Why Researchers Use Academic Social Networking Sites (ASNS)? A Uses and Gratifications Approach

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Abstract

In the academic world, the patterns of information sharing and publication are revolutionized by the use of Academic Social Networking Sites (ASNS). These platforms have influenced the dynamics and structure of research community by interrelating the scholars across the globe. Additionally, they provide platforms for professional communications, track the published research, sharing abstracts, uploading articles and providing links to the published articles. The purpose of this study is to investigate gratification and uses that faculty member derive from the use of social networks such as Academia.edu, Google Scholar, Research Gate, by employing uses and gratification theory. The focused group for this study were faculty members of 5 universities in Jordan. Results of this study show that ASNS are mainly used for consumption of information, with less focus on professional communication and information sharing. Gratifications are meaningful motivations for researchers to use ASNS and focus mainly on Self-promotion, acquisition of professional knowledge, interaction with peers and peer community.

Keywords: Academic social networking sites, Uses and gratifications, Users' motivation, Google scholar, Academia.edu, ResearchGate.

1. Introduction

In today's social arenas, millions of people worldwide are attracted towards social networks such as Instagram, YouTube, Twitter, and Facebook. The purpose for these networks is to develop and maintain social connections. They constitute four basic components; establish an individual's personal profile, the ability to establish new connections, to maintain and monitor the activities of the added connections, and to maintain the list of social groups with other users[1,2].

Apart from their core purpose of social connections, social networks are also used for professional communications. Traditional group discussions and mailing lists, trending during the late twentieth century, are replaced by alternative networks such as Facebook[3,4].

During recent years, several academic social-networking sites (ASNS) such as ResearchGate, Academia.edu, and Google Scholar have created an academic boom on the internet[5]. The most common ability of these social academic networks is to provide a platform where users can share and upload their academic research. These websites allow users to provide links of their published research, upload abstracts, academic articles, and track changes of the work they have published. Moreover, these platforms are used for discussions, exchange of ideas, and professional interactions with other users.

In the wake of studies that attempt to explain the potential of academic Web sites and create a profile of their use, the present study will examine the connection between the way academics use ASNS, their motives for doing so, and the gratification that they get from this activity. This study emphasizes on two questions in particular: Which motive, the social or the personal, is stronger in using ASNS, and to what extent do users refer to ASNS in ways that are familiar and known about social networks?

This study investigates the nature of the use and the perceived utility of the sites for academics whose professional careers are based on the performance and publication of studies. In a world that offers numerous and diverse online publishing opportunities (general social networks such as LinkedIn, Facebook, personal blogs and sites, and sites of formal journals), the question is what comparative advantage academic networking sites offer and why faculty members use them. Do these sites fit the definition of "social network"? And which of their affordances serve their users?

2. Academics' Use of Academic Networks

The significant attention of the researchers towards these social networks to date has motivated the current researchers to better understand the motives and attractions of academics towards ASNS. Millions of users[6], use these sites and have contributed towards a major addition to scientific media.

Official academic journals usually charge publication fees, for articles accepted in the refereed journals. These articles are then available in both print and online form, easily accessible to the active members in academic setups. Usually the time frame after submitting a research for a publication is sometimes lengthy, for specific journals, and exceed one year. ASNS challenge this model and make it easy for public to excess these articles free of cost. Authors are encouraged to upload their published works with full-text, drafts, and conference sessions on ASNS which is then easily accessible to public[7]. Moreover, readers are also allowed to ask questions and respond to these research publications[8], thereby encouraging and improving communication between researchers and readers.

Several ASNS are developed with similar properties. These sites are usually related to the people in academic institutions and involved in activities such as sharing information, articles, and research studies. Moreover, authors are provided with an access to keep track

of their research, number of readers and citations, and are also helpful for exchange of data. Previous literature highlights five major uses of ASNS for researchers; Managing online identity[9], Diffusion of studies[10], Collaboration[11,12], Information management[13], and Measurement of impact[5,14].

