

Awareness and Use of Academic Social Networking Websites by the Faculty of CIIT

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Abstract. The popularity and massive usage of online social networking sites is evident to all. There are a number of online social networks that are being widely used by the academic and non-academic community for entertainment. A new branch of these online social networks has emerged which is known as academic social networking websites (ASNWs). The purpose of ASNWs is entirely different from entertainment, as they specifically target scholars. ASNWs are virtual platforms where researchers can create a research profile and communicate with other members. This study aims to explore the awareness, usage and feelings of CIIT faculty members about the five most famous ASNWs namely; ResearchGate, Acedemia.edu, LinkedIn, Mendeley and Zotero. A structured questionnaire was designed and sent to all faculty members of CIIT via email to get the feedback. Findings show that the majority of faculty members are well aware of these ASNWs for the last three years or so. Most of the respondents are members to more than one academic social network. Faculty members also revealed that they visit ASNWs twice in a week for half an hour. The respondents expressed that they mostly use these platforms for following purposes: interacting with experts, promotion/sharing of their research output, participation in discussions, to get ideas about the latest research trends and to get help in resolving research problems. The feelings of CIIT faculty members about using ASNWs were also found very positive. The highest level of usage was reported for LinkedIn followed by ResearchGate, Acedemia.edu, Mendeley and Zotero, respectively.

Keywords: Academic social networking websites (ASNWs), COMSATS Institute of Information Technology (CIIT), Faculty members, Awareness & usage.

1. Introduction

The recognition and extensive usage of online social networking websites among the current generation is an open secret. People mostly use these social networking sites for recreational purposes to share their life experiences, events, pictures and videos with their friends in the circle. Another branch of online social networks has recently appeared, called Academic Social Networking Websites (ASNWs). The ASNWs serve different purposes than entertainment.

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These platforms target the academic community and fulfill their scholarly needs. As the scope of ASNWs is limited to the academic community, they appeal greatly to academics. The number of members of these online academic social networks is constantly rising. Pakistan is also in the list of those countries in which the ASNWs are rapidly growing. Although a number of research studies have been conducted worldwide on usage of ASNWs but there is a lack of literature about the use and benefits of ASNWs in Pakistan. The current study is an effort to fill this gap by exploring the awareness, usage and feelings of a Pakistani higher education institute's faculty members about these ASNWs. The study will greatly help in disseminating the value of these academic social networks among the faculty of CIIT and will also encourage them to join these platforms as early as possible.

2. Literature Review

The scholarly communication paradigm has undergone many changes in recent decades. The most revolutionary changes have occurred because of the rise of internet technologies, particularly informal communication tools such as social networks. Indeed, since the emergence of social networks in 1997, there has been a marked increase in the number of users, culminating in a total of 1.79 billion users worldwide in 2014. Furthermore, it is expected that there will be nearly 2.44 billion social network users around the globe in 2018 (Statistia, 2015). Huggett (2010) asserts that the invention of Web 2.0 has led the internet in a new interactive direction. Social networking sites have grown well and their users have expanded to a great extent. Boyd and Ellison, (2007); Rainie and Wellman, (2012) support this stance by stating that the last decade has seen tremendous growth in online social networking websites. Some of these social networking websites are aimed explicitly at scholarly community; such social networks are called the Academic Social Networking Websites. Almousa (2011) found in his study that academic communities of diverse categories and of different fields are gaining attention of academic social networks. Ward, Bejarano and Dudás (2015) argue that the growing recognition of collaborative and citation management applications, and new metrics to track scholarly impact, social media has achieved huge significance in scholarly communication. Thelwall and Kousha (2014); Mangan (2012); Yu et.al (2016) report in their studies that academic social networks like Academia.edu, ResearchGate, Mendeley and Zotero have millions of users. A survey carried out by Nature in 2014, which was based on the responses of 3,500 scientists from 95 countries; found that ResearchGate was the most famous scholarly social media network. Webopedia (2016) defines a social networking website as an online network that enables its users to form a public profile for interacting with other users on the platform.

