Article:	**Narratives of Students about the Role of Social Networking Sites in Higher Education Institutes**

Author(s):	Sidra Saeed Iqra Saeed Dr. Warda Gul

A publication of the
School of Professional Advancement
University of Management and Technology
Lahore, Pakistan.

Narratives of Students about the Role of Social Networking Sites in Higher Education Institutes

Sidra Saeed[1], Iqra Saeed[2*], Dr. Warda Gul[2]

[1]Lahore College for Women University, Lahore, Pakistan
[2]University of Management and Technology, Lahore, Pakistan

*Corresponding author: iqra.saeed@umt.edu.pk

Abstract

Social Networking Sites (SNS) such as Facebook, YouTube, WhatsApp, blogs, Twitter and other educational sites have become an essential part of daily routine at the tertiary level of education. The purpose of this study is to investigate how SNS enable social interaction as well as sharing of knowledge among students. Hence, this study explored students' perception of educational activities conducted via SNS and their experience of using SNS in higher institutes. The study adopted a qualitative approach and focused on interpreting students' narratives regarding the use of SNS in higher education. For this purpose, in depth interviews and focus group discussions were conducted from university students. Thematic analysis was used to analyze the data generated from the narratives of the participants. The findings showed that SNS plays an important role in distance education as they help students to attend online lectures delivered from the online forums of various universities. Students use SNS for various learning purposes, such as to access online libraries, e-learning, to download e-books and to find research articles from various authentic sites.

Keywords: higher education, learning, social interaction, social networking sites (SNS)

1. Introduction

Online platforms such as social networking sites (SNS) or social media are used for interaction among people, groups or community for sharing similar interests. These online platforms allow people to interact and build social relationships with each other (Coyle & Vaughn, 2008; Wang, Chen & Liang, 2011). Previous studies uncovered that there are over 500 million people are active on Facebook and almost 250 million people visit Facebook on daily basis (Boyd & Ellison, 2007). Facebook is most commonly used social networking platform by undergraduate students of colleges and universities on daily basis (Hewitt & Forte, 2006; Madge, Meek, Wellens & Hooley, 2009; Wise, Skues & Williams, 2011; Wolfe, 2007). At the same time, there are some reports which suggest that

students unconsciously use Facebook for social goals as well as for academic achievements (Bosch, 2009; Mazman & Usluel, 2010; Madge et al., 2009; Tian, Yu, Vogel & Kwok, 2011).

Mostly, social media users share information with the help of micro blogging which is used for the purpose of everyday discussions, activities, and for finding friends, celebrities, musicians etc (Java, Song, Finin, & Tseng, 2007). A blog or weblog is an online journal where different types of people participate in a dialogue about a particular topic (Du & Wagner, 2006). Social media is a tool through which organizations and people meet their audiences, clients and communicate with them individually (Hendricks, 2014). To achieve excellent academic performance, students gradually learn to use these technologies (Dror, 2008). SNS support learning through building community networks with activities such as chatting, wall posting, tagging and content sharing (Alexander, 2008).

Tariq, Mehboob, Khan and Ullah (2012) asserted that social media is a very important tool for communication among students as well as teachers. Facebook, Twitter and other SNS are helpful and beneficial in gaining knowledge. Learning with social technologies is a difficult task; as the students have to understand that social technologies are most influential in facilitating learning.

In Pakistan, the users of internet are increasing day by day. There are 20 million internet users in Pakistan which constitute 2.2% of all internet users in Asia (Groupin.com, 2011). SNS provide various opportunities to students to get feedback from their fellows through internet (Wheeler, Yeomans & Wheeler, 2008). The growth of SNS has been rapid in higher education and some universities adopted them as an opportunity to improve or support academic activities (Rosmala, 2011).

1.1 Objectives

- To determine the importance of SNS in social interaction as well as in sharing of knowledge and ideas among students
- To examine students' perception towards SNS learning
- To explore the educational activities conducted with the help of SNS
- To explore students' experiences regarding the practice and use of SNS in higher education

1.2. Significance of Study

This study allows us to discover the importance of SNS in social interaction as well as sharing of knowledge and ideas among students. Science Direct and

Google Scholar are the best search engines that lead us to acquire and utilize authentic information. Digital libraries help students to download, read e-journals or e-books, and search with references. The current study examines students' perception towards SNS learning. It strives to know more about educational activities conducted with the help of SNS and also about students' experiences regarding the practice and use of SNS in higher education.