3. Employing the Uses and Gratifications Theory

The Use and gratification theory (UGT) has gained an utmost importance to understand the motives behind the increase in use of internet and the development of several social networks[15].Since Internet use is an active process that entails intention on the user's part, the theory is an appropriate framework for analyzing the motives of people who visit Web sites for use and gratification[15,16,17]. The UGT also helps in understanding the behavior of users who visit sites such as Wikipedia, YouTube, and other social networks that are provide user-generated content. Research on behavior of the user in these different environments usually divide usability of these websites into three categories; information consumptions, involvement in social interaction, and data formation[18]. Research reveals a connection between the nature of the use of a site and the motives for its use. Shao stated that users have different motivations depending upon the nature of their use. Users who produce data and share content have a need of expression, whereas, users using interactive functions are motivated towards their social needs. Moreover, other users who are information consumer, are information-motivated.

According to Stafford[19], the singular characteristic of the gratifications and users that typify recourse to the Internet, as opposed to the use of television and other traditional media, is the centrality and the interactive characteristics of the social gratification. On the contrary, users of traditional media obtain gratification based on the process of information consumption, information they consume, and the availability of content. The increasing trend towards the internet environment is mainly based on its ability to allow communication among users and the interactive ability of the technology. Previous researches on the UGT of participants in ASNS support this point; they emphasize that centrality of gratification for these social networks is created by enhanced communication among existing friends, finding new and old friends, and strengthening the existing relations[15,20,21].

Seidman[22] notes the centrality of the social calculus as a motive for the use of social networks. Researcher further stated that social element is more about the need for a sense of belonging instead of interaction only. Additionally, studies related to gratification find that ego-bolstering is the principal need for the seekers of theses social networks. A study conducted on the girls who were regular internet users, and with age between 12-14 years, found that their motive for gratification is to build an ideal image for themselves[20]. Study conducted on gratification and use of ASNS identified that instead of establishing contacts with new users, academics use ASNS mainly to maintain their existing contacts. Researcher further identified that self-promotion and attitude towards SNS were not related significantly. They identified that academics does not usually contain desire of self-promotion[23].

4. Research Questions, Method and Tools

The research was designed to investigate the reasons academics use ASNS. The following operational questions were stated:
1. What are the characteristics of academics' use of ASNS?
2. What main gratifications do academics obtain by using ASNS? Are they related to the frequency of visits in these sites?
3. Is there a relation between the extent of ASNS use by academic faculty and the gratification obtained from ASNS?

This study is conducted in Jordan and is based on a survey that includes faculty members of five universities. This quantitative study is done by constructing a questionnaire composed of following three sections:

Users' demographic characteristics. Gender, institutional affiliation, age, activities on social sites, academic status, and academic discipline.

Characteristics of the use of academic networks. The second section is constructed by the thorough understanding of the affordances and familiarity of the social sites. This section includes; functions and the extent of their use (contacting authors, uploading and downloading articles), and details on number of respondent's followers, longevity of use, frequency of use, and number of users the respondent follows.

Motivations for use. This section is constructed using UGT in a relation towards the social networks. Twenty-four statements were to be asked by the respondents which are ranked using a 5-point Likert scale. These statements reflect five dimensions of gratifications that a site might fulfill (social, personal, cognitive, escapist and affective) related to UGT, and specifically tailored to the environment of academics.

In total, 500 questionnaires were distributed among the faculty members working at five different universities in Jordan. The response rate was 72.4 percent (362 questionnaires), with a ratio of 41 percent women and 59 percent were men. On average, the respondents were above 50 years of age, ranging in age between 26 to 72. Almost, 65 percent of the respondents were from the disciplines of humanities and social sciences. The remaining 35 percent of the respondents were from other disciplines including; arts, engineering, natural sciences, and exact sciences.

Among all the respondents, 78 percent of them have an account on at least one of the academic sites (Academia.edu/ ResearchGate) and 22 percent of these have account on both the networks. Moreover, all the respondents hold an account on Google Scholar indicating it to be the most preferred site among the faculty members in Jordan.

5. The Findings

1. What are the characteristics of academics' use of ASNS?
Longevity of use. The average time for 56 percent of these respondents who are maintaining an account on ASNS is four years. On the other hand, the respondents who have subscribed to these sites two years and one year ago are almost 26 percent and 18 percent.

