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The Influence of Social Networks on Students' Performance

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ABSTRACT

Social networks are becoming an integral part of our lives. Students are spending much time on social media and are considered the largest category that uses such application. This study tries to explore the influence of social media use, and especially Facebook, on high school students' performance. A proposed framework that guides research in this area and reflects on the issues related to such phenomenon. A proposed survey is also depicted to be used in future research. Conclusions and future work are stated at the end.

Keywords: *Social networks, Facebook, performance, high school, students, Jordan, advantages and disadvantages of social networks.*

1. INTRODUCTION

Social networks are the main application under the umbrella of social media, which comes with the Web 2.0 era. Social media is the fastest growing web application in the 21st century. The wide nature of applications like Wikis, video streaming and applications, and social networks makes it the phenomenon of the century. Facebook users topped all social media applications with over 955 million users in 2013, followed by Twitter with 500 million users (www.thecountriesof.com). Such huge user base is comparable to countries, which indicates the importance of such applications.

On the other hand, the age distribution of Facebook users is concentrated on the younger categories where 300 million users are 18-24 years old, and 120 million users are between 13-17 years old (www.quintly.com). The previous website indicated a nearly equal distribution of users between males and females. Finally, Jordan accounted for 2.5 million Facebook users at the end of 2012, with similar Internet users' size (www.internetworldstats.com). The last statistics indicate that Jordanians use Facebook through their mobiles, and the Internet. Such high penetration (38%) is indicative of the importance of Facebook and the social media domain for young people.

On the other hand, the use of information and communication technology (ICT) is an important factor that opened doors for distant learning and remote access of educational material. Such phenomenon is called "e-learning", where ICT is used as a facilitator of communication, assignment management, and task collaboration in universities (Harb & Abu-Shanab, 2009). E-learning systems are becoming important not in university environment, but even in schools (Hamam et al., 2008). A study in Jordan concluded that e-learning systems are not fully utilized in Jordan and many applications are not used by students and instructors (Abu-Shanab, Ababneh & Momani, 2012; Abu-Shanab, Momani & Ababneh, 2012). Such results indicate that it is important to reach students wherever they are, and especially on social media applications.

This ongoing study will explore the influence of Facebook, and if possible other social media applications, on students' performance and how they spend their time. As seen previously, young Jordanians are the major category that uses social networks, where they spend substantial time on the net. Such behaviors are influencing their academic performance. Research connected school/university performance with Facebook use. This study will propose a framework and an instrument (survey) that helps in future empirical research. The following section will explore the influence of social networks, it's bad and its good influence. The following section will include a description of the framework proposed and the instrument items. Finally, research conclusions and future work will be depicted at the end.

2. LITERATURE REVIEW

Social networks are becoming major tools for education, and entertainment. The human nature is keen on interacting with people and finding common areas and interests. In education, two streams are prevailing: the use of social networks as a tool supporting activities deemed important for the purpose of educational institutions, instructors, and students. The second stream is the bad influence social network inflicts on students behaviors and time management. The following sections will review the literature related to the two streams and the performance issue related to students.

A study by Abu-Shanab and Al-Tarawneh (2013) explored the advantages and disadvantages of Facebook utilizing university students. A sample of 206 students responded to a survey containing 10 advantages and 10 disadvantages of Facebook, and yielded interesting results. The study did not focus on students' academic performance, but took the issue as a general view of social media influence. This study will explore the relationship between performance and SN use.

2.1 How can SN Improve Students' Performance

Information and communication technologies (ICTs) are becoming important tools for educational support. Using computers and the Internet is becoming more and more important in the learning and teaching

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processes. Also, with the advent of mobile phones, especially smart phones, it is becoming easier to reach students and even utilize the capabilities of technology. As an example a study utilized three groups of students, where the assignments and interactions where conducted with three levels: 1) traditional methods, 2) fair use of phones, and 3) extensive use of smart phones in working on mathematical assignments for school students (Nasser, 2014). The sample included 58 secondary students in Qatar. Results indicated a higher performance of the smart phone group compared to the other two groups.

