membership to online knowledge networks, and the research achievements of the scholars affiliated to online knowledge networks. The convenience sample comprised 210 scholars from different European countries. A snowball sampling technique was used, starting from the authors' university peers towards their contacts from previous institutional or personal collaborations, projects, professional associations, etc. A questionnaire-based survey was conducted for one month. The findings supported all five hypotheses which were inferred, displaying different types of positive correlations, namely from weak to strong associations. Further research is welcome to investigate the proposed relationships more thoroughly.

Keywords

Online knowledge networks; academia; personal research interests; research achievements; policies and strategies of universities.

Introduction

We all live in a fast-moving world that is constantly bringing forward new challenges and the imperative to improve. The reality of a changing world is debated and widely researched, as it is a complex process, catalyzed by globalization. Some researchers argue that "globalization is a force" (Neras, 2006, p. 6), others define it as "the process of the shrinking of the world, the shortening of distances, and the closeness of things. It allows the increased interaction of any person on one part of the world to someone found on the other side of the world, to benefit" (Larsson, 2001). However, what we all

know is that we are consistently adjusting frameworks and patterns, and everyone needs to adapt to survive and/or thrive nowadays (Frunzaru et al., 2018; Vătămănescu et al., 2018a, b; Alexandru et al., 2020; Zaiț et al., 2021; Cegarra-Navarro et al., 2021).

Globalization is impacting everything around us, from marketing, politics, the way of living, the traditions, the economy, the medical system, the technological advancements, and the list can go on and include everything around us. One of the most important factors that supports the outspread of globalization is the Internet, which connects everything around us, especially people, no matter where they are located geographically. Information technology provides a multitude of opportunities, including the dissemination of knowledge, the possibility to create networking, the chance to get a new job, or to find partners for future projects (Hevner, 2020). More than that, when it comes to electronic documents, they bring also several benefits, such as they can be updated easily, they can be accessed no matter where a person is located as long as they have an Internet connection, they can be easily read by people that are visually impaired (with the help of different applications for the computers or mobile devices) and not to mention that they are environmentally friendly (Hoover, 2016). However, there are also some negative aspects when it comes to technology and the e-documents: if you do not have an Internet connection or a good device you cannot access them and sometimes they can be expensive, which might limit the existing opportunities (Ratten, 2015).

As previously mentioned, information technology is undergoing a continuous process of development and when it comes to researching and publishing, the Internet has turned into the printing press of the present generation (Haymes, 2021). Fostered by manifold transnational and transcultural connections and interactions, the online knowledge networks have progressively emerged and thrived, and their state-of-the-art attracting significant attention from researchers and scholars from all around the world (Photchanachan & Huo, 2021) The concept of "online knowledge networks" (often also referred to as "online knowledge communities") was defined by a myriad of researchers as a type of "platform for knowledge exchange without spatial and temporal limits" (Chen, 2020, p. 1), that combines knowledge from different domains or as a "self-organizing knowledge coproduction platform in which widely dispersed groups voluntarily contribute knowledge and collectively online" (Qiu et al., 2021, p.1). Consistent with Vătămănescu et al. (2016, p. 601), "knowledge is not only generated through interaction as discussed before but knowledge transfer is facilitated through network structures, the speed of this sharing and exchanging process being accelerated when it comes to online networks".

Given the attractiveness of the research topic of online knowledge networks within the academia framework, the current undertaking aims at exploring their importance in relation to other academic aspects, such as the scholars' personal research interests, the explicit policies/strategies of the universities, and the research performance of individuals and implicitly of institutions. In line with other previous studies (Vătămănescu et al., 2015a,b, 2016, 2018), the main premise is that the affiliation to online specialized networks, hereafter defined as online knowledge networks is correlated to some extent to personal motivation and institutional support. To test this assumption, the paper is organized as follows: a short theoretical framework is

introduced, afterward, the methodological design is depicted. The results are then presented followed by the final considerations.

