

Participations and Communications of Myanmar Academicians on Research Gate among Differences Disciplines

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Abstract

The purpose of this paper is to know the participating and communication of different disciplines among Myanmar academicians in ResearchGate (RG). The data were manually collected by visiting the profile pages of all members who had an account with the Institution of Myanmar in RG. In total, 1035 RG members and 59 participants' communications were analyzed by using the statistic method—Kruskal-Wallis H test under the five disciplines. The results show that Engineering and Technology disciplines massively participated than other disciplines on ResearchGate, while Natural science disciplines are more in research items. Life Science and Medicine disciplines have the most scholarly communication, respectively. There is no RG metric significant in social science disciplines. But, different disciplines of Myanmar academicians show varying levels of interest in being involved in RG with different significance

Keywords: Researchgate, Myanmar academicians, Interaction, academic, social networks, question and answer site.

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1. Introduction

With knowledge exploration in the information age, most of people have consumed the information in their daily life and works (Wu, He, Jiang, Dong & Vo, 2012). Among those people, academicians have increasingly interested in consuming the information through academic, social networks sites (ASNS): ResearchGate, Academia.edu, Google scholar and Linked in etc (Meishar-Tal, & Pieterse, 2017). These specialized academic, social network sites are equally gaining popularity among academicians by providing these services: online collaboration, sharing academic resources, or searching Information and scholarly communication (Chen, 2019, Lopes, Moro, Wives & De Oliveira, 2010, Segado-Boj, Díaz-Campo, Fernández-Gómez & Chaparro-Domínguez, 2019; Lee, Oh, Dong, Wang & Burnett, 2019; Ebrahimzadeh, Sharifabadi, Kamran & Dalkir, 2020; Jeng, DesAutels, He & Li, 2017). Hence, many millions of users and the number of profiles on ASNS are increasing and the number of communication is usual in every passing day.

According to Yan & Zhang, (2018), Most of the research on users of academic, social network sites mainly focused on the participation and behavior differences between different demographics and disciplines. Difference approaches of studies have been presented in a variety of scholarly journals since the ASNS is commonly used (Ovadia, 2014). Such previous studies showed that the importance of Researchgate for academicians. But, there is a lack of study concerning the activities of Myanmar academicians on ResearchGate. The statement early motivates to investigate the activities of Myanmar academicians in Researchgate.

One study should fill the above mention gap. For this reason, the following research questions are set up—

RQ1: What disciplines are more participating in ResearchGate among Myanmar academicians?

RQ2: What are the differences and relativity of RG metrics between disciplines?

RQ3: What kind of communication do academicians use on Researchgate Q & A site?

2. . Related Works

This section described the previous studies of ASNS from different approaches. According to Drula (2009), social networking sites are kinds of web-based sites that intent serve to interact with others. SNSs, profile-based websites, allowed users to maintain social relationships by viewing, visiting, and sharing their lists of social connections with other members (Boyd & Ellison, 2007). ASNS are specialized web-based services for academicians who take academic activities widely (such as share publications, seek collaborators, communicate work in progress, and build scholarly reputation). Many studies presented from — bibliometrics and alter metrics approach (Kraker & Lex, 2015, Orduna-Malea, Ayllón & Lopez-Cozar, 2016), effects of ASN- metric on difference individual, institutional and national research reputation (Thelwall and Kousha, 2014, Borrego, 2017) user behaviors approach (Kim, 2018, Dahlan & Ibrahim, 2017), user interaction approach (Li, Huang, Ye & Zhang, 2019) and social media literacy approach (El-Berry, 2015).

With regards to the RG score metric, Copiello & Bonifaci, (2018) explored that the RG score affects on the academic reputation of members on RG. The study found that the RG score is not a reliable indication of scientific and academic reputation. A study of Jordan, (2015) used the exploratory analysis

to know the correlation between RG scores and profile metrics. Yan & Zhang, (2018) studied the impact of institutional differences on RG reputational metrics found that RG metrics serve as indicators of research activities among US institutions. Some studies investigated the impact of ASNS metrics on users (Hoffmann et al., 2016, Thelwall and Kousha, 2015, Shrivastava & Mahajan, 2015, & 2017, Yan, Zhang, & Bromfield, 2018).

