

**Social Network Misuse in the Classroom and Its Impact on Male
Student Motivation in UAE Tertiary Education**

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Abstract

This paper presents data obtained from focus groups conducted to investigate male students' experiences in higher education in the United Arab Emirates. Among the issues discussed by students was the impact of social networks addiction on student motivation and this paper focuses on that issue. Thirteen focus groups were conducted with 83 English as a Foreign Language male students at four government campuses including United Arab Emirates University at Al Ain Campus, Higher College of Technology at Ras Al-Khaima Campus, and two campuses (Abu Dhabi and Dubai) of Zayed University. Students access social network sites for both educational and non-educational aspects. Students spoke about their experiences and how social network addiction influenced their academic motivation to study. The resulting themes from the focus groups show that social network addiction has had an impact on student class performance and in some cases led to class failure. Recommendation for better class management and intervention programs are suggested to policy makers and instructors to foster a better student learning experience.

Keywords: Mobile Learning; social networks; focus groups; motivation; self-efficacy.

Introduction

The United Arab Emirates (UAE) is the Middle East hub for quality higher education. There are 103,431 students enrolled in 75 higher education, public and international private universities and colleges (College Accreditation Association [CAA] 2011 Annual Report, 2011). In a region known for high unemployment because of the “low productivity of education” (Isfahani, 2010, p. 2), the UAE has taken the lead in educational policy change. In its 2021 vision initiative, the UAE government promises first rate education built around innovation, research, science and technology, with a special concentration on students’ achievement and attainment (UAE 2021 Vision, 2011). Although the education curriculum is undergoing a major revision to enter the digital economy era following the country’s 2021 vision initiative, public education at the primary and secondary level still follows a traditional face-to-face, teacher-centric education approach (Abu Dhabi Education Council [ADEC], 2009). However, higher-education universities and colleges have been progressively adopting a student-centric approach to learning (Hamdan Bin Mohamed e University [HBMeU], 2011). Building on the high investment in internet availability and infrastructure, the country leads the region in information and communication technology (ICT) connectivity (Robson, 2008). Higher education institutions have taken advantage of this connectivity continuum to offer students “functional, meaningful mobile learning in and outside of the classrooms” (Hargis, Cavanaugh, Kamali, & Soto, 2014, p. 46).

Tablets like the iPad are considered mobile learning tools and have been adopted as a technology that supports learning in educational institutes (Courts & Tucker, 2012). As a result, in 2012, the UAE vice president inaugurated the use of 14,800 iPads in the three UAE federal universities (Wekalat Anbaa eMarat [WAM], 2012) as a mobile learning device to pave the way for active learning and student-centric education (Hargis et al., 2014). The initiative, from planning to deployment, was executed within 8 months. Students in college English as a Foreign Language (EFL) programs started using unrestricted-access iPads for their learning of English, Math, Arabic and Information Technology (IT) classes as a replacement for textbooks in the second semester of 2012 (WAM, 2012). The aim was that iPads would motivate and engage students to acquire digital-economy skills of analytical thinking, adaptability and information technology.

Methodology

This study was constructed following a qualitative descriptive method design to acquire first-hand knowledge and gain a better understanding of what social issues affect student motivation in UAE tertiary education. It was essential that the research design followed a baseline design process. The flow of design took into account Onwuegbuzie and Collins’ (2007) guidelines for a sound research design technique, where research goal, objectives, purpose and research questions guided the selection of the research design. In other words, the methodology and method chosen, analysis technique and discussion presentations were carefully constructed to answer the research question. Focus groups “produce data that are seldom produced through individual interviewing and observation and that result in especially powerful interpretive insights” (Kamberelies & Dimitriadis, 2008, p. 397). Therefore, in this study, focus groups were used instead of observation or individual interviews because the technique was better suited to answer the research question (Connaway & Powell, 2010; Liamputtong, 2013).

The focus group protocol was carefully designed to extract the maximum information from students. The research opted for a technique that is a blend between specific and general inquiry

about the topic at hand. The generality here was intentionally being controlled by the topic introduced by the researcher, to let students freely determine, by themselves, the factors that they deemed important to their motivation. Data was collected using focus group sessions as per the following considerations of location, sample, language, and analysis method.