Li and Gillet (2013) state that the arrival of social media has changed the status of web consumers from inactive users of information to active co-creators of social content. Besides of the extensive use of social media amongst young generation for usage of social interactions, it has also been progressively used in educational circles to facilitate research movement. An increasing number of

academic social media websites like Mendeley and Academia.edu have facilitated global researchers to shape professional contacts, disseminate research resources, and promote scientific collaboration. Ovadia (2014) describes that academic social networks are specific in nature as they facilitate those associated with academic activities. They permit users to share their papers and data sets, post questions to the community; the group can see and respond to these questions. These platforms also offer publication analytics and assist in exchange of information. Elsayed (2015) reports that in recent years, social networks have played a role in digital scientific communication and have become part of the open science movement by creating scientific social communities called academic social networks. Its role has not been limited to sharing knowledge and exchanging experiences only. In fact, it is seen as a useful tool for helping researchers understand the value of their work by providing a forum where literature can be discussed and evaluated, where users can access a variety of statistics concerning the use of uploaded publications, and where researchers' profiles can be viewed.

Bishop (2007) asserts that online social networks are platforms for bringing together people who share common interests. Gruzd, Staves, and Wilk (2012) describe that more and more scholars are joining academic social networking websites day by day, in order to facilitate their research activities, make new connections with peers, enable collaboration, and showcase their research. Wang and Chen (2012) remark that when members with related interests join an online community, it greatly helps the development of that network. Many researchers have discussed the benefits of ASNWs. Zaugg, West, Tateishi and Randall (2011) claim that academic social networks assist researchers and academics in searching for research articles related to their area of interest. Moreover, academics can discover peers for possible partnerships, disseminate their research articles, and gain a better understanding on the most authoritative studies on a particular subject. Kelly (2013) asserts as ASNWs disseminate research output, it increases the chances of paper downloads. Espinoza and Caicedo (2015) enumerate some notable services that ASNWs offer to users. These are: collaboration, online persona management, research dissemination, document management, and impact measurement. Mikki, Zygmuntowska, Gjesdal, and Ruwehy (2015) make the similar case that ASNWs have various features that update users about their current activities. The most common of these include, number of publications, citations per publication, number of profile views, number of document downloads, who is following you and whom you are following and so on.

Each academic social network offers its own combination of tools and capabilities to support research activities, communication, collaboration, and networking (Bullinger et al, 2010; Espinoza and Caicedo, 2015). Mikki, Zygmuntowska, Gjesdal, and Ruwehy (2015) remark that the success of ASNWs depends upon the simplicity and ease of use. At present the ASNWs have become a part of most scholars' scientific lives. Researchers are joining ASNWs with two main aims; communication and collaboration with fellow scholars. Through these platforms they can meet peers in their specific

disciplines and upload or download articles, books or other scientific materials. Greenhow (2009) and Weintraub (2012) report in their studies that the ways in which the services of ASNWs are being used by academics are less focused in the literature as compared to the benefits that they can bring for the researchers. The major benefits of these ASNWs for the academics include facilitation in research collaboration and enhancement of scholarly communication.

The review of related literature shed light on various aspects of Academic Social Networking Websites. It disclosed that these academic networks are rapidly growing among scholarly circles in all over the world. Academics from developing countries like Pakistan are also very well informed about these academic networks. Studies regarding awareness and usage of these academic social networks are useful ways to create more awareness among academics on the efficacy of these platforms.

3. Objectives of the study

The study was carried out in order to attain following objectives. To establish:

- The level of awareness of CIIT faculty members about ASNWs.
- Which ASNWs are being used the most by the CIIT faculty members?
- How long CIIT faculty members have been members of ASNWs?
- How frequently CIIT faculty members visit the ASNWs?
- For what purposes the CIIT faculty members use ASNWs?
- What are the feelings of CIIT faculty members about usage of ASNWs?
- The ways in which the awareness and usage of ASNWs can be enhanced.