With regards to the user interaction approach, Li, Huang, Ye & Zhang, (2019) explored the scholar's question post to investigate the answer quality that found answer quality had not affected the question, but, get the academic resources. Prior studies on communication and interaction performance of the User in ASN Q & A site have investigated different information inquires and answering types. Kim, (2018) investigate biological scientists in the USA for academicians' article sharing mode. The study of Salahshour Rad, Nilashi, Mohamed Dahlan & Ibrahim, (2017) conducted the Malaysian researchers in an academic social network to know the individuals' behavioral intention and use of ASNSs. Lee, Oh, Dong, Wang & Burnett, (2019) assessed how were the motivations for self-archiving research items on academic, social networking sites by randomly selected ResearchGate users. Other user interaction approach studies were Goodwin, Jeng & He, 2014, Li, He & Zhang, 2016 & 2019, Jeng, DesAutels, He & Li, 2017, Ostermaier - Grabow & Linek, 2019, Li, He, Zhang, Geng & Zhang, 2018.

The vast majority of the studies above did not found on the activities of Myanmar academicians on participating and communication of ResarchGate. To address the above resaech gaps, this study explores each profile of Myanmar academicians and each scholar's communication in ResearchGate. Specifically, this research aims to describe how the statement of RG metric (such as RG score, research items, citation, read, following, and follower) and also Interaction (Information seeking, Discussion seeking, and suggestion seeking)in ResearchGate among Myanmar academicians.

Table 1 List of RG-metrics

RG metrics	Descriptions	Reference
RG score	It's a metric that measures scientific reputation based on how an author's research is received by his/her peers. The exact method to calculate this metric has not been made public, but it takes into account how many times the contributions (papers, data, etc.) an author uploads to ResearchGate are visited and downloaded, and also by whom (reputation) RG score measures scientific reputation based on how the work is received by peers. RG Score is calculated based on any contribution of users such as research dimension (paper, citation and read) and social dimensions (follower, following, question and answer)	Martín-Martín, Orduna-Malea, Ayllón, & Lopez-Cozar, (2016)
Publications	Total number of publications an author has added to his/her profile in ResearchGate (full-text or no)	
Views	Total number of times an author's contributions to ResearchGate have been visualized. This indicator has recently been combined with the —Downloads indicator to form the new —Reads indicator, but the data collection for this product was made before this change came into effect	
Citations	Total number of citations to the documents uploaded to the profile. ResearchGate generates its own citation database, and they warn this number might not be exhaustive	
Following	Number of ResearchGate users the author follows (the author will receive notifications when those users upload new material to ResearchGate)	
Follower	Number of ResearchGate users who follow the author (those ResearchGate will receive notifications when the author uploads new materials to ResearchGate)	

3. Research Method

3.1 ResearchGate

Researchgate was founded by Dr. Ijad Madisch along with Dr. Sören Hofmayer and a computer scientist, Horst Fickenschler, in 2008. Over 16 million members from all over the world use it to search, share, discuss and collaborate. All members are from various disciplines. It arranges to create a profile—personal information relevant to academics' professional status, understanding the demographics of the user population has been addressed through web scraping of profile characteristics and linkage data for requirement information as open access. ReserachGate is a rich source of reputation indicators such as RGScore; altmetric indicators such as publications, reads, profile views, citations, impact points; social interaction indicators such as followers and following, etc. The site is treaded to upload and download academic paper, Project, Communication. It collects

the related data of members automatically. It provided the Question and Answering section for members than to the job vacancy. ResearchGate also provides browsing features where one can search the need through keywords search and provide the filters: projects, publication, funding, questions, jobs, institutions, and departments. ResearchGate has an interface with other diffused social networks such as Facebook, Twitter, and Friend Feed of LinkedIn, so you can connect through yet existing profiles (ResearchGate, 2014).

3.2 Data Collection

When exploring the profiles of RG's members, there are over 16 million members in RG. Among those, over 2000 profiles with Myanmar Name are found in 2019. We start with the name of Myanmar institutions to set up an initial data set. We collected each institutional URL to get the information of each member, totaling 1684 profiles are found. Each user profile page with a series of indicators is collected manually. Then, the data of the study are clean with 2 criteria: user profiles must be with the Myanmar Institution in ResearchGate, but duplicate profiles are deleted, and users must have at least 10 followers or followings. After cleaning the profiles with 2 criteria, there choose 1035 profiles for this study. Within 1035 profiles, there are communications with 146 question posts and 294 answer posts of 59 participants, which are chosen for communications. The detail of the University list can be seen in Table 2.