Location

The study included the three UAE public (government) higher education institutes of the UAE University, Zayed University (ZU) and Higher Colleges of Technology (HCT). The research was conducted within large UAE public universities that adopt blended learning within their curriculum. The participants were divided into three groups based on their English level standings: lower, medium, and higher levels of English. Also, to cover the three universities and the diversity of the locations in the UAE, four locations or campuses were chosen to represent the different geographical regions in the UAE. The socioeconomics in Fujairah, Ajman, Um Al Qaiwain (UAQ) and Ras Al Khaima (RAK) are similar and students from these regions have been shown to have similar behavior patterns and attitudes to school (Ridge, Farah, & Shami, 2013). Dubai and Abu Dhabi (AD) have different socioeconomics, because more of the country's wealth is concentrated within these two cities. The focus group session breakdown and designation is listed in Table 1 below.

Table 1: Focus group designation.

College	Campus Code	Student English Level	Focus Group (FG) session
HCT	Campus 1	Low	FG3
		Medium	FG1
		High	FG2
UAEU	Campus 2	Low	FG5
		Medium	FG4
		High	FG6
ZU AD	Campus 3	Low	FG9
		Medium	FG7
		High	FG8
ZU Dubai	Campus 4	Low	FG11
		Medium	FG12
		High	FG10
		High	FG13

Source: Developed for this research.

Sample

Three to six focus groups were deemed suitable, as a minimum, with each having 6–10 participants (Krueger, 1994; Onwuegbuzie & Collins, 2007). The goal was to select group size so that the outcome information reached the saturation point where no new information could be obtained, while keeping the groups small enough for deep understanding (Johnson & Christensen, 2012). Initially the researcher planned to conduct 9 focus groups, 3 for each

campus. However, after ZU administration suggested an extra campus and groups, the researcher added 4 more groups and the final count of the focus groups conducted for the research was thirteen with a total of 83 male students.

Language

Since all students are Arabs, all questions were translated to Arabic language and then the answers were translated back to English through an authorized local legal service translator. This ensured that participants were able to express their opinion without the difficulty of looking for the right expression in a second language that they might not know very well.

Data Analysis

Analysis began with coding the factors for each of the thirteen focus groups on its own using the raw transcribed data of each recording. Then, using a long table technique, similar factors and opinions were gathered and tabulated for clarity and coherence. This helped with reducing redundancy during analysis. The long table approach allows data analysis to be “systematic. It breaks the job down into doable chunks. It helps make analysis a visual process” (Krueger & Casey, 2000, p. 137). The full study investigated motivation in the context of a broader set of issues but this paper reports specifically on data related to the iPads.

Results

The results have been divided into two sections: social network (SN) use section, and an SN impact section.

Social Network Use

Most students are members of varieties of SNs. When asked which SNs they frequently access, students acknowledged that the main SN sites accessed in both academic and social settings were: Instagram, BlackBerry Messenger (BBM), Facebook, Twitter, YouTube, Tumblr, WeChat, Keek, Skype, and social games like Subway Surf. Of all SNs, Instagram was the most frequently accessed. When asked what the purpose of accessing SNs in the classroom, students focused on explaining their habits about accessing SN sites during classes. Across the groups, most students discussed the social and academic perspectives of their experiences with SNs. Students used SNs in the classroom for learning, social interactions, entertainment, and academic cheating.

Learning

As mentioned in Table 2, most students agreed that SNs are accessed in class for educational, chatting and cheating purposes.

Table 2: SN use in the classroom: Learning.

SN use : Learning	FG	Student Quotes
	9	<i>“Sometimes we look up a word on the net, to know the meaning”</i>
	1	<i>“others try to find a translation to a word, so it has a positive negative impact in class”</i>
	3	<i>“There are programs that facilitate us writing and sending to our teacher”</i>

Source: Developed for this research.

Social

Across the focus groups, students gave examples of what social activities they engage in on SNs. Some students use SNs to communicate with their families and others use it to chat with both male and female friends as listed in Table 3.

Table 3: SN use in the classroom: Social.

SN use : Social	FG	Student Quotes
	5	<i>“ WhatsApp , I use it always to chat with my family”</i>
	8	<i>“Mostly chat with girls”</i>

Source: Developed for this research.