2. Literature Review

People and organizations use social networking sites for mutual interaction and social communication. The young generation is always interested and well informed about the use of new technologies. Almost 49 million people have their own smart phones (Hendricks, 2014). As well as millennials comprise 55% of population and they use social media for posting their "selfies" (Doherty, 2014). Moreover with the passage of time, the use of internet has changed many human resource practices and techniques. Twitter, Facebook, LinkedIn and other SNS are used for hiring and terminating individuals and other management decisions. Only 21% correspondents or participants used SNS as an HR tool according to survey report (Kelleher & Sweetser, 2012). Nevertheless, social media helps students to connect with different people because it is the most effective tool used for networking. It makes communication channel for students from various universities in spite of diverse geographical distances (Murray & Waller, 2007).

Formal learning takes place when teachers develop and use materials during the program instruction that is institutionally sponsored and generally recognized in terms of certificate or accreditations upon completion and that material is used by teachers to engage their learners (Colley, Hodkinson & Malcom, 2003). As remarked by Brady, Holcomb and Smith (2010), open learning systems are the best systems because they offer students the flexibility and autonomy to study those programs in which they are interested and are suitable keeping in view their circumstances.

Integrated Digital Library (IDL) is an electronic resource and an advance system that allows users to browse, search databases, journals, e-books etc. Students can also search by references, alphabets and/or by subject in this digital library. Federated search saves their time and provides them with authentic results quickly. Social Media helps to improve students' academic performance. It is significantly used to interact with peers, teachers and other people which affects students' learning.

Subsequently, Croft (2009) assessed that students are motivated to use SNS because they share their posts, pictures, and personal information to create interest groups in order to connect with other students. Cooke (2015) also stated that SNS have become very popular in higher education because they provide many different learning techniques and teaching resources. They also provide students with different opportunities for social and educational engagement. SNS in higher education have significant effects on students' engagement with the learning process. Social media is an effective and useful tool in enhancing learning experiences. It motivates students in the classroom and also involves them in the learning process. Students believe that they are more motivated through the use of social media.

Hemmi, Bayne and Land (2009) stated that using social media and social technologies is not an easy process; it is difficult to manage social media in an appropriate way. In higher education, students have to understand that social technologies are one of the most influential in learning process. Some studies have showed that more efforts are required to use social media and social technologies in educational activities.

Moreover, Brady et al. (2010) stated that the students receiving distance education need a platform or a place where they may easily connect with their teachers and with other students. Osharive (2015) said that a modern technology of communication has converted the whole world into a "global village". SNS help people to become enlightened, better informed, and keep abreast with changes and worldwide developments. SNS include WhatsApp Messenger, Yahoo, Twitter, Facebook Messenger, Skype, Google Talk, and Google Messenger. Mostly, students use SNS for the purpose of interaction with their friends. For enhancing the scope of academic activities and to avoid poor academic performance, the role of SNS should be expanded. He also argued that social media is playing vital role in connectivity regarding learning perspective. In his study, the author examines 66 top US universities and colleges' engagement and connectivity of students with Facebook. His findings revealed that in colleges and universities, use of social media has become essential to provide the required information to students. Students who are connected to their fellows through social media earn better grades and are more likely to complete their degree at their current institution as compared to those students who are not connected to their schools and universities.

Lenhart, Purcell, Smith and Zickuhr (2010) discussed the different uses of media by men and women. Gender affects social media as a demographic

variable. Women are more likely to have their personal profiles on Facebook as compared to men, while men are more likely to have a profile on LinkedIn as compared to women.

Luik, Voltri, Taimalu & Kalk (2011) stated that blogs are considered as a platform used to increase communication environs in an educational domain or setting. As a result, blogs are more personalized than any other electronic communication methods. Blog is an effective instrument for sharing knowledge, experiences, feelings and thoughts. Blogs empower both students and teachers to share or exchange their ideas, knowledge and information easily and at any time. Blogs increase the critical thinking of both students and teachers. Luik et al. (2011) also found that blogs improved the quality of critical reflection in both students and teachers. Instructors use different instructional strategies to integrate blogs successfully in order to support student learning (Yang, 2009).

