

PRIVACY, POSING, PRESENTATION and PHOTOGRAPHS on FACEBOOK:
A STUDY EXPLORING GENDER DIFFERENCES
AMONG COLLEGE STUDENTS' USE OF THE POPULAR SOCIAL NETWORKING SITE

A Research Report Prepared for the Partial Fulfillment of the Requirements of the
Course:

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for

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Introduction

The social networking site, “Facebook “was invented by Mark Zuckerberg in 2004. Zuckerberg invented the site to allow college students from across the country to communicate with each other. In the past four years, the use of Facebook among college students has skyrocketed. Ninety percent of all undergraduate students at colleges and universities where the site is available have signed up (Van Der, 2007). Facebook has become an extremely important part of the lives of college students across the United States of America, which renders it an important area for research. This study focuses on the Facebook habits of males and females and their use of photos and privacy settings.

Literature Review

Several studies have provided a foundation for the study at hand. Five scholarly articles are referenced in this study. The first article was written by Raacke and Bonds-Raacke in 2008. This study was conducted to evaluate (a) why people use these friend-networking sites (b) what the characteristics are of the typical college user, and (c) what uses and gratification are met by using these sites. The second scholarly article was written by Kramer and Winter of the University of Duisburg–Essen in Germany in 2008. This article studies the theory that impression management is a major motive for actively participating in social networking sites. These studies will be used in the research regarding gender differences in how college students represent themselves on Facebook.

The third article was written by Read in 2007. It examines the potential risks college students face when putting personal information on Facebook, particularly as

they apply for jobs. This study looked at the impact of posting scandalous information in terms of employer's use of the site in the hiring process. The fourth article was written by Van Der in 2007. This article examines college administrators' use of Facebook to police and punish students for illegal activities. Lawyers have advised colleges not to use Facebook for this purpose in order to avoid lawsuits against the schools. The fifth article was written by Harris in 2008. This article explores college professors' use of Facebook and how it affects students. It examines the students' use of privacy settings and the types of pictures posted on the site. These studies will be used in the research on how males and females represent themselves on Facebook, as well as the use of privacy settings and types of photos posted by males and females.

This study will use the combined research articles as well as a survey on college students' use of Facebook. This study will explore how college students present themselves on Facebook. Variables in the study include gender and the use or disuse of privacy settings. The study will explore these topics because Facebook is a new phenomenon and these variables; particularly those regarding gender have not yet been extensively studied.

Research Questions:

- 1) Do females update their profile pictures more times per year than males?
- 2) Are females more likely to use privacy settings than males?
- 3) Are females more likely to be concerned with how they represent themselves on Facebook compared to males?
- 4) Is there a relationship between the pictures people pose in and their privacy settings?

5) Is there a relationship between the pictures people pose in and their gender?

Hypotheses:

- 1) Females will update their profiles pictures more times per year than males.
- 2) Females will be more likely to use privacy settings compared to males.
- 3) Females will be more likely to be concerned with how they represent themselves on Facebook compared to males.
- 4) People who pose in pictures that involve alcohol, drugs or kissing will be more likely to have privacy settings.
- 5) Males will be more likely to pose in pictures involving drugs compared to females, but females will be more likely to pose with alcohol or be photographed kissing.

Methodology

Participants

This study examines Facebook use among a college population. The college population was chosen to be the participants because 90% of students whose schools are part of the Facebook networks are members of the site (Van Der, 2007). The sample size of the study is 978 college students representing approximately 40 states and 100 schools.

Measurements

The survey measured numerous variables pertaining to college students' use of Facebook. The variables that this particular study measured are gender differences in the number of times users update their profile pictures, use of privacy settings, concern about representation on Facebook and the types of pictures posed in. This study will also compare the types of pictures users pose in and their use of privacy settings.