Entertainment

Many students confessed that they access SN for leisure activities such as games, movies and picture browsing. Students acknowledge that such activities form a distraction to their focus in the classroom. Table 4 lists some student quotes on the leisure use of SNs in the classroom.

Table 4: SN use in the classroom: Entertainment.

SN use : Entertainment	FG	Student Quotes
	5	<i>“Teacher sometimes explains, and students are busy with SNs on their iPads, Instagram, and twitter. Some students, in the same class, they send each other pictures on Instagram while teacher is explaining the lesson”</i>
	2	<i>“When the teacher is busy writing on the board, most of the students open Instagram, twitter, and the like.”</i>
	7	<i>“What about SN in class?” “mostly games; some check Instagram”</i>
1	<i>“some students play while teacher explain,”</i>	

Source: Developed for this research.

Academic Cheating

Some students talked about the use of SN in academic misconduct during exams. Students acknowledged that SN cheating is a trend at their colleges and is on the rise. Table 5 lists some intriguing details of students' quotes on the issue of SN cheating in the classroom.

Table 5: SN use in the classroom: Academic cheating.

SN use :Academic Cheating	FG	Student Quotes
	4	<i>“Using Instagram, some students would take pictures and post it to help others...”, “to help others understand or cheat?”, “both ways,”</i>
	6	<i>“There was an exam using iPad, so all students were social-networking the solution. All got full marks. It was social networking cheating.”</i>
	6	<i>“Students cheat using all sorts of social networks. I don’t deny it, I cheat. I even taught others how to cheat using iPhone. Instead of studying vocabulary of 10 pages or 360 words, I take a picture of the pages on the iPhone, in the exam; I keep a phone on the table so the teacher thinks I don’t use a phone. But the other phone which has the picture is in my lap, I open it and cheat. And solve. The teacher did not see me. I got full marks” “Is this a trend?”, “Yes; it is a social trend that will not stop.”</i>

Source: Developed for this research.

Reasons for Improper SN Use

Most students think that SNs are accessed in class for various reasons such as boredom, defying sleep, annoying the teacher or addiction. Some bored students quotes include a student saying “We use it a lot because we get bored in class”(FG8), while another claimed that “Sometimes, frankly, I get bored in class, I watch English movies on You Tube during class” (FG11). Yet another student offered this explanation “I don’t use in class, but if the teacher does not teach, I pull my phone and start BBM chatting” (FG2).

Social Network Impact

The views of students on SN impact include both positive and negative reviews. Both are discussed hereafter.

Positive SN Impact

On a positive note, many students expressed their opinion that the positive impact of social networks included learning new words, accessing news and entertainment such as jokes and funny videos. Further, positive outcomes included gaining academic knowledge and communicating with family members. In FG 9, many students think social networks have positive effect on learning correct spelling of words in English and minimum negative impact because their phones are taken away when they enter the classroom. For example, one student

noted that using SN in the class is “positive in the sense you can learn from it, check spellings and stuff” (FG9).

Negative SN Impact

On the other hand, there were both social and academic implications of using social networks, according to students. Negative SN impact includes SN addiction, social isolation; lower motivation, improper time organization, lower motivation to learn, and weak academic outcomes.

Social Network Addiction

In some cases, students explained they are hooked on SNs to the point of addiction. Most students think that this form of addiction is on the rise and forms a trend as they encounter it every day in the classroom and beyond. Some even use it while driving, as one student confessed: “For me it [SN] is negative...all the times, even when I am driving sometimes, I play with my Blackberry” (FG2). In one instance, a student in FG 5 shared his social-network addiction experience in which he reached a point where his focus and attention outside and inside the classroom was solely on social networks. At the end, he deleted all the social network sites. Table 6 lists some of the students’ quotes on SN addiction.

Table 6: SN addiction quotes.

FG	Student Quotes on SN Addiction
1	<i>“Chatting about news, some people like to read on twitter, we made Instagram (account), we cannot. 24 hours we have to look, check, or on twitter, what is new news, or talking to another person”</i>
8	<i>“Even in class, they open SNs and chat. Tumblr, twitter”</i>
5	<i>“Sometimes I stay late, chatting and Youtubing from video to video and time is gone, all night. From football to cars”.</i>
8	▪ <i>“I have friends online, we chat, then I waste my time”</i>
3	▪ <i>“And negative...you care about it more than studying”</i>

Source: Developed for this research.

