

Motives As Predictors Of Facebook Usage Mediated By Gender: Cases Study Of University Students In Lahore

Abstract: Facebook (FB) is taking a lot of time of university students by compromising on educational motives. It is aimed to analyze the effects of motives on Facebook users to find the best predictors mediated by gender. University students from Pakistan constitute the population. The students are selected (n = 397) from universities in Lahore for the purpose. The offline cross-sectional survey is used for the collection of data. The study finds that social interaction, spy motives, educational motives and political motives are significant predictors of Facebook usage among university students in Lahore. It is found that 'male' students, in comparison to 'female', are using Facebook more for self-presentation and companionship motives in particular

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Key Words: Facebook usage, Gender, Survey, Uses and gratifications.

Introduction

The excessive use of social networking sites (SNS) has a significant impact on the interaction patterns of youth with strong ties ([Saleem, Malik, Ali, & Hanan, 2014](#)). Previous research shows that these SNS have been used for developing social capital ([Ahmad et al., 2016](#)). Facebook was found to be university students' favorite ([Ahmad, Mustafa, & Ullah, 2016](#)). Thirty-two (32) million Facebook subscribers are estimated in Pakistan at the time of writing ("[Internet Usage in Asia, 2020](#)"). In similar research, the use of Facebook is found to be for interaction socially among university students ([S.Z, Omar, Bolong, & Osman, 2011](#)). The internet is being used in

Pakistan during a 'political crisis,' and youth have been found to know and raise their voice for their rights through blogs ([Shaheen, 2008](#)). Youth in Pakistan have been found to share the policy of a particular party on their Facebook timeline ([Masiha, Habiba, Abbas, Saud, & Ariadi, 2018](#)). Facebook is also found to be used for religious motives in Muslim countries ([Shahnaz & Wok, 2011](#)). The association of diverse motives such as using for religious rituals, educational activities, business-oriented tasks, communicating with dear ones, socially interacting with dear ones, gratifying political needs and entertaining purposes with the Facebook addiction is

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researched ([Dhaha & Igale, 2014](#)). The motives like religious, educational, business, social interaction, communication, political and entertainment motives are researched in the context of multiple social media sites like Twitter, Facebook, Skype, Yahoo, Friendster and Blog ([Wok & Misman, 2015](#)). Self-promotion is found to be the positive predictor of Facebook usage ([Blachnio, Przepiorka, Boruch, & Bałakier, 2016](#)). Personal identity, surveillance, social interactivity and diversion have motivated the millennial generation to Facebook usage ([Kimani, 2018](#)).

Significance of the Study

The university students are empowered with digital technologies and Facebook is one of them which has educational implications. University students are rational human beings and their rationality can be determined by assessing the gratifications for the educational motives for Facebook usage. The gratification of other motives should be the second priority of university students. It is inferred from international literature that Facebook is being utilized by students for multiple gratifications. However, in this environment of Facebook ecology, there is a need to explain the diverse motives of education, social interaction, passing the time, entertainment, self-presentation, political, religious, companionship, self-presentation and spying and their associations with the Facebook usage. The study is of particular importance because it is observed that university students are not using Facebook for educational motives and using it for diversionary motives like passing the time and entertainment. It is also inferred from the literature that there is gender inequality, and significant differences are observed in male and female gender of university students for the motives for Facebook usage. The current study is unique because the studies being reviewed have not used the number of variables in one model. There is still limited research on the tradition of uses and gratifications from Pakistan with the diverse motives and the study at hand it is being done in Pakistani culture. It is important to know what students are doing with the dynamic social media platform of Facebook besides educational gratifications. The study also

explains gender imbalance for individual gratifications for Facebook usage.

Objectives of Research

1. It is to explain the effects of motives of social interaction, entertainment, communication, education, political, business, religion, passing time, companionship, self-presentation, and spying on Facebook usage to find the best predictors of Facebook usage.
2. There might be individual differences between male and female gender between the associations of motives and Facebook usage; therefore, the mediation of gender is explained in these associations.
3. The individual differences are also observed in literature in the context of male and female gender for the specific 'motives for Facebook usage'. Therefore the difference in male and female gender is explained for each motive.

