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Exploring the Relationship between Facebook, Face-to-Face and Intercultural Communication

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ABSTRACT

My Capstone Experience/Thesis project seeks to explore and examine the effects of Facebook on communication between American and international students. The use of social media as a means to communicate with others is increasing at an amazing rate. Facebook has become my generation's favorite way to communicate with friends and family and "to Facebook" has unofficially become a verb that many college students will use. While social media, such as Facebook and Linked-In, may encourage American college students to communicate with international students beyond the classroom and campus, it seems that Facebook is on the way to becoming a substitute for face to face intercultural interactions. Whether it will enhance or diminish the extent and quality of intercultural communication is an important question to be studied.

Keywords: intercultural communication, Facebook, communication, college, students, communication

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VITA

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FIELDS OF STUDY

Major: Corporate and Organizational Communication

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CHAPTER 1

INTRODUCTION

The use of communication technologies, such as texting, emailing, and "Facebooking," as a way to communicate with others is increasing at an amazing rate. To demonstrate this phenomenon, consider this statement: if Facebook were a country, it would be the third largest in the world behind China and India (Henrikson, 2011). There are 800 million active Facebook users ("Statistics," 2011). Many college-aged students will use terms such as "Facebook me" when talking to their friends, and "to Facebook" has unofficially become a verb that many will use. Many students can also be observed logging on to Facebook from computer labs, smart phones and other communication technologies.

With the continuous growth of the social networking phenomenon, it is important to understand what effects computer-mediated communication (CMC) has on face-to-face (FtF) personal interactions, especially the effects CMC has on intercultural interactions on college campuses. Throughout my time at Western Kentucky University I have seen American students interacting and working with international students in class, but outside of that I see international students hanging out with people from their country,

causing a line to be drawn between the American students and international students. Research has been done on social networking sites (e.g., Facebook, Twitter and LinkedIn) and how people use those sites, specifically to see if those sites are serving as substitutes for FtF communication. In order to attempt to understand the online social networking phenomenon, this paper will look at the research that has already been done on various forms and aspects of computer mediated communication, as well as explore the effects Facebook has on face-to-face intercultural interactions on a college campus.

CHAPTER 2

LITERATURE REVIEW

In order to understand the online social networking phenomenon, it is important to look at the research that has been done on various forms and aspects of communication, as well as definitions important to the past and present research.

Definitions

Adams and Galanes (2009) define computer-mediated communication as "any interaction via computer technology, such as chat rooms" (p. 61). CMC can include, but is not limited to, e-mail, chat rooms, discussion boards, net conferencing, and text messaging (Adams & Galanes, 2009, p. 100). Although not named by Adams and Galanes, social networking sites such as MySpace, Facebook, and LinkedIn are popular forms of CMC today. In their well-researched article "Social Network Sites: Definition, History and Scholarship," boyd and Ellison define social network sites as online services that allow users to construct a profile, share it with friends, and view their friends, as well as the connections made by their friends (boyd & Ellison, 2007). In this article, boyd and Ellison give an overview of the history of various social network sites, as well as an overview of the research that has already been done. Aleman and Wartman (2009) found that college student groups will use these social networking sites to "invite students to their events, to post important announcements, and to carry on the day-to-day business of the group . . . social network sites are often used by students to create communal feelings

. . . social networking sites are now fundamental to the culture of the campus and student life" (p. 3).

Research

The advances in CMC obviously make communication easier without time or distance interfering. As stated in "Social Networking, The 'Third Place,' and the Evolution of Communication" (2007)

> Online communication channels reduce the distance between people and allow interactions to happen more quickly than they might otherwise. Communication with distant colleagues, relatives, and friends is shortened from weeks to minutes and can even be instant, allowing us to maintain stronger ties to a wider group of people (p. 4).

In the article "High-Speed Internet Access to the Other: The Influence of Cultural Orientations on Self-Disclosures in Offline and Online Relationships," Tokunaga (2009) concluded that "there is little argument in claiming technologies supported by the Internet have created numerous opportunities for communication that would otherwise be unavailable. Internet-supported technologies . . . promote the development and maintenance of connections" (p. 134). Focusing specifically on how different types of cultures use CMC, Tokunaga (2007) found that collectivists favor FtF relationships and are more likely to self disclose in greater breadth and depth in FtF relationships than in a computer-mediated relationship (p. 143), while individualists freely disclose personal info in computer-mediated relationships as they would in FtF relationships (p. 144). Tokunaga did not discuss whether either group's use of computer-mediated communication had any impact on their various FtF interactions.