Some students keep checking their SN for updates all the time; others chat or watch videos all night. In some cases, students acknowledged that they cared about SN more than they cared about studying. However, in Campus 4, most students acknowledged that SNs are not accessed that much in the classroom. The reason behind that is mainly the teacher strictness.

Social Isolation

Some students, as a result of addiction to SN, become isolated from their society. When talking about SN addiction, a student described the symptoms of this isolation on his friend: “They stay home, isolated, just at home. Or when they go out with us, they are mentally not with us, only their body” (FG8).

Lower Motivation

Students with SN indulgence issues reportedly had lower motivation to learn. Table 7 lists some students' quotes on SN impact on their motivation.

Table 7: SN motivation issues.

SN Motivation issues	FG	Student Quotes
	1	
13		<i>"I waste a lot of time, I am distracted, I enter another world. I think it is demotivating, I do not know what the teacher said in the class."</i>

Source: Developed for this research.

Improper Time Organization

Many students noted that because of their constant engagement on SN, they were left with little time to study. As a result, assignments were either late or not done at all, and students were unprepared for their quizzes and exams. Sample of students quotes on time organization issues are listed in Table 8.

Table 8: SN time organization issues.

SN Time Organization Issues	FG	Student Quotes
	13	<i>"I watch you Tube... it distract me a little"</i>
	5	<i>"Yes, my sleeping and studying time. It affects time organization"</i>
	9	<i>"we all feel that sometimes we get into it so much that it leaves little time to do assignment or study"</i>
	8	<i>"this (social network activity) takes me away from studying"</i>
	10	<i>"I, sometimes, forget about time when I am on social networks"</i>

Source: Developed for this research.

Weak Academic Outcome

In some instances, student academic outcomes were negatively impacted. Some students noted that their grades were low, and sometimes they failed classes because of SN addiction. Ultimately, there were cases that students, as a result of the poor academic outcome, dropped

out of college. Some samples of students' quotes on SN impact on their academic outcomes are listed in Table 9.

Table 9: SN academic outcome issues.

SN Academic Outcome issues	FG	Student Quotes
	1	<i>"And what is the impact on your study?" "I get low grades in the exams, it all depends on one's desire, some use it for chatting, and others to learn"</i>
	1	<i>"some students they get distracted, they focus on Instagram and then they fail IELTS and then they say : why I failed ?", you did not focus"</i>
	1	<i>"there were 2 students in my class that failed and left college, I see them in the classroom, they did not care, and they failed, and left, they failed for two years, because of their addiction on social networks and not caring"</i>

Source: Developed for this research.

Discussion

In Table 10 below, SN impact on students is shown. There are both positive and negative outcomes of using social networks as listed in the table.

Table 10: SN use & impact @ UAE colleges.

SN Use & Impact	Campus			
	1	2	3	4
use				
Chatting with teacher	✓			
Spelling/ Translation	✓		✓	
Writing apps	✓			
Academic Cheating		✓		
SN Chat in class	✓	✓	✓	✓
Playing SN games in class	✓		✓	✓
Check SN sites in class	✓		✓	✓
Watching YouTube all night		✓		
Watching YouTube in class				✓
Send pictures to peers in class		✓	✓	
Impact				
SN addiction	✓	✓	✓	✓
Care SN more than studying	✓		✓	
Low motivation to learn	✓			✓
Loss of focus in the class	✓	✓	✓	✓
Time organization issues		✓	✓	✓
Social Isolation			✓	
Incomplete assignment	✓		✓	

Low Exam grades	✓		✓	
Low IELTS Score	✓			
Drop out of college	✓			

Source: Developed by the researcher.