Literature Review

Female students are among the active users of the Facebook site in Malaysia with good informational and communication skills ([SZ et al., 2011](#)). Facebook is found to be motivated by two primary needs, one being the need to belong and the second is the need for self-presentation; the collectivist societies are found to display a greater need to belong, whereas people from individualistic cultures display a greater need for self-presentation ([Nadkarni & Hofmann, 2012](#)). In addition to this, demographics are found to be contributing to the need to belong ([Nadkarni & Hofmann, 2012](#)).

[Hussain and Saleem \(2016\)](#) have found that students in Pakistan have not been using Facebook to its utmost potential and revealed that the majority of students are using it for communication with friends and family (51%) when compared with educational motives (43%). The percentage for communication with close relations is found to be higher than using it for educational purposes among students [Shahnaz, and Wok \(2011\)](#) have used the survey method and have revealed that the majority of students are Facebook users. The aggregate of the extrovert

female gender of twenty-two years and above is found to be using Facebook for the religious motives in their study.

The top three social networking sites are found to be Facebook, Yahoo, and Skype and most of the social networking sites are found to be used for "social, educational and communication motives," respectively ([Wok & Misman, 2015](#)).

It is stated in previous literature that Facebook is the most popular social networking site in Pakistan, especially among students between the ages of eighteen and twenty-nine years; however, Twitter and Linked in are less popular in Pakistan ([Ahmad et al., 2016](#)). [Kimani \(2018\)](#) concluded that the use of Facebook has the greatest effect on Facebook behavioral usage, followed by underlying motivations to use Facebook, while consequences of using Facebook have the least effect on the Facebook behavioral usage among the millennial generation. [Kimani \(2018\)](#) recommends training workshops for "Facebook (FB) literacy ." [Hossain \(2019\)](#) has focused on the Bangladeshi population only, so the researcher has advised being cautious in generalizing the results of "motives for FB use" to other settings. However, the study triggers more theoretical investigations.

Facebook has multiple features which attract the youth because of this social networking site's attributes of customization. However, the most prominent features of Facebook usage are found to be status updates, group creation, tagging, liking, commenting and sharing ([Hussain & Saleem, 2016](#)). [Wok and Misman \(2015\)](#) found that youth had used Facebook to learn about political affairs and share ideas about educational courses. They were also using this social networking site to join a group with similar business interests ([Wok & Misman, 2015](#)). [SZ et al. \(2011\)](#) have measured the passing time and companionship motives for Facebook usage. [SZ et al. \(2011\)](#) measured the companionship motives on 6 items for Facebook usage: to find long-lost friends; to share thoughts with friends; to feel less lonely; to find people with similar interests; to make new friends, and to find friends to be with.

It is also found in the context of Pakistan that university students in Pakistan had used

Facebook to become familiar among a circle/group or self-presentation and also for the surveillance function or what we call the spy motives ([Hussain & Saleem, 2016](#)).

[SZ et al. \(2011\)](#) do not provide sufficient logic to support the addiction to Facebook and they only emphasize the female gender in researching the active Facebook usage. [Nadkarni and Hoffman \(2012\)](#) do not discuss the role of demographics and the difference they make for the specific motives for Facebook usage and they utilize the generic categories for generalizations for the dual model which warrant more research into the post-positivist paradigm by using the reductionist approach. The studies by [Hussain and Saleem \(2016\)](#) in the context of Pakistani culture and [Shahnaz \(2011\)](#) outside Pakistan have used descriptive statistics and warrant more sophisticated research with the help of inferential statistics. [Blachnio et al. \(2016\)](#) have not explained the difference in the variable of gender and have only explained the prediction of the variable of self-promotion with the variable of Facebook usage. [Kimani \(2018\)](#) does not research the business motives for Facebook usage and highlights this limitation in the limitations section. [Hossain \(2019\)](#) has utilized a few items and has used the generic category of information seeking.

The motives in the reviewed studies are scattered. Therefore current study aims to extend motives while discussing all under one roof. Additionally, the contribution is made by researching the effect of the variable of gender on each of the motives for Facebook use.

Extended Theoretical Framework

The uses and gratifications theory focuses attention on (1) "individuals in the mass communication process," (2) "respect intellect and ability of media consumers" provides insightful analyses of (3) "how people experience media content" (4) "differentiates active uses of media from more passive uses," (5) "studies the use of media as part of everyday social interaction" and (6) "provides useful insights into the adoption of new media" ([Baran & Davis, 2015](#)). Youth have been found to use the new medium of Facebook. This social networking site is getting in popularity day by day with the

integration of new features. This site is used among students for diverse motives of social interaction, entertainment, communication (Shahnaz, 2011); religious (Shahnaz & Wok, 2011); political education, business (Wok & Misman, 2015); self-presentation, spy (Hussain & Saleem, 2016); passing the time and companionship motives (SZ et al., 2011). The contribution is being made in the knowledge of uses and gratifications theory by researching the associations of these different categorical motives with Facebook usage. Therefore, extending from previous literature, the hypothesis is established with a supporting research question.