Enriquez (2010) expressed that usage of Social Networking Sites may affect the grades of students. He stated that most people have Facebook or other social networking sites, their e-mails and maybe instant messaging constantly running in the background while they are carrying out their tasks. Dale and Pymm (2009) stated that some sites such as Wikipedia and blogs encourage collaborative learning activities among students at the level of higher education. It promotes learning opportunities for students, these sites allow individuals to access any information and knowledge in the learning process. Social media enables both students and teachers to share their knowledge, information, and learning activities with each other and also requires feedback from peers and teachers. When people publish their work on social media, a large number of readers provide feedback to learn new ideas and transform their own reflection.

Yin (2016) stated that WhatsApp has become very popular among students. Indeed, it has become an important part of higher education since it provides a platform to promote the upcoming events. It has become one of the most popular messenger applications. People use WhatsApp for staying connected with their family and friends. It helps to improve students' experiences. It is used to exchange messages and information among individuals around the world. Moreover, Selwyn (2011) found that social media had already dominated the ways in which digital technology was used around the world. People in the USA may log on to Facebook and Twitter, while Chinese users are more likely to access Renren and Netease. Universities need to play an important role in supporting students' supposedly self-directed activities and should provide students with a good opportunity to learn through technology based learning.

Rafiq and Ameen ([2012](#)) explained that people use digital media and e-initiatives such as e-health, e-government, information portals and digital libraries all around the world. Wireless services (WLL) have become very popular and important. Digital media is also used in universities in the form of video conferencing, LAN, WAN etc. Universities have established broadband and internet connectivity. Shabir et al. ([2014](#)) conducted a study in Pakistan in which he concluded that the use of social media has been increasing since the early 21st century. SNS such as Facebook and Twitter are used as research tools. In the academic context, social media enhances language proficiency, skills and connectivity and it also develops online communication skills. Social media creates awareness among individuals about every field or every aspect of life, whether it is related to professional or personal life.

4. Methodology

To meet the research objectives, qualitative research method was used. The use of semi-structured interviews was seen as an influential and effective research method because of their similarity to a loose, interactive and open-ended conversation (Lindlof & Taylor, [1995](#)). The data were collected through in depth interviews and focus group discussions. The researcher developed an open-ended interview guide and collected information from participants in detail. This type of data largely depends upon the different narratives of the participants.

4.1. Sample

The current research mainly used two instruments. These were semi-structured interview guide and focus group guide. The participants were selected based on the demographic survey with general questions about the topic before semi-structured interviews. The sample consisted of 30 students from different departments of LCWU. The participants were recruited through purposive sampling because the researcher chose only those students who used SNS. Two focus group discussions were conducted because the researcher desired to know about the shared experiences from different participants included in the focus group. There were approximately 5-7 participants in each focus group within the age range of 20-22.

4.2. Process of Data Collection

The researcher conducted each interview for a time span of 10-20 minutes and focus group discussion was held for approximately 25-35 minutes. During the interview, a large number of open ended questions were asked from respondents which covered their perception about the use of SNS in higher education.

Interviews were conducted in classrooms and conference rooms. Before conducting each interview, the researcher decided the time and place with the participant. After each and every interview, the researcher listened to the recorded interview and then transcribed it into English language because many interviews were held in the Urdu language. After proper transcription, the researcher thoroughly read the texts of the interviews for their analysis.

5. Thematic Analysis and Interpretation

For this purpose coding and categories method of qualitative research was used to analyze collected data. The researcher analyzed the data with the help of five major themes and fourteen sub-themes generated from the participants' interviews, demographic data and the researcher's reflexive journal.

Table 1

List of Major Themes and Sub-themes

Themes	Subthemes
Theme 1: *Internet: A Source of Efficient Connectivity*	a) Internet connecting devices b) Social networking sites (SNS) presenting multipurpose platform c) SNS considered as essential tool to remain responsive to global trends d) Excessive use of SNS detrimental to human health
Theme 2: *SNS Considered Vital Tool for Social Interaction*	a) Emails as more formal means of interaction with teachers b) WhatsApp widely used for sharing data with peers
Theme 3: *SNS Useful for Searching Valid Data over Internet*	a) SNS Accounts offer informative source of learning b) SNS exhibiting a collaborative and holistic learning approach c) Versatile use of SNS and need for regulatory surveillance
Theme 4: *SNS predominantly used for Gaining and Sharing Latest Knowledge*	a) SNS, chief contributor toward novel idea generation b) Extensive use of SNS in higher education c) SNS integral toward development of Pakistan's prospective education system

5.1. Internet: A Source of Efficient Connectivity

Majority participants had opinion about internet as a world in itself where they found everything they wanted. Some participants respond that *"Internet is a global website from which we can access anything we want". "Internet is a kind of network where so many people can interact and you can find a lot of information relevant to your views"* and *"Internet is a world in itself, where you can connect with anyone from anywhere and get new updates and give your opinion".* After focus group discussion, almost everyone came out with the same point that SNS are helpful to connect with each other around the world in order to increase work efficiency as well as a means to convey messages.