Academic use of social networks includes chatting with teachers, spelling checks, word translation and cheating. This has positive and negative impact on students' learning. Many students mentioned that they use social networks for non-academic purposes in class for two main reasons: social network addiction and feeling bored in the classroom. Students' social use of social networks includes browsing Instagram, Tumblr and twitter, chatting and sending pictures to friends and girlfriends using WhatsApp and BBM, watching movies on YouTube, and playing games like Subway Surf. Most students agree that negative use of social networks outweighs its positive use. Students mentioned that the impact of social network use includes loss of focus in class, time organization issues, social isolation in social gatherings, low motivation to learn, social network addiction and less care for studying. Most students thought social networks addiction is a trend at college and is on the rise.

Social network activities distracted students' study schedule and sleep habits which in turn affected their attendance and grades. It also had an impact on their social status as they became more and more socially isolated even when they were with their friends. Academically, negative outcomes of social network access by students were incomplete assignments, low grades, and sometimes failing their classes. As a result some students dropped out of college.

Research on social media utilization by students in and out of the classroom supports the finding of this study (Bain, 2015; Kuss, Griffiths, & Binder, 2013; Stollak, Vandenberg, Burklund, & Weiss, 2011; Tindell & Bohlander, 2012; Wiest & Eltantawy, 2012; Yu, Hsu, Yu, & Hsu, 2012). Wiest and Eltantawy (2012) conducted a survey of 200 students of a UAE private college asking them to rate their use of social networks one year post-Arab spring. The survey revealed that as many as 81% of students have Facebook profiles, and 63% send daily messages through social networks during and after classes (Wiest & Eltantawy, 2012). When asked about the purpose of accessing social networks, only 4.7% of students accessed social networks for educational purposes while the majority used them for news updates, political and health information, and entertainment purposes (Wiest & Eltantawy, 2012). Using data from their online survey of 269 male and female students, Tindell and Bohlander (2012) found that engaging in social network actions had a negative impact on students. As many as 35% of students admitted to texting during classes and suffered from loss of attention and poor grades. In their study on social media access in the classroom, Stollak et al. (2011) administered an online survey on a sample of 430 students at a liberal arts college in the US asking them to rate their usage of social media. Mostly, students used social networks to build social contacts and find jobs. Of the accessed social networks, students spent most time on Facebook which had a negative impact on their grades. In their quantitative study of 577 students, both males and females, at five universities in Taiwan, Yu et al. (2012) focused on the relation between time spent on the social network platform of Facebook and increased internet addiction amongst students.

The study concluded that the more time students spent on Facebook, the more addicted they were as it became a daily habit to access Facebook for both emotional support and amusement. Therefore, students addicted to Facebook became more socially withdrawn than those who were not. On the other hand, a survey-based research conducted by Helou and Rahim (2014) on 30 undergraduate and graduate Malaysian students indicated that although students

acknowledged their addiction to social networks, spending more than 50% of their time on social networks to make friends and chat, their grades and academic outcomes were not affected (Helou & Rahim, 2014). This difference between Yu et al. (2012) and Helou and Rahim (2014) could be attributed to the sample size difference. The latter study used a very small sample of students and different age groups of student with graduate students being more mature in their social networks interaction, while the former study used a large sample size from many universities of similar age students. Although they differ on the impact of social networks, both studies agree that students are addicted to social networks; a result that confirms the finding of the current study. Kuss et al. (2013) conducted a study on use of Twitter and online gaming and internet addiction. The study found out that participants' use of Twitter gives them instantaneous satisfaction while online gaming makes them encounter the internet more often and become addicts. The findings of the study support the notion that internet addiction has become a mental health issue amongst students and that increased usage of social networks may lead to situations where “adolescents who are less conscientious would choose using the Internet over other, less pleasurable activities, such as doing their homework, and may therefore be at increased risk of using the Internet excessively” (Kuss et al., 2013, p. 1992).

In this study, it emerged that improper time management and consequent attendance issues are related to student use of social networks outside the classroom for long hours into the night. This association is confirmed by Wolniczak et al. (2013) who studied the relationship between social networks use and sleep disorder. The study used the Pittsburgh sleep quality index to assess sleep quality of college students who use Facebook. The findings of the study revealed that “there is an association between Facebook dependence and poor quality of sleep” (Wolniczak et al., 2013, p. 4) and that over 55% of students suffered sleep disorders because of their addiction to Facebook, which had a negative impact on their academic standing (Wolniczak et al., 2013). Cheating using social networks is a representation of how “e-cheating has also advanced to creative and new levels” (Bain, 2015, p. 3) where, for example, students access the internet to find and copy answers for their tests. The range and complexity of technology-assisted cheating behaviors constantly increases as technology improves and social networks become more pervasive.

