Saudi Arabian Students' Attitudes to and Perceptions of Social Networking for Educational Purposes

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Abstract— Web 2.0 applications, in the form of social networking sites, are increasingly being repurposed as academic tools in higher education institutions. In this context, social networking sites are used to support a number of key academic functions including the sharing of ideas between students and academic staff, the forming of dedicated study groups, the exchange of links and other academic objects and self-publication. While these tools are readily being adopted in mainstream Western contexts, little is currently known regarding whether - and how - social networking sites are used in other geo-cultural regions. This study sought to redress this research gap by investigating how often and in what ways Saudi Arabian students use social networking for learning purposes as well as how they perceive these instruments as educational instruments. The study was based on the analysis of results derived from focus group discussions with university students at four Saudi Arabian universities. The research found that Saudi Arabian students are aware of, and welcome, social networking sites and are starting to use them for academic purposes in the same way that university students do in more mainstream contexts. However, it is evident that, in Saudi Arabia, the utilization of these sites for teaching and learning purposes is not yet widespread, nor is it particularly sophisticated in terms of user knowledge of a range of social networking sites and their application to higher education. The study concluded that, due to students' enthusiastic reception of these sites, Saudi Arabia is wellplaced to adopt them in a considered and organized manner, looking to global best practice usage. This study is part of a wider research project and the outcomes will be used as the basis of an in-depth survey which will be published in future research.

Keywords; Web2.0; Social Network; Education; Saudi Arabia.

I. INTRODUCTION

Social networking sites, such as Facebook and Twitter, have developed under the umbrella of the interactive and collaborative platform known as Web 2.0[1]. Such applications offer users the opportunity to dynamically create and share self-generated content in Tomayess Issa School of Information Systems Curtin University Perth, WA, Australia Tomayess.Issa@cbs.curtin.edu.au

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communities defined by common interests and purposes. Whilst initially intended for social and leisure usages, these applications have penetrated a number of sectors such as business, healthcare and government, changing the landscape of human communication and interaction [2]. One sector that has particularly benefitted from the advantages offered by social networking sites is higher education where these applications have been put to use for educational purposes such as the establishment of academic groupings or networks, the dissemination of materials, the sharing of ideas and resources, and engagement with group-based collaborative projects [3]. World-wide, there has been a shift from informal and incidental usages of social media in education by students themselves to more purposeful and intentional incorporation of social networking into university courses, often at faculty-wide level. However, much of the research into the use of social networking in higher education has occurred within mainstream, Western contexts and little is known about how social networking is regarded and employed as an educational tool in nonmainstream contexts which may differ markedly in terms of pedagogical understandings, technological resources and cultural backgrounds. Saudi Arabia is one such nonmainstream context, and therefore does not offer a clear picture of how social networking is used and perceived as a pedagogical instrument. The aim of this study was to analyse data obtained from student focus groups in an attempt to determine their attitudes to and perceptions of the use of social networking for educational purposes.

In order to contribute to the body of knowledge about the use of social networking sites in the higher education sector in Saudi Arabia, this research addressed two main questions:

In what ways do Saudi Arabian students use social networking in learning activities?

What are students' attitudes to and perceptions of social networking for educational purposes?

The paper is structured into six sections: section I introduces the key themes aims and objectives of the paper, followed by Section II which describes how social networking has been used in higher education settings as both an informal and formal learning tool. Section III surveys the sparse literature on social networking in universities in Saudi Arabia while Section IV discusses the focus group as a research methodology as well as explains the approach used in this study. Section V reports the findings arising from the focus group sessions and Section VI extrapolates the key discussion points from the findings. Finally, the paper concludes by reiterating the main themes that have emerged from the research.

II. SOCIAL NETWORKING IN HIGHER EDUCATION

Higher education is considered to be a natural arena for the adoption of social networking technologies for two main reasons: firstly, the vast uptake of social networking by "Digital Natives" [4], or a post-1980 cohort born into a networked society, and secondly, the suitability of interactive technologies to serve the purposes of higher education where creating, sharing and disseminating ideas in academic communities is of primary importance. University students as a demographic tend to be technologically aware, bringing with them to university their established networking usages, habits and practices, as well as the capability to acquire new ones. Indeed, it is claimed that social networking is as "natural to education as the commute, the computer and everything else which students bring" [5].