H1. Motives are likely to predict Facebook usage.

RQ1. How well do the eleven measures of motives (e.g. social interaction, entertainment, communication, political, educational, business, religious, passing time, companionship, self-presentation and spying) predict Facebook usage?

Individual differences theory states that "media messages contain particular stimulus attributes that have differential interaction with personality characteristics of members of the

audience" (DeFleur, 1970, p. 122-123). Gender is recognized as a variable of individual differences in determining the use of technology (Lai, Hsieh, & Zhang, 2018, p.5). Females and males have been found to use Facebook differently. Women have been found to use this social networking site for maintaining relationships and men for developing new relationships (Sheldon, 2008). The contradictory results are also found in the previous research; like female gender in Pakistan is found to be using Facebook to "maintain relationships," whereas men are found to go for "finding newer relations" (Nazir, 2012).

The second objective of the research is to explore the difference which the variable of gender makes in the extended model of associations of motives with Facebook usage. It is inferred from the literature that there will be a significant difference in gender in the associations of motives with Facebook usage. Our study formulates the hypothesis.

H2. The proposed model (H1) is likely to be mediated by gender.

RQ2. Is there a difference in male and female gender for each motive?

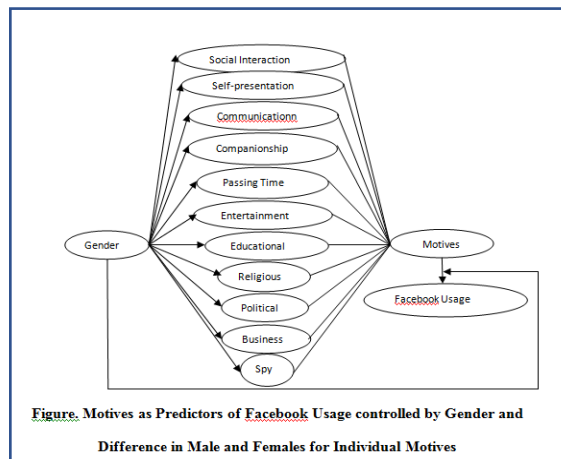


Figure 1

Methodology

Students from universities in Pakistan constitute the population. By using the non-probability technique of purposive sampling, three hundred and ninety-seven (n = 397) students are selected from "Punjab University" and "Forman Christian

College University."The university students are selected because they have access to Facebook at home, in the hostel, and in dormitories with the help of computers, laptops and smartphones. They are digitally privileged. Two hundred and forty-seven are female students (n₂ = 247) and one

hundred and fifty are male students ($n_1 = 150$). The respondents are between the ages of 20 and 22 years. The average age of these respondents is twenty-one years ($M=21$).

The cross-sectional design is utilized. The method for data collection is a survey. The responses are collected with the help of a self-administered questionnaire in the classes.

The conceptualization of FB usage is extended from previous research ([Hussain & Saleem, 2016](#)). Facebook usage is measured on 6 items, "status update;" "creating groups;" "tagging;" "like;" "comment;" and "share;" by asking the question, "I happen to use the following features of Facebook to/for: ."The scales for social interaction, entertainment and communication were extended from [Shahnaz's \(2011\)](#) study. The social interaction motives for the current study are measured on 4 items, "to build a network with others;" "to check on wedding/birthday/event invitations in the calendar;" "to make new friends;" and "to share recent activities." The entertainment motives for "FB usage" are measured on 4 items, "share movies, hobbies, previews, music, videos;" "download music, video, picture;" "share links related to entertainment;" and "get update on gossip about celebrities.". Communication motives are measured on 4 items, "send and receive messages from friends and family members;" "chat with friends and family members;" "share opinions with friends and family;" "maintain old friendships." The scale for the religious motives for Facebook ([Shahnaz & Wok, 2011](#)), "share wisdom from religious scholars;" "share advised contents, videos, songs;" and "share notes on religious values like helping others" is used. The items for measuring the political, business and educational motives for Facebook usage are taken from [Wok \(2011, 2015\)](#). Educational motives for Facebook usage are measured on 4 items, "share web-links related to assignment;" "discuss academic matters with group members;" "find information related to studies;" and "motivate friends to study hard;" by asking "I happen to use Facebook for educational purposes like to:"Political motives for Facebook usage were measured on 4 items, "know about the political development in my country;" "know about the political problems occurring in my