Recommendations

There are many recommendation for better SN utilization in college classrooms. Two such recommendations are countering SN cheating and positive use of SN as educational tools. Both are discussed hereafter.

Countering Cheating Using Social Networks and Smart Devices

One way to counter cheating through social networks is to use a three-point remedy summarized by Bain (2015) as awareness, prohibition, and reporting. The approach begins by establishing and implementing an academic integrity policy and ends with awareness campaigns as regards the definition of cheating and sanctions applied to cheaters. This program could be extended to instructors to keep them up to date with the latest technology-based cheating methods used by students. A second step is to block students' ability to access social networks using college-provided iPads or their own smart devices during examinations. This step requires the involvement of the college information technology department to help implement such measures. Reporting is the last step of the remedy to help prevent academic cheating using social networks. Although punishment for academic cheating is commonly implemented, it is the reporting that is loosely applied, where some cheating actions go

unnoticed or some faculty hesitate to report the case and this gives students a message that “cheating is not taken seriously” (Bain, 2015).

Social Networks as Educational Tools

Davis III, Deil-Amen, Rios-Aguilar, and Gonzalez Canche (2012) argue that theories such as student persistence (Astin, 1984; Braxton, Hirschy, & McClendon, 2011; Donovan, 1984; Tinto, 1987), attrition (Bean, 1982; Bean & Metzner, 1985; Braxton et al., 2011; Tinto, 1982, 1987, 1988), engagement (Lamborn, Newmann, & Wehlage, 1992; Skinner & Belmont, 1993) and social and academic integration (Merton, 1968; Shilling, 2012; Terenzini & Pascarella, 1977) are focused on positive achievement and are associated with “engagement, involvement, and connection and belonging with the academic and social realms of the campus” (Davis III et al., 2012, p. 20). These theories can be used as research frameworks to “explore how SMT (social media activity or social networks) may or may not function to support such student engagement and involvement” (Davis III et al., 2012, p. 20) at college.

Furthermore, a national survey of 224 colleges in the US on the current and potential use of social media in academic learning revealed that embedding social media in the learning activities was widely used in college. The survey, described usage of social networks in these colleges as an environment to link class Blackboard spaces to Facebook, post lectures, class discussions, group-assignments, study groups and student recruitment information in academic programs (Davis III et al., 2012). Further, it was seen as a tool of increased communication, better learning communities and as a boost to student engagement and academic outcomes. Junco, Heiberger, and Loken (2011) conducted a semester-long student-engagement experiment on 125 students divided into two groups on the impact of using Twitter in the curriculum. Twitter, a form of social network, was embedded in an experimental group as a platform for academic discussions between students and instructors, and monitoring their engagement and grades in comparison with the control group where Twitter was not utilized. The result showed that use of Twitter increased students’ engagement and grades in comparison to those who did not use it. This study provides evidence that social networks such as “Twitter can be used as an educational tool to help engage students and to mobilize faculty into a more active and participatory role” (Junco et al., 2011, p. 119).

Conclusion

Social networks are interwoven in the daily lives of today’s student generations. As the study at hand showed, there were positive and negative uses of SN in UAE college classrooms and these uses have implications on student learning experiences in college and their motivation to pursue their academic career or not. Therefore, students’ opinions should be taken into account when addressing the shortfalls and issues in using SN in the classrooms. UAE Colleges should adopt SN as an educational tool to help counter the negative effects of improper use of SN. Future studies should focus on the extent of the SN addiction phenomena in UAE colleges. Also, since this study focused only on male students, future research should include female students in their sampling for data collection. A gender comparison of SN addiction in college might shed some facts on how female students compare to their male counterparts regarding SN addiction.