Procedure

The study was conducted by use of online survey. The survey was put together by about thirty college students along with their professor. The finished product was then sent to the Stonehill College Institutional Review Board (IRB), where it received a full board review. The study was approved and the survey was subsequently published online using a website called surveymonkey.com. The researchers used a snowball effect to distribute the survey. The survey was posted on student listservs, message boards, AIM away messages, as well as directly on Facebook. On Facebook, it was distributed through a group, an event and through individual researchers' personal Facebook pages. The researchers asked the participants of the survey to forward on the survey to their peers in order for the survey to spread throughout the country and to represent as many different schools and states as possible. This was done in order to have a sample that represented all college students throughout the United States.

Results

Descriptive Statistics about the Sample

Of the respondents surveyed, 289 (29.8%) were male and 680 (70.2%) were female. In terms of race, 900 identified themselves as being White/Caucasian (93.1%),

13 as Black/African American (1.3%), 16 as Latino or Hispanic (1.7%), 14 as Asian American (1.4%), 4 as Native American (.4%), 8 as Biracial (.8%) and 12 as Other (1.2%). The average age of participants was 19.91 with participants ranging in age from 14 to 43. The average GPA was 3.314 with the participants' Grade Point Average ranging from 1.5 to 4.0.

Descriptive Statistics about College Student's Use of Facebook

Of the participants surveyed, the average days per week the respondents reported logging on to Facebook was 6.53, with the days ranging from 1 time per week to 7 times per week. In regards to the average times throughout the day logged on to Facebook, the participants reported an average of 7.27 log ons per day, with a minimum of 1 time per day and a maximum of 26 times per day. In terms of average minutes per day spent on the internet, the respondents reported an average of 172.91 minutes per day with a maximum of 4200 minutes per day and a minimum of 2 minutes per day. In respect to the average minutes per day spent on Facebook, the respondents reported an average of 60.26 minutes per day, with a maximum of 900 and a minimum of 0.

Results of Research Questions and Hypothesis

Research Question 1

An independent T-Test was used to answer the first question, "Do females update their profiles more times per year than males?" A significant difference between males and females was discovered ($T=-2.426$, $P=.017$). On average, males update their profile pictures 7.02 times each year and females update their profile pictures 12.95 times each year.

Research Question 2

A cross tabulation was used to answer the second research question, “Are females more likely to use privacy settings than males?” The cross tabulation concluded that females are significantly more likely to use privacy settings compared to males ($\chi^2=39.000$, $P=.000$). 92.5% of female respondents reported using privacy settings while 78.5% of male respondents reported using privacy settings.

Research Question 3

The third research question, “Are females more likely to be concerned with how they represent themselves on Facebook compared to males?” was studied using a cross tabulation. Respondents were asked to answer this question using a likert scale of five choices ranging from “Strongly Agree to Strongly Disagree” The results of the cross tabulation were insignificant. There is not a noteworthy difference between males and females concern about how they represent themselves on Facebook ($\chi^2=8.176$, $P=.085$).

Research Question 4

The fourth research question, “Is there a relationship between pictures people pose in and their privacy settings?” was studied using a series of cross tabulations. The first cross tabulation studied the use of privacy settings of those who reported posing with alcohol compared to those who reported not posing with alcohol. Of the 557 respondents who reported posing with alcohol, 57.1% also reported using privacy settings. Of the 421 respondents who reported that they have not posed with alcohol, 42.9% reported using privacy settings. This difference is significant ($\chi^2=7.497$, $P=.024$).

The second cross tabulation studied the use of privacy settings of those who reported posing with drugs compared to those who reported that they did not pose with drugs. Of the 45 respondents who reported posing with drugs, 4.5% also reported using privacy settings. Of the 933 respondents who reported that they did not pose with drugs, 95.5% reported using privacy settings. This data was found to be insignificant ($\chi^2=.566$, $P=.753$).

