



Structural Equation Modeling of Educational Use of Facebook among University Students in Pakistan

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Abstract: South Asia, the world's most populous region, has the highest number of young social networking site users. Pakistan has over 40 million young active Facebook users among them. As a result, there is a greater need to explain how young people, particularly students, can use social networking sites like Facebook for educational purposes. The purpose of this paper is to investigate Pakistani students' attitudes, perceptions, and behavior toward Facebook, as well as how they use the platform for learning purposes. The researchers conducted a cross-sectional survey at three Pakistani universities. The study included a sample of 1050 students who were Facebook users and were selected randomly. We developed a structural equation model to outline the relationships between different types of independent and dependent variables. We used appropriate fitting indices such as the goodness of fit index (GFI), comparative fit index (CFI), and non-normal fit index (NFI) to test our model. The proposed model's results confirmed the hypothesized latent structures as well as the theoretical validity of the probed factors. The study's findings may be useful in better understanding the educational use of social networking tools in Asian and non-western countries.

Introduction

The proliferation of digital technologies (web 2.0) has transformed higher education worldwide (Sadowski, Pedititis & Townsend, 2017; Ernst & Young, 2012). Social network sites (SNSs) are considered educational technology that can be effectively used for teaching and learning (Akçayır, 2017). Keeping this in view, many academics conducted studies to explore the educational potential of Facebook (Ali, 2017; Balakrishnan et al., 2017; Mancal & Ranieri, 2016).

Pakistan, like other developing countries, has stepped into a digital culture (Mahmood, Bhutta, & Haq, 2018). The country has over 148 million celluar and 54 million internet subscribers (PTA, 2018). Most of them are students because

they have more access to the Internet than others. This is due to huge investments made by the Government of Pakistan to enhance the use of information and communication technologies (ICTs) for education. The Prime Minister's National Laptop Scheme has received the most praise in this regard. This project has provided students with free laptop computers and internet access (HEC, 2018). This project has altered the country's digital landscape because young people are now tactfully using ICT-based applications in their daily lives. As a result, they may be referred to as the "internet generation" The "internet generation" is believed to have grown up (Prensky, 2010).

Facebook is a social networking platform that is used all over the world. This platform is well-liked by users of all ages, particularly those in their younger years. Facebook has a level of popularity among young people in Pakistan that is comparable to that seen in other nations and communities. There are presently over 40 million people using Facebook in Pakistan, and of them, 66 percent are considered to be young adults (under the age of 25). This unequivocally proves that the young of Pakistan are ardent users of Facebook (Qureshi, [2016](#)).

There is a widespread misunderstanding regarding the extent to which young people in Pakistan use Facebook, despite the massive efforts made by the government to equip young people with digital skills. This is a result of the strong traditional customs that are prevalent in South Asian nations (Mahmood, Zakar, & Zakar, [2018](#); D'Souza, 2010). Within these cultures, individuals do not perceive contemporary communication tools in a favourable light. People have the perception that young people, and students in particular, spend an excessive amount of time on Facebook. As a consequence of this, Facebook hinders their capacity for learning. The findings of certain research (Farooqi et al., [2013](#); Rafiq & Ameen, [2012](#)), which supported this passive way of thinking, revealed unfavourable social networking use in Pakistani culture. According to research conducted by Haq and Chand ([2014](#)), students' use of Facebook has a detrimental impact on their academic performance. In addition to their enormous claim, the research does not include a statistical analysis or a sample that is typical of the whole. In this environment, college and university students who use Facebook and several other social networking services are subjected to a great deal of criticism (Ertmer et al., [2011](#)). In contrast, other studies have shown that students use Facebook to search for and share information (Mahmood, Bhutta, & Haq; [2018](#)), participate in politics (Ahmad & Shiekh, [2013](#)), and develop social capital through the use of Facebook (Mahmood,

Zakar, & Zakar, 2018; Sánchez, Cortijo, & Javed, [2014](#); Saud, [2018](#)). Despite the existence of these conflicting points of view, there is still a dearth of scholarly research on the educational usage of Facebook among Pakistani users. What role does Facebook play in the academic lives of Pakistani university students? The purpose of this research is to try to answer the research question that was presented before.