References

- Abu Dhabi Education Council (2009). New School Model. Retrieved July 27, 2017 from <https://www.adec.ac.ae/en/Education/P12Education/Pages/New-School-Model.aspx>
- Astin, A. W. (1984). Student involvement: A developmental theory for higher education. *Journal of College Student Personnel*, 25(4), 297–308.
- Bain, L. Z. (2015). How students use technology to cheat and what faculty can do about it. *Information Systems Education Journal*, 13(5), 92–99.
- Bean, J. P. (1982). Conceptual models of student attrition: How theory can help the institutional researcher. *New Directions for Institutional Research*, 36, 17–33. <https://doi.org/10.1002/ir.37019823604>
- Bean, J. P., & Metzner, B. S. (1985). A conceptual model of nontraditional undergraduate student attrition. *Review of Educational Research*, 55(4), 485–540. <https://doi.org/10.3102/00346543055004485>
- Braxton, J. M., Hirschy, A. S., & McClendon, S. A. (2011). Understanding and reducing college student departure. ASHE-ERIC Higher Education Research Report Series (30).
- College Accreditation Association 2011 Annual Report (2011). Retrieved July 27, 2017 from <https://www.caa.ae/caa/images/AnnualReport2011.pdf>.
- Connaway, L. S., & Powell, R. R. (2010). *Basic research methods for librarians, fifth Edition*. CA: Libraries Unlimited.
- Courts, B., & Tucker, J. (2012). Using technology to create a dynamic classroom experience. *Journal of College Teaching & Learning*, 9(2), 121–128. <https://doi.org/10.19030/tlc.v9i2.6907>
- Davis III, C. H., Deil-Amen, R., Rios-Aguilar, C., & Gonzalez Canche, M. S. (2012). Social Media in Higher Education: A literature review and research directions. The Center for the Study of Higher Education at the University of Arizona.
- Donovan, R. (1984). Path analysis of a theoretical model of persistence in higher education among low-income black youth. *Research in Higher Education*, 21(3), 243–259. <https://doi.org/10.1007/BF00974861>
- Hargis, J., Cavanaugh, C., Kamali, T., & Soto, M. (2014). A federal higher education iPad mobile learning initiative: Triangulation of data to determine early effectiveness. *Innovative Higher Education*, 39(1), 45–57. <https://doi.org/10.1007/BF00974861>
- Hamdan Bin Mohamed eUniversity (2011). HBMeU e-learning. Retrieved April 12, 2012, from <http://www.hbmeu.ac.ae>
- Helou, A. M., & Rahim, N. Z. A. (2014). The influence of social networking sites on students' academic performance in Malaysia. *International Journal of Electronic Commerce*, 5(2). <https://doi.org/10.7903/ijecs.1114>
- Isfahani, D. S. (2010). Human Development in the Middle East and North Africa (pp. 57). Virginia, USA.

- Johnson, B., & Christensen, L. (2012). *Educational Research Quantitative, Qualitative, and Mixed Approaches* (Fourth Edition ed.). CA, USA.: Sage Publications, Inc.
- Junco, R., Heiberger, G., & Loken, E. (2011). The effect of Twitter on college student engagement and grades. *Journal of Computer Assisted Learning*, 27(2), 119–132. <https://doi.org/10.1111/j.1365-2729.2010.00387.x>
- Kamberelies, G., & Dimitriadis, G. (2008). Focus group: Strategic articulations of pedagogy, policies, and inquiry. In N. K. Denzin & Y. S. Lincoln (Eds.), *Collecting and Interpreting Qualitative Materials* (pp. 375–402). California: Sage Publications, Inc.
- Krueger, R. A. (1994). *Focus groups: A practical guide for applied research*. California: SAGE Publications, Incorporated.
- Krueger, R. A., & Casey, M. A. (2000). *Focus groups a practical guide for applied research*. Thousand Oaks, Calif: Sage Publications.
- Kuss, D. J., Griffiths, M. D., & Binder, J. F. (2013). Internet addiction in students: Prevalence and risk factors. *Computers in Human Behavior*, 29(3), 959–966. <https://doi.org/10.1016/j.chb.2012.12.024>
- Lamborn, S., Newmann, F. M., & Wehlage, G. (1992). The significance and sources of student engagement. In F. M. Newman, (Ed.). *Student engagement and achievement in American secondary schools* (11–39). NY: Teachers College Press.
- Liamputtong, P. (2013). *Qualitative Research Methods*. Victoria, Australia: Oxford University Press.
- Merton, R. K. (1968). *Social theory and social structure*. NY: Simon and Schuster.
- Onwuegbuzie, A. J., & Collins, K. M. T. (2007). A typology of mixed methods sampling designs in social science research. *The Qualitative Report*, 12(2), 281–316.
- Ridge, N., Farah, S., & Shami, S. (2013). Patterns and perceptions in male secondary school dropouts in the United Arab Emirates. Sheikh Saud Bin Saqr Al Qasimi Foundation for Policy Research.
- Robson, S. (2008). UAE UAE leads the Middle East in ICT readiness. IPT.net, Retrieved July 27, 2017 from <http://www.itp.net/518509-uae-leads-the-middle->
- Shilling, C. (2012). *The body and social theory*. California: Sage. <https://doi.org/10.4135/9781473914810>
- Skinner, E. A., & Belmont, M. J. (1993). Motivation in the classroom: Reciprocal effects of teacher behavior and student engagement across the school year. *Journal of Educational Psychology*, 85(4), 571. <https://doi.org/10.1037/0022-0663.85.4.571>
- Stollak, M. J., Vandenberg, A., Burklund, A., & Weiss, S. (2011). Getting social: The impact of social networking usage on grades among college students. Paper presented at the Proceedings from ASBBS annual conference.
- Terenzini, P. T., & Pascarella, E. T. (1977). Voluntary freshman attrition and patterns of social and academic integration in a university: A test of a conceptual model. *Research in Higher Education*, 6(1), 25–43. <https://doi.org/10.1007/BF00992014>