Table 2 Name of institution

Disciplines	# of institution	Name of Institution
Engineering and Technology	4	University of Computer Studies, Yangon Yangon Technological University University of Computer Studies, Mandalay Mandalay Technological University
Life Science and Medicine	4	University of Veterinary Science, Yezin University of Medicine Myanmar, Mandalay University of Pharmacy, Yangon Yezin Agricultural University
Natural Science	4	University of Yangon University of Mandalay Yadanabon University Mandalay Technological University
Social Science	4	University of Yangon University of Mandalay Yadanabon University University of Economic, Yangon
Humanity	4	University of Yangon University of Mandalay Yadanabon University Dagon University

Source: Survey

3.3 Coding

For the classification of discipline, the coding scheme followed the study of Vaughan, Tang & Yang, (2017). The disciplines were divided into five disciplines: Engineering and Technology, Life Science and Medicine, Natural Science, Social Science, and Humanity.

For the Information of RG members, the coding scheme ultimately included the following categories in relation to options for self-presentation and related functionality on RG: Institution, Name, position, degree, specialized discipline, research interest, research items (article, conference paper, full text, poster, etc.), number of follower and following and number of communications. This information of each member is noted in the excel sheet manually.

For the interaction, the coding scheme adapted from the study of Ostermaier - Grabow & Linek, (2019). The categories were established for the main elements of the communications: Characteristics of communication types and language used in communication types.

Characteristics of interaction types: the factual description of posting for their academic works and organized into information-seeking, discussion-seeking, suggestion-seeking and socio information. Information-seeking questions and Discussion-seeking questions are adapted from the study of Jeng, DesAutels, He & Li, (2017) and suggestion seeking questions and socio information are adapted from the study of Deng, Tong & Fu (2018) (see table 9. in Appendix).

Used language of interaction post is the length of the communication post and is arranged into a short

sentence, Medium sentence, and Long sentence. (Short sentence: no nesting, no listing, no including; average sentence: max. 1 nesting or listing or inclusion; long sentence: over several lines), sentence-construction (number of paragraphs, lines)(Ostermaier - Grabow & Linek, 2019) (see table 3).

Table 3 Used languages in interaction

Language used	Description	Examples	Reference
Short sentence	no nesting, no listing, no including	2nd Bio-economy Book E4?	Ostermaier - Grabow & Linek, (2019)
Medium sentence	max. 1 nesting or listing or inclusion	Diffusion distance of rice root exudates? I would like to know the diffusion distance of rice root exudates. How far can rice root exudates affect the microorganisms in bulk soil? I don't mean for soil depth, just horizontal distance. I will be really appreciated for your answers.	
Long sentence	over several lines	What is the best method to determine the phosphate solubilizing activity of bacteria? We are using Vogel method, in which sodium molybdate and sulphuric acid are used to form a blue color complex to determine the solubilized P in culture broth with UV-vis spectrophotometer at 830 nm. In this method, we are using cation exchange resin. But, I would like to use another method that doesn't need to use cation exchange resin. Which method are you all using to determine the Phosphate solubilizing activity of bacteria?	

3.4 Data Analysis

In the study, 1035 profiles of Researchgate members were classified under their interest disciplines. These disciplines are calculated with the RG metrics: (a) RG score, (b) publication metrics such as number of publications, reads, and citations, (c) Social interaction metrics (number of followers, number of followings, and communications) to know the relativities of each discipline. The statistic method—Kruskal-Wallis H test was applied in the data analysis of the study (Ortega, 2015). The test is a nonparametric technique (distribution-free test) that can be used for both continuous and ordinal-level dependent variables (Pallant, 2005, StatisticsSolutions, 2017). The test enabled finding statistical differences between several nonparametric samples. User communications of 59 participants of user communication in ResearchGate among Myanmar academicians were analyzed manually.

4. Finding

In this section, results related to three questions of this study will be presented. Data are analyzed and summarized concerning RG metrics: (a) RG score, (b) publication metrics such as number of publications, reads, and citations (c) social interaction metrics: number of followers, number of followings, and communication. Table 4 and 5 showed the result of the demographic information of academicians. The study was conducted on 1035 Myanmar academicians in Researchgate.