Research suggests that people are using the social networking aspect of CMC in order to supplement their personal, offline relationships, arguing that online social networking and other forms of CMC are not substituting for FtF communication. Rhoads (2010), in "Face-to-Face and Computer-Mediated Communication: What Does Theory Tell Us and What Have We Learned So Far," states that FtF communication is "expected to be the superior method of communication for conflict resolution, negotiation, developing relationships, and resolving situations of uncertainty" (p. 113). Additionally, Boase (2004) found that people still communicated "with their social ties in traditional ways, in addition to the use of the Internet for social communication . . . in-person encounters were most widely used, followed by landline phone, cell phone, email and IM communication" (as cited in Lee, et al, 2010, p. 377). Furthermore, in their study of households in China, Lee, Leung, Lo, Xiong, and Wu (2010) found that "the use of the Internet for interpersonal communication cannot replace face-to-face communication in improving quality of life" (p. 383). Similarly, in a study conducted in Singapore, Tan, Wei, Watson, Clapper, and McLean (1998) found that collectivistic cultures, which value harmony over confrontation, "may be less willing to use available means, including CMC, to contradict opinions" (p. 1274). Though the study discussed focused on CMC utilization in a group setting, Watson, et al, (1994) state that "national culture is like to moderate the impact of CMC because people from each culture have unique notions on what are appropriate uses of CMC (as cited in Tan, Wei, Watson, Clapper, and McLean, 1998, p. 1266).

Subrahmanyam, Reich, Waechter, and Espinoza (2008), in "Online and offline social networks: Use of social networking sites by emerging adults," explored "emerging

adults' use of social networking sites for communication and examine[d] the relation between their online and offline social networks" (p. 420). As a result, Subrahayam, et al, (2008) found that

> the emerging adults in [their] sample seemed to be using social networking sites to…connect with others, in particular those in their offline lives. Similarly, most users reported that they would only add people that they had met in person onto their network on social networking sites (p. 430).

On the other hand, Sheldon (2008) stated that "internet users who avoided face-to-face interaction, or found it less rewarding, chose the internet as a functional alternative to fulfill interpersonal needs" (p. 67), suggesting that the Internet could possibly be a substitute for FtF interactions in some cases. But Schiffrin, Falkenstern and Stewart (2010) found in their study that "participants consistently rated the Internet as less beneficial than face-to-face communication" (p. 303) and that "participants indicated that FTF communication was more useful than CMC . . . they also considered FTF communication to be more enjoyable than CMC" (p. 304).

Research has also been done specifically on the use of Facebook on college campuses. Aleman and Wartman (2009) conducted a "multi-method research project to better understand college student online culture through an examination of their Facebook use" (p. 50). Through this research, they found that Facebook is the "primary means of online communication between students (e-mail is not for peer-to-peer communication)" (p.53). They also found that, on average, college students spend 6.2 hours per week on Facebook (Aleman & Wartman, 2009, p. 7). Similar to Aleman and Wartman's research, Coyle and Vaughn (2008) wanted to "learn more about why

students engage in social networking as well as discover something about the type of communication they engage in" (p. 14). They found that social networking "is for chatty, social searching; it is used to post humorous comments . . . or to 'see what others are up to.' Young Americans are not generally communicating with unknown others . . . they are using [social networking sites] as a form of entertainment and a way to stay connected with people they already know" (p. 15). They also found that social networking does not replace FtF communication (Coyle & Vaughn, 2008, p. 15), but there was no discussion on whether or not FtF communication decreased as a result of the use of social networking sites.

Sheldon (2008), in her article "The Relationship Between Unwillingness-to-Communicate and Students' Facebook Use," sought to examine how unwillingness to communicate influenced the gratifications that were sought or obtained from Facebook use. She investigated the relationship between the two dimensions of unwillingness to communicate and motives for Facebook use, as well as examined the relationship between unwillingness to communicate and the behavioral or attitudinal outcomes of Facebook use (Sheldon, 2008,p. 67-68). As a result of her research, she found six motives for Facebook use: relationship maintenance, passing time, virtual community, entertainment, coolness, and companionship (Sheldon, 2008, p. 70-71). In addition to the Facebook-specific research that has been done, Schiffrin, et al, (2010) wanted to explore current trends in Internet usage among college students and examine the impact of computer-mediated versus FtF communication on well being. They state that "college students live in a unique social environment in which FTF communication with peers is readily available . . . however, despite ample opportunities for FTF interaction, they

spend an inordinate amount of time communicating online with their peers," (Schiffrin, et al, 2008, p. 300). The "inordinate amount of time" on average was "7 days a week for almost 3 hours each day, or an average of 19.45 hours per week" (p. 301).

As a result of the continued rise of social networking, communication researchers are presented with new opportunities for research dealing with computer-mediated communication, especially when it comes to communicating across cultures. The following study examines whether Facebook fosters face-to-face intercultural interactions between college students, or if today's students are using Facebook as a substitute for those face-to-face interactions with students from other cultures.

Research Questions

Observations on campus led me to two general research questions:

RQ1: How do American and international students differ in their use of Facebook?

RQ2: Is Facebook fostering intercultural communication or is it becoming a substitute for face-to-face intercultural interactions between college students?

In order to answer these general research questions, ten specific test questions were constructed.

TQ1: Does a student's gender affect how comfortable he or she is approaching someone from another culture in person?

TQ2: Does the number of Facebook friends a student has affect how comfortable he or she is approaching someone from another culture in person?

TQ3: Does the number of international Facebook friends affect how comfortable he or she is approaching someone from another culture in person?

TQ4: Does a student's fluency in another language affect his or her comfort levels when approaching someone from another culture in person?

TQ5: Does a student's reported comfort level when approaching someone from a different culture affect his or her channel preference when communicating with someone from a different culture?