- Tindell, D. R., & Bohlander, R. W. (2012). The use and abuse of cell phones and text messaging in the classroom: A survey of college students. *College Teaching*, 60(1), 1–9. <https://doi.org/10.1080/87567555.2011.604802>
- Tinto, V. (1982). Limits of theory and practice in student attrition. *The Journal of Higher Education*, 687–700. <https://doi.org/10.2307/1981525>
- Tinto, V. (1987). *Leaving college: Rethinking the causes and cures of student attrition*. Chicago: University of Chicago Press. <https://doi.org/10.2307/1981920>
- Tinto, V. (1988). Stages of student departure: Reflections on the longitudinal character of student leaving. *The Journal of Higher Education*, 438–455.
- United Arab Emirates 2021 vision (2011). Retrieved 24 April, 2012, from <https://www.vision2021.ae/en>
- Wiest, J. B., & Eltantawy, N. (2012). Social media use among UAE college students one year after the Arab Spring. *Journal of Arab & Muslim Media Research*, 5(3), 209–226. https://doi.org/10.1386/jammr.5.3.209_1
- Wekalat Anbaa eMarat (2012). Mohammed launches ‘Smart Learning’ initiative. Retrieved from <http://www.emirates247.com/news/government/mohammed-launches-smart-learning-initiative-2012-09-24-1.476662>
- Wolniczak, I., Cáceres-DelAguila, J. A., Palma-Ardiles, G., Arroyo, K. J., Solís-Visscher, R., Paredes-Yauri, S., Mego-Aquije K, & Bernabe-Ortiz, A. (2013). Association between Facebook dependence and poor sleep quality: a study in a sample of undergraduate students in Peru. *PloS ONE*, 8(3). <https://doi.org/10.1371/journal.pone.0059087>
- Yu, S.-C., Hsu, W.-H., Yu, M.-N., & Hsu, H.-Y. (2012). Is the use of social networking sites correlated with internet addiction? Facebook use among Taiwanese college students. *World Academy of Science, Engineering and Technology*, 68, 1659–1661.

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Acronyms

AD: Abu Dhabi

ADEC: Abu Dhabi Education Council

BBM: Black Berry Messaging

CAA: College Accreditation Association

EFL: English as a Foreign Language

FG: Focus Groups

HBMU: Hamdan Bin Mohamed e University

HCT: Higher Colleges of Technology

ICT: Information & Communication Technology

IELTS: International English Language Testing System

IT: Information Technology

RAK: Ras Al Khaima

SN: Social Networks

UAE: United Arab Emirates

UAU: UAE University

UAQ: Um Al Qaiwain

WAM: Wekalat Anbaa Emarat

ZU AD: Zayed University Abu Dhabi

ZU: Zayed University