

Perspectives of University Students about Pedagogical Aspects of Facebook

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Abstract

Facebook is the most popular and widely used social networking site because it comprises diverse features. This study sought to observe the practical grounds for using Facebook as a promising pedagogical tool in the light of opinions collected through a survey method with a sample of 800 students from the University of Okara, Punjab Pakistan. The structural Equation Model proposed by Premadasa et al., (2018) is used to find out the relationship between Facebook usage and educational needs. The findings of the study show that Mobility (MO) is the most substantial factor in Facebook adoption; students find it convenient to handle all of their work including educational tasks in an interactive way while they have access to a smartphone. The most significant purpose of Facebook usage is maintaining "Social Relations". Results also reveal that the adoption of Facebook has a positive and significant relationship with the purposes of using Facebook while the purposes of Facebook have a positive and significant relationship with the educational usage of Facebook. But adoption of Facebook shows an insignificant relationship with educational usage of Facebook.

Keywords: *Social networking sites, pedagogical aspects, educational needs, mobility*

Introduction

When it comes to the way we communicate, modern information technologies have brought speedy development and thanks to ICT what we did not know is possible now within few clicks. Several studies explain the way social networking tools backing the purpose of educational usage through interaction, collaboration, information and material sharing (Ajjan

& Hartshorne, 2008; Bicen & Cavus, 2011; Tapscott & Williams, 2010). Students today are living in the digital age and they feel more convenient to interact through online tools rather meeting in a formal way; they have been involved with popular social networking sites from their childhood (Prensky, 2010).

There are 2000 million Facebook users out of 3200 million users of internet (Nowak & Spiller, 2017). Now Facebook is growing more popular among the university students, the researcher focused on educational usage of Facebook in Pakistan. AlphaPro (2018) analyzed that there are 35 million Pakistani Facebook users which are increasing by 17% every year. Researcher aims to recognize the features that inspire the university students for educational usage of Facebook. The current study adapted the Structural Equation Model proposed by Premadasa et al., (2018).

Bullas (2015) stated that 47% of all internet users have Facebook accounts and they perform many activities freely. Abe & Jordan (2013) explain the usage of Facebook in which most of the account holders use it to make new friends, build social relations, bridging the cultural gaps and exchange views with strangers. Stutman (2006) indicated that Facebook provides a verity of features which no other social media site provides and almost 90% of students use these features in their educational activities. Ratliff (2011) explained that people, organizations and even classrooms use Facebook to communicate personal, business and learning connections.

However, Facebook provides facilities for information sharing by using features like immediate messaging, links, pictures and videos etc. Schwart (2009) elaborated that Facebook forum is open to communicate among students.

Rationale of the Study

Facebook through diverse features is considered an important educational strategy at higher education institutions. Unfortunately, in Pakistan, perceived Facebook usage's impact as a pedagogical tool is unclear, even it is owned by an increasing number of students. Despite all the persuasive features of Facebook in education, this tool is not formally incorporated as an educational instrument in the academic environment in Pakistan. Current study follows the Structural Equation Model modified by Premadasa et al., (2018) to find out the local students' perceptions towards their educational needs through Facebook.

Objectives

- To conclude perception of university students about Facebook adoption and its usage as a pedagogical tool for academic learning.
- To determine the key factors that may influence or stimulate university students in predicting Facebook adoption and its usage for educational activities.

Literature Review

By analyzing of previous studies provide an overview of current literature pertaining to adoption of Facebook, its uses in academic events, as a teaching tool for professors and perceptions of students to use it in their studies and course-related activities. With major focus to the Facebook; issues such as privacy, technological development, adoption and diffusion of new innovations, working memory and attentional skills were discussed in past by different scholars (Debattin, Lovejoy, Horn, & Hughes, 2009; Alloway & Alloway 2012; Mazman & Usluel, 2010; Fogel & Nehmad, 2009).

The new innovation always come up with positive and negative reactions, so as two schools of thoughts are present within the scholarly debate on the usage of Facebook and the results of the previously conducted studies can be mentioned here as evidence (Ellison, Steinfield, & Lampe, 2007; Sheldon, 2008). Tucciarone (2009), describes students' efforts to get updated with the important notices and urgent announcements about different academic deadlines; they utilized the University Facebook pages and groups during their research on Universities and Colleges. One in 12 people from all over the world have a Facebook account (Siegle, 2011). Heiberger & Harper (2008) conducted an empirical study and reported that Facebook has 85% of market shares of four-year colleges and universities in USA.