Since the advent of social networking, an increasing number of studies have explored the intention to use, the rates and sectors related to usage, and the purposes and effects of usage of such sites by university students so as to learn more about how they communicate and interact by means of modern collaborative technologies [6]- [9].

In examining the purported purposes of social networking usage by university students, studies reveal that, apart from social and leisure uses, respondents use these tools for contacting peers and "talking about" academic work [6]-[9]. According to Selwyn [10], social networking is used by students as a means of discussing learning experiences, exchanging factual information with peers, and seeking moral support. Furthermore, there is a shift towards the formal incorporation of social networking sites by universities themselves, rather than simply leaving students to their own independent usages. A number of studies Saxena and Majumdar [11], Cuesta, et al. [12], Lahiri and Moseley [13], El Bialy and Jalali [14] attest to social networking as a formal method of student-student interaction and collaboration, studentinstructor engagement, contribution and discussion of ideas, clarification of concepts, information posting (e.g., announcing assignments or events), information and resource-sharing (articles, course notes, video clips, links

to webpages or blogs, photos) and self-reflection/publication [11]- [13], [15].

Research into the use of Facebook as an official educational tool, for example, confirms its powerful ability to create groupings or communities of users, acting as a dedicated shared space for the interactions of targeted students, often with university instructors or tutors as participatory or mediating interlocutors [11]-[13], [15]-[21]. While not as prolific as studies on Facebook within the higher education setting, research on Twitter confirms its serviceability as a convenient and cost-effective conduit for tapping into internal and external scholarly networks, allowing for immediate information sharing and updating [22]-[34]. Similarly, resource-sharing sites have been heralded for their relevance to higher education tasks, especially the use of social bookmarking sites as a means of annotating, categorising, exchanging and storing online documentary resources within the context of groups united by common academic pursuits [35]-[41]. Scholarly attention has likewise been paid to contentcreation tools as learning accessories, such as blogging [42]-[47] and wikis [48]-[51]. In particular, studies of blogging and wikis as communication tools in tertiary settings emphasise their ability to enhance critical thinking, to develop a student "voice", as well as to facilitate collaborative group processes [52]-[58].

III. SOCIAL NETWORKING IN THE HIGHER EDUCATION SECTOR IN SAUDI ARABIA

While there is evidence that Saudi Arabian universities are making some use of social networking platforms, their usage appears to be largely restricted to communicative functions rather than educational engagement. University websites incorporate Facebook, Twitter and other Web 2.0 tools but only as a means of recruiting, informing and updating students and their parents [59], Ahmad, et al. [60] However, little published research is available to support enquiry into how Saudi college students perceive and make use of social networking as a learning tool and whether any usage is self-directed or a faculty directive [61].

Of the handful of studies that do exist, many focus on "e-learning" or distance learning technologies and classic Learning Management System [62] tools as opposed to more contemporary collaborative Web 2.0 instruments [59], [63]- [67]. Moreover, many of the more recent studies do not clarify the intended purposes of the For example, a recent study at the applications. University of Dammam found that respondents use the Internet accompanied by Facebook, Twitter and YouTube to support their studies without differentiating between students' independent, informal usage and the more university-driven incorporation of formal social networking sites in higher education [68]. In addition, while a study by Alwagait, et al. [69] explicitly references Twitter and Facebook usage by Saudi Arabian university students and suggests that using these sites does not adversely impact on GPA, it also does not clearly specify what these networking sites were being used for or whether indeed they were used for educational purposes at all. Generally, then, current research tells us little about whether and how social networking is actually used by students in university settings in Saudi Arabia.

