

Exploring Academic Social Networking Websites: A Review of the Empirical Literature

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Abstract

Purpose: The purpose of this study is to identify various research studies and review the existing research on academic social networking.

Methodology: A review of sixteen research studies at national and international level was undertaken chronologically. Using the protocol based approach, the relevant literature was searched and retrieved. The literature was finally summarized and compiled for the present study.

Findings: The relevant studies showed that awareness and usage of academic social networking websites is still at nascent stage. The participants in various studies were found to be either unfamiliar with the concept or the usage of these sites was less as compared to other social networking websites. The findings revealed that the research on academic social networking websites is scanty in developing countries.

Limitations: The research is limited to the academic social networking websites only.

Practical implications: This paper contributes to the literature by providing a focused analysis of empirical studies on the academic social networking websites. It also unveils information gaps and renders prospect research opportunities.

Originality/value: This is the first in-depth study in India exploring the awareness and usage of academic social networking websites in India as well all over the World.

Index Terms: academic social networks, academic social networking websites, ASN, ASNWs

1. Introduction

Since the advent of Web2.0 technology, there is an enhancement in knowledge sharing all the way through collaboration in all walks of life, across people of all age groups, crossing the barrier of time and place (Gunawardena, Hermans, Sanchez, Richmond, Bohley and Tuttle¹, 2009). Academic social networking (ASNs) is one such artifact of Web 2.0 technology. ASNs provides podium to the researchers to share their research studies with other researchers, and collaborate online thereby enhancing

¹ Gunawardena, C. N., Hermans, M. B., Sanchez, D., Richmond, C., Bohley, M., & Tuttle, R. (2009). A theoretical framework for building online communities of practice with social networking tools. *Educational Media International*, 46(1), 316.

their knowledge and skills. Accordingly, there is an increase in research productivity which enhances the academic rank of the higher educational institutes. Hence, high education is also taking interest in enhancing their research output by promoting collaborative research through ASNs.

The last decade witnessed the introduction of social networking websites (SNS) such as Facebook, Twitter, etc. Keeping in view its success, a need was felt for a parallel online social network system which is purely academic in nature. Hence, the creation and development of modified version of SNS called ASNs. These ASNs proved useful to the academic researchers who wanted to improve or enhance their scholarly work. These ASNs assist students, academicians and research scholars to connect and grow their academic network, share and show their research accomplishments. (Vala Ali², 2014).

2. Review

A plethora of literature related to the use of social networks in diverse disciplines has emerged with the advent of Internet and Web 2.0 technology. The disciplines of education (Eid and Al-Jabri³, 2016; Kaya and Bicen⁴, 2016), library sciences (Zohoorian-Fooladi and Abrizah⁵, 2014),

and scientific analysis (Jeng, DesAutels, He and Li⁶, 2017; Meishar-Tal and Pieterse⁷, 2017) are making abundant usage of such social media and networks for teaching and research. Thelwall and Kousha⁸ (2014) and Mangan⁹ (2012) also indicated in their studies about specific academic social networks (ASNs) having large number of database of users, such as Zotero, Academia.edu, Mendeley and ResearchGate. Moreover, an analysis of 35,000 scientists from 95 countries was also carried out by 'Nature' in 2014. The results of the study revealed that the most prominent scholarly social media among the scientists was ResearchGate only.

Brady, Holcomb, and Smith (2010)¹⁰ in their paper entitled, "Use of alternative social networking sites in higher educational settings: A case study of the e-learning benefits of Ning in education" studied 50

presence: a story of motivations and deterrents. *Information Development* 30(2), 159–171

⁶Jeng, W., He, D., and Jiang, J. (2015). User participation in an academic social networking service: A survey of open group users on Mendeley. *Journal of the Association for Information Science and Technology*, 66(5), 890–904.

⁷Meishar-Tal, H. and Pieterse, E. (2017). Why do academics use academic social networking sites? *International Review of Research in Open and Distributed Learning*, 18(1), 1–22.

⁸Thelwall, M., and Kousha, K. (2014). Academia.edu: social network or academic network? *Journal of the Association for Information Science and Technology*, 65(4), 721–731.

⁹Mangan, K. (2012). Social networks for academics proliferate, despite some doubts. *Chronicle of Higher Education*, 58(35), 1–7.

¹⁰Brady, K.P., Holcomb, L.B., & Smith, B.V. (2010). Use of alternative social networking sites in higher educational settings: A case study of the e-learning benefits of Ning in education. *Journal of Interactive Online Learning*, 9(2), 151–170. Retrieved September 20, 2018 from <http://www.ncolr.org/jiol/issues/pdf/9.2.4.pdf>

² Vala Ali, R. (2014). *Content-based recommender system for an academic social network*. Doctoral dissertation, University of Malaya.