country;" "get updates about political gossips;" and "share latest news related to politics." Business motives for Facebook usage were measured on 4 items, "promote my blog where I sell/buy my stuff;" "buy products or services;" "sell stuff; and "join groups with similar business interests." Self-presentation motives ([Hussain & Saleem, 2016](#)) were measured on 4 items, "to be get noticed;" "want others to know about my personality/persona;"and "present my positive self-image;" by asking, "I happen to use Facebook for the purpose of self-presentation to...". The spy motives for FB usage ([Hussain & Saleem, 2016](#)) were measured on 4 items, "know who is talking to whom;" "check comments about me in group;" "check what class fellows are saying about me;" and "be a detective;" by asking, "I happen to use Facebook for surveillance/spy purposes like to...". The response format to measure the responses on each item for these scales is 5 point Likert scale with responses ranging from, "1=strongly disagree;" "2=disagree;" "3=neutral;" "4=agree;" and "5=strongly agree."

The gender of respondents is measured on a two-point nominal scale, "1=male;" "2=female;" by asking respondents, "Please mark the appropriate number in the gender column." Before running correlations, the normality of data is assessed with the help of histograms. The inferential statistics are utilized to inform hypotheses and the research questions. Pearson correlations are ensured before running standard regressions. Before applying standard regressions, it is ensured to have correlations of more than .3 in line with the recommendations ([Pallant, 2007](#)). The standard regressions are then applied to explain the prediction of motives with the Facebook usage to enlighten the variance produced by the independent variables of motives in the general Facebook usage. The overall extended model is also explained. The hierarchical regressions are used to explain the controlled effect of gender on the predictors of Facebook usage. The independent-sample t-tests are being utilized to see the effect of the variable of gender on the difference in each motive for Facebook use. The eta squared values are determined. [Cohen \(1988\)](#) has introduced the guidelines for small (.01), moderate (.06) and large (.14) eta squared values for determining the

effect size for the difference. These values are followed for the interpretation of effect size for the difference which the variable of gender makes for each motive.

Results

This result section presents the descriptive statistics. Secondly, it discusses the correlations among diverse motives with Facebook usage. After satisfying the conditions, multiple regressions are applied to find the effects of motives on Facebook usage. Next, the hierarchical regression explains the controlled effect of gender in these predictors. Finally,

differential gratifications from Facebook are explained within the context of two dimensions of gender (male versus female).

All the items for the continuous scales have a mean score higher than 3 except for the items of "create a group(s)," "get an update on gossip about celebrities," and 4 items for business motives for Facebook usage. However, all the continuous scales for independent and dependent variables have standardized Cronbach Alpha values in line with the recommendations suggested by [DeVellis \(2003\)](#), who has recommended that Cronbach Alpha (α) value for a scale should be greater than .7.

Table 1: Predictors of Facebook Usage (n=397)

Independent Variables	Correlation		Prediction				Model Summary
	R	β	t	p	T	VIF	R ²
Social Interaction	.526**	.294	5.945	.000	.599	1.670	.437
Entertainment	.376**	.051	1.084	.279	.649	1.542	
Communication	.359**	.085	1.897	.059	.731	1.368	
Educational	.396**	.149	3.186	.002	.669	1.496	
Political	.327**	.126	2.897	.004	.768	1.302	
Business	.340**	-.023	-.448	.654	.567	1.764	
Religious	.350**	.041	.876	.382	.653	1.531	
Passing Time	.345**	.082	1.872	.062	.762	1.313	
Companionship	.444**	.096	1.845	.066	.541	1.850	
Self -presentation	.404**	-.016	-.290	.772	.507	1.974	
Spy	.356**	.171	3.863	.000	.744	1.345	

** . Correlation is significant at the 0.01 level (2-tailed).

Table reports that all the variables have correlations above .3. In Table 1, all the VIF values are above .10 and the tolerance values are less than 10, so there is no issue of multicollinearity.

