

## Original Research Article

# Use of academic social networks among Myanmar Academicians

### ABSTRACT

This study investigates to know Myanmar academicians' use of academic social networks, with especially focus on the Google scholar, Academia.edu and Researchgate. Adopting the descriptive survey design, the study used web based questionnaires as research instrument. In total, 500 participants who were at Arts and Science Universities in Myanmar have in the study. The finding reveals that Google scholar is the most common used academic social networks among Myanmar academicians. Academicians want to gain more new research area and researchers, but also more communicate with academic social network members for their academic works by joining academic social networks. Furthermore, academicians knew how to use academic social networks for their academic life. Academic social networks are recognized as important one for academicians and also academic social networks should be put into better research tool services.

**Comment [MOT1]:** The sentence seems incomplete. Reconstruct it

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**Comment [MOT3]:** How will you classify articles and conference proceedings that are automatically indexed in Google Scholar? In other words, apart from researchers opting to use Google Scholar, some journals and international conferences are indexed in Google Scholar as a database. The author(s) are therefore advised to be self-explanatory regarding the use of the Google Scholar

*Keywords:* academic social networks, google scholar, academia.edu, researchgate, Myanmar

### 1. INTRODUCTION

Along with the growing of internet based platforms, academic social networks have been popularity in many scholarly areas. The numbers of users of academic social networks are increasing day-by-day and the numbers of scholarly paper are growing day by day. The

young generation and research paper are precious of a country. Social network sites, especially for academic purpose, are importance for academicians. Furthermore, many academic institutions and scholars are already active on one or more academic social networks [1]. Academic social networks are promoters of open access. They target the academic audience and provide services directing to community of students, research scholars, teachers and other academic stakeholders [2]. The popularity gained academic social networking platforms are Google Scholar (2004), ResearchGate (2008) and Academia.edu (2008). They support collaboration, communication and research items among research community [3]. Moreover, ASNs improve the reputation of researcher and institution. As mention multi-fold benefits of ASNSs for academic community, the present study was taken up to find the motivation, activities and benefits of joining academic social networks among Myanmar academicians.

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The study of previous, Hoffmann, Lutz, & Meckel [4] surveyed to know the interactions of Swiss scholars in ANS site which helped to get more followers then impacts to their publication and academic achievement. A study was found that Spain Institution preferred to upload the article to RG than their Institutional Repositories [5]. Manca & Ranieri [6] conducted a survey on assessment of RG by Italian scholars found that the scholars more increased in using of academic social network for their academic achievements. An empirical survey of the top 150 Taiwan researcher's grants and their RG score investigated by Kuo, Tsai, Jim Wu, & Alhalabi [7] that showed the correlation in researcher's grants and RG score. An important study on ResearchGate usage and publication examined by Thelwall & Kousha [8] found that while Brazil, India and some other countries seem to be disproportionately taking advantage of ResearchGate, academics in China, South Korea and Russia may be missing opportunities to use ResearchGate to maximize the academic impact of their publications. These studying encourage to do survey on academic social networks among Myanmar academicians to know their academic performance.

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## 2. LITERATURE REVIEW

Academic social networks are becoming a tool of information access operations worldwide, research scholars have increased in using academic social networks with difference purpose of research performances and academic tasks. There were many types of research on social networks which use especially for academic propose. Balakrishnan et al. [9] found that male academicians more participated than female academicians in academic social networks. Ortega [2] studied academicians from different disciplines to know the most academic contribution disciplines in academic social networks. The study focused on the 6,132 profiles of the academic social networks found that humanists and social scientists discipline are massively contributed in academia and biologists are popular in Researchgate. A study of Ortega & Aguillo [10] analyzed the profiles of google scholars in a year (2011-2012). The study found that mathematical and natural science (including technology) (about 50%) was increasingly participating in google scholar than following by the medicine (6%) and social science (5%). Holmberg & Thelwall [11] studied how researchers use the microblogging site Twitter. The study collected the data from selected researchers in ten disciplines (astrophysics, biochemistry, digital humanities, economics, history of science, cheminformatics, cognitive science, drug discovery, social network analysis, and sociology). The results showed that Biochemists like more to use retweet than researchers in the other disciplines. Borgohain [12] presented a study on research scholars of Dibrugarh University use social networking sites for their research performances. The study used 150 participants the results found that ResearchGate, Academia.edu and Facebook are the most preferred social networking sites for research purpose. A study of Singson and Anees [13] analysed the motivation of research scholars in Pondicherry University. Finding have shown that the motivation of joining Researchgate enhance their research skills and research fields by reading newest articles. Ali & Richardson [14] examined the reason of using academic social networks of social science faculty members at five Karachi (Pakistan) public sector universities. The finding have revealed that the main