5.1.1. Internet connecting devices. The respondents expressed that they usually prefer using laptops and mobile phones to connect with the internet. Their day starts with their mobile phones and also ends with it as they use the internet on mobile phones all the time for different purposes. For example, *"I usually used cell phone but it depends upon where I am. If I am outside, cell phone is more convenient to use and if I am at home I use laptop".*

5.1.2. Social networking sites (SNS) presenting multipurpose platform. The results found from participants are that, *"It's a platform where you can interact with people, give your suggestions, indulge in debates, and exchange of ideas".* Similar to that, "*SNS is basically a tool for freedom of expression of every individual. Every individual has the right to give opinion about anything and talk bluntly about any issue. They may belong to any age group or class, they are free to talk."* Another participant is of same view that *"You can judge everyone's opinion and also their mentality. Social media marketing is very amazing. Through social media now you can start your business at home".*

5.1.3. SNS considered as essential tool to remain responsive to global trends. Results revealed through interviews that social networking sites become a need for most professions that we have to remain responsive in social networking sites with changing world. During focus group discussion, participants agreed that WhatsApp provides a platform for free, chat and call for academic discussions and learning for the purpose of academic discussion**.** It helps in getting new updates about new technologies and advancements in education. It is beneficial for sharing different ideas with peers and others and the participants can do online group studies, make groups with peers and with people around the world.

5.1.4. Excessive use of SNS detrimental to human health. The participants expressed that due to the excessive use of these sites students become lazy,

physically as well as mentally. Facebook and other sites make students mentally disturbed because of excessive usage. Participant further added that "*We don't like to sit with our families anymore and want to use these things all the time and "We don't read the study material carefully, we just copy and paste the data and want to finish the work".*

5.2. SNS Considered Vital Tools for Social Interaction

The participants expressed their views that in the era of technology, SNS plays an important role in social interaction. 80% of their interaction with their teachers, fellows, colleagues as well as their family is totally dependent upon SNS. They use these sites to exchange different types of information as well as their syllabus and reading materials. They are able to collect information from all around the world through SNS. One participant shared her experience in these words, *"When I was working on my ACP project, that is, Active Citizen Program, we had to interact with a lot of people who were conducting the same program in Britain as well as in US. So, I made a lot of foreign friends and interacted with them and we got to know more about their cultures. Indeed, there was a big culture exchange and exposition as well."*

5.2.1. Emails as more formal means of interaction with teachers. Most of the interaction between teachers and students takes place through SNS. Teachers exchange syllabus, assignments and presentations through emails and WhatsApp. Most of the participants preferred emails for communicating with teachers since it is a formal method of sending and receiving data elaborating that, *"E-mails have a record in written form and have a proof, so no one can deny that".*

5.2.2. WhatsApp widely used for sharing data with peers. The participants' first preference was again WhatsApp because it is easy to use, easy access and friendly user. Through WhatsApp, sharing data like documents, articles, presentations, pictures and other media is made easy. Furthermore, the participants also mentioned that video calling helps a lot in sharing different ideas and thoughts.

5.3. SNS Useful for Searching Valid Data Over Internet

It can help find anything just by a single click which saves student's precious time. They can find relevant information easily on the internet. The participants further discussed the validity of data found on the internet as compared to libraries. They believed that if they found data through SNS or the internet, their main focus should be on the author and the website which they used to acquire information. Cooke (2015) stated that SNS in higher education have a great effect

on students' engagement in obtaining information. Social media is an effective tool in enhancing research or education. It motivates the students in class and involves them in the teaching and learning process.

5.3.1. SNS Accounts offer informative source of learning. The participants mentioned that they have accounts on different SNS where they can follow and like pages of their interest and they get notifications about different posts and expressed that "*we use Facebook for learning purposes because I like so many pages which are very informative and helpful for me''*. Alexander (2008) stated that Facebook, Twitter, MySpace and other SNS are essential in supporting social learning that takes place through community networking such as chatting, wall posting, tagging and content sharing is potential to support the social learning.