The third cross tabulation studied the use of privacy settings between those who reported being photographed kissing compared to those who did not report being photographed kissing. Of the 272 people who reported being photographed while kissing, 27.8% also reported using privacy settings. Of the 706 respondents who reported that they have not been photographed kissing, 72.2% reported using privacy settings. This data was found to be insignificant ($\chi^2=1.92$, $P=.551$)

Research Question 5

The fifth research question, "Is there a relationship between the pictures people pose in and their gender?" was studied using a series of cross tabulations. The first cross tabulation studied the gender differences of those who posed with drugs compared to those who have not posed with drugs. Of the 45 people who reported posing with drugs, 19 were male and 26 were female. However, many more females took the surveys than males. 6.6% of male respondents reported posing with drugs, while 93.4% reported that they have not posed with drugs. 3.8% of females reported posing with drugs while 96.2% reported that they have not posed with drugs. This difference is significant ($\chi^2= 3.446$, $P=.048$)

The second cross tabulation studied the gender difference of those who posed with alcohol compared to those who have not posed with alcohol. Of the 555 respondents who reported posing with alcohol, 171 were male and 384 were female. This resulted in 59.2% of male respondents reporting that they have posed with alcohol and 56.5% of female respondents reporting that they have posed with alcohol. The difference is not significant ($\chi^2=.604$, $P=.240$).

The third cross tabulation studied the gender difference of those who have been photographed kissing compared to those who have not been photographed kissing. Of the 272 respondents who reported being photographed kissing, 94 were male and 178 were female. This resulted in 32.5% of male respondents reporting that they have been photographed kissing and 26.2% of female respondents reporting that they have been photographed kissing. This difference is significant ($\chi^2=4.050$, $P=.027$).

Discussion

As mentioned previously, prior research on Facebook is lacking, particularly in gender difference. In Raacke and Bonds –Raacke’s 2008 study, they found that women change the appearance of their website more often than men. This information supports this study’s findings that women update their profile picture more often than men. While it was hypothesized that women would be more concerned about how they represent themselves on Facebook than men, the cross tabulation showed insignificant results in these variables. This result showed that both men and women are concerned with how they represent themselves on Facebook. While Kramer and Winter’s 2008 study researched many variables in terms of self–presentation on social networking sites, it did not look into gender differences. Since it cannot be assumed that females update their profile pictures more often than males because they are more concerned

with self presentation, the logical conclusion is that women update their profile pictures more often because women spend more time on Facebook. While Raacke and Bonds–Raacke’s study found that men log on to Facebook more times per day than women (5.0 times per day vs. 3.45), this study found the opposite (6.67 times per day vs. 7.54) (Raacke and Bonds–Raacke, 2008). The difference in these results could be a result of the samples. Raacke and Bonds–Raacke’s study involved 116 students from one school, while this study involved 978 students from over 100 schools in 40 states (Raacke and Bonds–Raacke, 2008).

Raacke and Bonds–Raacke’s study also looked at the relationship between privacy settings and gender. Their study found that 65.5% of women used privacy settings while only 38.8% of men used privacy settings (Raacke & Bonds–Raacke, 2008). While the male to female relationship is the same, this study found a much higher percentage of males and females use privacy settings. This difference can also be attributed to the sample of students in each study. Because women have been found to spend more time on Facebook, this could also explain why they are more likely to use privacy settings. The longer one spends on Facebook, the more likely they are to know about its features. The high amount of men and women using privacy settings may be attributed to the number of employers, professors and college administrators who use Facebook. Read’s study found that 40% of companies would consider looking at Facebook before making hiring decisions. Read also found that 32% of students think it is unethical for employers to look at Facebook to scan job applicants while only 17% of employers feel the same way (Read, 2007). Harris’ 2008 study found that Social Networking Sites have become the common denominator among students who are actively engaged with college faculty and staff. However, Harris found that this new social networking phenomenon has also caused issues and concerns involving self-

disclosure and identity management which also explains the high use of privacy settings among students across the board (Harris, 2008).