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reason of using academic social networks were to uploading their own publications to academic social networks. Asmi & Margam [15] investigated to know the activities in academic social networks. Finding from the study showed that the most researchers used Researchgate to connect with other researcher when using Academia for sharing and following research. Moreover, the authors suggested that academic social networks were good tools for research and learning. A study on activities and reasons for using Social Networking Sites (SNS) by the research scholars of North Eastern Hill University (NEHU) found that researcher in social science files used academic social networks for education purposes except researchers in pure science fields. However, the author suggested that social networks sites should be used as an educational tool for time consuming [16]. A study of El-Berry [17] on the South Valley University (SVU) academic staff explored the awareness and use of five famous ASNSs; namely ResearchGate, Acedemia.edu, LinkedIn, Mendeley and Scholastica. Finding pointed that academic staff have the most awareness levels on ResearchGate and usage on LinkedIn, Acedemi.edu, Mendeley and Scholastica, respectively. Jeyapragash & Arputharaj [18] investigated the level of awareness on Academic Social Networking Sites (ASNS) among the research scholars in the Universities of Tamil Nadu. The authors noted that research scholars were medium affected on awareness of ASNS. However, awareness of academic social networks by research scholars were differs on various age and qualifications. Parabhoi & Kumari [19] explored the use of ASNSs among the Faculty and Students of Indian Institute of Technology (Indian School of Mines), Dhanbad. The study was specifically mentioned that academic staffs used academic social networks sites for dissemination of knowledge but also for job searching.

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### 3. RESEARCH METHODOLOGY

The study was investigated to know the use of academic social networks among Myanmar academicians adopting the descriptive survey design. The online based questionnaire was used as data collection instrument of this study and created "Google Form". The survey form was designed in a way that participant was limited to send only response but can edit his/her submitted response and personally distributed (via social media application:

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messenger) among Myanmar academicians in Arts and Science Universities of Myanmar in January 2021. The survey form was adopted from studies of Singson & Anees [13] and Asmi & Margam [15]. The data from 500 respondents were processed using excel. The results of data analysis present in percentage and mean values.

## 4. RESULTS

### 4.1 Demographic characteristics of the respondents

Data were collected from 500 academicians, out of which 452 (90.4%) were female and 48 (9.6%) were male. Among the respondents, undergraduate students 67 (13.4%), graduate students 91 (18.2%), tutor 220 (44%), assistant lecturers 98 (19.6%), lecturers 2 (.4%), associated professors 12 (2.4%), professors 10 (2%), respectively.

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### 4.2 Frequently used academic social networks

To categorize the commonly used academic social network among difference social networks, the question "Which is the most frequently used academic social networks? The respondents indicates that google scholar is the most frequently used academic social networks with 150 (30%) respondents followed by academia.edu 136 (27.2%), researchgate 127 (25.4%) and other social networks 87 (17.4%) respectively. Thus, the results imply that google scholar is the most common used academic social networks among Myanmar academicians.

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### 4.3 Times spend on academic social networks

To know the average time spend of academicians using academic social networks, the results reveal that 156 (31.2%) respondents use the most academic social networks within 16 hour and above, followed by 132 (26.4%) respondents using for 6- 10 hours and 116 (23.2%) respondents use academic social networks within 0-5 hours. Least 96 (19.2%) respondents spent 11 – 15 hours.

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### 4.4 Search experience in academic social networks

To identify the familiar with academic social networks, the results indicate that 183 (36.6%) respondents had the most 1-3 years search experience in academic social networks, followed by 135 (27%) respondents who use academic social networks for 4-6

years, 87 (17.4%) respondents had 7- 9 years, 49 (9.8%) respondents had used less than 1 year and 46 (9.2%) respondents use it since 10 years and above with the least.