By using Facebook features, students can learn a great deal of collective knowledge and enhance critical learning by interacting with like-minded people (Moskaliuk, Kimmerle & Cress, 2009). Karimi and Khodabandeh (2013) stress upon the appropriate features of Facebook that would be supportive for students which can be helpful in their studies. Some of the departments at University of Florida as well as Stanford University in the USA were collaborating and sharing their research data, lectures and seminars with faculty and students by using diverse features of Facebook

(Fernàndez & Gil- Rodríguez, 2011). Bicen's and Uzunboylu's (2013) findings show a significant relationship between professors and students while communicating academic stuff through Facebook.

Significance of Study

After reviewing the literature, the researcher has found that there a lot of tasks required to explore the Facebook role in educational system of Pakistan. The researcher aims to explore the features that influence university students to adopt Facebook and fulfill educational purposes by applying Structural Equation Model developed by (Premadasa et al.) in 2018. The researcher hypotheses that Facebook adoption explicitly involved in predicting the purposes of using Facebook and purposes will determine the educational usage of Facebook. Current study will guide us to improve the way of use Facebook and can use it as a pedagogical tool under the light of opinions from the students collected through an adapted questionnaire.

Population of the Study

The population contains estimated 5000 students studying in 13 different departments at Okara University, Pakistan in the year 2021. This public sector university chooses to make contribution of students from all four provinces of Pakistan with diversity of social and economic backgrounds. Systematic sampling technique is used.

Research Instrument

The questionnaire proposed by Premadasa et al., (2018) is applied to include the answers from respondents to test the Structural Equation Model. The questionnaire is divided into four portions which contain demographic features, common information, and examination of Facebook adoption, usage for educational and other purposes. Second and third portion of the questionnaire is based on five points Likert-scale starts with “strongly disagree” to strongly agree”.

Procedure

Cronbac's alpha test is used to measure the reliability of variables. If the reliability score is equal to or more than 0.7 then data might be greatly reliable and consistent. At the next phase of study, SEM (Structural

Equation Model) is used to check in the significant relations between observed and latent variables.

Results

Table 1
Demographics

| Item | | Frequency | % |
|-----------------------------|---|-----------|------|
| Gender | Male | 256 | 42.9 |
| | Female | 341 | 57.1 |
| Age | 18-20 | 208 | 34 |
| | 21-23 | 280 | 46 |
| | 24-26 | 83 | 13.9 |
| | 26+ | 26 | 4.4 |
| | BSc. Honors | 492 | 82.4 |
| Program of the MSc. | | 80 | 13.4 |
| Study | PhD | 25 | 4.2 |
| | Once a day | 30 | 5 |
| | 2-5 times daily | 230 | 38.5 |
| Frequency of using Facebook | 6-10 times daily | 240 | 40.2 |
| | 11-15 times daily | 43 | 7.2 |
| | 16-20 times daily | 45 | 7.5 |
| | More than 20 times daily | 9 | 1.5 |
| | Socialization with friends | 259 | 43.4 |
| Purposes of using Facebook | Communicate with batch mates about education topics | 111 | 18.6 |
| | To let other people know about latest happening | 40 | 6.7 |
| | Connect with lost contact people | 130 | 21.8 |
| | Establish professional relationships | 20 | 3.4 |

| | | | |
|---|--|-----|------|
| | To flirt | 19 | 3.2 |
| | Others | 18 | 3.0 |
| | 1-50 | 135 | 22.6 |
| Network size (Friends on Facebook) | 51-100 | 98 | 16.4 |
| | 101-500 | 245 | 41.0 |
| | More than 500 | 119 | 19.9 |
| Number of academic related professionals (teachers, lectures) in your network | 1-1011-20 | 449 | 75.2 |
| | 21-30 | 108 | 18.1 |
| | 31-40 | 15 | 2.5 |
| | More than 40 | 10 | 1.7 |
| | 15 | 2.5 | |
| Opinion about using Facebook | It would be convenient | 79 | 13.2 |
| | It would be an opportunity to be in touch with classmates on SNSs | 403 | 67.5 |
| | Facebook is personal but not for Education | 53 | 8.9 |
| | Personal information would not be Protected Other | 31 | 5.2 |

Above table 1 shows the frequency of total 597 (100%) students, highest frequency of friends was 245 (41%). Considering academic-related professionals in their Facebook friend list, out of total 597(100%), highest frequency of students counted as 449(75.2%) only 15(2.5%) students had more than 30 academic professionals in their friend list on Facebook. Last demographic question explained that 79() students had opinion about using Facebook because they feel it a convenient tool, 403(67.5%) students had found it as an

opportunity to connect with friends, 53(8.9%) students had an opinion that Facebook is a SNS and cannot be used as pedagogical tool, 31(5.2%) students had an opinion about privacy issues, and 31(5.2%) students were in another category.