TQ6: Does the number of Facebook friends a student has affect his or her channel preference when communicating with their Facebook friends who are international students?

TQ7: Does a student's fluency in another language affect his or her channel preference when communicating with someone from another culture?

TQ8: Does the amount of time spent online affect a student's channel preference when communicating with someone from another culture?

TQ9: Does where a student lives in relation to campus affect his or her channel preference when communicating with someone from another culture?

TQ10: Does a student's year in school affect his or her channel preference when communicating with someone from another culture?

These test questions served as the basis for the statistical analyses and discussions that follow.

CHAPTER 3

METHODOLOGY

Procedure

In an attempt to blend both qualitative and quantitative research methods, and to reach an adequate number of students, a survey was created to evaluate several variables concerning the participants Facebook usage, quantity of friends, and communication preferences. A copy of the actual survey questions and response options can be found in Appendix A.

Since the study involved human subjects, it was necessary to gain approval from the Institutional Review Board before sending out the survey. A detailed application outlining the procedure, accompanied by the email text and a copy of the actual survey, was submitted to the IRB for approval. Initial project approval came on November 5, 2010.

Participants

Research participants were selected by systematic sampling from the WKU campus directory. An email containing information regarding the study and a survey link was sent to a pool of 1,695 students selected from the directory. A second email was sent to 895 students on the Honors College listserv, bringing the total number of emails sent to 2,590. No distinction was made between Honors and non-Honors students; sending the email to the Honors list was a last minute attempt to increase the number of respondents and the survey was not altered before sending it out. 186 students responded to the

survey, resulting in a 7.18% response rate. US citizens accounted for 98.4% of the participants. Only two international students responded to the survey. 78% of respondents were female and 22% were male. 23.1% classified themselves as freshmen in college. 19.9% classified themselves as sophomores. 23.1% classified themselves as juniors and 26.9% classified themselves as seniors. 7% of respondents indicated that they were graduate students. 94.6% were full time students and 5.4% were part time. 48.9% of students said that they live on campus. 36.6% said that they live off campus but within Bowling Green, and 14.5% said that they live outside of Bowling Green.

CHAPTER 4

RESULTS

Frequencies

Before running any tests between variables, I looked at the frequencies of each answer to each question in order to gain some insight into the general communication habits of the participants. Questions based on data from international students were not considered during the data analysis.

How do students use Facebook?

95.7% of respondents reported that they have and use a Facebook account. 14.5% reported that they have between 1 and 200 Facebook friends. 31.7% reported between 201 and 400 friends. 20.4% reported between 401 and 600 friends. 15.1% reported having between 601 and 800 friends, and 14.5% reported that they have over 800 Facebook friends.

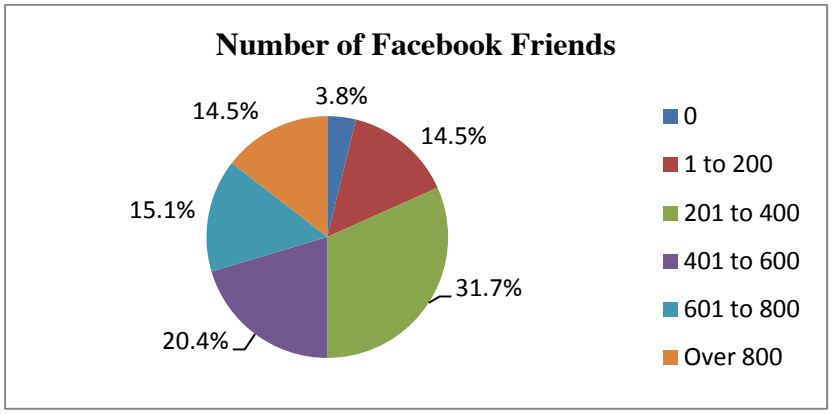

Figure 1

Of those Facebook friends reported, 15.6% of respondents said that none were international students. 53.8% reported having between 1 and 10 international students as friends, followed by 17.2% having between 11 and 20 international students as friends. 13.4% reported having over 20 international students on their friends list.