5.3.2. SNS exhibiting a collaborative and holistic learning approach. SNS provide diversity in learning for every field of life. They are able to acquire solutions of daily life obstacles without much difficulty. It supports elements of collaborative learning. Students can find everything they consider as necessity. Allama Iqbal Open University and other online institutes like Virtual University are an example, where students receive education virtually.

5.3.3. Versatile use of SNS and need for regulatory surveillance. There are two types of students, those who use SNS in learning and those who don't use them and they are more or less equal in number. It depends upon the level of studies, since no one can survive without using SNS learning in higher studies. One participant said that *"if you want to apply in a foreign university, as an SNS user you can take advantage of Google, you can contact with the students of that university on Facebook and the university you want to apply for, you can know their views, their experiences"*. Tariq et al. (2012) stated that it has been calculated that more than 90% of college students use SNS. These websites have become an essential need of today's life and this fact can ruin the future of children and teenagers since it has a very negative impact on their education. There is no regulatory body/authority that can check the activities performed by different users on these SNS.

5.4. SNS Predominantly Used for Gaining and Sharing Latest Knowledge

During learning process, we share values, knowledge, and skills from one generation to another which helps them in gaining knowledge of the past as well as future advancements. These days, the study of higher education is mainly dependent upon SNS.

5.4.1. SNS, chief contributor toward novel idea generation. The participants revealed that there is an ever increasing use of SNS in educational activities which helps in making assignments and presentations as well as in the preparation of papers. *"Basically, SNS doesn't contribute towards education but it contributes in the development of ideas towards education"*.

5.4.2. Extensive use of SNS in higher education. In higher education, there is considerable use of SNS. Liu (2010) also stated that we still have those faculty members who believe that the concept of a traditional classroom is more fruitful and the traditional teaching methods are the most efficient in teaching the students. However, the extensive use of SNS has prevailed among students.

5.4.3. SNS integral toward development of Pakistan's prospective education system. All the participants agreed that SNS will play an important role in the future of education in Pakistan. Those institutes who are not using SNS will be unable to compete with rival institutions. It is also important to compete with developed countries. Respondents also revealed that it has negative aspects as well, like cybercrime is a common practice now days. But on the other hand, it is useful for educational and informational purposes with advent of technology and innovation.

6. Discussion

This study explored the use of SNS in higher education institutes of Pakistan. Students in higher education use SNS for academic and learning purposes. Most of the participants stated that SNS provides a considerable variety of knowledge about every aspect of life, whether it is related to education or practical field. Applications like Messenger and WhatsApp are a major source to connect with people around the world and they also connect with those family members and friends who live away from us. The participants shared their perspectives and stated that in this era of information technology, it is important to have access on different SNS accounts to keep up with the pace of our dynamic world. Ismail and Arshah (2016) argued that now day's students in higher learning used social networking sites such as facebook, twitter to encourage their learning through the academic collaboration which further improves the social capital of the students. Until now, Facebook is the largest interpersonal communication platform at this time which is generally used by students in higher education to connect with each other.

Another concluding fraction of this study shows the benefits of using SNS in higher education as they help in getting regular updates about new technological

advancements, and sharing information and knowledge with peers. Students involve in online group studies and also informative groups with people around the world. This helps them in the development of their creativity and analytical skills. They can also talk about the different forums of universities and their online systems as well as online lectures on university forums. They may share different experiences regarding submitting their work online through emails and sending their work to their supervisors. The findings illustrated that with the excessive use of these sites students become lazy, physically as well as mentally, due to the lack of physical activities. Excessive usage of Facebook and other sites make students unstable and retarded at the same time. The opportunities related with the use of social networking sites in the class room examines the student's narratives toward its usefulness and upgrading their educational experiences. Neier and Zayer (2015) analyzed that the students of undergraduate in the private universities taking marketing course regarding preferences and experiences of social networking sites in higher education. It empowers the social interaction, information motives and offers theoretical as well as pedagogical implications among students in higher education.

Another very important aspect of this study is the significance of social interaction. The majority of participants responded that 80% of their interaction with their teachers, fellows, and colleagues as well as family members is totally dependent upon SNS. They used them to exchange any type of information as well as their syllabus and reading materials. In the 21st century, universities are facing social, economic and technological challenges that will enhance and change the educational experiences of students. With the advent of technology, students usually prefer social networking sites for sake of knowledge acquisition and active learning (Cronin, 2009).