Table 4 Demographic information of academicians

Demographic information of the academicians	Number of academicians	Percentage of academicians (%)
Gender		
Male	390	38
Female	645	62
Disciplines		
Engineering and Technology	526	51
Life Science and Medicine	448	43
Natural Science	38	4
Social Science	13	1
Humanity	10	1
Title/Stage		
Student	284	27.4
Bachelor Degree Holder	37	3.6
Master Degree Holder	45	4.3
PhD candidate	51	4.9
Tutor/Demonstrator	26	2.5
Assistant Lecturer	36	3.5
Lecturer	50	4.8
Associate Professor	58	5.6
Professor	39	3.8
Consultant/Doctor	377	36.4
Researcher	32	3.1
N=1035		

Table 4 Branches of disciplines

Disciplines	Branch of disciplines
Engineering and Technology	Engineering Civil & Structural, Engineering Chemical, Computer Science and Information System, Engineering Electrical & Electronic Engineering Mechanical,
Life Science and Medicine	Agriculture, Veterinary Science, Anatomy and Physiology, Biological Science, Medicine, Pharmacy and Dentistry
Natural Science	Mathematics, Geology, Chemistry and Physics
Social Science	Law, International Relation, Economics and Management
Humanity	Philosophy, Psychology

Source: Survey

Researchgate Metrics

The following results showed the results of Researchgate metrics between different disciplines by applying the Kruskal-Wallis H test.

RG Score Metric

RG score measures scientific reputation based on how the work is received by peers. RG Score is calculated based on any contribution of users such as research metrics (paper, citation and read) and social interaction metrics (follower, following, question and answer). To apply the test of Kruskal-Wallis H test (between-subject)

Table 6 RG score metric

Disciplines Metric	Engineering and Technology	Life Science and Medicine	Natural Science	Social Science	Humanity	Total	Kruskal-Wallis H test (Between Subjects)				
	n	n	n	n	n	n	mean	SD	χ^2	df	Sig
RG Score	n=526 (mean= 0.77 SD= 2.78)	n=448 (mean= 1.77 SD= 4.24)	n= 38 (mean=2.95 SD=5.56)	n=13 (mean= 4.43 SD= 7.01)	n=10 (mean=5.46 SD= 9.80)	1035	1.38	3.86	62.91	4	.000*

*p<0.05

Table 6 shows the computed variables for RG Score on five different disciplines. The results for RG scores show that Humanity users have the highest value (mean=5.46, SD= 9.80), while engineering and technology users have the lowest value (mean= 0.77, SD= 2.78). RG score is (mean=1.38, SD= 3.86) between discipline. All the means of RG score metrics fall within their respective 95% confidence intervals. With the Kruskal-Wallis H test, this study shows that RG scores among different disciplines were relatively large ($\chi^2= 62.91$, df = 4, Sig = 0.000).

Research Metrics

Research metrics include the number of publications that a user uploaded onto RG, indicating a user's participation status and academic output, and the total number of reads and citations of these publications, revealing academic quality and impact. As shown in Table 7, the number of publications per User, numbers of citations per publication, and the number of reads per publication and per interactions.

Table 7 Research metrics

Disciplines Metrics	Engineering and Technology	Life Science and Medicine	Natural Science	Social Science	Humanity	Total	Kruskal-Wallis H test (Between Subjects)				
	n	n	n	n	n	n	mean	SD	χ^2	df	Sig
Research Items	n=526 (mean= 2.3 SD= 10.44)	n=448 (mean= 2.13 SD= 5.34)	n= 38 (mean= 13.52 SD=52.636)	n=13 (mean= 6.84 SD= 7.01)	n=10 (mean=7.10 SD= 16.70)	1035	2.74	13.24	18.21	4	0.001*
Citation	n=526 (mean= 6.60 SD= 31.00)	n=448 (mean= 18.44 SD= 81.45)	n= 38 (mean= 56.42 SD=161.97)	n=13 (mean= 79.61 SD= 193.34)	n=10 (mean= 242.40 SD= 661.71)	1035	16.75	95.88	30.69	4	0.000*
Read	n=526 (mean= 629.36 SD= 3863.21)	n=448 (mean= 413.40 SD= 1990.59)	n= 38 (mean= 4011.36 SD= 18468.45)	n=13 (mean= 304.15 SD= 493.84)	n=10 (mean= 381.60 SD= 569.60)	1035	653.57	4684.37	16.46	4	0.002*

*p<0.05

Table 7 illustrates the computed variables for research metrics. The results of the Research items are that Natural science discipline is the highest value (mean=13.52, SD= 52.63), while engineering and technology users have the lowest value (mean= 2.3, SD= 10.44). Research items are difference with (mean=1.38, SD= 3.86) between discipline (n=1035). Citation results show that Humanity discipline is the highest value (mean= 242.40, SD= 661.71), while engineering and technology users have the lowest value (mean= 6.60, SD= 31.00). Citation are difference with (mean=16.75, SD= 95.88) between discipline (n=1035). Read results show that engineering and technology users are the highest value (mean= 629.36, SD= 3863.21), while Social Science and humanity user have the lowest value (mean= 304.15, SD= 493.84). Read are difference with (mean=653.57, SD= 4684.37) between discipline (n=1035). Research metrics fall within their respective 95% confidence intervals and significant between differences discipline of research items ($\chi^2= 18.21$, df = 2, Sig = 0.001) citations ($\chi^2= 30.69$, df = 4, Sig = 0.000) and reads ($\chi^2= 16.46$, df = 4, Sig = 0.002) in Kruskal-Wallis H test.