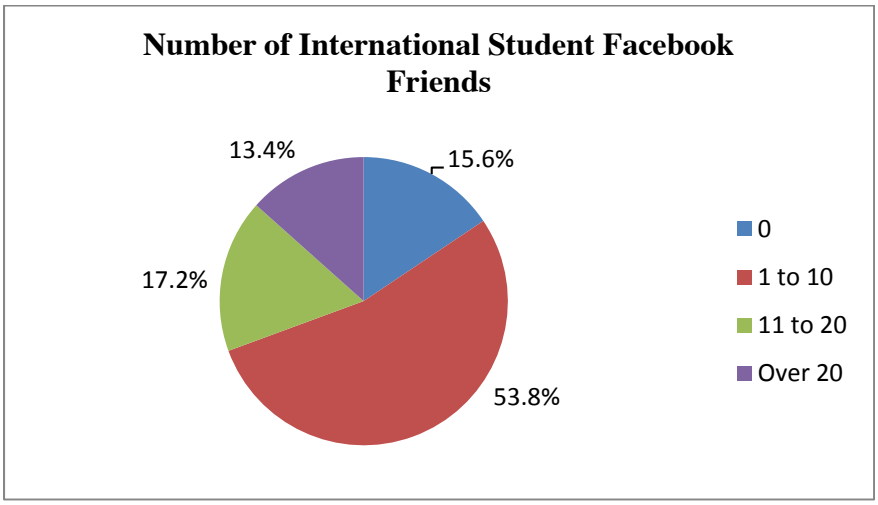

Figure 2

Amount of time spent on Facebook each day varied widely. Students who reported that they spend up to 15 minutes a day on Facebook accounted for 15.6% of respondents while 21% reported that they spend between 16 and 30 minutes on Facebook each day. 17.2% of the respondents said that they spend between 31 and 45 minutes online, while 15.1% said they spend between 46 minutes and an hour online. 17.2% reported that they spend between one and two hours online and 7.5% reported that they spend more than 2 hours online each day.

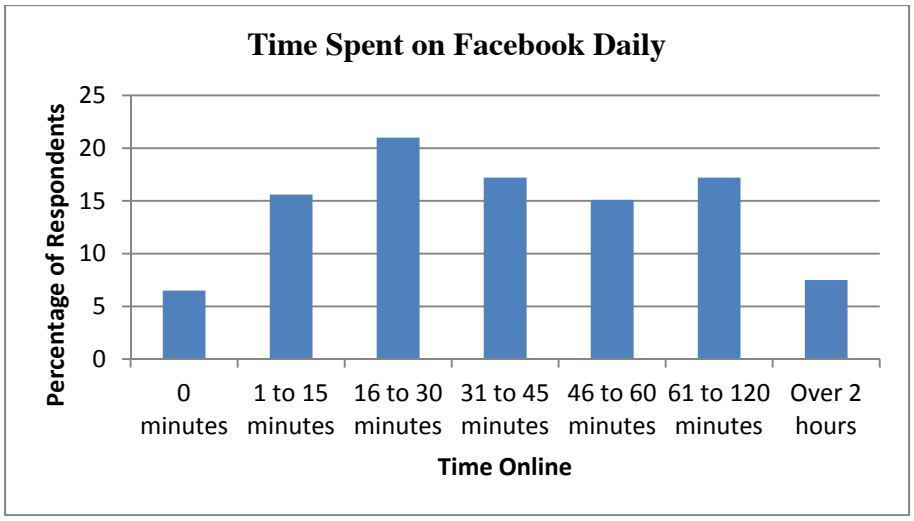

Figure 3

Participants were also asked how they use Facebook. 13.4% said that they use it to maintain contact with their friends and relatives. 60.2% said that they use it to maintain contact with their friends and relatives, as well as to share pictures. 11.8% said that they use it for those reasons and to play games. 9.6% said that they use Facebook for a combination of reasons and 4% said that they do not have a Facebook to use or do not get online often.

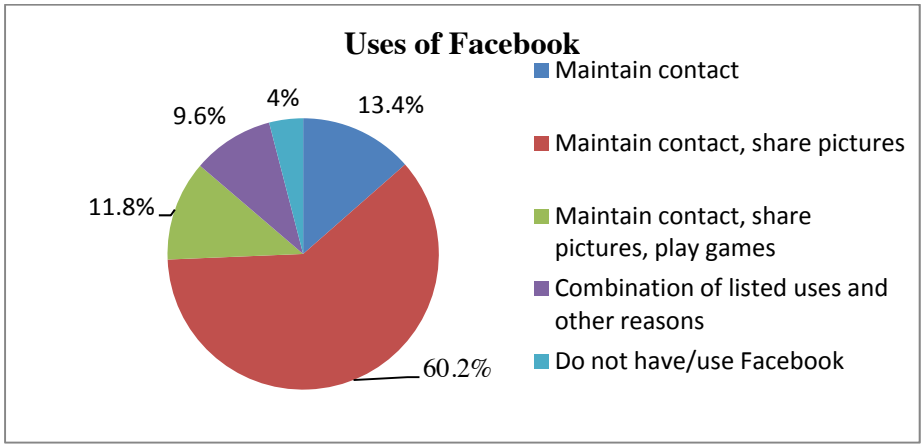

Figure 4

Communication Patterns

Participants were asked how comfortable they are approaching someone in person who is ethnically or culturally different. 1.6% reported that they are very uncomfortable and 10.2% reported that they are somewhat uncomfortable approaching someone who is ethnically or culturally different in person. On the other end of the spectrum, 33.9% reported that they are very comfortable and 54.3% reported that they are somewhat comfortable approaching someone who is ethnically or culturally different in person.