7. Conclusion

The potential advantages of SNS for tertiary level education includes students-teacher interaction outside the class settings, socialization, network building and destroying obstructions, online peer group discussion about course and boundless access to contemplate materials and course information to provide reasonable academic results. Social networking sites have proven its significance that it is valuable platform for students and teacher in term of education. Some researchers also presented their negative impact of high frequency of time spending on social networking sites ultimately on the learning of students at higher education level. But others argued that it keeps students with the updated knowledge and innovation in the learning process.

7.1. Recommendations of the Study

- To prevent students from engaging in cybercrimes, the enactment of social media usage act is necessary.
- Academic institution should issue email identifications to login for Google Scholar, JSTOR, and Science Direct etc. should ensure a check on users.
- Encourage students to store or retain blog on a specific topic by creating a database.
- Students must avoid the sharing of any undesirable posts or pictures.

References

Alexander, J., & Salas, G. (2008). Technology for institutional enrollment, communication, and student success. *New Directions for Student Services, 124*, 103–116.

Bosch, T. E. (2009*).* Using online social networking for teaching and learning: Facebook using at University of Cape Town. *South African Journal for Communication Theory and Research,* 35(2), 185–200.

Boyd, D. M., & Ellison, N. B. (2007). Social network sites: Definition, history, and scholarship. *Journal of Computer-Mediated Communication, 13*(1), 210–230.

Brady, K. P., Holcomb, L. B., & Smith, B. V. (2010). The use of alternative social networking sites in higher educational settings: A case study of the e-learning benefits of Ning in education. *Journal of Interactive Online Learning*, *9*(2), 151–170.

Colley, H., Hodkinson, P., & Malcom, J. (2003). *Informality and formality in learning: A report for the learning and skills research center*. University of Leeds, Lifelong Learning Institute.

Cooke, S. (2015). Social teaching: Student perspectives on the inclusion of social media in higher education*, Education and Information Technology, 22*, 255–269.

Coyle, C., & Vaughn, H. (2008). Social networking: Communication revolution or evolution. *Bell Labs Technical Journal, 13*(2), 13–17.

Croft, S. (2009). *Top 20 reasons you should be using Facebook in your classroom*. Retrieved from http://www.studentloaninfo.org/blog/facebook-classrooms

Cronin, J. (2009). Upgrading to Web 2.0: An experiential project to build a marketing Wiki. *Journal of Marketing Education, 31*, 66–75.

Dale, C., & Pymm, J. (2009). Podagogy – The iPod as a learning technology. *Active Learning in Higher Education*, *10*(1), 84–96.

Doherty, C., Krishnamurthy, V., Parker, K., & Taylor, P. (2014). *Millennials in adulthood*. Pew Research Center, Washington, D.C. Retrieved from http://www.pewsocialtrends.org/2014/03/07/millennials-in-adulthood/

Dror, I. E. (2008). Technology enhanced learning: The good, the bad, and the ugly. *Pragmatics & Cognition, 16*(2), 215 –223.

Du, H. S., & Wagner, C. (2006*).* Exploring the role of technology. *International Journal of Human Computer Studies, 64*(9), 789–798.

Enriquez, J. (2010). *Facebook and other online social networking sites can lower grades, study says.* Retrieved from http://seerpress.com/facebook-and-other-online-social-networking-sites-can-lower-gradesstudy-says/6935/

Groupin.pk. (2011). *Internet users in Pakistan & the best Internet Browsers* [Blog post]. Retrieved from https://groupin.pk/blog/internet-users-in-pakistan-the-best-internet-browsers-2011/

Hemmi, A., Bayne, S., & Land, R. (2009). The appropriation and repurposing of social technologies in higher education. *Journal of Assisted Learning, 25*(Special Issue), 19–30.

Hendricks, D. (2014). *3 ways social media is driving a business revolution*. Retrieved from http: //www.forbes.com/sites/drewhendricks/2014/02/25/3-ways-social-media-is-drivinga-business-revolution/

Hewitt, A., & Forte, A. (2006). *Crossing boundaries: Identity management and student/faculty relationships on the Facebook.* Paper presented at the Computer Supported Cooperative Work Conference, Banff, Alberta, Canada.

