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# Facebook Use Among African American and Hispanic Students: An Exploratory Investigation of Perceived Academic Impact

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## ABSTRACT

*Facebook is one of the world's leading social networking sites. It is pervasive in students' lives and can impact their academic careers in a variety of ways. However, little research exists evaluating the use of Facebook in minority academic settings. An early step in this direction is to gain an understanding of how different student demographic groups use Facebook. An interest in further assessment of Facebook's role in diverse segments of academia motivates the collection and analysis of Facebook-related data from minority serving institutions such as Historically Black Colleges or Universities (HBCUs) and Hispanic Serving Institutions (HSIs). This study presents the results of a comparative examination of African American students at an HBCU and Hispanic students at an HSI regarding their perceptions of Facebook use for academics. The findings reveal significant differences between the two groups. When compared to African American students, the Hispanic students use Facebook more for academics even though they perceive it to have a negative impact on academics. This perceived negative impact of Facebook is not directly translated into actual differences in self-reported GPA.*

*Keywords: Facebook, social networks, education, educational technology, questionnaire*

## INTRODUCTION

Social networking sites as defined by Boyd and Ellison (2008) are web based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system. Social networking continues to increase in popularity, with about two-thirds of all internet users belonging to at least one social networking site (Duggan & Brenner, 2013).

Users of social networking sites have exhibited great ingenuity and adaptability in their applications of social media. The networking sites have been used to manage relationships (find people, keep in touch with friends, and form new friendships); organize, communicate and share information (posts, pictures, other resources); engage in self-presentation; or simply for entertainment, playing games and having fun. Businesses use social media to connect and communicate with customers, both current and potential. Social media is also being used extensively in political campaigns.

Since its founding in 2004, Facebook has grown to become one of world's leading social networking sites, exceeding 1 billion active monthly users by 2012 (Facebook, 2015). Recent estimates indicate that Facebook now has more than 1.3 billion active monthly users, with about 48% logging in on any given day. An average user spends about 18 minutes per Facebook visit, has 130 friends, and is connected to 80 pages, groups, and events (Statistic Brain, 2015). Recent academic research supports some of these statistics. For example, Akyildiz and Argan (2011) found that users log into their site several times a day, have 101-300 friends, and spent 15-30 minutes daily on Facebook-related activities. Other studies have found an average use time of at least 30 minutes per session (Mazman & Usluel, 2010; Pempek, Yermolayeva & Calvert, 2009), while Muise, Christofides, & Desmarais, (2009) found that respondents spent approximately 40 minutes on Facebook with females tending to spend a longer time than males.

A dominant theme in prior studies has been to examine the Facebook and social networking experience and use for college students (Ellison, Steinfield & Lampe 2007; Pempek et. al., 2009; Akyildiz & Argan, 2011; Case & King, 2012; Paul, Baker & Cochran, 2012). Such use of Facebook has also provided a rich setting for studies in a variety of use and user topics such as identity construction (Boyd & Heer, 2006), the effect of social media on student engagement and academic performance (Junco, 2012), privacy (Lewis, Kaufman & Christakis, 2008; Mathiyalakan, Heilman & White, 2013; Pinchot & Poullet, 2012; Whitcomb & Fiedler, 2010), interaction with elected officials (Stieglitz & Brockmann, 2013), and a variety of demographic comparisons including age, gender, ethnicity and academic major (Gabre & Kumar, 2012; Grasmuck, Martin & Zhao, 2009; Hargittai, 2008; Heilman, Mathiyalakan, White, Seshie & Clark, 2014; Junco, 2010; Mathiyalakan, Heilman, White, Wood & Weisenfeld, 2014).

Using mainly 18 and 19 year old students enrolled at the University of Illinois-Chicago, Hargittai (2008) examined the impact of gender, ethnicity, and parental education on social network use. Hispanic students used MySpace (a popular site in 2008, now revamped with a focus on music and culture) significantly more than White students. Asians and Asian American students were significantly less likely to use MySpace. Students whose parents had less schooling were more likely to use MySpace, while students whose parents had higher levels of schooling were more likely to use Facebook. Hargittai's research also shows that students who lived with their parents were significantly less likely to use Facebook than other students. Based on her findings, Hargittai states that "unequal participation based on user background suggests that differential adoption of such services may be contributing to digital inequality" (p.276).