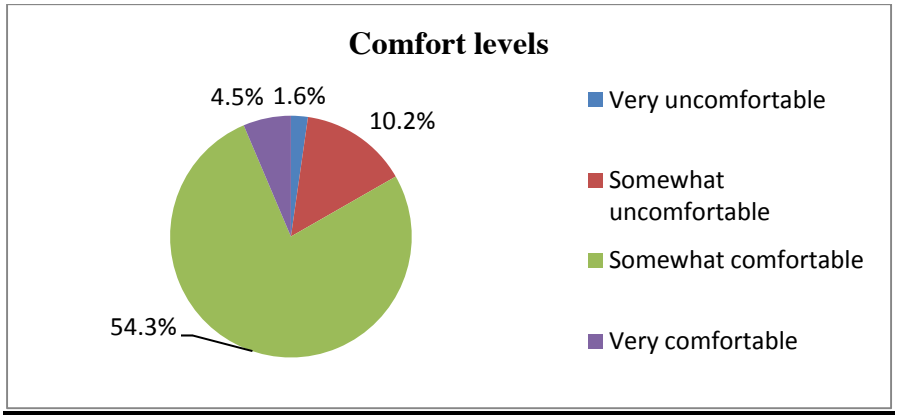

Figure 5

When asked which communication channel they prefer, face-to-face or Facebook, when communicating with Facebook friends who are ethnically or culturally different, 32.3% said that they prefer Facebook over face-to-face communication. A surprising 54.3% indicated that they prefer face-to-face communication over Facebook. 13.4% reported that they either did not prefer one communication channel over the other, or that channel preference would depend on the situation.

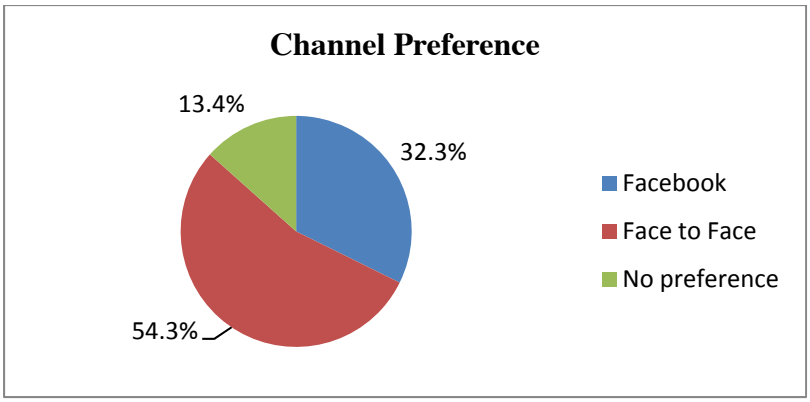

Figure 6

Students were then given the opportunity to explain why they chose their preferred communication channel. When discussing face-to-face communication, one student said that "communication is simply more natural and fulfilling face-to-face, regardless of ethnicity." Another said that "culture differences are hard to interpret, and it is easier to understand them face-to-face." A third student said that "communication via Facebook is not as authentic as in person. I think that you get more from the conversation if it is person to person." When discussing Facebook, some students said that it is easier to understand an international student in writing if there is a language barrier. Others said that Facebook is easier because of busy schedules. Of those students who showed no preference, most said that the channel preference would depend on the situation, but one student said that he/she does not "communicate in a certain way based on the ethnicity or culture of my friends." Overall, those students who said they preferred face-to-face stated that they like the personal interaction; those who picked Facebook said that they were either shy or busy, or their international student friends had returned to their home country.

In continuing my research, I also considered whether students spoke a language other than English and to what degree of fluency. 29.6% reported that they did not speak

another language at all. 47.8% reported that they speak another language with minimal fluency. 16.7% reported that they speak another language with moderate fluency and 4.3% reported that they speak another language with considerable fluency.

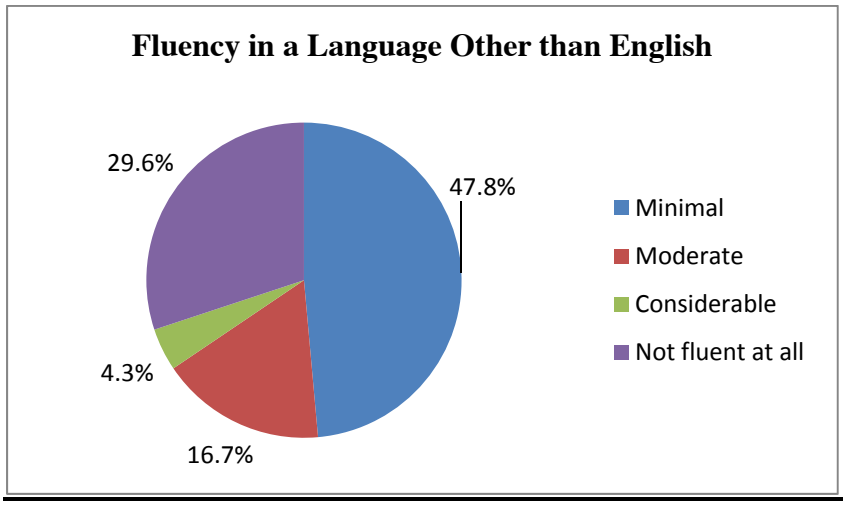

Figure 7

Statistical Analysis

1. **Does a student's gender affect how comfortable he or she is approaching someone from another culture in person?**

To determine whether males and females differed in their level of comfort when approaching a student from another culture in person, a T-test was conducted. Reported comfort levels, treated as an interval measure, were considered to be dependent upon gender, which was treated as a nominal measure. The T-test generated a p-value of .36, indicating that no statistical significance existed between males and females on comfort level.