In terms of barriers to uptake, Almalki [67] suggested that the main impediments to the penetration of social networking in universities in Saudi Arabia are the poor quality of internet connections in the country, and trust issues related to intellectual property and privacy. Another study concluded that the lack of wireless internet, poor maintenance of technology tools and the need for user training were the main barriers preventing the adoption of this technology by tertiary institutions [68]. Other obstacles cited by researchers are the lack of Arabic interfaces in social networking platforms, lack of Arabic user support documents and lack of online Arab content, as well as resistance to uptake due to traditional face-toface, storytelling-focused and rote-based learning styles which are valued in this society [61], [70], [71]. Sultan, et al. [70] analysed a number of key cultural issues associated with the use of contemporary technologies for teaching and learning purposes in Saudi Arabia: one important question is how the deeply entrenched practice of "wasta" which is a personal influence through social connections, might fare when democratized digital forms of learning are used [70]. Another consideration is how well digital learning mechanisms align with typical Arab characteristics such as extreme politeness conventions and the avoidance of making critical comments to and about others. Moreover, Sultan, et al. [70] raise the question of how to equip Arab learners with global digital competencies such as the ability to filter content and make judgements about quality and trustworthiness of information within an education system that favours memorization and traditional examination success as measures of successful pedagogy. This is compounded by the dearth of Arabic open access content and the limited English possessed by Saudi citizens, making participation in an information culture extremely challenging. Against this background, this study aims to gauge current usage of social networking for educational purposes by Saudi Arabian students, as well as their attitudes to and perceptions of these sites.

IV. RESEARCH METHODOLOGY

Focus groups have been in use for several decades in various fields such as healthcare, marketing and numerous academic sub-disciplines within the social sciences. This is a qualitative method of collecting and analysing data, and is distinct in methodology from other qualitative techniques such as interviews and surveys [72]. Primarily, focus groups are intended to elicit data regarding the personal experiences and insights of individual members of the group in a relaxed and interactive environment. Each member of the focus group is encouraged to engage and converse with the moderator and other respondents [73].

In a typical focus group, the researcher facilitates the discussion rather than conducting individual interviews. Usually, a group will consist of five to twelve participants, and it is limited to this small number of participants to allow each participant to express an opinion about each question or statement, while providing the opportunity to agree or disagree with the opinions expressed by others in the group. Typically, the chosen participants are members of a particular group of interest to the research, and they are available. In this way, a focus group can help to indicate whether there is general agreement or consensus regarding a particular viewpoint. For this study, university students were selected because the research examines whether social networking should be incorporated into the university's educational regimen.

The usual procedure is to record the discussion and transcribe it. It is also important for the facilitator to ensure that everyone in the group has a chance to share his/her ideas and that any of the more assertive group members do not dominate the discussion [74].

Based on the guidelines mentioned above for using a focus group, four focus groups were conducted with Saudi Arabian university students who would be the target sample for the investigation into social networking at university. These four focus groups constituted the pilot study conducted prior to the subsequent more indepth survey of students designed to provide a quantitative analysis of the different views and attitudes of the students. The findings from the focus group provided the basis for survey questionnaire.

The students were recruited by inviting interested students to participate on the grounds that they were social media users who actively used Facebook, LinkedIn, Twitter, or other popular social media platforms.

Each group comprised 7 to 10 students, with a gender balance so as to provide a representative sample of the student body at universities. The focus group discussions were conducted by the researcher in one of the lecture rooms on campus and the opinions and responses were recorded and transcribed. The universities were selected based on their classification as government or private universities, as well as their high ranking within the country [75].

TABLE I. FOCUS GROUPS

	Male	Female	Total
University A	8	-	8
University B	5	3	8
University C	5	4	9
University D	6	4	10

The focus group discussions covered several areas, namely, usage of social networking, purposes of usage, benefits of social networking, how best to incorporate social networking into the Saudi Arabian higher education sector, as well as the barriers to and drivers of social networking specific to Saudi Arabia. This study addressed only the student attitudes to and perceptions of social networking as an educational tool.

V. FINDINGS

The research found that the student participants in the focus groups actively used social media, especially Facebook and Twitter, and were very receptive to having it incorporated into the Saudi educational system. They felt that social media provided them with many benefits for both university work and entertainment, including using it to obtain information and communicating with other students as well as watching videos on their smartphones. They expressed a preference for professors providing them with course information online.