Many studies also focused on using SN applications, where they categorized them as productivity tools. Alonso et al (2013) listed many in their literature, where they focused on mobile applications and how they can accommodate the functionalities of learning management systems.

Facebook resulted in a significant improvement in students' performance in universities. A study in a Vietnamese university concluded that students using Facebook as a social media has improved substantially with respect to their grades (Tuan & Tu, 2013). The same study also concluded that the improvements and value of social network sites was not related to the academic performance but also to the adaptation to the social environment of school. The same argument relating to

social absorption by students is reached by Gafni and Deri (2012), where they emphasized the role of social networks in socializing students and opening channels for finding more academic resources, thus improving their academic achievement. Such result was not supported for senior students, where social absorption is less relevant at later years and student experience might benefit more in academic area.

Social network is a strong tool for social interaction and connection, where it can improve fa,ily ties and friends in a rich social context. A study on 161 Tunisian students concluded that performance was improved because of students' satisfaction with their family and friends relations (Rouis, 2012). The author emphasized the role of multitasking as a moderator of such relationships, where multitasking and students interest in university will help enhance performance based on Facebook use.

The use of Facebook was associated with co-curricular activities, which might be considered a positive influence by social media (Junco, 2012a). The following Table summarizes research that indicated positive impact of social media on student performance.

Table 1: Positive influence of social network on student performance

Context and benefits	Idea	References
Using SN as an informal learning tool,(Malaysian Students)	SN is helpful and convenient for discussions and communication	Hamat, Embi & Hassan (2012)
Students using video, creating blogs, chatting and communicating with friends (Greek Students).	A good tool for learning with entertainment and fun	Zaidieh (2012)
Students use SN for tracking activities, friends and videos.	SN is beneficial for students working memory and learning skills.	Alloway & Alloway (2012)
Facebook can facilitate informal learning f students	Facebook and Twitter as a knowledge sharing tool	Forkosh-Baruch & Hershkovitz (2012)
Students reported that Facebook is better for navigation and search. Students learn more using Facebook.	Facebook as a tool for making education more efficient and effective.	Hurt et al. (2012)
Students gained more vocabulary and improved their writing, reduced their spelling mistakes.	Facebook Improves the writing skill of students.	Yunus & Salehi (2012)
Students can exchange assignments, resources, and discussions around educational material and issues.	Facebook as a group collaboration and communication domain	Asad, Abdullah-Al-Mamun, & Clement (2012)
Students can benefit from chatting with other students, teachers and external sources to acquire knowledge	Facebook chat facility	Jain et al. (2012)
Social networks bridge self-esteem deficiency for students and help build social capital	Facebook as a tool for social capital formations	Stein field, Ellison & Lampe (2008)
Facebook improves learning through the interrelationship, communication, social relationship, and participation in a Hong-Kong environment.	Facebook improves motivation to learning	Lam (2012)
[1]Tweets improve English language education [2]Blogs improve student performance (through	Other social media tools influencing students achievements and	[1]Van-Vooren & Bess (2013). [2]Roland, Johnson & Swain

knowledge sharing, and group formation) [3]Using Wikis for content collaboration	performance in an educational context	(2011) [3]Wheeler, Yeomans & Wheeler (2008)

2.2 The Downside of SN on Students' Performance

Research indicated negative influence of Facebook on students, where a study by Haq and Chand (2012) utilized a sample of 384 students and concluded that Facebook use has an adverse influence on student academic performance. The study noticed that males and females spent equal time on the Internet where females used Facebook more, but males had more friends than females. The important difference was that Facebook use had an adverse influence on males' performance than females. The authors accounted such adverse performance because males spend more time on sports and games activities than females, which caused a loss of time and a bad influence on performance.