Van Der's 2007 article studied illegal activities that are broadcasted on Facebook. The article used the example of a vandalized sculpture at DePauw University. The administration at DePauw received a tip that they would find the people who did it by looking at Facebook pictures. DePauw administrators did find the students and they were disciplined. Lawyers have recommended colleges not to use Facebook to police students because it could invite lawsuits against the school in terms of breach of student's privacy. However, ignoring illegal activity could also put schools at risk (Van Der, 2007). This study found that students who have pictures on Facebook posing with drugs are more likely to have privacy settings than those who do not have pictures of themselves posing with drugs. This could be because drugs such as marijuana or cocaine are illegal and these students are concerned about being punished because of these pictures. This study did not find significance between privacy settings and pictures with alcohol. This could be because alcohol is legal for approximately half of college students to drink and therefore they cannot get in trouble for having pictures that show possession of alcohol.

Raacke and Bonds-Raacke's study found that men were more likely to make personal information available compared to women (Raacke and Bonds-Raacke, 2008). This study found that men were more likely to display pictures of themselves posing with drugs or while kissing compared to women. There was not a significant difference between men and women posing with alcohol. This could be because alcohol is legal for all students over age 21 whether they are male or female. While females are more likely to have privacy settings than men, there was also not a significant difference

between posing with alcohol and the use of privacy settings. Men were found to not use privacy settings as often as females and they were also found to be more likely to pose in “scandalous” pictures involving drugs or kissing. Therefore, while there was not a significant difference between males and females in regards to overall concern about how they represent themselves on Facebook, it may be possible that there is a difference in male’s and female’s concern about how they represent themselves in photos. This could be a further research question for a subsequent study.

A great limitation to this study is the gender difference between respondents. 70.2% of the respondents were female while only 29.8% were male. This does not represent the college population. The study would be more accurate if the researchers had been able to recruit more males to complete the online survey. There were also more female student researchers compared to male student researchers and the students’ professor was also female. Therefore, the student’s connections in the distribution of the survey have shown to be primarily female. A gender balanced group of researchers may have prevented this problem.

In conclusion, the study of the social networking site Facebook among college students is very relevant because the majority of college students who have access to Facebook choose to use it. This study focused on a small portion of the settings and applications that Facebook offers. There is such a wide range of information posted on Facebook and new applications and settings are constantly being introduced to the website. Photos and privacy settings have been studied in the past, but this study took a new angle on these variables making this study very important in the investigation of social networking sites.

Descriptive Statistics regarding the Sample

Gender	Frequency	Valid Percent
Male	289	29.8
Female	680	70.2

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Race	Frequency	Valid Percent
White/Caucasian	900	93.1
Black/African American	13	1.3
Latino/Hispanic	16	1.7
Asian American	14	1.4
Native American	4	.4
Biracial	8	.8
Other	12	1.2

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	Minimum	Maximum	Mean	Standard Deviation
<u>Age</u>	14	43	19.91	1.826
<u>GPA</u>	1.5	4.0	3.314	.4136

Descriptive Statistics about College Students Use of Facebook

	Minimum	Maximum	Mean	Standard Deviation
Average days per week logged on to Facebook	1	7	6.53	1.056
Average times throughout the day logged on to Facebook	1	26	7.27	5.229
Average Minutes per day spent on the internet	2	4200	172.91	210.339
Average minutes per day spent on Facebook	0	900	60.26	63.008

Group Statistics

Are you male or female?	N	Mean	Std. Deviation	Std. Error Mean
Approximately how many times have you updated your PROFILE PICTURE in the PAST YEAR?	289	7.02	10.522	.619
	676	12.95	40.907	1.573

Do you currently use any privacy settings on Facebook? * Are you male or female? Crosstabulation

			Are you male or female?		
			male	female	Total
Do you currently use any privacy settings on Facebook?	yes, use privacy settings	Count	227	629	856
		% within Are you male or female?	78.5%	92.5%	88.3%
	no, dont use	Count	36	26	62
		% within Are you male or female?	12.5%	3.8%	6.4%
	uncertain	Count	26	25	51
		% within Are you male or female?	9.0%	3.7%	5.3%
	Total	Count	289	680	969
		% within Are you male or female?	100.0%	100.0%	100.0%

Im concerned w/ how I represent myself on FB profile. * Are you male or female? Crosstabulation