Ismail, M. I. B., & Arshah, R. B. A. (2016). The impacts of social networking sites in higher learning. *International Journal of Software Engineering and Computer Systems*, *2*(1), 114–119.

Java, A., Song, X., Finin, T., & Tseng, B. (2007). *Why we twitter: Understanding micro blogging usage and communities.* Paper presented at the Proceedings of the 9th Web KDD and 1st SNA-KDD 2007 Workshop on Web Mining and Social Network, Analysis, New York, United States.

Kelleher, T., & Sweetser, K. (2012). Social media adoption among university communicators. *Journal of Public Relations Research*, *24*(2), 105–122.

Lenhart, A., Purcell, K., Smith, A., & Zickuhr, K. (2010). *Social media & mobile internet use among Teens and Young Adults. Millennials*. Pew Internet & American Life Project.

Lindlof, T., & Taylor, B. (1995). *Qualitative communication research methods* (2nd ed.). Sage Publications.

Liu, Y. (2010). Social media tools as a learning resource. *Journal of Educational Technology Development and Exchange, 3*(1), 101–114.

Luik, P., Voltri, O., Taimalu, M., & Kalk, K. (2011). On the use of student teacher blogs during teaching practice. *Procedia-Social and Behavioral Sciences*, *11*, 165–169.

Madge, C., Meek, J., Wellens, J., & Hooley, T. (2009). Facebook, social integration and informal learning at university: It is more for socializing and talking to friends about work than for actually doing work. *Learning, Media and Technology*, *34*(2), 141–155.

Mazman, S. G., & Usluel, Y. K. (2010). Modeling educational usage of Facebook. *Computers & Education, 55*(2), 444–453.

Murray, K. E., & Waller, R. (2007). Social networking goes abroad. *International Educator, 16*, 56–59.

Neier, S., & Zayer, L. T. (2015). Students' perceptions and experiences of social media in higher education. *Journal of Marketing Education*, *37*(3), 133–143.

Osharive, P. (2015). *Social media and academic performance of students*. Paper presented the Conference of Research Work, Unilag. doi: https://doi.org/10.13140/RG.2.1.2407.1201

Rafiq, M., & Ameen, K. (2012). Use of digital media and demand for digitized contents in higher education sector of Pakistan. *International Information & Library Review, 44*, 116–122.

Rosmala, D. (2011). Study of social networking usage in higher education environment. *Social and Behavioral Sciences, 67,* 156–166.

Selwyn, N. (2011). *Web 2.0 applications as alternative environments for informal learning a critical review*. Paper presented at the OECD-KERIS exp-ert meeting - Session 6, New York.

Shabir, G., Mahmood, Y., Hameed, Y., Safdar, G., Muhammad, S., & Gilani, F. (2014). The impact of social media on youth: A case study of Bahwalpur city. *Asian Journal of Social Sciences & Humanities, 3*(4), 132–151.

Tariq, W., Mehboob, M., Khan, A., & Ullah, F. (2012). The impact of social media and social networks on education and students of Pakistan. *International Journal of Computer Science Issues, 4*(3), 157–178.

Tian, S. W., Vogel, D., & Kwok, R. C. (2011). The impact of online social networking on learning: A social integration perspective. *International Journal of Networking and Virtual Organizations, 8*(3/4), 264–280.

Wang, Q., Chen, W., & Liang, Y. (2011). The effects of social media on college students. *MBA Student Scholarship, 5,* 1–12.

Wheeler, S., Yeomans, P., & Wheeler, D. (2008). The good, the bad and the wiki: Evaluating student-generated content for collaborative learning. *British Journal for Educational Technology*, *39*(6), 987–995.

Wise, L. Z., Skues, J., & Williams, B. (2011). Facebook in higher education promotes social but not academic engagement. In G. Williams, P. Statham, N. Brown, & B. Cleland (Eds.), *Changing demands, changing directions: Proceedings ascilite Hobart* (pp. 1332-1342).

Wolfe, A. M. (2007). *Student attitudes towards social networks and learning modalities.* Paper presented at the Marketing Management Association (MMA) Spring Conference, Chicago, Illinois, USA

Yang, S. H. (2009). Using blogs to enhance critical reflection and community of practice. *Educational Technology & Society*, *12*(2), 11–21.

Yin, L. C. (2016). *Adoption of Whatsapp instant messaging among students in Ipoh higher education institutions*. Wawasan Open University.