4. Methodology

The study was quantitative in nature, so a survey research method was adopted and an online questionnaire was used for data collection. The survey was designed in a way that a single respondent was not allowed to give more than one response. The survey was carried out from the beginning of December, 2015 to the start of January, 2016. In the given period, a link to the online questionnaire was sent to all the faculty members of CIIT by email. Reminders were also sent to the respondents to get maximum participation in the survey. Eleven closed questions were included in the questionnaire covering different aspects of the awareness, usage and feelings of CIIT faculty members about ASNWs. The total population of the study consisted of approximately two thousand faculty members. Out of the 2000 faculty members 516 responded to the questionnaire giving a response ratio of 25.8%. The data was thoroughly analyzed and results were presented in tables, figures and graphs by using the mean and frequencies.

5. Results and Discussion

This section displays the findings of this study with interpretation of the results. The results are presented in shape of tables, pictures, pie charts, and bar charts.

Distribution of Response Rate by Users Category

The first question identifies and discusses the demographic characteristics of the respondents. All the respondents were asked to disclose their academic status under which they are serving in CIIT. Results show that the majority of the respondents 271 (52.51%) were Assistant Professors by their academic status. The least response was received from Professors which were only 9 (1.74%) in number. Table-1 demonstrates the academic breakdown of the respondents.

Table-1

Sr No	Designation	Response	Ratio
1	Professor	9	1.74%
2	Associate Professor	27	5.23%
3	Assistant Professor	271	52.51%
4	Lecturer	209	40.50%
	Total	516	

Were you aware of the "Academic Social Networking Websites" before this email?

The second question was about the awareness of Academic Social Networking Websites. Those respondents who were not aware of the ASNWs before this email were asked to submit their response by answering this question as the rest of the questions were not relevant to them. Findings show that 434 (84.10%) respondents were aware of the ASNWs, whereas the 82 (15.89%) of the respondents were not aware of the ASNWs (See Figure-1)

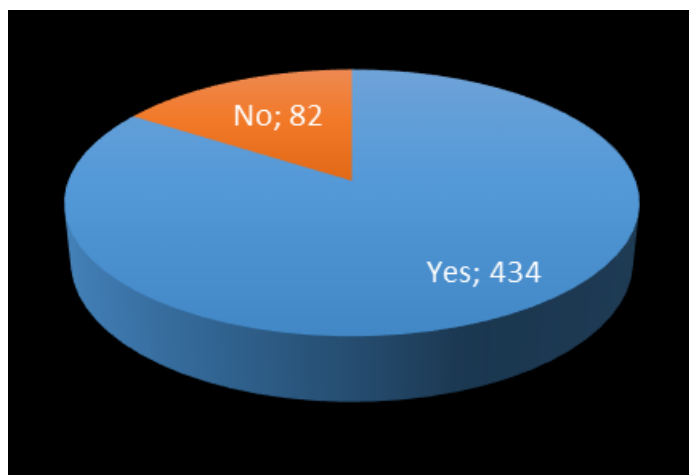


Figure-1

Which of the following "Academic Social Networking Websites" you use?

The third question was asked from the faculty about identification of those ASNWs which they use. Results show that LinkedIn was found to be the top most used academic social network with 182 users with a ratio of % (41.93%). ResearchGate was on second number with 130 (29.95%) users, Academia.edu was on third number with 93 (21.42%) users, Mendeley was on fourth number with 24 (5.52%) users and Zotero was fifth with 5 (1.15%) users (See Figure-2).

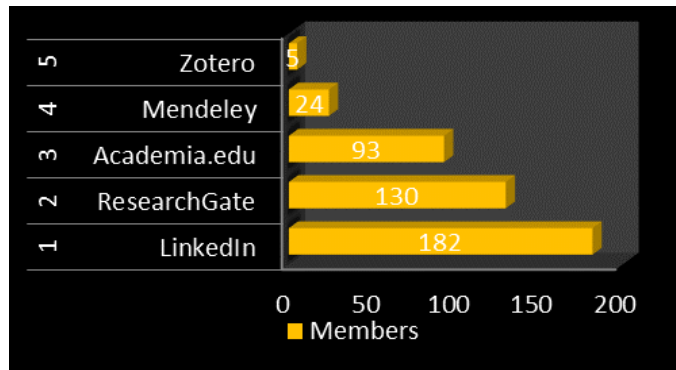


Figure-2

How did you come to know about the "Academic Social Networking Websites"?