			Are you male or female?		
			male	female	Total
Im concerned w/ how I represent myself on FB profile.	Strongly Agree	Count	64	164	228
		% within Are you male or female?	22.4%	24.2%	23.6%
	Agree	Count	107	290	397
		% within Are you male or female?	37.4%	42.7%	41.1%
	Neutral	Count	68	112	180
		% within Are you male or female?	23.8%	16.5%	18.7%
	Disagree	Count	33	87	120
		% within Are you male or female?	11.5%	12.8%	12.4%
	Strongly Disagree	Count	14	26	40
		% within Are you male or female?	4.9%	3.8%	4.1%
	Total	Count	286	679	965
		% within Are you male or female?	100.0%	100.0%	100.0%

Have you posed with alcohol? * Do you currently use any privacy settings on Facebook? Crosstabulation

		Do you currently use any privacy settings on Facebook?			
		yes, use privacy settings	no, dont use	uncertain	Total
Have you posed with alcohol? yes	Count	493	42	22	557
	% within Do you currently use any privacy settings on Facebook?	57.1%	67.7%	42.3%	57.0%
no	Count	371	20	30	421
	% within Do you currently use any privacy settings on Facebook?	42.9%	32.3%	57.7%	43.0%
Total	Count	864	62	52	978
	% within Do you currently use any privacy settings on Facebook?	100.0%	100.0%	100.0%	100.0%

Have you posed with drugs? * Do you currently use any privacy settings on Facebook? Crosstabulation

		Do you currently use any privacy settings on Facebook?			
		yes, use privacy settings	no, dont use	uncertain	Total
Have you posed with drugs? yes	Count	39	4	2	45
	% within Do you currently use any privacy settings on Facebook?	4.5%	6.5%	3.8%	4.6%
no	Count	825	58	50	933
	% within Do you currently use any privacy settings on Facebook?	95.5%	93.5%	96.2%	95.4%
Total	Count	864	62	52	978
	% within Do you currently use any privacy settings on Facebook?	100.0%	100.0%	100.0%	100.0%

Have you been photographed kissing? * Do you currently use any privacy settings on Facebook? Crosstabulation

		Do you currently use any privacy settings on Facebook?			
		yes, use privacy settings	no, dont use	uncertain	Total
Have you been photographed kissing?	yes	Count 240	20	12	272
		% within Do you currently use any privacy settings on Facebook? 27.8%	32.3%	23.1%	27.8%
	no	Count 624	42	40	706
	% within Do you currently use any privacy settings on Facebook? 72.2%	67.7%	76.9%	72.2%	
Total	Count 864	62	52	978	
	% within Do you currently use any privacy settings on Facebook? 100.0%	100.0%	100.0%	100.0%	

Have you been photographed kissing? * Are you male or female? Crosstabulation

		Are you male or female?		
		male	female	Total
Have you been photographed kissing?	yes	Count 94	178	272
		% within Are you male or female? 32.5%	26.2%	28.1%
	no	Count 195	502	697
	% within Are you male or female? 67.5%	73.8%	71.9%	
Total	Count 289	680	969	
	% within Are you male or female? 100.0%	100.0%	100.0%	

Have you posed with drugs? * Are you male or female? Crosstabulation

		Are you male or female?			
		male	female	Total	
Have you posed with drugs?	yes	Count	19	26	45
		% within Are you male or female?	6.6%	3.8%	4.6%
	no	Count	270	654	924
		% within Are you male or female?	93.4%	96.2%	95.4%
Total		Count	289	680	969
		% within Are you male or female?	100.0%	100.0%	100.0%

Have you posed with alcohol? * Are you male or female? Crosstabulation

		Are you male or female?			
		male	female	Total	
Have you posed with alcohol?	yes	Count	171	384	555
		% within Are you male or female?	59.2%	56.5%	57.3%
	no	Count	118	296	414
		% within Are you male or female?	40.8%	43.5%	42.7%
Total		Count	289	680	969
		% within Are you male or female?	100.0%	100.0%	100.0%

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