The extended model is respectable because the residual square value (R²) is .437 which means

that the model explains 43.7% of the variance. Table 2 reports that independent variables of social interaction ($\beta = .294$, $p = .000$) and spy ($\beta = .171$, $p = .000$) make the unique contribution. The educational ($\beta = .149$, $p = .002$) and political ($\beta = .126$, $p = .004$) motives also make significant unique contribution to the prediction of the dependent variable of Facebook usage.

Table 2: Motives as Predictors of Facebook Usage controlled by Gender, n= 397

Variance	Variance Values	F change	Significance F change
Gender (R square)	.013	5.057	.025
Overall Model (R square)	.437	24.870	.000
Additional variance (R square change)	.425	26.347	.000

Table 2 presents these results. By using hierarchical regression, the variable of gender in Block 1 has been entered, and the overall model explains 1.3 per cent of the variance, $R^2 = .013$, $F(1, 395) = 5.057$, $p = .05$. After Block 2 variables (social interaction, educational, spy, political, entertainment, communication, business, religious, passing time, companionship, self-

presentation) have been included, the model as a whole explains 43.7% of the variance, $R^2 = .437$, $F(12, 384) = 24.870$. All the selected independent variables explain an additional 42.5 % of the variance even when the effect of the variable of gender is statistically controlled for, R^2 change = .425, $F(11, 384) = 26.347$, $p = .001$.

Table 3: Difference in Gender for each Motive for Facebook Use, n=397

Motive	Male ^a		Female ^b		t-test for equality of means	Effect Size Eta Squared
	M	SD	M	SD	Sig. (2-tailed)	
Social Interaction	13.373	3.353	11.919	3.473	.000	.025
Entertainment	12.987	3.603	11.951	3.361	.004	.021
Communication	14.000	3.211	13.611	3.701	.271	-
Educational	13.253	3.008	12.648	3.746	.078	-
Political	13.240	3.289	13.093	3.673	.688	-
Business	12.013	3.524	10.705	3.893	.001	.029
Religious	13.200	3.215	12.081	3.622	.002	.025
Passing Time	13.600	3.382	12.907	3.300	.045	.01
Companionship	13.600	3.301	12.300	3.773	.001	.032
Self Presentation	13.987	3.192	12.081	3.793	.000	.068
Spy	12.907	4.031	12.057	4.062	.043	.01

^a n₁ = 150 ^bn₂ = 247

The significance levels for the difference and the effect size in eta squared are also reported. There is found to be a significant difference in gender for the self-presentation motives for Facebook usage; $t(395) = 5.146$, $p = .000$. The male group ($M=13.987$, $SD=12.081$), in comparison to the female group ($M=12.081$, $SD=3.793$), utilizes Facebook more for self-presentation motives. The magnitude of these differences in means is found to be at the moderate level (eta squared= .068). There is also found a significant difference for gender in the variables of companionship, business, social interaction and religion, entertainment, spying and passing time motives but with small effects. There is no statistically significant difference found in male and female gender of students for the variables of communication, education and political motives.

Discussion

The variable which makes a unique contribution is social interaction. University students in

Lahore are using Facebook to build a network with others, check on weddings, birthdays, and event invitations in the calendar, make new friends and for sharing their recent activities. These findings are consistent with the finding provided by [Saleem et al. \(2014\)](#), who argued that social networking sites have a noteworthy impact on the interaction patterns of youth for the strong ties like friends and family. In this way, the finding is in agreement with [Ahmad et al. \(2016\)](#) that motives for social networking sites are used for bridging the social capital. In fact, Facebook, as the growth in popularity site, is truly a website for social networking among these male and female students who find this medium a powerful tool for socialization with their close relations. The culture of Pakistan is becoming a hybrid sort of culture because of global trends by Facebook. However, it is perceived as collectivist culture in which the unit of the family is also important, and Islamic values adhere. Therefore, the findings are also consistent with [Nadkarni and Hofmann](#)

(2012), who argued that members of the collectivist societies display a greater need to belong.

The second independent variable which makes a unique contribution is spy motives. Students have perceived themselves as detectives on Facebook who are using it for checking comments about them in the group, for seeing what class fellows are saying about them with the curiosity of knowing who is talking to whom which is fulfilling the surveillance function.