Table 2
Reliability Analysis

| Construct | Dimension | Reliability |
|-------------------|------------------|--------------------|
| Adoption | PU | 0.729 |
| | PEU | 0.867 |
| | SI | 0.850 |
| | FC | 0.739 |
| | CI | 0.777 |
| | MO | 0.913 |
| Purpose | SR | 0.834 |
| | WR | 0.718 |
| | DA | 0.745 |
| | CM | 0.723 |
| Educational Usage | C | 0.799 |
| | RMS | 0.823 |
| | IR | 0.885 |

Above table 2 demonstrates the adoption of Facebook. Reliability scores of six used indicators are: Perceived Usefulness (PU) was 0.729, PEU (Perceived Ease of Use) was 0.867, SI (Social Influence) was 0.850, FC (Facilitating Conditions) was 0.739, CI (Community Identification) was 0.777 and MO (Mobility) factor was 0.913. Reliability score of three used indicators for purposes of using Facebook are: Work-Related (WR) was 0.718, Daily Activities (DA)

was 0.745 and Communication (CM) indicator was 0.723. The internal reliability scores three used indicators for Educational Usage are: C (Collaboration) was 0.799; RMS (Resource/Material Sharing) was 0.823 and 0.885 Interactivity factor. The scores of reliabilities of indicators were more than 0.7 which decides that all the observations were greatly reliable and consistent.

Table: 3
Matrix of Pearson Correlation

| Vari able | PU | PEU | SI | FC | CI | MO | SR | WR | DA | CM | C | RMS |
|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| PEU | 0.758 | | | | | | | | | | | |
| SI | 0.351 | 0.898 | | | | | | | | | | |
| FC | 0.347 | 0.362 | 0.724 | | | | | | | | | |
| CI | 0.536 | 0.601 | 0.274 | 0.823 | | | | | | | | |
| MO | 0.324 | 0.555 | 0.268 | 0.325 | 0.767 | | | | | | | |
| SR | 0.408 | 0.423 | 0.355 | 0.384 | 0.591 | 0.831 | | | | | | |
| WR | 0.315 | 0.281 | 0.258 | 0.395 | 0.467 | 0.349 | 0.752 | | | | | |
| DA | 0.288 | 0.464 | 0.440 | 0.337 | 0.569 | 0.494 | 0.571 | 0.888 | | | | |
| CM | 0.329 | 0.153 | 0.251 | 0.461 | 0.308 | 0.310 | 0.433 | 0.586 | 0.773 | | | |
| C | 0.211 | 0.297 | 0.305 | 0.367 | 0.360 | 0.229 | 0.338 | 0.450 | 0.410 | 0.861 | | |
| RMS | 0.207 | 0.377 | 0.237 | 0.388 | 0.474 | 0.268 | 0.439 | 0.497 | 0.477 | 0.478 | 0.701 | |
| IR | 0.415 | 0.422 | 0.261 | 0.394 | 0.470 | 0.462 | 0.514 | 0.494 | 0.545 | 0.435 | 0.462 | 0.788 |

Note. Perceived usefulness = PU; Perceived ease of use = PEU; Social influence = SI; Facilitating conditions = FC; Community identification = CI; Mobility = MO; Social relations = SR; Work-related = WR; Daily activity = DA; Communication = CM; Collaboration = C; Resource/Material sharing = RMS; Interactivity = IR.

Above table 3 shows the Pearson correlation matrix's results which applied to explore the relationships among variables. The values were PU and PEU ($r = 0.758$, $p < 0.05$), SI and PEU ($r = 0.898$, $p < 0.05$), FC and SI ($r = 0.724$, $p < 0.05$), CI and FC ($r = 0.823$, $p < 0.05$), MO and CI ($r = 0.767$, $p < 0.05$), SR and MO ($r = 0.831$, $p < 0.05$), WR and SR ($r = 0.752$, $p < 0.05$), DA and WR ($r = 0.888$, $p < 0.05$), CM and DA ($r = 0.773$, $p < 0.05$), C and CM ($r = 0.861$, $p < 0.05$), RMS and C ($r = 0.701$, $p < 0.05$), and interactivity and RMS ($r = 0.788$, $p < 0.05$). The values $r > 0.5$ and $p < 0.01$ show that all of the variables were significantly correlated with each other.