Literature Review

Students in educational institutions all throughout the globe have a favourable opinion of Facebook (Hope, [2016](#)). They are the most frequent consumers of these forms of electronic communication technologies (Duggan & Smith, [2013](#); Smith & Caruso, [2011](#)). They learn more about the individuals they encounter in real life via the usage of Facebook. They are able to maintain relationships with their families, friends, students, and coworkers (Mahmood et al., 2018). Students in higher education may benefit from using Facebook (Munoz & Towner, 2009). According to the results of a prior study, it has the potential to be exploited for instructional reasons (Sharma, Joshi, & Sharma, 2016). Students may benefit from its features, such as group collaboration, peer feedback, and course subject discussions, which can aid in their educational pursuits (Bumgarner, 2007; Mazman & Usluel, 2010; Mason, [2006](#)). In addition, Facebook makes it possible for instructors and students to collaborate educationally by sharing images and multimedia clips (Qureshi, Raza, & Whitty, 2014). As a consequence of this, educators are now able to use Facebook as a teaching tool in the classroom. According to Mazer, Murphy, and Simonds (2007), the usage of Facebook by teachers may have an effect on the student's level of motivation as well as their attitude toward their instructors. Students are of the opinion that Facebook may be utilised to improve educational opportunities (Hung & Yuen, [2010](#)). They are able to boost their engagement with their peers, participate in debates pertaining to the class, and

distribute lecture notes, all via the usage of Facebook (Irwin, Ball, Desbrow, & Leveritt, 2012). Students at the university level have the opportunity to generate and exchange tacit knowledge in a more intimate environment thanks to Facebook, which provides them with a platform for doing so (Ractham & Firpo, 2011). In addition to this, according to Wang, Woo, Quek, Yang, and Liu (2012), Facebook has the capacity to either replace or enhance a learning management system, making it an excellent host site for blended learning settings (McCarthy, 2010).

Research Model and Hypotheses Section 1.2

According to Sanchez, Cortijo, and Javed (2014), several attempts have been made by academics throughout the course of time to incorporate newly developed technology. One school of thought seeks to explain the choices that individuals make while making decisions (Venkatesh & Davis, 2000), whilst another school of thought places a greater emphasis on the motivating factors that play a role in the adoption of such technologies (Lai & Chen, 2011). For the sake of our investigation, the conceptual model that Mazman and Usluel provided back in 2010 served as our primary point of reference. This model takes into consideration both the technology and the socio-cultural aspects of social networking services (SNSs). A proposed model was used in our research, and one of the independent variables was people's propensity to utilise Facebook. The adoption of Facebook usage provides an explanation of the beneficial and instructive uses of Facebook (Demir, M, 2018; Broadbent et al., 2018). The adoption rate of Facebook was evaluated based on factors like perceived ease of use, perceived utility, social impact, and situations that facilitated the adoption. The purpose of using Facebook was evaluated based on day-to-day activities, professional responsibilities, and personal relationships. The usage of Facebook for educational purposes was measured using a number of different criteria, including

communication, the sharing of resources, and cooperation. The following assumptions were made based on the information provided by this model:

H₁: Perceived ease of use, social influence, perceived usefulness, and facilitating conditions manifest the adoption of Facebook among students

H₂: Work-related, daily activity, and social relations have a significant positive effect on the purpose of Facebook use.

H₃: Educational use of Facebook can be assessed through communication, collaboration and resource sharing.

H₄: Adoption of Facebook use predicts purposive use of Facebook.

H₅: Adoption of Facebook use predicts educational use of Facebook.

H₆: Purpose of Facebook use explains the education usage of Facebook.

Research Methods

This part of the study presents the research methods.

Study Settings

In this study, the quantitative research technique was used, and the participants were recruited from the city of Lahore, which is the second most populated city in the nation. The city of Lahore has a greater concentration of educational establishments than any other metropolis (Zahra, 2013). As a direct consequence of this, the majority of students choose to pursue their higher education in Lahore (Tariq et al., 2017). The researchers selected to conduct their studies at the Technology Lahore, Forman Christen College Lahore, University of Punjab, and the University of Engineering, all of which are recognised academic institutions that provide degrees. A total of 1,050 students from various educational establishments participated in the research study.