Theoretical considerations

Nowadays, most institutions, companies, and individuals are experiencing new ways of sharing knowledge, benefitting substantially from the Internet platforms and opportunities that are becoming more performant and user-friendly, offering access to numerous digital tools and inter-unit architectures and availing favorable circumstances to collaboration within all areas of interest (Vătămănescu et al., 2020; Bratianu et al., 2021).

Leaving in a fast-moving world, there is a constant need to transform the traditional approach into the new reality of online networking and, by understanding the necessity of change (no matter whether it is technology, education, economy, environment, or politics), people realized the exigency to adapt and to keep pace with the times to perform professionally. In accordance with the needs that arise at their workplace or within the pathway of their career, people tend to affiliate with online knowledge networks that are closer to their professional performances (Ashmarina & Mantulenko, 2020). In this way, it is underlined by a growing body of empirical research that social relationships and networks are working hand in hand nowadays and that they are influential in describing and explaining how the process of knowledge creation and transfer is unfolding (Phelps et al., 2012). Thus, development of the online knowledge networks brings value to research and educational centers, by gathering together people from all around the world, by offering the possibility to cooperate in a free way (working from distance, without the need to meet face to face), by potentiating the access to projects, events, research studies and collective knowledge, and by creating the necessary environment for exchanging ideas, for bringing together researchers from more developed countries with other researchers from less developed environments and for changing the society into a better place (Vătămănescu et al., 2018a).

Among the online specialized networks, one can list Reddit, Yahoo! Answers, and all the other platforms that are hosted on Stack Exchange (Chen et al., 2019). However, when it comes to knowledge sharing in academia, especially in social sciences, the most important tools capitalized by scholars are ResearchGate, Academia.edu, LinkedIn (here referring to the specialized groups), and ScienceDirect (Vătămănescu et al., 2015) How these online platforms are creating and organizing knowledge is an important topic these days and a compelling issue that has arisen over the years within the dedicated literature of knowledge networks is "how agents choose other agents for the creation and transfer of knowledge" (Tsouri, 2020, p. 2). Similarly, Vătămănescu et al. (2018a, p. 2) add that "online academic networks have achieved new functions and roles, among which their capacity as knowledge brokers has steadily come forth. Knowledge brokers refer to the individuals or organizations that yield benefits from transferring ideas from where they are well-known and developed to where they engender innovative opportunities".

As mentioned by Holden and Glisby (2013), knowledge always starts with the individual and, pursuant to this point of view, most of the individuals are prone to affiliate to different groups that are specialized according to their needs and preferences (Holden & Glisby, 2013). Here, Wenger (2013) underlines that learning stands for social participation. Implicitly, "knowledge transmission involves the communication of new ideas through social relationships" (Wang et al., 2021, p. 2). As a prerequisite of socialization, we need to have things in common with other people and to settle common grounds for shared interests, therefore, scholars are open to joining specialized online networks according to their values, expectations, goals, and interests (Vătămănescu et al., 2015a,b, 2016; Jun & Wei, 2017; Wang et al., 2018).

When it comes to higher education institutions, there is a consistent trend to embrace novelty and innovation (including here digital and technological progress), consequently striving to find suitable ways to get in touch and keep open doors for other institutions on purpose to exchange knowledge and good practices and to collaborate on future projects (European Commission, 2021). Exploiting the academic online networks is deemed to be a paramount factor of self-improvement and of organizational development (Vătămănescu et al., 2015a), and the more knowledge networks the researchers are affiliated to, the more visibility and popularity they achieve for their deliverables and the better the knowledge sharing process becomes (Chatti & Matthias, 2007; Vătămănescu et al., 2015a,b, 2018a).

Since affiliating to a network and finding new collaborators with whom to cooperate implies accessing and capitalizing on new ideas, sharing news, information about key issues in the field, and disseminating novel results on different research topics, this can lead to innovation and improvement at various levels (Ilvonen & Vuori, 2013; Vătămănescu et al., 2016, 2018a). Therefore, as also posited by prior literature (Vătămănescu et al., 2015a; Aswegen & Retief, 2020), a proper capitalization of knowledge networks is often conducive to personal and organizational development which may be quantified via actual deliverables (i.e., publications in top-ranked journals, institutional ranking, and attractiveness, etc.).