This difference in technology usage has been found in other studies, which have shown the existence of a digital divide across various demographic categories. Citing prior research, Junco

(2013), notes that gender, race, and socioeconomic status affect technology adoption and use. Other researchers have proposed that students' use and adoption of technology derives from cultural relevance (White & Lester, 2001). A 2014 Nielsen study found that social media access and use differs across races, noting that that Hispanics use mobile devices more than any other demographic group to access social networks while African Americans are second to Hispanics in mobile access and first in access through their personal computers. Both of these demographic groups are underrepresented populations, especially in business disciplines (Payton, White & Mbarika, 2005). Since some researchers have indicated that social media and technology can potentially widen the digital divide between socioeconomic groups (Olshan, 2015), a critical research interest revolves around how these underrepresented groups use technology, in particular social media, to increase knowledge and overall effectiveness.

Junco (2013) notes that social media use by minorities has not been extensively researched. Motivated by an interest in further assessment of Facebook's role in diverse segments of academia, specifically within minority-serving institutions, we collected Facebook-related data from students at a Historically Black College or University (HBCU) and a Hispanic Serving Institution (HSI). This study presents the results of a comparative examination of African American HBCU students and Hispanic students at a HSI regarding their perceptions of Facebook use and its use for academics. We examine if there are differences in attitudes between these two sets of students and whether their perceptions of use match the reality of their reported academic performance.

To address these issues, a survey was developed from questions in earlier studies (Lampe, Ellison & Steinfield, 2006 & 2008; Ellison, Steinfield & Lampe, 2007; Pempek et al., 2009) in an attempt to gain an understanding of minority student perceptions toward Facebook use for academics and its relationship to academic performance. Potential weaknesses of this study as well as suggestions for future research are also discussed.

## REVIEW OF LITERATURE

Ellison, Steinfield & Lampe (2007) looked at Facebook's importance in forming and maintaining social capital among college students. They reported a strong association between Facebook use and three types of social capital - bridging, bonding, and maintenance. An interaction between Facebook use and measures of psychological well-being suggested that Facebook can provide greater benefits to users having low self-esteem and low life satisfaction. A strong link was also found between Facebook use and maintaining high school connections, leading the authors to hypothesize that Facebook helps in maintaining relationships as people move between various offline communities. Hew (2011) and Pempek et al. (2009) added support to this view of maintaining social capital when they found that Facebook users tend to spend their time socializing with others based on pre-existing relationships.

Case & King (2012) examined the social networking behavior of students enrolled at a private northeastern U.S. university who used Facebook and Twitter. They found that approximately 65% of the respondents indicated social networking as either somewhat or very important to them. There appeared to be a gender difference, with a higher percentage of females indicating that social networking is important to them. The percentage of students indicating that social sites are

important to them fell as students rose in academic class. The findings also indicated that although Twitter is not used as much as Facebook, it is becoming more popular.

With the rapid growth of social networks, there comes a unique opportunity to enhance students' academic learning experiences. Social media can impact their academic careers in a variety of ways. Instructors can use social media to enhance students' class room experience and involvement by using it as a communicating, collaborating tool, and resource sharing tool. However, this use of social media remains only as a potential in many academic environments, since Facebook has not made big inroads into classrooms as a resource for learning (Sanchez, Cortijo, & Javed, 2014).

To effectively design instruction to benefit learning, it is important to get a clear understanding of students' use and attitudes toward this technology. Prior research suggests that using Facebook for educational advantage may not be a priority for many students. Using undergraduate and graduate students of a large public Midwestern university, Kirschner and Karpinski (2010) examined the relationship between Facebook use and academic performance. They found that Facebook users have a lower GPA and study fewer hours than non-Facebook users. Paul, Baker, and Cochran (2012), in an examination of the impact of social media on academic performance of undergraduate students enrolled in business school courses, found that time management skills, student characteristics, and time spent on social media all have an impact on academic performance. Positive relationships with academic performance were found for age, marital status (single), number of children and academic performance. On the other hand, a negative relationship was found for time spent in social media. After a review of prior research, Hew (2011) found little support for Facebook's educational value.