Instrument

For the purpose of data collection, we employed a questionnaire that was organised and could be

self-administered. This musical instrument was divided into three distinct parts.

Variables Relating to Socio-demographic

The first portion of the report focused on socio-demographic information as well as Facebook profile attributes. These factors included your gender, the amount of money your family made each month, the academic field in which you were enrolled, and your present degree of schooling. The students' Facebook profiles included the number of accounts they had, the total number of acquaintances they had, the number of close friends they had, and the average amount of time they spent on Facebook each day.

Independent Variable

The degree to which users adopted Facebook was considered an independent variable, and it was evaluated using four different observable variables in total. The perceived usefulness, perceived simplicity of use, societal influence, and settings that were favourable to its application were some of the criteria that comprised these attributes. In order to quantify all of these different aspects, the researcher relied on a scale that had first been developed by Mazman and Usluel and then refined by Sánchez et al. (2014). A Likert scale with five questions was used to assess the perceived ease of use, perceived usefulness, and perceived social effect of the product. Each question was worth five points. For instance, items such as "allows me to communicate with more people in a short period of time. Other items included "allows me to share more in a short period of time" and "allows me to have more control over my relationships." For the purpose of gauging users' opinions on the level of difficulty involved in using Facebook, questions along the lines of "find it simple to use Facebook features and find it easy to become a member on Facebook" were posed to participants. The

enabling circumstances were evaluated using a total of seven distinct questions, each of which was scored using a Likert scale with a possible maximum of five points. Each of these observed variables has an alpha value that is within the allowable range, according to the results of the analysis of reliability: ease of use (Cronbach alpha =.701), usefulness (Cronbach alpha =.734), social influence (Cronbach alpha =.729), and facilitating conditions (Cronbach alpha =.807).

Dependent Variables

The Facebook and purposes of using it and how it is to be used for educational purposes served as the dependent variables in this study. The goal of using Facebook was evaluated based on three different variables: everyday activities (Cronbach alpha =.622), work-related activities (Cronbach alpha =.918), and social interactions (Cronbach alpha =.721). Daily activities and work-related concerns each received two points out of a possible five on the Likert scale, while social interactions were given six. There were three observable factors that were used in the evaluation of Facebook's educational use: communication (Cronbach alpha =.808), cooperation (Cronbach alpha =.609), and resource sharing (Cronbach alpha =.618). There were six different items used to assess communication, and there were two different things used to assess teamwork. The initial scale that measured resource and material sharing consisted of two different components. The researcher, on the other hand, divided one of the categories into two distinct parts: the availability of multimedia materials and media assistance. The scales for all of the observed variables were derived from previous research conducted by (Ali et al., 2017; Ali. 2017b; Mazman & Usluel, 2010: Sánchez et al. 2014).

Data and Analysis

Table 1. Socio-demographic variables of the respondents (n=1050)

Variables	Frequency	Percent
Gender		
Male	588	56.0
Female	462	44.0
Monthly Family Income		
10,000–100,000	822	78.3
100,001–200,000	100	9.5
200,001–300,000	128	12.2
University		
Uni: of Punjab	450	42.9
Uni: of Eng. and Tech.	150	14.3
Forman Christ. College	450	42.9
Discipline		
Social Science	148	14.1
Computer Science	158	15.0
Engineering & Technology	391	37.2
Natural & Environment Sciences	102	9.7
Arts & Humanities	129	12.3
Management Sciences	122	11.6
Educational Level		
14 Education in Years (BS)	636	60.4
16 Education in Years (MA/MSc.)	260	24.8
18 Education in Years (MS/MPhil)	134	12.8
21 Education in Years (PhD)	22	2.10
Total	1050	100

Of the 1050 respondents, almost two third of them (60.4 %, n=923) had attained education up to graduation. Most of them were male respondents (56%, n = 588), and the majority were getting an education in engineering and technology. Most of the respondents were from middle-class families because three-fourths of respondents indicated their monthly family income was between ten and

hundred thousand (See Table 1). According to the findings, one-fourth of the respondents had more than 200 acquaintances on Facebook. Almost half of the respondents reported having 1–20 close friends on Facebook. One-third of university students reportedly spend less than one hour per day on Facebook, and the majority have only one personal account (see Table 2).