The third prominent independent variable which makes a unique contribution to Facebook usage is the educational motives. Facebook is helpful for students in the development of their educational abilities. Because the sample being selected is the university students, therefore, this variable of educational motives is the second-best predictor of Facebook usage. Facebook is empowering students for not only social interaction with their close ties of friends and family but is also being utilized by students to expand their social network beyond these strong ties by including their class fellows and teachers. Because today, teachers are also using Facebook and they share academic material and useful links, therefore, the contribution of the educational motives for the Facebook usage is justifiable.

The fourth variable which makes a unique contribution is the political motives for Facebook usage. These findings are in agreement with [Kimani \(2018\)](#) who has identified that social interactivity and surveillance are the functions served by Facebook. University students in Lahore are also using Facebook to learn about political development in the country, to get updates about political gossip, to get awareness about the political problems faced by the country and share the latest news related to politics.

The findings are in conflict with the dual model of [Nadkarni and Hoffman \(2012\)](#) who have categorized the gratifications into merely two categories of need to belong and the need for self-presentation. In a nutshell, Facebook is serving its intended function of bringing people close to each other by providing the features of like, comment, share, status update, group creation and tagging which are inviting gratifications of social interaction which is a need to belong, however,

the educational motives along with the spy and political motives. The variable of gender does affect these predictors.

Specifically speaking the study finds if we control for the possible effect of gender (e.g. male and female), the selected set of variables predicts a significant amount of variance in Facebook usage with some effect. The extended model as a whole explains 43.7% of the variance. The variable of gender explains 1.3% of the variance. All the selected independent variables explain 42.5% of the variance when the effect of gender is statistically controlled for.

It is found in research that members of the given groups, in our case male and female groups, do not respond to the medium of Facebook in uniform ways. To explain this point, eleven independent sample t-tests are run to find the statistical difference for the variable of gender for the eleven motives. The purpose is to clearly identify the variable of a single motive in which there is a huge difference between male and female students. The eta squared values are determined to explain the size of the effects. There is a considerable magnitude of difference in mean scores of male and female groups for the self-presentation motives with the moderate effects (eta squared= 0.068). The small effects are also found for companionship (eta squared= 0.032), business (eta squared= 0.029), social interaction (eta squared= 0.025), religious (eta squared= 0.025) entertainment (eta squared= 0.021), spy (eta squared= 0.01) and passing time (eta squared= 0.01).

Conclusion

Students in Lahore city of Pakistan, are using Facebook for gratifying their social-psychological needs of expanding their social network with the help of social interaction motives for FB usage with a small difference among male and female students. Students are also curious to know who is doing what on Facebook; therefore, they are utilizing this social networking site for spy motives. These social interaction motives and spy motives for Facebook users are getting a lot of attention from students. This site is also popular for the educational motives among the male and female students in Urban Lahore who are using it in uniform ways. Students are also utilizing this

site to learn about the happening of political affairs. There is also a visible difference between male and female students when they utilize Facebook for self-presentation motives. The students are from urban Lahore city; therefore, there is a slight difference in the majority of the gratifications among male and female groups. The comparison of rural and urban settings can better explain the picture with a broader stroke. The dualistic models do not explain the Facebook ecology and future research should focus on using the reductionist approaches with more variables among heterogeneous groups with longitudinal designs.

Implications of the Study

The study has implications for academicians, teachers, policymakers and social media networking sites developers. The research on the Facebook addition or problematic Facebook usage should use the motives with positive and negative valence. To know the problematic side of Facebook usage, the researchers should focus on the motives as antecedents to Facebook usage and the Facebook usage as the antecedent to problematic usage in a single model. Our extended model can be expanded by future researchers. Teachers should make an

educational strategy by integrating the platform Facebook for academic discussion and by sharing academic-related links. For this, workshops and seminars may be conducted in classrooms for integrating the application of Facebook. Students have been using smartphones in classrooms and they can utilize the Facebook application for analysis of the contents of Facebook and doing surveys in the classroom. Social media developers should send notifications to users related to social interaction motives. Politicians can use the pathos of close relationships to make their political campaigns successful.

Limitations of Study

The study only defines the variable of gender to explain the individual differences and the social categories. It does not include the variable of age. The media generations like millennials and i-Generation are not considered. The same model can be replicated in non-student samples. The focus group can be utilized to better explain the Facebook ecology. A comparison can be made between rural and urban settings. More research is required to explain when the spy motives for Facebook usage become problematic when students use it for social interaction with friends and how do students define friends?

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