Social Interaction Metrics

Social interaction metric is a metric that is measured on the number of following and followers and communication of academicians in RG. Follower, number of ResearchGate users who follow the author (those ResearchGate will receive notifications when the author uploads new materials to ResearchGate).

Following is the number of ResearchGate users the author follows (the author will receive notifications when those users upload new material to ResearchGate)

Table 8 Social interaction metric

Disciplines Metrics	Engineering and Technology	Life Science and Medicine	Natural Science	Social Science	Humanity	Total			Kruskal-Wallis H test (Between Subjects)		
						n	mean	SD	χ^2	df	Sig
Follower	n= 526 (mean=17.80 SD=22.66	n= 448 (mean=13.62 SD=18.83	n=38 (mean= 19.31 SD= 19.18	n= 13 (mean= 7.92 SD= 10.33	n= 10 (mean=9.40 SD=8.66	1035	15.84	20.85	11.18	4	0.25*
Following	n= 521 (mean= 24.26 SD= 38.68	n= 447 (mean= 18.19 SD=35.85	n= 38 (mean=24.07 SD= 49.76	n= 13 (mean=15.69 SD=14.62	n= 10 (mean= 10.70 SD=20.12	1035	21.38	37.68	21.61	4	0.00*

*p<0.05

Table 8 shows that Follower (social interaction metric) results is that Natural Science is highest value (mean= 19.31, SD= 19.18), while Social Science and humanity have the lowest value (mean= 7.92, SD= 10.33). Follower are difference with (mean=15.84, SD=20.85) between discipline (n=1035). Following (social interaction metric) results found that engineering and technology is highest value (mean= 24.26, SD= 38.68), while Humanity have the lowest value (mean= 10.70, SD=20.12). Follower are difference with (mean=15.84, SD=20.85) between discipline (n=1035) within their respective 95% confidence intervals. The Kruskal-Wallis H test results also indicate that there are the significant between differences disciplines of number of follower ($\chi^2= 11.18$, df = 4, Sig= 0.25*) and number of the following ($\chi^2= 21.61$, df = 4, Sig= 0.00*).

Interaction

Interaction includes the number of postings when the academicians ask, discuss and suggest the information for their academic works.

Its metrics measured by the characteristic of the scholar communication post and language used of the scholar communication post. The characteristic of the scholar communication post is the factual description of posting for their academic works and has two types of posting: questioner post and answer post for academic works. Questioner posts include information asking, information discussion and information suggestion and socio information and also answer posts include too. (mention in table of Appendix). The language used of the scholarly communication post is the length of the communication post and divided into three types: short length, medium length and long length.

Table 9 Characteristics of interaction

Discipline	Participants	Question Posts				Total	Answer Posts			Total	
		Information Seeking	Information Discussion	Information Suggestion	Socio Information		Information Seeking	Information Discussion	Information suggestion		
Engineering and Technology	26	12	12	19	6	49	35	47	59	141	
Life Science and Medicine	32		27	23	38	8	96	37	51	64	152
Natural Science	0	0	0	0	0	0	0	0	0	0	0
Social Science	1	1	0	0	0	1	1	0	0	1	
Humanity	0	0	0	0	0	0	0	0	0	0	
Total	59	40	35	57	14	146	73	98	123	294	