Table 2. Facebook profile characteristics of the respondents (n=1050)

Variables	Frequency	Percent
Number of Friends		
1–40	133	12.7
41–80	149	14.2
81–120	177	16.9

121-160	182	17.3
161-200	149	14.2
Above 200	260	24.8
Number of Close Friends		
1-20	494	47.0
21-40	219	20.9
41-60	177	16.9
Above 60	160	15.2
Time Spent on Facebook (In Hours)		
Less than one hour	349	33.2
1-2	291	27.7
2-3	134	12.8
3-4	106	10.1
Above 4	170	16.2
Number of Facebook Accounts		
1	590	56.2
2	325	31.0
3	85	8.1
4	23	2.2
5	20	1.9
6	7	.7
Total	1050	100.0

Table 3. Descriptive Statistics of the Adoption of Facebook

Adoption of Facebook	Mean	SD
Perceived Ease of Use (Cronbach alpha= .701)		
In general, I don't have a hard time figuring out how to utilise Facebook.	3.37	1.77
I had no trouble signing up for Facebook at all.	3.41	1.43
The functions of Facebook are simple for me to use.	3.27	1.37
It is not difficult for me to educate myself on my own on the capabilities that Facebook offers.	3.08	1.37
My interactions with Facebook are straightforward and easy to comprehend.	3.17	1.18
Social Influence (Cronbach alpha= .729)		
The majority of the individuals I know use Facebook; thus, that is the primary reason I use it.	3.23	1.24
I am able to communicate and exchange information with the folks in my immediate vicinity by using Facebook.	3.44	1.25
I pay more attention to the Facebook features that are being utilised by the people in my network of friends and connections.	3.44	1.13
I go into Facebook because a lot of the people I know anticipate that I will.	3.53	1.21
It was suggested to me by a number of people that I should join Facebook.	3.52	1.19
Perceived Usefulness (Cronbach alpha= .734)		
Facebook enables me to communicate more in a shorter amount of time.	3.26	1.57
Facebook gives me the ability to exert greater influence on the connections in my life.	3.35	1.53

Facebook enables me to communicate with a greater number of individuals in a shorter amount of time.	3.32	1.35
The usage of Facebook, in general, helps increase the quality of my personal connections.	3.37	1.22
Facilitating Conditions (Cronbach alpha= .807)		
Anyone can help me use Facebook	3.24	1.24
I find compulsory resources to use Facebook with ease	3.35	1.22
I can get technical support by email if I have a problem using Facebook	3.34	1.27
Facebook offer technical support when needed	3.07	1.27
Facebook is similar to other social networks that i use	3.26	1.15
I can connect to Facebook wherever there is internet connectivity	3.27	1.32
In general, Facebook offer suitable support	3.28	1.12
Community Identity (Cronbach alpha= .729)		
Using Facebook, I can join groups that I am interested in.	3.37	1.26
Using Facebook, I can create groups to share information with others that have the same interests.	3.16	1.38
I use Facebook to work as a team with the other members of the groups I joined	3.28	1.29
Facebook allows the creation of groups of people who share the same interests and needs.	3.35	1.25

The results of the observed variables of Facebook adoption are presented in Table 3. The findings indicated that scales used to measure perceived ease of Facebook use (Cronbach's $\alpha = 0.701$), social influence (Cronbach's $\alpha = 0.729$), perceived usefulness (Cronbach's $\alpha = 0.734$), facilitating

conditions (Cronbach's $\alpha = 0.807$) and community identity (Cronbach's $\alpha = 0.729$) were well above than acceptable range ($\alpha > 0.60$). The mean values for these scales ranged from 3.08 to 3.52, which indicated that students agreed with the statements (see Table 3).