The respondents were inquired about the sources from where they came to know about these academic social networks. Results show that majority of the respondents 251 (57.83%) came to know about these platforms through surfing on the internet. 152 (35.02%) came to know through friends and colleagues; 82 came to know through library email and 31 came to know through attending a conference/workshop (See Figure-3).

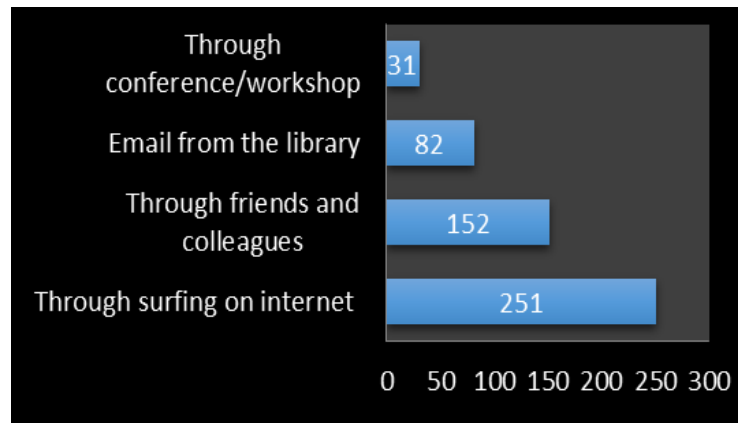


Figure-3

Are you member of more than one "Academic Social Networking Websites"?

Question regarding membership of multiple ASNWs was also incorporated in the study. Results show that the majority of the faculty members 332 (76.49%) have membership of multiple ASNWs, whereas the faculty members that have membership of solo academic social network were 102 (23.50%) See Figure-4.

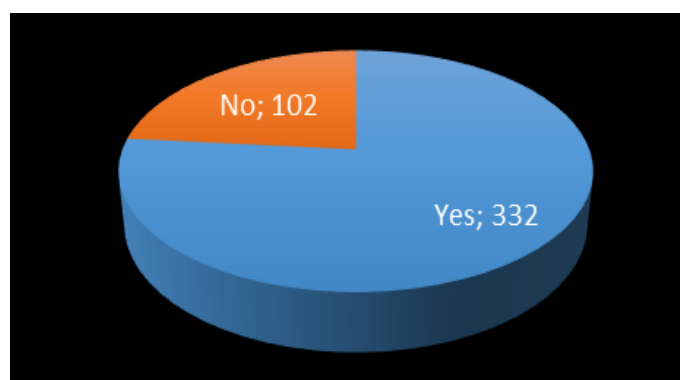


Figure-4

Membership period of "Academic Social Networking Websites"

The respondents were also inquired that since when they are members of the ASNWs which they use. Results demonstrate that variation was found in the membership period but most of the respondents 189 (43.54%) were members of the ASNWs since 3 years or more. 114 (26.26%) of the respondents were members of the ASNWs for the last two years. 81 (18.66%) were members of the ASNWs for the last one year. 34 (7.83%) were members of the ASNWs for less than one year. Only 16 (3.68%) faculty members were members of the ASNWs for the last six months (See Figure-5).

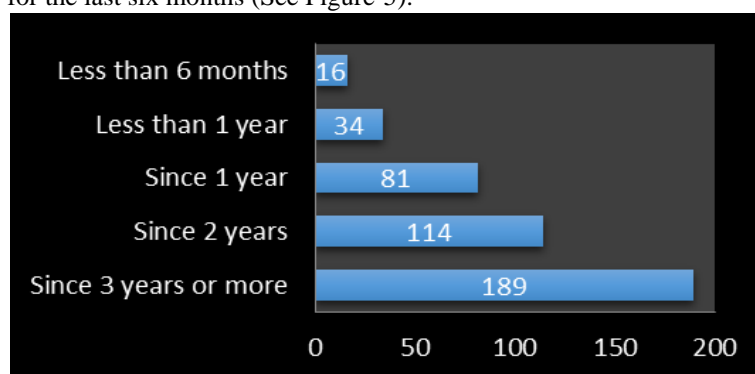


Figure-5

Frequency of visiting the "Academic Social Networking Websites"