The correlation between the affiliation of the academic members to knowledge networks and the explicit policies and strategies of the universities has been previously assumed by other studies (Vătămănescu et al., 2016, 2018a). These policies are also supported by multilevel programs (regional, national and international) which stress the existence of common goals, priorities, and objectives and support education and research to make sure that all types of organizational actors can cope with the change (Majoor, 2015; Aswegen, 2018; Kiv et al., 2020). Furthermore, "university representatives and members should acknowledge that the IC (i.e., intellectual capital) renewal depends greatly on assuming the work of notable scholars and on inter-organizational learning, the knowledge-intensive organization progressively extending its capacity to shape the future to develop itself and not only to survive" (Vătămănescu et al., 2016, p. 612).

Starting from these considerations, we propose the following hypotheses:

H1. There is a positive correlation between the propensity of scholars to join online knowledge networks and the number of networks they are affiliated with.

H2. There is a positive correlation between the propensity of scholars to join online knowledge networks and their personal research interests.

H3. There is a positive correlation between the explicit policies and strategies of the universities and the propensity of scholars to join online knowledge networks.

H4. There is a positive correlation between the number of online knowledge networks scholars are affiliated with and their research achievements.

H5. There is a positive correlation between the explicit policies and strategies of the universities and the personal research interests of scholars.

Research design

Sample

The convenience sample comprised 210 scholars from different European countries. A snowball sampling technique was used, starting from the authors' university peers towards their contacts from previous institutional or personal collaborations, projects, professional associations, etc. Also, invitations were sent to the participants to the yearly international conference organized by the faculty where the authors are affiliated. More than 1000 invitations were sent, the response rate being almost 21%. In terms of the socio-demographic characteristics of the sample, most participants were between 31 and 40 years old (46.7%), with a Ph.D. title (45.7%), occupying positions as assistant professor or lecturer (50.5%), and coming from the field of Economics & Social Sciences (70.5%).

Method

A questionnaire-based survey was conducted for one month. The questionnaire was designed as a comprehensive research instrument covering over ten major dimensions and 90 items. For the scope of the present research, only five factors were considered as the object of the scrutiny. To test the inferred relationships, the Pearson correlation coefficient (Pearson's r) for bivariate analysis was used.

Measures

The main variables which were of interest for the current analysis referred to 1. the number of online knowledge networks the scholars were affiliated to, 2. the personal interests of the scholars to join online knowledge networks, 3. the explicit institutional policies and strategies of the universities to stimulate membership to online knowledge networks, 4. the research achievements of the scholars affiliated to online knowledge networks and 5. the propensity of the scholars to join online knowledge networks. The second, third, and fifth factors consisted of more than five items measured on a 5-point Likert scale, ranging from 1 (not at all) to 5 (very much). The first dimension was a one-item factor whereas the fourth comprised two different indicators referring to publications in high-ranked journals (either published solely or in partnership with the scholars from the knowledge networks).

Results and discussion

The testing of the four hypotheses in the context of the current study brought forward several interesting facts which are further accounted for (as displayed in Table 1).

Table 1. Correlations between the considered factors

		No. of online knowledge networks affiliated to	Institutional policies and strategies	Personal research interests	Research achievements	Propensity towards affiliation to online knowledge networks
No. of online knowledge networks affiliated to	Pearson Correlation	1	.154*	.378**	.162*	.369**
	Sig. (2-tailed)		.025	.000	.019	.000
	N	210	210	210	210	210
Institutional policies and strategies	Pearson Correlation	.154*	1	.451**	.036	.509**
	Sig. (2-tailed)	.025		.000	.605	.000
	N	210	210	210	210	210
Personal research interests	Pearson Correlation	.378**	.451**	1	.126	.700**
	Sig. (2-tailed)	.000	.000		.068	.000
	N	210	210	210	210	210
Propensity towards affiliation to online knowledge networks	Pearson Correlation	.369**	.509**	.700**	-.009	1
	Sig. (2-tailed)	.000	.000	.000	.894	
	N	210	210	210	210	210