Studies conducted outside the U.S. also show that students tend to use Facebook more for socialization than for academics. For example, Akyildiz and Argan (2011) examined Facebook usage among college students in Turkey and found that their predominant uses of Facebook tend to be having fun, contacting friends, and following the news, as opposed to conducting educational and school-related work. Hew & Cheung (2012) examined motivations for Facebook use among Singaporean students ranging in age from 15 to 23. They found that Facebook was used primarily for maintaining relationships with people they already knew (such as current or former schoolmates), although about half the students did not have any misgivings in accepting total strangers as friends. The respondents also used Facebook for entertainment and for venting their emotions. None of the respondents indicated that they used Facebook for academic purposes. Jong, Lai, Hsia, Lin & Liao (2014) used students at a university in Taiwan to examine the educational value associated with the use of Facebook and compared it with the use of Bulletin Board Services (BBS). They found that 81% of the students discussed course issues in Facebook and that such use was considered fourth in importance after relationship maintenance, passing time, and entertainment. They also found that Facebook does not satisfy a user's occasional need to review prior communication. Ainin, Naqshbandi, Moghavvemi and Jaafar (2015) examined the impact of Facebook use of Malaysian public university students. Using two socialization constructs, social acceptance and acculturation (a measure dealing with adaptation to new cultural contexts), they found that social acceptance was related to Facebook use but acculturation was not. And, in a departure from other studies, they also found a significant positive relationship between Facebook usage intensity and academic performance.

While enhancing the educational experience may not be a predominant theme among Facebook users, there is some research that indicates it can be useful. Studies also show that if properly designed and utilized, benefits may accrue. For example, Jackson (2012) found that new students who joined a university-sponsored Facebook group that provided pre-enrollment contact and integration information had higher retention rates than the new students who did not join. Additionally, Duncan and Barczyk (2013) found that students tended to have favorable impressions of Facebook for classroom use and, surprisingly, older students thought it provided a greater social learning experience than their younger counterparts.

With few exceptions, little has been done to evaluate the use of Facebook within HBCUs or HSIs. Using students from two schools, one of which was an HBCU and the other a metropolitan commuter university, Gabre and Kumar (2012) examined the role of perceived stress on the academic performance of accounting students. They found that female accounting students reported higher levels of stress than their male counterparts and that accounting students who used Facebook while studying had a lower academic performance after controlling for stress. African American students also reported higher levels of stress than their peers.

Heilman et al. (2014) examined Facebook use by undergraduate HBCU accounting students. The goal of their research was to determine how Facebook is assimilated into the lives of accounting students, how they use Facebook to satisfy social needs, and how these uses differ between traditional and nontraditional students. Significant differences were found between traditional and nontraditional accounting students in terms of Facebook assimilation and in the use of Facebook for social outreach and social maintenance. Mathiyalakan, et. al. (2014) examined the use of and attitudes toward Facebook of two groups of students - Accounting and Management Information Systems (MIS) majors. The findings indicate that, compared to Accounting majors, MIS majors are more likely to use Facebook to communicate with other students about a course and to communicate with professors.

## METHODOLOGY

The focus of this study is on understanding attitudes, values, and behaviors related to Facebook use among students enrolled at a Historically Black College or University (HBCU) and a Hispanic Serving Institution (HSI), and assessing differences in usage and attitudes between these ethnically diverse student populations in relation to academics. Because the perceptual and attitudinal constructs used here were drawn from prior survey-based research, a survey approach also was chosen for this study. Convenience sampling was used in administering the survey to students enrolled at the two institutions. Students in selected courses were invited via their school email accounts to participate in a survey hosted on Survey Monkey, a leading platform for survey administration. The students were offered no financial incentives, although some received course credit for completing the approximately 15-minute survey.

The first survey was administered to students enrolled in a HBCU located in a Mid-Atlantic U.S. state during late fall 2012 and early spring 2013. Respondents were students enrolled in undergraduate and graduate Management Information System and Accounting courses, but not necessarily MIS or Accounting majors. The same survey was administered to students enrolled in

courses at a business school in a HSI located in southwestern U.S. during the spring 2013. The respondents were primarily business majors. The students were given course credit, but no financial incentives, for completing the survey.

The respondents were asked to provide selected demographic and background information such as gender, age, ethnicity, school classification, GPA, and academic major. Respondents were also asked whether they had a Facebook account, the year that they joined Facebook, and if they had an account, how often they logged in to Facebook, length of stay for each log in, and their approximate number of friends. Measures for assessing Facebook use for academics were drawn from prior research by Ellison et al. (2007), Lampe et al. (2006), Lampe et al. (2008), and Heilman et. al. (2014). Each item is measured on a five point Likert-type scale where 1 represents “Strongly Disagree” and 5 represents “Strongly Agree.”