2. **Does the number of Facebook friends a student has affect how comfortable he or she is approaching someone from another culture in person?**

An ANOVA test was run in order to determine if level of comfort when approaching someone from another culture in person was affected by the number of Facebook friends a student has. To run the ANOVA test, I treated the number of Facebook friends a student reported, expressed in wide categories, as a nominal measure and the reported comfort levels as an interval measure. The test generated a p-value of .04, indicating a significant difference in comfort levels according to the number of Facebook friends a student has.

After the One-way ANOVA test, a post-hoc Tukey B test further examined the relationship between the number of friends and a student's reported comfort levels. All respondents indicated that they were somewhat comfortable approaching someone from another culture in person but the Tukey B test indicated that if a student reported having between 1 and 200 or over 800 friends on Facebook, they were slightly more comfortable than students with 200 to 800 Facebook friends. Though no further post-hoc tests were conducted to investigate this outcome, speculation leads to the assumption that people with more friends are typically extroverted in nature, and would therefore be more comfortable approaching someone in person. Speculation also leads to the assumption that people with less Facebook friends value and place more weight in interpersonal relationships and would therefore be more comfortable approaching someone from another culture in person.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	5.293	5	1.059	2.354	.042
Within Groups	80.943	180	.450		
Total	86.237	185			

Table 1: ANOVA, comfort level by number of Facebook friends

	Number of Facebook Friends in 6 categories	N	Subset for alpha = 0.05
			1
Tukey B[a,b]	0	7	3.00
	601-800	28	3.00
	401-600	38	3.13
	201-400	59	3.17
	>800	27	3.30
	1-200	27	3.56

Table 2: Post-hoc, Comfort Level by Number of Facebook Friends

The mean in the Tukey B test indicated that most respondents in each category of number of friends reported that they were "somewhat comfortable" approaching someone from another culture in person. The means concur with the previously discussed frequencies that indicated a majority of respondents were comfortable approaching someone from another culture in person.

3. **Does the number of international Facebook friends affect how comfortable he or she is in approaching someone from another culture in person?**

I questioned whether a student who had a significant number of international students as Facebook friends would be comfortable approaching someone from another culture in person. An ANOVA test was run in order to see the differences between those who have a significant number of international students as Facebook friends and those who do not. The number of international Facebook friends, measured in broad ranges, was considered the independent variable and treated as a nominal measure. The reported comfort level was considered the dependent variable and treated as an interval measure. The test generated a p-value of .67, which indicates that no significant difference in comfort exists between the groups.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.877	6	.313	.664	.679
Within Groups	84.359	179	.471		
Total	86.237	185			

Table 3: ANOVA, Number of International Friends and Comfort Level

4. **Does a student's fluency in another language affect his or her comfort levels when approaching someone from another culture in person?**

I questioned whether a student who spoke a second language, at any level, would be more comfortable approaching someone from another culture in person. To answer this question, a One-way ANOVA test was run. Comfort, treated as an interval measure, was considered to be dependent on whether or not a student speaks another language, which was treated as a nominal measure. The test generated a p-value of .14.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.503	3	.834	1.830	.143
Within Groups	81.606	179	.456		
Total	84.109	182			

Table 4: ANOVA, Comfort Level by Other Language Fluency

The calculated value indicates a very slight, almost negligible difference between the two variables. A difference may exist, but that difference is not strong for this sampling.

5. **Does a student's reported comfort level when approaching someone from a different culture affect his or her channel preference when communicating with someone from a different culture?**

I questioned whether a student who is more comfortable approaching someone from another culture in person would prefer face-to-face communication over Facebook. In order to answer this question, to examine the possible differences between the groups and see if a correlation existed between the two variables, an ANOVA test was conducted, and a Pearson's r was calculated.

For the ANOVA test reported comfort levels were treated as a nominal measure with channel preference, the dependent variable, as a dichotomous interval measure as a dichotomous interval measure, because face to face communication is considered to be the better of the two options. For the dichotomous interval measurement, 1 = prefers Facebook and 2 = prefers Face to Face. The ANOVA test generated a p-value of .01, indicating a significant difference between the four groups.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.800	3	.933	4.205	.007
Within Groups	34.840	157	.222		
Total	37.640	160			

Table 5: ANOVA, Channel Preference by Comfort Level

A post-hoc Tukey B test allowed me to examine this significant difference further. The test showed that those students who reported being very comfortable approaching someone from another culture in person were more likely to favor face-to-face communication over Facebook. The means in the Tukey B test also indicated that those students who reported being very uncomfortable were more likely to favor face-to-face communication over Facebook, a phenomenon that was unexpected, but the very small number of respondents in this category renders this conclusion suspect.

	Q6 Comfort levels	N	Subset for alpha = 0.05
			1
Tukey B[a,b]	Somewhat uncomfortable	17	1.3529
	Somewhat comfortable	89	1.5843
	Very uncomfortable	3	1.6667
	Very comfortable	52	1.7885
Scheffe[a,b]	Somewhat uncomfortable	17	1.3529
	Somewhat comfortable	89	1.5843
	Very uncomfortable	3	1.6667
	Very comfortable	52	1.7885
	Sig.		.261

Table 6: Post-hoc, Channel Preference by Comfort Level

To calculate the Pearson's r value, both the independent and dependent variables were treated as interval measures. The calculated Pearson r value was .24, indicating a weak but still positive relationship between the two variables.