Table 4
Fit Indices for selected Model

| Fit indices fit Perfect | | fit Accepted | fit Model results |
|--------------------------------|------------------|---------------------|--------------------------|
| | < 3 | 3 < < 5 | 1.432 |
| RMSEA | 0 < RMSEA < 0.05 | 0.05 < RMSEA < 0.08 | 0.451 |
| IFI | 0.95 < IFI < 1 | 0.09 < IFI < 0.95 | 0.874 |
| TLI | 0.95 < TLI < 1 | 0.90 < TLI < 0.95 | 0.814 |
| CFI | 0.97 < CFI < 1 | 0.95 < CFI < 0.97 | 0.969 |
| GFI | 0.95 < GFI < 1 | 0.90 < GFI < 0.95 | 0.883 |

Table 4 show that all the indices surpassed levels of acceptance and reached to perfect fit levels.

Table 5
Path Coefficient

| Latent Variables | Observed Variables | Path Coefficients | p > z |
|-------------------|--------------------|-------------------|--------|
| Adoption | PU | 0.71 | 0.000 |
| | PEU | 0.68 | 0.000 |
| | SI | 0.75 | 0.000 |
| | FC | 0.52 | 0.000 |
| | CI | 0.81 | 0.000 |
| | MO | 0.85 | 0.000 |
| Benefits | SR | 0.76 | 0.000 |
| | WR | 0.69 | 0.000 |
| | DA | 0.74 | 0.000 |
| Education al Uses | CM | 0.68 | 0.000 |
| | C | 0.67 | 0.000 |
| | RMS | 0.71 | 0.000 |
| | I | 0.82 | 0.000 |

Above table 5 shows the significance of observed variables in predicting latent variables. It shows that students feel more convenient in Facebook adoption when they have access to a smartphone. Community identification was the major element in predicting Facebook adoption. Results revealed that rest of the coefficients of selected variables like PU (0.71), PEU (0.68), SI (0.35), and FC (0.52), were positive and significant towards Facebook adoption. The results of observed variables like SR (0.76), WR (0.69) and DA (0.74) are in favor and impacted the aim of Facebook usage. The coefficients of selected variables such as CM (0.68), C (0.67), RMS (0.71) and I (0.82) revealed positive and highly significant relationships to predict educational usage.

Table 6
Path Coefficient and Model Fitted Values

| Relation | Path Coefficients | R²-value (%) |
|---|------------------------------|--------------------------------------|
| Adoption of Facebook vs. Purposes of Facebook Usage | 0.902 | 0.813 |
| Purpose of using Facebook vs. Facebook usage in Education | 0.732 | 0.849 |
| Adoption of Facebook vs. Facebook use in Education | 0.333 | 0.386 |

Above table 6 shows that 0.902 was the standardized path coefficient of Adoption of Facebook vs. Purposes of Facebook Usage and determinants are 81% fitted approximately of variance to purpose for using Facebook. Result expressed the variable of adopting in favor and greatly influenced aim of Facebook usage. Result directed that 0.732 was the value of standardized path coefficient and Facebook usage purpose 85% fitted approximately with the model factors of variance to Facebook usage in Education. The relation between adoption of Facebook and use in education was different as 0.333 was the standardized path coefficient and 38% fitted variance of model determinants of model 38% fitted variance to Facebook usage for educational purpose which was a weak relationship.

Discussion

The international academic arena has been evolving into new patterns and internet technologies are the most important factors in this transformation. These freehand features of Facebook app provide more space and freedom to improve the learning experience through critical discussions on a certain topic. Facebook through its potential features and significant features can be utilized as a substantial pedagogical tool but so far this dimension has not been explored by Pakistani academia. The selection of topic is based on firstly its popularity especially among university students and secondly its potential features.

The differences based on culture may have an impact on the way a certain community thinks about different aspects of daily routine life. These differences really matter to understand the perceptions, behavior, learning styles, and attitudes of students. This study is an effort to bridge the gap by using digital technology in universities; to check in the students' opinion about Facebook usage as a pedagogical tool. The consequences of this study show that Mobility (MO) is the main indicator in foretelling the variable "Facebook adoption"; Pakistani university students are more convenient to accept it when they have access to a smartphone because they can quickly manage all of their formal/informal tasks. Students are more inclined to maintain social relations, interact and communicate with their friends, relatives, and colleagues by using Facebook. Ardent and vibrant response from students about use of Facebook in educational activities is a positive sign. The findings show a positive attitude among students' opinions towards Facebook usage as a pedagogical tool.

However, important point is that it was not originally designed to meet pedagogical demands but potential Facebook usage can enhance the learning outcomes. Educationists must need to plan the learning process in a well-structured way; this time demands to revisit the course objectives, learning strategies and students' expectations. Facebook can be useful tool along with potential features that can be used by professors as a part of their teaching methodologies to engage the young class for interactive participation and critical learning. These suggestions are important to get the full advantages of Facebook as a pedagogical tool.