Table 4. Descriptive Statistics of Purpose of Facebook Use

Purpose of Facebook Use	Mean	SD
Social Relations (Cronbach alpha= .721)		
I use Facebook to be updated on the events of my previous school and former classmates	3.18	1.20
I use Facebook to find new friends	3.23	1.28
I use Facebook to share information and resources with my friends	3.00	1.34
I use Facebook to communicate with my friends	3.34	1.23
I use Facebook to locate friends I have not been in touch with for a while	3.20	1.30
I use Facebook to join groups to communicate about common interests	3.06	1.30
Work Related (Cronbach alpha= .918)		
I use/would use Facebook as a resource to increase my performance in my courses.	3.35	1.24
I use/would use Facebook to communicate with my classmates about homework and group projects.	3.20	1.32
Community Identity (Cronbach alpha= .622)		
I use Facebook to find out what is new and innovative.	3.27	1.78
I use Facebook to get up-to-date information and news about my contacts.	3.23	1.33

Descriptive statistics on the purpose of Facebook users are presented in Table 4. According to the findings, university students agreed to use

Facebook purposefully. These purposes were maintaining social relations, work-related use, and possessing students' community identity.

Mean analysis ranged from 3.00 to 3.35, with high variability in the responses (SD 1.20–1.78). Furthermore, all scales showed a good reliable fit

as the values of Cronbach's alpha for social relations, work-related, and community identity was above than acceptable fit ($\alpha \geq .60$).

Table 5. Descriptive Statistics of Educational Use of Facebook

Educational Usage of Facebook	Mean	SD
Communication (Cronbach alpha= .808)		
The use of Facebook improves communication between classmates	3.25	1.28
The use of Facebook improves communication between teachers and students	3.21	1.17
The use of Facebook improves classroom discussion	3.17	1.30
The use of Facebook improves the delivery of course content and resources	3.30	1.27
The use of Facebook improves the communication of announcements about courses, classes and university	3.44	1.14
Facebook provide resources to support students when doing their assignment	3.23	1.24
Collaboration (Cronbach alpha= .609)		
The use of Facebook encourages the creation of academics groups of people with the same interest	3.16	1.29
Facebook is an appropriate platform for exchanging course-related information	3.12	1.15
The use of Facebook improves students' group work	3.24	1.22
Resource Material Sharing (Cronbach alpha= .618)		
Facebook provide the resources to share a wide variety of resources and learning materials	3.39	1.79
Facebook provide audio media support to improve the educational experiences	3.34	1.20
Facebook provide video media support to improve the educational experiences	3.22	1.21

Like adoption and purpose of Facebook use, the observed variables of educational use of Facebook, namely; communication (Cronbach's $\alpha = 0.808$), collaboration (Cronbach's $\alpha = 0.609$) and resource material sharing (Cronbach's $\alpha = 0.618$), were reliable and values of Cronbach alpha were acceptable ($\alpha \geq 0.6$). Mean analysis indicated that

the students agreed to use Facebook for education purposes as it allowed them to communicate with each other related to their educational activities. Furthermore, they used Facebook to provide them with a platform to collaborate and utilize it also for sharing educational content with each other (Table 5).