³Eid, M. and Al-Jabri, I.M (2016) Social networking, knowledge sharing, and student learning: The case of university students. *Computers & Education*, 99, 14–27.

⁴Kaya, T. and Bicen, H, (2016). The effects of social media on students' behaviors: Facebook as a case study. *Computers in Human Behavior*, 59, 374–379.

⁵Zohoorian-Fooladi, N. and Abrizah, A. (2014). Academic librarians and their social media

distance education graduate students using 'Ning' as an alternative social networking website. A Ning is an education allied non-commercial social networking website specifically designed for distance education students. The authors of the paper observed that majority of the participants were using 'Ning' in distance education courses as it is helpful in out of the class interaction. Moreover, it provides a platform to frequently interact with other peers and colleagues within the course also. The findings of the study also revealed that 'Ning' was more opportune to use for sharing educational material. Findings of the study showed three themes surfaced from the benefits of using Ning, viz., collaboration, time-efficiency, and differing viewpoints. Furthermore, time surfaced as the only drawback of using 'Ning'. Some of the respondents viewed 'Ning' with no limitations as compared to other respondents who feel that time and access are major limitations to use 'Ning'. Finally, they concluded that distance education and social networking tools should be merged together to augment the online learning beneficial to the students.

Almoussa¹¹ (2011) in his study entitled, "Users' classification and usage-pattern identification in academic social networks" examined the usage pattern of academic social networks, especially academia.edu, by various groups of academicians from diverse disciplines. He investigated the participants (students, faculty members, research

scholars and post-doc researchers) from four disciplines, viz., Anthropology, Philosophy, Chemistry and Computer Science basically covering arts, natural science and technical sciences. The results of the study revealed that the faculty members and post-doc participants had completed their profile on academic.edu as compared to other participants. The participants from Arts discipline were more active as compared to others. It has been further observed that independent researchers were inclined towards finding more collaborators for their research interest. It was also observed that the post-doctoral participants were having strong relationships probably due to the fact that they need ties to perform better, whereas independent researchers were least in relationships. The results of the study disclosed that the independent researchers from the discipline of Chemistry were more interested in following updates, papers as compared with other disciplines. Moreover, independent researchers were found to be more active on academic social networking websites as compared to the other participants. Majority of the post-doctoral and faculty members upload the content on such networks was found in this study.

Gruzd and Goertzen¹² (2013) in their recent study entitled, "Wired academia: Why social scholars are using social media" investigated the uses of social media by academicians and the ways in which the

¹¹Almoussa, O. (2011). *Users' classification and usage-pattern identification in academic social networks*. IEEE Jordan Conference on Applied Electrical Engineering and Computing Technologies (AEECT)

¹²Gruzd, A., and Goertzen, M. (2013). *Wired academia: Why social scholars are using social media*. 46th Hawaii International Conference on System Sciences (HICSS), Wailea, Maui, HI USA, 2013, pp. 3332-3341. Retrieved September 30, 2018 from <https://www.computer.org/csdl/proceedings/hicss/2013/4892/00/4892d332.pdf>

social science academicians are adopting such websites for their academic usage. The results of the study found that there are eleven potential usages of social media by the academicians. They found that networking (35%), and self-promotion (39%), followed by collaboration (32%) were preferred by the majority of the academicians. It was further revealed that purpose of using such websites was for information seeking, dissemination of information in addition to partnership and inter-mingling also called socialization. Social networks such as Facebook and Twitter were found to be the most prevalent non-academic social media websites. They concluded that all academic social networking websites are comparatively novel ones. These sites have simply initiated its impact on the scholarly communications as well as the research community therein.

Eke, Omekwu and Odoh¹³ (2014) in their article entitled, "The use of social networking sites among the undergraduate students of University of Nigeria, Nsukka" found that nearly all the respondents were using the social networking sites. These sites were used by the participants for interacting with each other, connecting online with mates, covers in gover grave national issues and for viewing movies. Some commendable advantages are also associated with the usage of these networks along with possible hazards too. It was recommended that seminars should be organized periodically by the university authorities to

¹³Eke, H.N., Omekwu, C.O. and Odoh, J.N. (2014). Use of social networking sites among the Undergraduate Students of University of Nigeria, Nsukka. *Library Philosophy and Practice (e-journal)*, 1195. Retrieved from <http://digitalcommons.unl.edu/libphilprac/1195>

apprise the participants about the worse effects of using social networking sites and the possible measures to prevent such dangers.