The respondents were inquired about how much frequently they visit the ASNWs. Results show that the majority of the respondents 219 (50.46%) visit the ASNWs twice in a week. 116 (26.72%) of the respondents visit the ASNWs on daily basis. 67 (15.43%) of the respondents visit the ASNWs on weekly basis. 23 (5.29%) of the respondents visit the ASNWs on Bi-weekly basis. Whereas only 9 (2.07%) of the respondents visit the ASNWs many times in a day (See Figure-6).

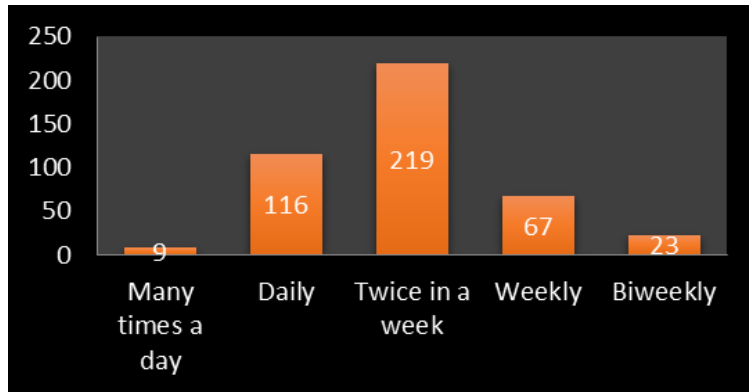


Figure-6

Time spending on "Academic Social Networking Websites"

Question regarding time spending on ASNWs was also a part of the study. Results show that the majority of the respondents 285 (65.66%) spend half an hour when they visit the ASNWs. 95 (21.88%) of the respondents spend fifteen minutes when they visit the ASNWs. 43 (9.90%) of the respondents spend an hour, 11 (2.53%) of the respondents spend one to two hours and there were no such respondents who spend two to three hours on ASNWs (See Figure-7).

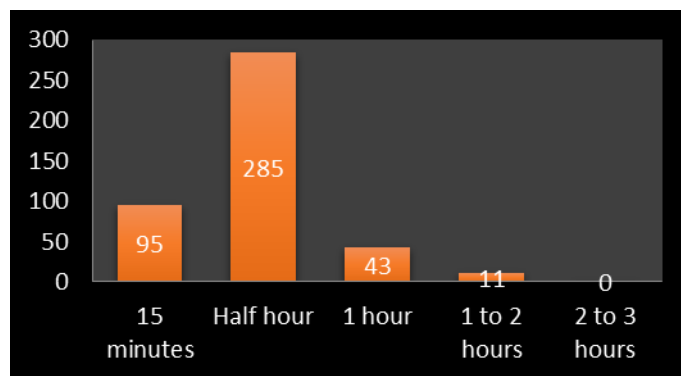


Figure-7

Purposes of using "Academic Social Networking Websites"

The respondents were given a checklist of 10 purposes and they were asked to point out those purposes for which they mostly engage in while using the ASNWs. Results demonstrate that there were 5 such purposes for which more than (90%) of the respondents use the ASNWs. These include: to interact with experts in their area of research, to promote/share their research publications, to participate in discussions, to get ideas about the latest research trends in their field of interest and to get help in resolving their research problems (See Table-2).

Table-2

Rank	Purposes	Frequency	Ratio
1	To interact with experts in my area of research	412	94.93%
2	To promote/share my research publications	399	91.93%
3	To participate in discussions	397	91.47%
4	To get ideas about the latest research trends in my field	394	90.78%
5	To get help in resolving my research problems	391	90.09%
6	To access my required articles	381	87.78%
7	To view the published research by peers of my subject	279	64.28%
8	To get informed about the citations of my work	237	54.60%
9	To know the ranking of other researchers	138	31.79%
10	Others	13	2.99%

Ranked order mean score of faculty feelings about "Academic Social Networking Websites"

One of the purposes of this study was to report the feelings of CIIT faculty members about the usage of ASNWs. Hence the researcher accordingly incorporated a question comprising on 7 statements in the survey tool. The respondents were provided a 5-point Likert scale ranging from strongly agree to strongly disagree, to indicate the level of agreement for the each statement. Ranked order mean scores of the feelings of respondents are presented in (Table-3). The analysis of the results demonstrates that feelings of the respondents were found very positive about usage of ASNWs as the mean score of all statements was above than 4.00 (See Table-3).