Some universities embedded the use of computers, tablets and other technology channels in their educational setup. A study that focused on the issue of multitasking in classrooms concluded to the fact that students who use ICT and involve in multitasking (examples like: text messaging, Facebook, internet searching, emailing, and instant messaging) would have lower GPA, which means lower academic performance based on their behavior (Burak, 2012). The study also related risk taking behavior to such use of ICT, and concluded that multitasking would result in a higher risk taking behavior.

It is imperative to realize that time spent on social activities (using Facebook or other social media) will be on the account of academic performance. This logic is important regardless of the positive side we see in SNs. A study that utilized students in a US university concluded to a negative relationship between time spent by students on online social networks and their academic performance (Paul et al., 2012). The authors pointed to the importance of attention span devoted to multiple sources of attractions. Such result indicates the importance of using Facebook and other social media tools wisely and towards a productive time in class rooms and back home.

The same study motioned in the previous section, regarding the improvement of social absorption and academic achievement (Gafni & Deri, 2012), concluded that using Facebook by students consumes times and thus negatively influencing academic performance. Using mobile phones for texting and social network access was also explored to see if it is related to the engagement level in classrooms, where research indicated that engagement is closely related to teacher's style and control. Also, the use of social networks and mobile texting was not related to lower performance results (Paul & Gelish, 2011). Such issue emphasizes the distraction that social media cause, but not to the extent of risking academic performance.

Social network use is related to personality of students, where some students are influenced more than others depending on their personality. A study of Swedish university students utilized 239 undergraduate students filling a survey related to their Facebook use (Rouis et al., 2011). Results indicated that the extensive use of Facebook by students with extraverted personalities will lead to poor academic performance. The authors concluded also that self-regulation and goal orientation (related to performance) characterized the students who are more in control of this social activity, and this better academic performance.

The time spent on using Facebook was significantly associated with negative performance of students in a study that involved 3866 US students. The other indicator that showed significant association with performance is time spent preparing material for classes, where students devoted some time for sharing resources and material using Facebook or other social media website (Junco, 2012b). Table 2 below summarizes the literature related to the negative influence of Facebook on performance.

Table 2: Negative influence of social network on student performance

Context and benefits	Idea	References
Facebook has a bad influence on student engagement in learning. Time spent by student is on non-academic activities.	Using Facebook and engagement in learning	Junco (2012a)
Negative relationship between GPA and time spent on Facebook.	GPA and time spent on Facebook	Junco (2012b); Paul, Baker & Cochran (2012)
Students delay their meals, sleepless and get addicted to Facebook activities	Facebook and health issues	Tariq, Mehboob, Khan & Ullah (2012)
Students spent more time on Facebook resulted in lower performance	Facebook, performance and gender	Haq & Chand (2012).
GPA will be influenced badly by multitasking in classrooms (using multiple social media	Facebook and multitasking	Burak (2012)

tools)		
Spending time on fun and social activities of Facebook (Wasting time) will influence GPA and academic performance	Student time management and Facebook	Gafni & Deri (2012); Paul & Gelish (2011)
Spending time on fun and social activities of Facebook (Wasting time) will influence GPA and academic performance	Especially extraverted & lower self-regulation students	Rouis et al (2011)