Frequency of visits to ASNS. The frequency of using these sites daily, once a week, once a month, and infrequently is 24 percent, 43 percent, 19 percent and 14 percent respectively.

Nature of use. In order to understand the use of ASNS by academics, the list of possible activities on the academic networks is maintained and then presented to the participants. In total, 3 variables (consumption of information, interaction among users, and diffusion and information sharing) with six items were aggregated. The extent to which the respondents are involved in various activities is ranked by using a 5-poing Likert Scale (5=great extent; 1=not at all).

Results highlights that the average score range of the users is not very high, and the most common use of these academic sites was for consumption of information (M=2.36, SD=1.11), which was followed by sharing of information (M=2.09, SD=1.00) and interaction among users (M=1.73, SD=1.00).

Table1: Uses of ASNS

	M	SD
Information consumption	2.36	1.11
Information sharing	2.09	1.00
Interaction	1.73	1.00

Additionally, ANOVA test with repeat measurements was further done to refute the null hypothesis. Results suggest that significance level among the three groups vary. The reason behind this variation

is that users are find more gratification towards consumption of information rather that interaction and sharing of information.

2. What main gratifications do academics obtain by using ASNS?

This is very typical question and 26 possible motives of ASNS use were presented to the participants to answer this question. All these motives were gathered from the theory of gratifications and uses and then adjusted them according the use of social network system. The participants were having freedom to rank the extent of identifications with corresponding motive on a Likert scale of 5-point. In this result we calculated Cronbach's alpha and found reliability.

Self-promotion and ego-bolstering

This group is very important because it has been ranked highest factor in different factors found (SD=1.45, M=2.63). Someone can obtain gratifications and affective utilitarian by belonging to the motives of reinforcement of personal ego and self-promotion network system.

Table 2: Self-Promotion and Ego-Bolstering

Self-promotion and ego-bolstering	M	SD
Share my knowledge with others	2.83	1.48
Know how often my articles are viewed	2.76	1.41
Increase the readership of my studies	2.72	1.5
Enhance my professional reputation	2.68	1.42
Enjoy seeing that my articles are of interest to other researchers	2.65	1.48
Make it more likely that others will cite my articles	2.57	1.47
Know how often my articles are cited	2.5	1.36
Feel gratified that my research is viewed	2.47	1.47
Satisfy my curiosity about the popularity of my articles	2.45	1.47
M	**2.63**	**1.45**

Acquisition of professional knowledge

This group is related to the acquisition of knowledge that academics obtain from ASNS. On average, this group has the second rank (M=2.53, SD=1.37). This show that academic faculty find these networks as a valuable source of professional knowledge.

Table 3: Acquisition of Professional Knowledge

Acquisition of professional knowledge	M	SD
Keep track of others' research	2.7	1.28
Keep abreast of new articles	2.65	1.43
Know who is writing on topics in my area of interest	2.47	1.41
Be exposed to new research trends	2.3	1.36
M	**2.53**	**1.37**

Belonging to professional community

According to research observations this community attributes the significance about affiliation with professional and scientific community. In this community someone needs to indicate the disciplines of their colleagues as well when representing himself/herself at somewhere.

Table 4: Belonging to Professional Community

Belonging to professional community	M	SD
Receive professional recognition in my peer community	2.61	1.31
Be part of the research community in my discipline	2.51	1.31
Show my presence where my colleagues are showing theirs	2.47	1.32
Be like all my colleagues	2.3	1.34
Share my research with the public at large	2.19	1.38
M	**2.42**	**1.33**

This analysis factor has been indicating the peers community regard with researchers in their discipline like meaningful and important affiliation group more than function they perform the public at large. There is also a statement that got top position in rank it is described as "Receive professional recognition in my peer community". While my motive "shar[ing] my research with the public at large"

had received the most bottom rank in the list.

Interaction with professionals

This group of people gathers motives related with enhanced interaction and communication with the people who research. These people have some mutual activities which are useful to communicate with other people. Rather than low mean of 2.18, the factor had been ranked at the position of four. If we analyze the ranking of statements in this group, we would come to know that if the statement is more general and of principle, there will be greater chances of identification with it and vice versa. There is more enterprising and active intent of statement is like have answers of your professional questions published by others, and it is considered as less identified with this statement.