To start with, the investigation of the first hypothesis - H1. There is a positive correlation between the propensity of scholars to join online knowledge networks and the number of networks they are affiliated to – indicating the existence of a moderate positive correlation between the two variables ($r=.369$, $p<0.001$, $N=210$). The result is illustrative of the fact that scholars who are open to joining online knowledge networks are also open to affiliating to more such networks in an effort to have access and to capitalize on the knowledge potential of these specialized groups. The evidence is consistent with prior researches (Vătămănescu et al., 2015a,b, 2016, 2018a) which have underscored scholars' propensity towards the intangible resources found under the aegis of online specialized communities in academia.

Moving further, the analysis of the second hypothesis - H2. There is a positive correlation between the propensity of scholars to join online knowledge networks and their personal research interests – indicating the existence of a strong positive correlation between the two variables ($r=.700$, $p<0.001$, $N=210$). This situation complements previous studies (Vătămănescu et al., 2015a, 2016) asserting the importance of personal research interests in any endeavor of academic affiliation. The inner motivation emerges as a compelling factor when it comes to membership to

online specialized networks and implies the scholars' awareness of the inherent benefits of such affiliation.

The testing of the third hypothesis - H3. There is a positive correlation between the explicit policies and strategies of the universities and the propensity of scholars to join online knowledge networks - revealed a strong positive correlation between the two variables ($r=.509$, $p<0.001$, $N=210$). The influence of the institutional policies and organizational support regarding the benefits of joining knowledge networks by scholars was previously inferred and confirmed in different studies (Vătămănescu et al., 2016, 2018a). Therefore, the current empirical undertaking validates this evidence.

Focusing on the fourth hypothesis - H4. There is a positive correlation between the number of online knowledge networks scholars are affiliated to and their research achievements – the findings pointed to a weak positive correlation between the two variables ($r=.162$, $p<0.05$, $N=210$). The obtained result suggests the existence of an interconnection between the access to various specialized networks and the achievement via publications in high-ranked journals (either published solely or in partnership with the scholars from the knowledge networks), however, further research is needed to draw clear conclusions in this respect. Still, the present situation is consistent with other studies (Vătămănescu et al., 2016) which have contended that the affiliation to online knowledge networks gives way to the network-based intellectual capital and is conducive to personal and organizational competitiveness.

The last inferred hypothesis - H5. There is a positive correlation between the explicit policies and strategies of the universities and the personal research interests of scholars – was meant to assess the existence of definite connections between the personal goals and the organizational approach. In this vein, the results indicated a moderate positive correlation between the two variables ($r=.451$, $p<0.05$, $N=210$), thus advancing the idea that there is a certain interdependency between these factors. The harmonization of scholars' personal research interests and the explicit policies and strategies of universities stands for a desideratum to achieve better academic results, thus further appraisal of such relationships is welcome.

Conclusions

As the empirical findings have revealed, all the inferred relationships between variables have been supported by the data. We can conclude that the hypothesis presented within this paper are strongly related to the objective of this paper, underlining the scholars' affiliation to online knowledge networks in academia, the personal interests of the scholars to join different online knowledge networks, and how institutional policies and strategies of the universities are aiming to stimulate membership to online knowledge networks. In this sense, the confirmation of significant associations between the considered factors was meant as a first-step attempt to decipher the underlying interconnections which account for the affiliation to online knowledge networks and the research achievements of the scholars who have joined such communities. The current endeavor is merely exploratory, aiming to avail new research avenues for in-depth scrutiny of more fine-grained relationships among factors. The usage of more advanced statistics (e.g., structural equation

modeling) springs as a must to provide an accurate picture of the state-of-the-art in the field of online knowledge networks. Moreover, the present study admits its conceptual and methodological limitations, encouraging future empirical examinations not only of the proposed relationships but also of other hypotheses covering factors such as knowledge sharing format, knowledge sharing content, openness/reluctance to knowledge sharing, etc.

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