3. RESEARCH FRAMEWORK AND PROPOSITIONS

This study explored the literature to understand how the different applications of social media and specifically the Facebook influence students' performance. It is important to build a framework for future research that can guide researchers into the process. The framework proposed in Figure 1 depicts the major dimensions of such phenomenon and how it interacts with the educational society. Table 3 also lists the items that each of these dimensions convey to research.
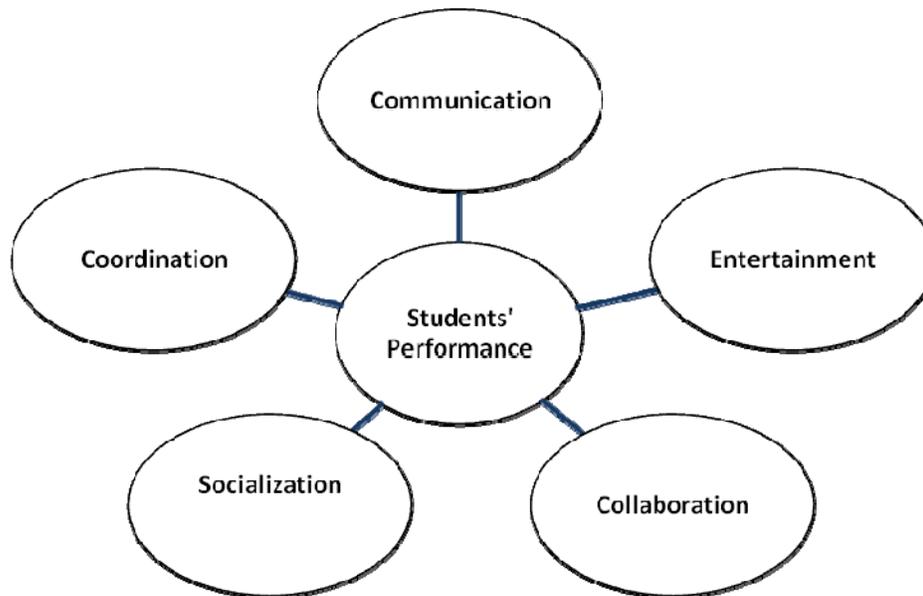

Fig 1: A proposed research model of the factors influencing students' performance

Table 3: List of items proposed for future research

#	Dimension	Item
1	Communication	▪ Facebook facilitates my communication with people that I don't know. ▪ Facebook facilitate my communication with my friends ▪ Facebook open new channels of communication for me ▪ My personal page on Facebook push my messages to all my followers
2	Coordination	▪ Facebook facilitates my coordination with people that I work with ▪ Facebook makes scheduling my tasks easier ▪ Facebook tools (calendaring) makes it easier for me to coordinate my tasks ▪ My coordination is better using groups on Facebook ▪ Through Facebook, I can get all my resources coordinated ▪ Finding help to do my assignments is easier through Facebook
3	Socialization	▪ Facebook facilitates my social activities on the web ▪ It is easy to make friends on Facebook ▪ It is easier to keep in touch with old friends on Facebook ▪ The chat facility helps me keep in touch with my friends ▪ Tracking other peoples activities (events) keeps me acquainted with them
4	Collaboration	▪ Facebook facilitates my group work collaboration ▪ Facebook multiple chat capability helps me collaborate on tasks

		▪ The large size of groups on Facebook makes it easy to collaborate
		▪ Finishing my school group tasks is easier through Facebook
5	Entertainment	▪ Facebook is an entertaining tools
		▪ Playing games is one of the fun activities to do on Facebook.
		▪ Socializing on Facebook is entertaining
		▪ Facebook is fun to interact with
		▪ Knowing other peoples activities is entertaining

4. CONCLUSIONS AND FUTURE WORK

This study tried to explore the literature to come up with the major dimensions of social network that influence the behaviors of students. Facebook can be a great tool for the following tasks, which contributes to a better performance: Communication, socialization, coordination, collaboration and entertainment.

The previous literature tried to identify the advantages and disadvantage of using Facebook as a social network in improving students' performance. The major ones came to be as follows: improving productivity, communication, and collaboration. Also, injecting fun into the educational system can improve the motivation to learn and the involvement of students (entertainment). Finally, belonging to the system and finding help is a social process that Facebook helps into its attainment. Facebook made students adapt to the new culture easier and faster. Such step will make the productivity goals easier.

On the other hand, Facebook use is reported to have bad influences like addiction, wasting time, information overload, and isolation from physical society. Such results call for more research to see the tradeoff between Facebook advantages and disadvantages. Also, it is important to empirically explore such factors and how they interact with the educational system.

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