		Q6 Comfort levels	Channel Preference in 2 categories
Q6 Comfort levels	Pearson r	1	.240**
	Sig. (2-tailed)		.002
	N	186	161
Channel Preference in 2 categories	Pearson Correlation	.240**	1
	Sig. (2-tailed)	.002	
	N	161	161

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

Table 7: Comfort Level and Channel Preference (Pearson r)

The ANOVA test indicated that there is some difference between a student's level of comfort when approaching someone from another culture in person and his or her channel preference when communicating with international students. The Pearson's r further indicated that a slight relationship does exist between the two variables. These tests showed that those students who are the most comfortable approaching someone from another culture in person tend to prefer face-to-face communication over Facebook when communicating with their friends who are international students.

6. **Does the number of Facebook friends a student has affect his or her channel preference when communicating with their Facebook friends who are international students?**

I questioned whether students with more Facebook friends would prefer Facebook over face-to-face communication when communicating with their Facebook friends who are international students. An ANOVA test was run to determine whether the number of Facebook friends a student has differentiates his or her channel preference when communicating with someone from another culture.

Number of Facebook friends, in 5 categories, was considered to be the independent variable and treated as a nominal measure, while channel preference (face-to-face versus Facebook) was considered to be the dependent variable and treated as a dichotomous interval measure. The ANOVA generated a p-value of .77, indicating no difference between the five groups.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.435	4	.109	.456	.768
Within Groups	37.205	156	.238		
Total	37.640	160			

Table 8: ANOVA, Channel Preference by Number of Facebook Friends

The test showed that no significant difference exists between the number of Facebook friends a student has and the student's channel preference when communicating with his or her Facebook friends that are international students.

7. **Does a student's fluency in another language affect his or her channel preference when communicating with someone from another culture?**

It was hypothesized that the more fluent a student was, the more likely they would be to choose face-to-face communication over Facebook than a non-fluent student. In order to determine if a difference in channel preference existed between the varying levels of fluency, an ANOVA test was run. Fluency in a second language was treated as a nominal measure and channel preference was treated as a dichotomous interval measure. The ANOVA test generated a p-value of .04, which indicates that a statistically significant difference exists in channel preference between the students with various levels of fluency in a foreign language.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.930	3	.643	2.834	.040
Within Groups	35.177	155	.227		
Total	37.107	158			

Table 9: ANOVA, Channel Preference by Other Language Fluency

The post-hoc Tukey B test allowed me to pinpoint which groups were more likely to choose face-to-face communication over Facebook. The test indicated that those students who reported minimal or considerable fluency were more likely to choose face-to-face communication than students who reported no level of fluency. The test also showed that those students who reported no level of fluency in a language were more likely to choose Facebook for their intercultural communication, possibly because Facebook allows each party to overcome language barriers at their own pace.

	Q10 US citizen/another language	N	Subset for alpha = 0.05
			1
Tukey B[a,b]	Not at all	45	1.4667
	Moderate Fluency	25	1.6000
	Considerable Fluency	7	1.7143
	Minimal Fluency	82	1.7195
Scheffe[a,b]	Not at all	45	1.4667
	Moderate Fluency	25	1.6000
	Considerable Fluency	7	1.7143
	Minimal Fluency	82	1.7195
	Sig.		.461

Table 10: Post-hoc, Channel Preference by Other Language Fluency

Overall, the results of the ANOVA test showed that fluency in a second language has some effect on a student's communication channel preference.

8. Does the amount of time spent online affect a student's channel preference when communicating with someone from another culture?

In order to determine if a difference exists between the time a student spends on Facebook each day and his or her channel preference when communicating with someone from another culture, an ANOVA test comparing the two variables was run. Time spent online was treated as the independent variable, with the student's channel preference being dependent on how much time he or she spends online. To run the ANOVA, time online was treated as a nominal measure and channel preference was treated as a dichotomous interval measure. The test calculated a p-value of .67, indicating that no statistically significant difference exists between the groups and a student's channel preference when engaging in intercultural communication.

9. Does where a student lives in relation to campus affect his or her channel preference when communicating with someone from another culture?

Students were asked if they lived on campus or off campus. If they lived off campus, they were asked if they lived within or outside of Bowling Green. It was hypothesized that if a student lived off campus, especially outside of Bowling Green, that he or she would prefer Facebook over face-to-face communication for the convenience. To determine whether where they live affected their channel preferences when communicating with a student from another culture, an ANOVA test was conducted. Channel preference was assumed to be dependent on where the student lives in relation to campus.

To run the ANOVA test, the independent variable was considered to be nominal and the dependent variable was treated as an interval measure. The test generated a p-value of .63, indicating that no significant difference existed between the three groups in their channel preference for intercultural communication.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.215	2	.108	.454	.636
Within Groups	37.425	158	.237		
Total	37.640	160			

Table 11: ANOVA, Channel Preference by Residence Location

10. Does a student's year in school affect his or her channel preference when communicating with someone from another culture?