Table 5: Interaction with Professionals

Interaction with professionals	M	SD
Expand relations with other researchers	2.46	1.25
Create academic collaborations	2.34	1.36
Get feedback about my articles	2.06	1.35
Get answers to professional questions from researchers in my field	1.84	1.06
M	**2.18**	**1.26**

Escapism

To get relief from the daily hassles, this factor speaks of using ASNA for entertainment only. It had been derived from the theory of gratifications and uses. According the research in this case, it has been represented that it is completely not important in scenario of using ASNS.

Table 6: Escapism Factor

Escapism	M	SD
Get relief from daily hassles	1.43	0.63
This is how I spend leisure time	1.22	0.71
M	**1.33**	**0.67**

In four motives like acquisition of professional knowledge, interaction with others, belonging to an information community and self-promotion, to know the existence of instinct difference, an ANOVA test had been performed with the repetition of measurements among four complex indicators. It has been taken care of the mean of the statements in every and each factor.

This research is also responsible to indicate distinct and clear differences in different gratifications. Although, the gratification like "interaction with professionals" is really less significant than the self-promotion and ego-bolstering, "acquisition of professional knowledge" and "belonging to a peer community".

3. Is there a relation between the extent of ASNS use by academic faculty and the gratification obtained from ASNS?

In this case all the participants had been asked to inform and report about the frequency of visits on the sites of ASNS. We observe and judge a strong relationship between the intensity of the perceived gratification and the number of visits on the sites of ASNS. There has been also a correlation found between number of visits on ASNS sites and gratifications like self-promotion, acquisition of knowledge and belonging to professional community. It is meant that if greater number of participants visits sites of ASNS then those participants obtain three these types of visits.

6. Conclusions

According to my research work, this paper indicates the perceived utility and the nature of utilization of three different sites for academic purposes and they include Academia.edu, Google Scholar and ResearchGate. I have invoked theory like gratifications and uses considering it a departure point. This theory has also been adjusted and modified in the mass-media context to academic context networks carrying with singularities.

Although the research has been based upon a small population of different kinds of academic sites, is including a valuable answer to

questionnaire which was online. This research work has also been representing that 67% Jordanian academics researchers utilize ASNS. Overall researchers do not use it regularly because greater than 60% people utilize these sites only once in a month. People also utilize these sites only for consumption of knowledge rather than sharing of knowledge and for interaction to some extents with other people. This research has also been showing different academic system networks do not have same function like different social system networks do. Some social system networks are mainly used for interaction with other people[1,15]. On the other hand academic system networks have their main use for consumption of information. Academic system networks are also used to perceive as database to seek rather than creating social relationship or professional relationship.

There are gratifications also and motivate utilizers to come on these ASNS sites and visit four main ones like self-promotion, acquisition of professional knowledge, interaction with peers and belonging to community[24].

The main gratifications mentioned above describe the utilization of academic system networks and determine gratifications and uses theory. These four main gratifications are also required some kind of adjustments. The original gratifications theory discriminates personal factors from emotional factors[25]. While in ASNS ego bolstering or affective and personal factors cannot be separated. On the other side, social factor has been separated in two where academic system networks are concerned and they contact to peer community. So, belongings with peer community are found like separate factors. They are considered as separated peer group affiliation and also no need to interact with others. They are also considered as manifested in action of unilateral by utilizers. They are also responsible to entail responsiveness and initiative for users because of interaction among the users.

The result for the academic information consumption gratification implies and describes the value of gratification. It also shows that academics information is having open and direct access[26]. When separation was done between gratifications of interactions with professional peers and the sense of belonging, then sense of belonging was kept at higher ranked which supports the Siedman's statement. It is known that social system networks have more need for belonging sense than the interaction need[22].

This research also indicates the fact of interaction of the current system and motivation about academics to interrelate it. They are also weaker than the gratifications and uses which should have been explained on the ground. It also indicates that social potential of ASNS is not understood completely by the people of academics because they are new in market.

Acknowledgments

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