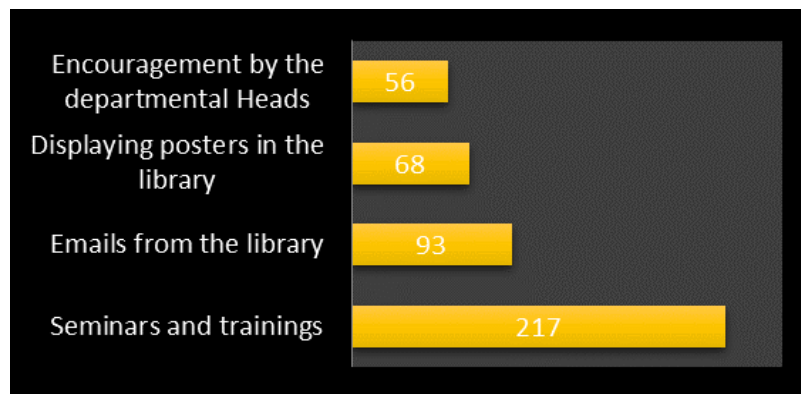
Table-3

Rank	Statements	Mean
1	Existence on ASNWs increase the citations of my publications	4.45
2	Use of ASNWs increase the visibility of my research work	4.42
3	The "ASNWs" are very useful platforms for the academic community	4.37
4	ASNWs help in working collaboration with other researchers	4.31
5	I encourage my colleagues to join ASNWs	4.28
6	I must have online account on all ASNWs	4.23
7	Maximum use of ASNWs in universities will promote the research culture	4.21

Scale: 1= Strongly disagree, 2= Disagree, 3=Neutral, 4= Agree, 5 = Strongly agree.

Methods to increase awareness and usage of "Academic Social Networking Websites"

The final question was about to find out the best way of increasing awareness and usage of the ASNWs. In this respect the respondents were given 4 options and they were asked to select the option which they consider the most effective in their opinion. Results demonstrate that conduction of seminars and workshops were indicated as the most effective method pointed out by the respondents (See Figure-8).

Figure-8

6. Conclusion and Suggestions

ASNWs have emerged as valuable platforms for researchers and academics of all disciplines. The population of these networks is rapidly growing as they help the academic community in various pedagogical activities. The current study gives an insight on the awareness, usage patterns and feelings of CIIT faculty members about the top five academic social networking websites. Findings of the study show that the majority of CIIT faculty members are well aware of the ASNWs. Most of the respondents have been members of more than one academic social network for the last 3 years or more. The respondents also indicated that they visit these networks on twice a week. LinkedIn was found to be the most popular academic social network among CIIT faculty members. The majority of faculty members came to know about these platforms by surfing on the internet. The results also reveal that the CIIT faculty members are mostly making use of these academic social networks for the purpose of interacting with experts in their area of research, to participate in discussions, to get help in resolving their research problems, to promote/share their research publications, to access their required articles and to get ideas about the latest research trends in their field. The feelings of the CIIT faculty members were also found to be very positive about the use of ASNWs. The respondents also indicated that seminars and training sessions about ASNWs is the best way to raise awareness among potential users. This would ultimately result in an increase of the usage of these networks.

In consideration of the findings of this study the researcher recommends that:

- The CIIT library at Islamabad campus conduct regular training sessions on how to make best use of ASNWs.
- The CIIT library at Islamabad campus encourages the information professionals working at its other six campuses to join these platforms.
- Libraries at other CIIT campuses should also market these ASNWs to their faculty members through emails and workshops.
- Similar research studies on the use of ASNWs should also be conducted at other CIIT campuses.