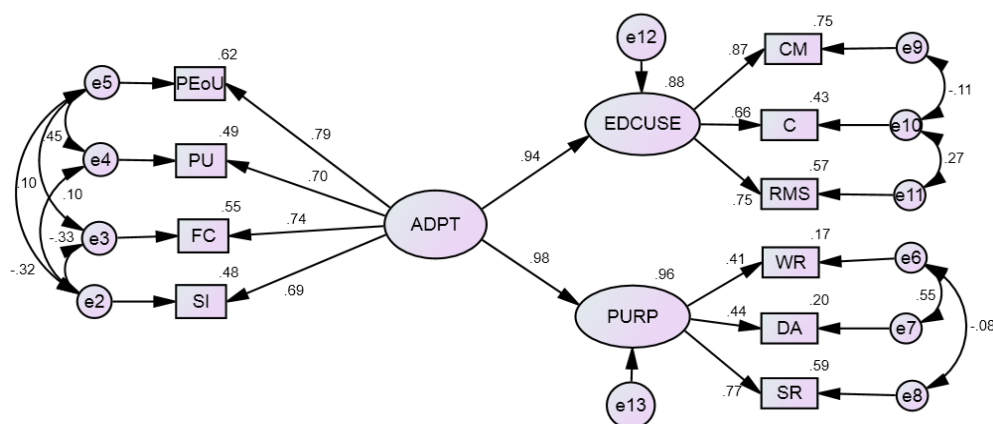


Figure 1: Structural Equation Model (SEM) Model of adoption, purpose and educational usage of Facebook

Table 6. SEM model fit indices explaining adoption, purpose and educational use of Facebook

Model Fit Ind:	G. Fit	Accept. Fit	Mod: Values
Chi-square (X^2)	Non-Significant	Non-Sig	Sig
NFI.	0.950 < AGFI < 1	0.900 < AGFI < 0.950	.935
CFI.	0.950 < CFI < 1	0.900 < CFI < 0.950	.939
GFI.	0.950 < GFI < 1	0.900 < GFI < 0.950	.933

Table 6 provides a breakdown and explanation of the model's fit indices that may be found below. The chi-square test revealed that the model could not provide a satisfactory fit to the data [$X^2(24) = 377.99$]. Despite this, further fit indices (CFI = .939, GFI = .933, and NFI = .935) revealed that the sample had an adequate fit. Table 7 displays the estimated route coefficients of the observable variables that were loaded into the three latent variables for this experiment. It has been discovered that each of the coefficients that exist between the development of Facebook and its observable variables is statistically significant. This conclusion was reached after careful consideration (p less than .005). This result offered evidence in favour of the hypothesis that the four observed variables, namely perceived ease of use (= 0.79), social influence (= 0.69), perceived usefulness (= 0.70), and facilitating conditions (= 0.74), have a significantly positive influence on an adaptation of Facebook. The values for these variables were as follows: perceived ease of use = 0.79, social influence = 0.69, perceived usefulness = 0.70, and facilitating conditions = 0.74. (H1 supported). In a similar vein, the significance of the relationship between the reason for the establishment of Facebook and

the variables that it monitors can not be understated (p less than .005). According to the results of this research, the three recognised features that have a significant positive effect on the purpose of Facebook use are work-related (=0.41), daily activity (=0.44), and social contacts (=0.77). (H2 supported). Additionally, the identified features of educational use of Facebook, which included communication (= 0.87), collaboration (= 0.66), and resource material sharing (= 0.75), had a substantial effect on the educational usage of Facebook as well (H3 supported). In addition, the data showed that the adoption of Facebook use had an effect on purpose (=0.98, $R^2=.96$, $p.001$) and that it had an effect on the educational use of Facebook (=0.94, $R^2=.88$, $p.001$) as well. This was proved by the fact that both of these correlations were significant (H4 and H5 supported; see table 8). The researchers were unable to find any relationship between the reasons people use Facebook and the ways in which Facebook may be used educationally in this specific inquiry. As a consequence of this, they did not agree with Hypothesis 6, which proposed that the fundamental objective of Facebook was to serve as a platform for educational applications.

Table 7. Path Coefficients of Observed Variables

Latent Variable	Observed Variable	Path Coefficients
Adoption	Ease of Use	.79***
	Usefulness	.70***
	Facilitating Conditions	.74***
	Social Influence	.69***
Purpose	Social Relations	.77***
	Daily Activity	.44***
	Work Related	.41***
Educational Use	Communication	.87***

	Collaboration	.66***
	Resource Sharing	.75***

Note: ***P<.001

Table 8. Estimates of SEM Model

Latent Variable	Squared Multiple Correlations (R ²)	Standardized Estimates
Adoption on		
Purpose	.96***	.98***
Educational Use	.88***	.94***