Table 9 shows that the results of question posts and answer posts: **Characteristics of the question posts in each discipline**, Engineering and Technology disciplines use the most Information suggestion post (19 posts among 146 posts) and follow information seeking (12 posts among 146 posts), information discussion (12 posts among 146 posts) and socio information (6 posts among 146 posts). Life Science and Medicine disciplines use the most Information suggestion post (38 posts among 146 posts) and follow information seeking (27 posts among 146 posts), information discussion (23 posts among 146 posts), and socio information (8 posts among 146 posts), respectively. Social science disciplines have only one information seeking post. The most active question post is Life science and Medicine disciplines, followed by Engineering and Technology disciplines and Social Science disciplines. There are no activity communications in Natural science and Humanity disciplines. **Characteristics of the answer posts in each discipline**, Engineering and Technology disciplines use the most Information suggestion post (59

posts among 294 posts) and follow information discussion (47 posts among 294 posts) and information seeking (35 posts among 294 posts) respectively. Life Science and Medicine disciplines use the most Information suggestion post (64 posts among 294 posts) and follow information discussion (51 posts among 294

posts) and information seeking (37 posts among 294 posts), respectively. Social science disciplines have only one information seeking. The most active answer post used discipline is a Life science and Medicine disciplines, followed by Engineering and Technology disciplines and Social Science disciplines. There is no activity in Natural science and Humanity.

Table 10 Used language in interaction

Discipline	Participants	Used Language in Question			Total	Used Language in Answer			Total
		Long	Medium	Short		Long	Medium	Short	
Engineering and Technology	26	8	32	9	49	14	96	31	141
Life Science and Medicine	32	14	57	25	96	13	125	14	152
Natural Science	0	0	0	0	0	0	0	0	0
Social Science	1	0	0	1	1	0	1	0	1
Humanity	0	0	0	0	0	0	0	0	0
Total	59	8	32	9	146	14	96	31	294

Table 10 shows the results of used language in Questions and Answers. Engineering and Technology disciplines use the most Medium language types (32 posts among 146 posts), short language types (9 posts among 146 posts), and long language types (8 posts among 146 posts), respectively. Life science and medicine disciplines use the most Medium language types (57 posts among 146 posts), short language types (25 posts among 146 posts), and long language types (14 posts among 146 posts), respectively. Social science disciplines have only short language types of question posts.

5. Discussion

The study showed disciplinary differences in the relationships between RG metrics.

Answering the first question, the results highlight disciplinary differences in the use of ResearchGate and show the different populations of this site. Academicians from the Engineering and Technology disciplines are more active to participate in ResearchGate and more following other scholars in ResearchGate. The finding is in harmony with those of Ostermaier - Grabow & Linek, (2019), who had found that the majority of participants are engineering and technology disciplines (engineering and computer science), and it is different from the study of Elsayed, (2016).

Answering the second question, RG metrics are divided into two groups from the aspects of motivation. The one group represents the motivation of scholar reputation. The other group represents the motivation of information seeking values. RG metrics for motivations of scholar reputation are RG score, research items, citations, reads, followers, and communications. Humanity disciplines are large participate in research activity with the proof of RG score more and citations more and also Natural Science with high uploading of Research items that results, on the other hand, showed that effects more increased in followers (social interaction metric). But, Engineering and Technology disciplines are getting more reads from other scholars that is the action of communications (social interaction metric). RG research metrics (reads) is a complex metric that tie-up with research items read and communication read. The result is the same of the (Yan & Zhang, 2018) , which means these disciplines positively tie to academic influence as reflected in RG score, citation score, research items, and follower. In addition, more RG metrics: RG score, research items, citation and follower tend to improve scholarly reputation. Life Science and Medicine and social science disciplines users show that they intend to use the RG by the motivation of information seeking values as indicated in followings to other researchers. Thus, the results show that there is the relativity of each RG metric between disciplines.

Answering the third question, the most active users in communication are from Life science and Medicines disciplines and followed by Engineering and Technology disciplines and Social science disciplines. When the academicians more preferred to use the characteristic of information suggestion for question post (social interaction metric) by adding the statement of problems for their works, the study found that the characteristics of answer posts use the information suggestion characteristic, too. Socio information use less when comparing the Interaction of posts because most of the users do not use polite usage and farewell words at the beginning or end of their post (Ostermaier - Grabow & Linek, 2019). Used language of Interaction is the most in the medium sentence in which combines the negative and negative statements by senior researchers who experts in research knowledge.

6. Conclusion

Targeting the research questions, the study is sought the initial insights of the participating and communication natures of different disciplines among Myanmar academicians in ResearchGate. The study found that disciplines in Engineering and Technology are more participating to explore the Information in RG, but Natural Science and Humanities disciplines intend to share more their research activities in RG. Life Science and Medicine are more participating in discussion threads, respectively. On the other hand, the results concluded that different disciplines of academicians show varying levels of interest in being involved in RG with difference significant. The study is a primary work to explore the activities of Myanmar academicians in RG. In the future, more studies should attempt to consider the motivation and behavior of Myanmar academicians in RG when they sought an insight of knowledge by using academic, social network sites.

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