References

- Almoussa, O. (2011, December). Users' classification and usage-pattern identification in academic social networks. *In Applied Electrical Engineering and Computing Technologies (AEECT)*, 2011 IEEE Jordan Conference on (pp. 1-6). IEEE.
- Bishop, J. (2007). Increasing participation in online communities: A framework for human-computer interaction. *Computers in Human Behavior*, 23(4), 1881-1893.
- Boyd, D. M & Ellison, N. B. (2007). Social network sites: Definition, history, and scholarship. *Journal of Computer-Mediated Communication*, 13(1), 210-230.
- Bullinger, A. C., Hallerstedde, S., Renken, U., Soeldner, J. H., & Möslein, K. (2010, August). Towards Research Collaboration-a Taxonomy of Social Research Network Sites. In *AMCIS* (p. 92).
- Elsayed, A. M. (2015). The use of academic social networks among Arab researchers a survey. *Social Science Computer Review*, 1-14.

- Espinoza Vasquez, F. K., & Caicedo Bastidas, C. E. (2015). Academic Social Networking Sites: A Comparative Analysis of Their Services and Tools. *I Conference 2015 Proceedings*.
- Greenhow, C. (2009). Social scholarship: Applying social networking technologies to research practices. *Knowledge Quest*, 37(4), 42.
- Gruzd, A., Staves, K., & Wilk, A. (2012). Connected scholars: Examining the role of social media in research practices of faculty using the UTAUT model. *Computers in Human Behavior*, 28(6), 2340-2350.
- Huggett, S. (2010). "Social Networking in Academia," *Research Trends*. Retrieved 01 January, 2016, from: <http://www.researchtrends.com/issue16-march-2010/research-trends-8/>
- Kelly, B. (2013, June). Using social media to enhance your research activities. In *Social media in social research 2013 conference*. University of Bath.
- Li, N., & Gillet, D. (2013, August). Identifying influential scholars in academic social media platforms. In *Proceedings of the 2013 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining* (pp. 608-614). ACM.
- Mangan, K. (2012). Social networks for academics proliferate, despite some doubts. *Chronicle of Higher Education*, 58(35), 1-7.
- Mikki, S., Zygmuntowska, M., Gjesdal, Ø. L., & Al Ruwehy, H. A. (2015). Digital Presence of Norwegian Scholars on Academic Network Sites—Where and Who Are They?. *PloS one*, 10(11), e0142709.
- Ovadia, S. (2014). ResearchGate and Academia. edu: Academic social networks. *Behavioral & Social Sciences Librarian*, 33(3), 165-169.
- Rainie, L., & Wellman, B. (2012). *Networked: The new social operating system*. MIT Press.
- Statista, (2015). Number of social network users worldwide from 2010 to 2018. Retrieved from <http://www.statista.com/statistics/278414/number-of-worldwide-social-network-users/>
- Thelwall, M., & Kousha, K. (2014). Academia.edu: social network or academic network?. *Journal of the Association for Information Science and Technology*, 65(4), 721-731.
- Wang, E. S. T., & Chen, L. S. L. (2012). Forming relationship commitments to online communities: The role of social motivations. *Computers in Human Behavior*, 28(2), 570-575.
- Ward, J., Bejarano, W., & Dudás, A. (2015). Scholarly social media profiles and libraries: A review. *Liber Quarterly*, 22.
- Webopedia, (2016). What does social networking site (SNS) mean? Retrieved 02 January, 2016, from: http://www.webopedia.com/TERM/S/social_media.html
- Weintraub, A. (2012). Social networks attempt to spark academic-industry collaborations. *Nature biotechnology*, 30(10), 901-903.
- Yu, M. C., Wu, Y. C. J., Alhalabi, W., Kao, H. Y., & Wu, W. H. (2016). ResearchGate: An effective altmetric indicator for active researchers?. *Computers in Human Behavior*, 55, 1001-1006.
- Zaugg, H., West, R. E., Tateishi, I., & Randall, D. L. (2011). Mendeley: Creating communities of scholarly inquiry through research collaboration. *Tec*