Note: ***P<.001

Discussion

In spite of the fact that Facebook was not initially developed with educational objectives in mind, there is no denying the platform's ability to make one's educational experience more enjoyable. According to the findings of a large number of studies, Facebook can be successfully utilised for instructional purposes. Explanatory methods such as structural equation modelling were used in the majority of empirical studies (Al Omoush, Yaseen, & Alma'Aitah, 2012; Gruzd, Staves, & Wilk, 2012; Milosevic, Zivkovic, Arsic, & Manasijevic, 2015; Paul, Baker, & Cochran, 2012) to explain students' adoption of Facebook (SEM). Mazman and Usluel (2010) and Sanchez et al. (2014) investigated the relationships between adoption processes, user purposes, and educational use of Facebook by employing SEM in their research. According to their findings, the purposeful and educational use of Facebook by students can be explained by students' adoption of Facebook. In our study, we also used SEM on a Mazman and Usluel conceptual model (2010). The current study's findings add to previous research (Mazman & Usluel, 2010; Sanchez et al., 2014), indicating that Facebook adoption predicts purposeful and educational use of Facebook (H4 and H5 accepted).

According to the assumptions made in the model, the rate of Facebook users can be determined by looking at four different observed variables: perceived ease of use, perceived usefulness, social influence, and facilitating conditions. According to the findings of this

study, the use of Facebook among students can be broken down into four categories: perceived ease of use; social influence; perceived usefulness; and facilitating conditions. Mazman and Usluel (2010) developed three observed variables to measure a latent variable, which they referred to as the educational use of Facebook. These observed variables were communication, collaboration, and resource sharing. In this work, their proposed model was put through its paces using SEM. Previous research (Mazman & Usluel, 2010; Sanchez et al., 2014; Manasijevi et al., 2016) has shown that the educational use of Facebook can be evaluated through communication, collaboration, and resource sharing. These findings confirm those previous findings.

In our structural equation modelling (SEM), we had a hypothesis (H2) that stated that work-related, daily activity and social relationships all have a significant positive effect on the purpose of using Facebook. The findings also provided support for hypothesis 2, and they are in line with those of earlier studies. In contrast, the findings of this study showed no correlation between the reasons people use Facebook and the educational content they access on the platform. This finding goes against what was found in earlier research (Mazman & Usluel, 2010; Sanchez et al., 2014; Manasijevi et al., 2016).

Conclusion

The results of this research have important ramifications for appreciating the reasons Pakistani university students use Facebook and

the ways in which they utilise it. This survey disproves the misconceptions that people have regarding the Facebook usage of students in Pakistan. Students at universities in Pakistan use Facebook in the same manner that their counterparts in other countries use the platform. Additionally, for instructional reasons, they make use of this site. According to findings from earlier studies, students use Facebook to distribute educational content such as projects, papers, and beneficial resources. This content may take the form of text, voice, videos, images, or links to other websites or resources (Hamid et al., 2015; Manasijevi et al., 2016). This research also offered empirical data to support the hypothesis that Pakistani students exchange academic resources with one another on Facebook. In addition, earlier studies revealed that Facebook might be a good instrument for the cooperation of students. The outcomes of this investigation provided more evidence in favour of this notion. It was found that students in Pakistan were using Facebook to communicate and work with their peers (Ainin et al., 2015). As a direct consequence of this, Facebook did not hinder but rather aided in the users' educational pursuits (Ali, 2017c; Aydin, 2012).

According to the findings of this survey, Pakistani students use Facebook to keep in touch with their friends. They use Facebook not only to keep in touch with their friends and family but also to carry out tasks relevant to their jobs and their everyday lives via the medium of Facebook. In addition to utilising other social networking sites (SNSs) or more conventional methods of connection, they choose to utilise Facebook because of its user-friendliness, circumstances that facilitate usage, perceived utility, and social impact. This outcome is also in line with previously discovered patterns (i.e., Ali et al., 2017b; Sanchez et al., 2014; Mahmood et al., 2018). The learning process can be expanded beyond the constraints of a conventional classroom thanks to Facebook's capacity to build robust communities of practice for teaching and learning. Facebook

can be utilised in Pakistan, just as it can be used in any other nation, to encourage collaborative learning methods, connect students and instructors, boost learners' motivation, and make classrooms more comfortable.

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