Megwalu¹⁴ (2015) in his case study entitled, "Academic social networking: A case study on users' information behaviour" explored the communication behaviors of physicists, linguists, and sociologists on Academia.edu, an academic social networking website. They also studied the motivations behind using ASNs, the impact of its usage in their professional fields. The data of the users of academia.edu was collected using three methodologies; server log data, survey questionnaires, and interviews of participants from the disciplines of Physics, Sociology, and Linguistics. The findings of the study showed that usage of sample ASN is reliant upon the affiliated discipline of the user scholars, their professional positions, etc. It was found that scholars from the discipline of linguistics and sociology were using academia.edu and other ASNs. The differences in the scholar motivation and activities were determined by the social and cultural discipline deviations. The findings of this study are significant for drafting computer and web-based communication media.

Kenchakkanavar, Hadagali and Ranadev¹⁵ (2017) in their paper entitled

¹⁴Megwalu (2015). Academic Social Networking: A case study on users' information behaviour. *Current Issues in Libraries, Information Science and Related Fields*, 39, 185-214. doi: 10.1108/S0065-28302015000039014

¹⁵Kenchakkanavar, A.Y., Hadagali, G.S. and Ranadev, S. (2017). Use of Academic Social Networking Sites by the Research Scholars in the Universities of Dharwad City: A study. *Journal of Advances in Library and Information*

“Use of Academic Social Networking Sites by the Research Scholars in the Universities of Dharwad City: A study” in their paper investigated the awareness, usage and impact of academic social networking websites amongst 156 research scholars of Karnatak University and University of Agricultural Sciences, both universities of district Dharwad. The study was based on the primary data collected through survey method using questionnaire. The results of the study showed that all the participants were aware of the ASN’s and ResearchGate was used by the majority of the respondents. It was found that ASNSs were mainly used to share information related to jobs, education and research. Majority of the participants were using ASN’s for looking up information on latest conferences / seminars and workshops, etc. The study revealed that ASN’s have impacted the research work of the participants. The findings of the study also revealed that the non-access to the ASN’s was the major obstacle in using ASNs.

Jordan and Weller¹⁶ (2018) in their study entitled, “Academics and social networking sites: Benefits, problems and tensions in professional engagement with online networking” secondary analyzed the 3509 responses from a survey conducted on usage and perception of online social networking services by Nature Publishing Group. The responses received were from diverse geographical locations such as Europe

(1,581) or North America (1,062), Asia (647), Australasia (95), South America (95) and Africa (29). The results of the study showed that 72% of the respondents cited problems in using the social networks rather than quoting benefits (11%). The major problems identified (35%) were time concerns, spams, several numbers of websites and privacy and security concerns. Concerns related to digital literacy and digital inclusion were less prevalent among the respondents. The connection between positive and negative experiences of the respondents is well reported from the benefits and problems faced by the respondents.

3. Inferences

The notion of academic social networks is constantly developing; therefore it is obligatory for the scholars to stay abreast of updates and transformations, if any in the said social networks. Unfortunately, the investigation of the usage of academic social media amongst the scholars for academic purpose is thinly distributed. Hence, the review in the present study includes limited number of articles relating to usage of academic social networking sites by the academia.

The majority of the studies reviewed on ASNs focused upon the advocacy and promotion of academic social media by the research scholars. However, few studies stressed upon specific manifesto; some of the studies even presented practical advice or guidelines for enhancing the usage amongst academicians within higher education sector also. Further, most of the studies focused upon users rather than the ASNs, its structure and services, the studies

Science, 6(3), 274-278. Retrieved September 30, 2018 from <http://jalis.in/pdf/6-3/Anand.pdf>

¹⁶Jordan, K. and Weller, M. (2018). Academics and social networking sites: Benefits, problems and tensions in professional engagement with online networking. *Journal of Interactive Media in Education*, 1(1), 1-9. doi:10.5334/jime.448

have been published because of the originality of the topic or concept. The literature on ASNs particularly lacks convincing vision into the possible grounds for the scholars to use academic social networking websites features, the stimulus for joining the groups and perceived benefits of usage of ASNs.

It was observed that even though ample studies that have been carried out on ASNs, but at the same time lack studies on the awareness and usage of ASNs. The review reveals that no such single study detailing the identification and comparison of attributes of academic social networks is available for ready reference to the researchers as well as academicians.

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Therefore, the studies focusing on the existing and emerging academic social networks is still needed. The network of academicians is most conducive to being studied, because of its openness and simplicity of data collection. Hence, it is recommended that a profound and extensive understanding and investigation of ASNs awareness, usage, preferences, and practice is desirable and needs to be undertaken for prospective research. Another area which has not been fully explored as revealed from the review is the implication for libraries while strengthening and encouraging academicians to use these sites. Finally, this paper is intended to help address above stated gaps.

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