#### 4.5 Motivations of joining academic social networks

Continuously, to know the motivation of academicians joining academic social networks, the question "What motivations are gaining when joining academic social networks?" was asked using the same five point scale. Respondents were asked to indicate their motivation of joining academic social networks with the following items:

- To connect to other researchers
- To share and access scientific output, knowledge, and expertise
- To find solutions to research problems
- Share publications, access others and publish data
- Connect and collaborate with others
- Ask and reply to questions
- Following and discussing different topics
- Checking new feeds

The findings suggest that checking new feeds (Mean=4.246), following and discussing the different topics (Mean=4.192) and to connect with other researchers (Mean=4.062) have the greatest mean value above 4.000 while connect and collaborate with others (Mean=3.034) has the smallest mean value. The results indicate that motivations of joining academic social networks were strongly or moderately agreed by academicians of Arts and Science Universities in Myanmar with Mean values above 3. The results can be concluded that academicians want to gain more new research area and researchers by joining academic social networks. Further details can be seen in Table 1.

Table 1. Motivations of joining academic social networks

Motivations of joining academic social networks	SD	D	N	A	SA	Mean	Std. Deviation
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To connect to other researchers	3	12	114	193	178	4.062	.8553
To share and access scientific output, knowledge, and expertise	10	30	152	227	81	3.678	.8854
To find solutions to research problems	19	34	148	191	108	3.670	1.0095
Share publications, access others and publish data	33	85	173	149	60	3.236	1.0764
Connect and collaborate with others	50	89	191	134	36	3.034	1.0654
Ask and reply to questions	8	35	133	240	84	3.714	.8819
Following and discussing different topics	3	7	81	209	200	4.192	.7978
Checking new feed	3	5	66	218	208	4.246	.7633

#### 4.6 Activities of academic social networks members

The question "What activities are encouraged to joining academic social networks?" was asked using five point scale. Respondents were asked to indicate their activities to joining academic social networks with the following items:

- Regularly communicating with researchers around the world
- Regularly visiting updating my profile information
- Posting my research article papers
- Reading comments and reviews on my research publication
- Read articles and reviewing paper posted by others
- Regularly answering questions posted in my area of interest
- Sending my papers to fellow users on request
- Requesting article not accessible to me in my university
- Search for job opportunity

Table 2 shows different activities academicians were engaged in academic social networks. Findings of the study show that the main activities of academicians on academic social networks was regularly communicating with researchers around the world

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(Mean=3.840), requesting article not accessible to me in my university (Mean=3.766), regularly visiting updating my profile information (Mean=3.822), regularly answering questions posted in my area of interest (Mean=3.860) while reading comments and reviews on my research publication (Mean score = 3.358). The results indicate that activities of academic social networks members were moderately agreed by academicians of Arts and Science Universities in Myanmar with Mean values above 3. The results can be concluded that academicians want more communicate with academic social network members for their academic works.

Table 2 Activities of academic social networks members

Activities of academic social networks members	SD	D	N	A	SA	Mean	Std. Deviation
Regularly communicating with researchers around the world	3	26	131	227	113	3.840	.852
Regularly visiting updating my profile information	0	11	171	214	104	3.822	.7794
Posting my research article papers	14	31	164	206	85	3.634	.9305
Reading comments and reviews on my research publication	13	60	236	117	74	3.358	.9611
Read articles and reviewing paper posted by others	0	40	167	217	76	3.658	.8309
Regularly answering questions posted in my area of interest	14	21	187	177	101	3.660	.9392
Sending my papers to fellow ResearchGate users on request	6	51	188	212	43	3.470	.8358
Requesting article not accessible to me in my university	2	23	159	222	94	3.766	.8201

#### 4.7 Benefits of joining academic social networks

The question "What kinds of benefits are gaining by joining academic social networks?" was asked using five point scale. Respondents were asked to indicate their benefits of joining academic social networks with the following items:

- Helps in research and learning
- Downloading of resources
- Collaborative and peer to peer learning
- Developing web skills
- Share and seek research ideas and experience
- Easy communication (video calls, messages)
- Finding solutions to research problem
- Knowledge about new research tools and techniques

The benefit researcher seeks while joining academic social networks are as shown in Table 3. From the result of the study, academicians stated that joining academic social networks have the most solved their research problems (Mean = 4.266) and it has also enabled them to easy communicate researcher in academic social networks (Mean = 4.202). Other reasons academicians stated that they have developed their web skills (Mean = 4.186), enhanced their knowledge sharing and seeking (Mean = 4.166), enhance their knowledge about research tools and techniques (Mean = 4.120), and their collaborative and peer to peer learning (Mean = 4.020), respectively. However, academicians stated that joining academic social networks has less enhanced helps for their research and learning (Mean = 3.830) and downloading of resources (Mean = 3.870). The results indicate that benefits of joining academic social networks were strongly agreed by academicians of Arts and Science Universities in Myanmar with Mean values above 3. The results can be

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concluded that academicians gain by knowing how to use academic social networks for their academic life.

Table 3. Benefits of joining academic social networks

Benefits of joining academic social networks	SD	D	N	A	SA	Mean	Std. Deviation
Helps in research and learning	8	26	149	177	140	3.830	.9502
Downloading of resources	2	32	143	175	148	3.870	.9267
Collaborative and peer to peer learning	2	15	102	233	148	4.020	.8105
Developing web skills	2	13	76	208	201	4.186	.8129
Share and seek research ideas and experience	1	14	80	211	194	4.166	.8073
Easy communication (video calls, messages)	0	9	70	232	189	4.202	.7418
Finding solutions to research problem	0	15	55	212	218	4.266	.7723
Knowledge about new research tools and techniques	2	13	91	211	183	4.120	.8216

## 5. DISCUSSION

The results of the study showed that Myanmar research scholar' motivations, activities and benefit for joining academic social networks-Google scholars, academia.edu and Researchgate. The results of the study suggest that Google scholar is very popular among research scholar, particularly among the science disciplines. The finding is corroborated in previous studies by Ortega and Aguillo [9]. Moreover, motivations of research scholars using academic social networks, the study result reveals that "Checking new feed" is more motivated to research scholars to use academic social networks. Similarly, "Following and discussing different topics" and "To connect to other researchers" are also motivated to research scholar to use academic social networks. In line Singson & Anees [13], finding of

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the study suggest that academicians' motivation of joining academic social networks were gaining visibility and following the researchers.

Academicians' activities while using academic social networks have shown that Myanmar research scholars are more active in communication. For example "Regularly communicating with researchers around the world" and "Regularly visiting updating my profile information". From the results, it is clear that academicians, still entirely comfortable with the virtual communities, feel reliably on virtual space through discussion groups and manage their professional social life [20].

Finally, Academic social networks are gained popularity in among research scholar with these benefits "Finding solutions to research problem", "Easy communication (video calls, messages)" and "Developing web skills" when Myanmar research scholars are very less in knowledge sharing. For example "Share publications, access others and publish data". However, the uses of academic social networks have been increased in educational fields supporting newest educational information resources. It is suggested that academicians interested in the new social media and new technology [21]. Overall, academicians are indeed utilizing academic social networks sites to participating for their interests. Therefore, academic social networks are recognized as important one for academicians and also academic social networks should be put into better research tool services.

## 6. CONCLUSION

This study can be concluded that research scholars are interesting to use academic social networks for the purpose of their academic advantages. Therefore, emphasizing the utility of academic social networks may be the best ways to increase global educational environments. Since many research scholars have aware in searching scholarly articles using academic social networks. Academic social networks should clearly mention to research scholars with full understanding for search features and limitation of content for linkage resources. Surprisingly, research scholars' motivation, activities and benefits are

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also significant on using academic social networks. The results were mostly highlighted to research scholars' social interaction. This social interaction gained research scholars' needs. Moreover, academic social networks should provide information resources to research scholars a deep well. The study is limited to arts and science universities in Myanmar. Also, the paper did not explore correlation of uses of academic social networks. Further research could be conducted across other Myanmar academic universities faculties' uses of academic social networks and their performances.

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