To determine whether a student's year in school differentiates his or her channel preferences when communicating with someone from another culture, an ANOVA test was run. Channel preference was assumed to be dependent on the student's year in school.

For the ANOVA test, year in school was treated as a nominal measure and the student's channel preference was treated as a dichotomous interval measure. The ANOVA test calculated a p-value of .17, which indicates no significant difference in channel preference between years in school.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.487	4	.372	1.604	.176
Within Groups	36.153	156	.232		
Total	37.640	160			

Table 12: ANOVA, Channel Preference by Year in School

CHAPTER 5

CONCLUSIONS

RQ1: How do American and international students differ in their use of Facebook?

Not enough data was provided from the international student base to be able to compare the ways in which international students and American students use Facebook. As a result, this research question remains unanswered.

RQ2: Is Facebook fostering intercultural communication or is it becoming a substitute for face-to-face intercultural interactions between college students?

Observations across campus led me to believe that students were using Facebook as a substitute for face-to-face intercultural interactions. However, a surprising number of students (54.3%) reported that they prefer face-to-face communication over Facebook. Statistical tests indicated that those students with under 200 or over 800 Facebook friends are more comfortable approaching someone from another culture in person, but that no real relationship exists between the number of Facebook friends and a student's channel preference for intercultural communication.

Statistical test results indicated that if a student was comfortable, to some degree, approaching someone from another culture in person, then he or she preferred face-to-face communication over Facebook. Tests also indicated that if a student considered themselves to have some degree of fluency in a second language, he or she preferred face-to-face communication. However, the small percentage gap between students who

prefer face-to-face communication and students who prefer Facebook indicates that Facebook has largely become a substitute for the face-to-face intercultural interactions on campus. The closing gap can be attributed to students feeling less comfortable approaching international students in person or the fact that Facebook can allow American and international students time to construct a message so the other can understand, overcoming the language barrier that face-to-face communication may present.

Considerations for Future Research

An obvious limitation of this study is the lack of international participants. A total of two international students responded to my survey, which did not provide enough data to compare to the American demographic. Future researchers should make an effort to gather more data from international students and compare the two demographics. A distinction should also be made between honors students and non-honors students in future studies, as honors students may not exemplify "typical" college student communication patterns. Future studies might also want to consider whether or not a student has studied abroad when examining comfort levels, channel preferences, and number of international Facebook friends.

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Appendix A

Survey of Facebook Usage

Please answer all questions as they pertain to you.

1. Do you have and use a Facebook account?
    (1) Yes
    (2) No

2. Roughly, how many Facebook friends do you have? (If you do NOT have a Facebook, please select 0.)
    (0) 0
    (1) 1 to 200
    (2) 201 to 400
    (3) 401 to 600
    (4) 601 to 800
    (5) 801 to 1000
    (6) Over 1000

3. Of those friends, how many of them are international students? If you are an international student, how many of your friends are American students? (If you do NOT have a Facebook, please select 0.)
    (0) 0
    (1) 1 to 10
    (2) 11 to 20
    (3) 21 to 30
    (4) 31 to 40
    (5) 41 to 50
    (6) Over 50

4. On average, how much time do you spend on Facebook each day? (If you do NOT have a Facebook, please select 0.)
    (0) 0 minutes
    (1) 1 to 15 minutes
    (2) 16 to 30 minutes
    (3) 31 to 45 minutes
    (4) 46 to 60 minutes
    (5) 61 minutes to 2 hours
    (6) Over 2 hours

5. How do you use Facebook? Please check all that apply. (If you do NOT have a Facebook, please specify that in the "other" box.)
    (1) To maintain contact with friends and relatives
    (2) To share pictures
    (3) To play games

Other:

6. How comfortable are you approaching someone in person who is ethnically or culturally different than you?
(4) Very comfortable
(3) Somewhat comfortable
(2) Somewhat uncomfortable
(1) Very uncomfortable

7. If you are Facebook friends with someone who is ethnically or culturally different than you, which communication channel do you prefer? (If you do NOT have a Facebook, please indicate that in the "other" box.)
(1) Facebook
(2) Face to Face
Other:

8. Please briefly explain why you chose the communication channel you chose in the previous question.

9. Are you a United States citizen?
(1) Yes
(2) No

10. If you are a US citizen, do you speak another language?
(4) Yes, with considerable fluency
(3) Yes, with moderate fluency
(2) Yes, with minimal fluency
(1) Not at all

11. If you are NOT a United States citizen, how long have you lived in the US?

12. If you are NOT a United States citizen, how well do you speak English?
With considerable fluency
With moderate fluency
With minimal fluency
Not at all

13. What is your gender?
(1) Female
(2) Male

14. Year in school:
(1) Freshman
(2) Sophomore
(3) Junior
(4) Senior

(5) Graduate student

15. Are you a part time or a full time student?
    (1) Part time
    (2) Full time

16. Where do you live?
    (1) On campus
    (2) Off campus, within Bowling Green
    (3) Off campus, outside of Bowling Green