Conclusion

In the current era of versatile technology, Facebook among other social networking forums is becoming more and more popular among masses and students because of its features diversity. Now users can easily get access to Facebook by smart phones. The basic purpose of using Facebook is to maintain social relations. But users also build new relationships and interact with other user globally by using Facebook. Students and faculty members fulfill their educational needs too from different Facebook features. Facebook also offer many amazing features like face to face conversations, messaging, calling, videos, memes and marketing platforms as well.

References

Ajjan, H., & Hartshorne, R. (2008). Investigating faculty decisions to adopt Web 2.0 technologies: Theory and empirical tests. *The internet and higher education*, 11(2), 71-80.

Bicen, H., & Cavus, N. (2011). Social network sites usage habits of undergraduate students: case study of Facebook. *Procedia-Social and Behavioral Sciences*, 28, 943-947.

Tapscott, D., & Williams, A. D. (2010). Innovating the 21st-century university: It's time. *Educause review*, 45(1), 16-29.

Prensky, M. (2010). Why You Tube matters. Why it is so important, why we should all be using it, and why blocking it blocks our kids' education. *On the Horizon*, 18(2), 124-131.

Nowak, M., & Spiller, G. (2017). Two billion people coming together on Facebook. *Facebook newsroom*.

Pakistan Social Media Stats 2018. (2022, September 10). Retrieved from <https://alphapro.pk/pakistan-social-media-stats-2018/>

Bullas, J., social media facts and statistics you should know in 2015. Retrieved at <http://www.jeffbullas.com/2015/04/08/33-socialmedia-facts-and-statistics-you-should-know-in-2015/>.

Abe, P., & Jordan, N. A. (2013). Integrating social media into the classroom curriculum. *About Campus*, 18(1), 16-20.

Stutzman, F. 2006. Proceedings from 2006 iDMAa and IMS Code Conference. University of Miami, Oxford, OH.

Ratliff, A. F. (2011). Are they listening? Social media on campuses of higher education. *Journal of the Australian & New Zealand Student Services Association*, (38).

Schwartz, H. L. (2009). Facebook: The new classroom commons. *The Chronicle of Higher Education*, 56(6), B12-B13.

Alloway, T. P., & Alloway, R. G. (2012). The impact of engagement with social networking sites (SNSs) on cognitive skills. *Computers in Human Behavior*, 28(5), 1748-1754.

Debatin, B., Lovejoy, J., Horn, A., & Hughes, B. (2009). Facebook and online privacy: Attitudes, behaviors, and unintended consequences. *Journal of Computer Mediated Communication*, 15(1), 83-108.

Ellison, N. B., Steinfield, C., & Lampe, C. (2007). The benefits of Facebook "friends": Social capital and college students' use of

online social network sites. *Journal of Computer Mediated Communication*, 12(4), 1143-1168.

Moskaliuk, J., Kimmerle, J., & Cress, U. (2009). Wiki-supported learning and knowledge building: effects of incongruity between knowledge and information. *Journal of Computer Assisted Learning*, 25(6), 549-561.

Fernàndez, C., & Gil-Rodríguez, P. E. (2011). Facebook as a collaborative platform in higher education: The case study of the Universitat Oberta de Catalunya. *Technology-Enhanced Systems and Tools for Collaborative Learning Scaffolding. Studies in Computational Intelligence*, 350(1), 27-46.

Bicen, H., & Uzunboylu, H. (2013). The use of social networking sites in education: A case study of Facebook. *J. Univers. Comput. Sci.*, 19(5), 658-671.

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

Fogel, J., & Nehmad, E. (2009). Internet social network communities: Risk taking, trust, and privacy concerns. *Computers in Human Behavior*, 25(1), 53-160.

Heiberger, G., & Harper, R. (2008). Have you Facebooked Astin lately? Using technology to increase student involvement. *New Directions for Student Services*, 124, 19-35.

Karimi, L., & Khodabandelou, R. (2013). Perspective of Iranian university students about academic use of social networking sites: A study of Facebook. *International Journal of Academic Research in Progressive Education and Development*, 2(3), 113-123.

Sheldon, P. (2008). Student favourite: Facebook and motives for its use. *Southwestern Mass Communication Journal*, 23(2), 39-53.

Siegle, D. (2011). Facing Facebook: A guide for non-teens. *Gifted Child Today*, 34(2), 14-19.200

Tucciarone, K. M. (2009). Speaking the same language: Information college seekers look for on a college web site. *College and University*, 84(4), 22-31.2011