The students indicated that they frequently used different social media platforms, especially Facebook and Twitter. They used it for both work and in their social entertainment. watching life. for videos and communicating with other individuals. Students cited a number of benefits, including being able to do things such as finding information online more easily and quickly. Several mentioned using it for learning - looking up words or finding interesting articles. Another perceived advantage was that it allowed students to work from home, which saved them time commuting,

Some students were able to create groups to enhance their learning, sharing links to specific information and sharing this information with each other, which saved time as they did not have to do these tasks independently. For instance, one male student commented:

> "We used it for both (work, entertainment, or learning). For example... (we used) video clips...on YouTube to learn more about a subject." (UniCM1)

Another male student observed:

"We use it for learning about different things. Sometimes people share useful links that I save in my favorites for future used...The young men have formed a group and forums for intercommunication. They explain to one another and send messages through the sites." (UniCM2)

Several students pointed out that social networking platforms enabled them to receive feedback and guidance from others. Commenting on these advantages, one male student stated:

"I have used SNS in one of the projects that I was working on ... We used SNS to get feedback and the perception of people about our project, mostly after we have started the development and the operation stage...We viewed the feedback that we received from the people for the service we organized...and try to improve our service based on the feedback...until our project received high satisfaction from the users...So (SNS) was a quick point for communication with the people." (UniCM3)

Some of the students indicated that they were able to learn more from each other in a time-efficient manner by posting questions and then obtaining answers from other students. Furthermore, this helped them because they were able to acquire more knowledge and insights from others. As one male student commented:

> "We made an account on Facebook. Some Wikipedia issues were raised. Always the students and doctors were communicating with each other whether for homework or any other thing related to the subject." (UniDM1)

Another male student observed:

"It was very nice (to use the SNS). If I have any question, I write it on Facebook. Next morning, I find the answer...Another student gives the answer. It was very beneficial." (UniDM2)

A third respondent pointed out that he was able to obtain information from other students if he was not able to attend lectures; moreover, he could receive input from lecturers in regard to study materials. As he commented:

> "I have obtained considerable benefits in entertainment and work, both. For instance, with respect to Whatsapp, if I could not go to the university, I would ask my groups on Whatsapp about what we had covered...Or take Twitter. If the lecturer would like a emphasize a certain point or request consulting references for a particular subject, he would say, for example, review that subject. It would be discussed further." (UniAM1)

Another student simply observed:

"I use social networking sites, including Whatsapp and Twitter for both work and entertainment...as my colleague has maintained. In the case of absence, you may inquire about the subjects taught." (UniAM2)

A third echoed a similar experience in the following comment:

"As for social networking sites, I use Twitter, Snapchat, and Whatsapp. Whatsapp is, of course, for work and communication with friends if there was a lesson that I missed do to my absence...(And) lecturers do communicate with us. If a lecturer was absent for any reason he would inform us." (UniAM3)

Still other students pointed to the advantages of using social media for distance learning. It helped them with research project designs and provided them with answers to any problems they encountered along the way. It also enabled them to work at home which was very convenient and saved them time. As one male student commented:

"My program was distance learning...I used it in making questionnaires and obtaining answers (from Google). I followed Twitter summaries and cues." (UniBM3)

A female student concurred:

"It allows you to work from your house. I used Instagram for work for certain periods. It was extremely marvelous and beneficial. (UniBF2)

Another male student stated:

"If I would (use it) to search about any information or face a problem in using my mobile, I normally find the answer in the program, mainly in Twitter for solving the problems or obtaining other information." (UniBM1)

"In terms of the learning, it is beneficial. I use it for several things, (such as) for finding words and other things I feel are interesting." (UniDM3) "We were a group. We agreed to prepare the graduation dissertation. All of our communications were maintained using Facebook." (UniBF3)

Some students also stated that they found it helpful to transfer written materials into electronic documents which could be shared, while hard copies documents could not be disseminated as efficiently. As one male student explained:

> "The first thing to do is transfer the educational subjects into electronic, and then we introduced the social networking sites. It is not easy to introduce social networking sites when the learning is still paper-based." (UniBM1)

In some cases, the students were able to use social media for posting and promoting programs they had developed, such as video clips. As another male student explained:

"We were making films for the university...We planned to form a website onto which we downloaded educational video clips that we designed" (UniBM2)

Another advantage of the social media mentioned by many students was its speed, enabling them to do whatever they wanted to do very quickly. For instance, two male students offered these comments:

> "As I work in the media, the most convenient use and most easy method for obtaining information and news is to access Twitter. It is very fast." (UniBM2)

> "We can do things easily and faster anywhere." (UniDM3)

Similarly, the female students who participated in the focus groups used the social networking sites for both leisure and learning, though the female students stressed the use of social networking for entertainment and did not participate as much in the general conversation. As some of the female students commented:

"I mostly use it as a form of entertainment" (UniCF2).

The student was referring to Instagram, Twitter, and Facebook, wikis, and blogs.

"We have used Twitter and Instagram. The objective varies from person to another. Sometimes (it is) for leisure and some time to learn new things. (It) depends on the individual's interests." (UniCF1).

VI. DISCUSSION AND LIMITATIONS

As this research shows, the students in the focus group had had some favourable experiences with using major social networking sites for studying and learning purposes, most notably Facebook, Twitter, and WhatsApp. They especially liked the fact that these could be used quickly and easily as a means of keeping them connected with others. In general, in relation to their tertiary studies, the respondents used social networking sites for searching out and obtaining required academic information, connecting with others and forming study groups, learning about topics from video clips, and problem-solving by posting questions and receiving answers from other users. There was also some evidence of lecturers using social networking sites to post materials and to keep in contact with students, usually due to lecturer or student absence. The respondents also commented on the convenience of being able to use social networking sites from home. This positive orientation to

using social networking as an educational tool suggests that, despite the barriers to uptake particular to Saudi Arabia, there is a high level of student acceptance of social media as an educational instrument and a desire to use it to facilitate the learning experience.

However, while the research reveals an enthusiasm for and a desire to use social networking for educational reasons, there is also evidence that most students independently use social media for personal reasons. While there is some suggestion that instructors engage with students via social networking platforms, it seems that there is limited formal inclusion of social networking sites in Saudi Arabian universities as a planned pedagogical aid. Hence, Saudi Arabia has not yet fully harnessed the benefits of social networking sites for teaching and learning purposes in higher education, with current usages being relatively unsophisticated and at an individual level of endeavor. It is also evident that Saudi Arabian students use a relatively narrow range of social networking sites, namely, Facebook, Twitter, WhatsApp, Snapchat and Instagram. Other applications which are advantageous to higher education, such as wikis, blogs and social bookmarking, were not mentioned by any of the respondents.

The significance of this study is that it indicates that there is great scope for Saudi Arabia to look to worldwide trends and developments so as to more formally incorporate social networking into its teaching and learning activities at a broader faculty or university-wide level using a range of interactive Web 2.0 tools.

This study had several limitations, namely, the small sample size as well as the restricted participation of females who were reluctant to share their views despite the best efforts of the researcher, in comparison to males. This can be attributed to cultural values in a predominantly patriarchal society. A further limitation was the limited knowledge of the participants who were unfamiliar with sophisticated usage of social networking as it applies to formal education. Moreover, the respondents had a limited awareness of the wide range of available social networking applications. Lastly, this study covers only a part of the focus group data as the rest of the data will be presented and discussed in future research.

VII. CONCLUSION

Social networking sites have a natural affinity with higher education due to their interactive and collaborative capacities. Universities world-wide have begun to actively tap into the potential of these sites as pedagogical tools in order to capture the interest and attention of millennium students. While there remain some barriers to the widespread uptake of this technology, Saudi Arabian universities are ideally positioned to harness the benefits of social networking sites in education due to the wide acceptance of these applications by students. Whilst usage is currently relatively incidental and unsophisticated, there is vast potential for Saudi Arabia to reap the benefits of these technologies by implementing them for teaching and learning purposes.

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