SPSS version 22 was used for data analysis. Chi square tests (incorporating Yates’ correction for continuity when any cell values are  $\leq 5$ ) were performed on all demographic variables to identify differences in distributions. In addition, categorical means were computed where appropriate and t-tests of differences in means were performed.

## DEMOGRAPHICS

Two hundred, thirty-nine (239) usable surveys were collected from students at the HBCU, 52 of which were from students who were not African American. 106 usable surveys were collected from students at the HSI, 10 of which were from students who were not Hispanic. Including only the majority ethnicities from each of the school’s respondents left a final sample of 283 students, 187 African American students from the HBCU and 96 Hispanic students from the HSI. A summary of the demographic data for the sample is presented in Table 1.

There is a marginally statistically significant difference in distribution of respondents by Gender ( $X^2_{(1)}=3.24$ ,  $p=.072$ ). A test of proportions confirms that the 64% proportion of African American female respondents is marginally statistically higher than the 53% proportion of Hispanic female respondents ( $p=.071$ ). There is a statistically significant difference in distribution of respondents by Academic Major ( $X^2_{(1)}=9.10$ ,  $p=.003$ ). A test of proportions confirms that the 93% proportion of Hispanic Business majors is significantly higher than the 79% proportion of African American Business Majors ( $p=.002$ ).

There are no statistically significant differences in distribution or categorical means for respondents by Age ( $X^{2(Yates)}_{(4)}=2.39$ ,  $p=.665$ ) or Classification ( $X^{2(Yates)}_{(4)}=5.85$ ,  $p=.210$ ). The African American respondents are, on average, somewhat older than the Hispanic respondents (mean categorical value of Age is 2.93 for African American students versus 2.81 for Hispanic students), which may be attributable to the marginally higher proportion of African American graduate students (African Americans = 7%, Hispanics = 2%,  $p=.063$ ).

		African Americans (HBCU) N= 187	Hispanics (HSI) N = 96
Gender	Male	67 (36%)	45 (47%)
	Female	120 (64%)	51 (53%)
Academic Major	Business	147 (79%)	89 (93%)
	Non Business	40 (21%)	7 (07%)
Age	1: Under 18	1 (01%)	1 (01%)
	2: 18 - 22	122 (65%)	69 (72%)
	3: 23 – 26	31 (17%)	15 (16%)
	4: 27 – 30	8 (04%)	2 (02%)
	5: Over 30	25 (13%)	9 (09%)
	Categorical Mean	2.65 (SD=1.06)	2.47 (SD= 0.94)
Classification	1: Freshman	17 (09%)	13 (14%)
	2: Sophomore	52 (28%)	21 (22%)
	3: Junior	60 (32%)	35 (36%)
	4: Senior	44 (24%)	25 (26%)
	5: Graduate	14 (07%)	2 (02%)
	Categorical Mean	2.93 (SD=1.08)	2.81 (SD=1.04)

**Table 1: Demographic Information.**

## FACEBOOK USAGE

All respondents had a Facebook account. A summary of their self-reported Facebook usage statistics is presented in Table 2. Chi-square tests were performed on all usage variables to identify differences in distributions. In addition, categorical means were computed where appropriate and t-tests of differences in means were performed.

The difference in distribution between ethnicities for Year Joined Facebook is statistically significant ( $X^{2(Yates)}_{(1)}=15.99, p=.003$ ). A test of proportions shows that the 61% of the African American students who joined Facebook in 2008 or earlier is significantly higher ( $p=.001$ ) than the 41% of Hispanic students who joined during this same period, indicating that the African American students tend to be longer-term site users.

The difference in distribution between ethnicities for Log In Frequency is statistically significant ( $X^{2(Yates)}_{(5)}=48.68, p<.001$ ). More than three-fourths of Hispanic students log into Facebook at least daily (25% about once a day, 57% several times per day) while less than half of African American students log in daily (26% about once a day, 19% several times a day). The mean categorical value of Log in Frequency is 1.81 (several times a day) for Hispanic students and 3.29 (3-5 days a week) for African American students. The difference in mean Log In Frequency is statistically significant

( $p < .001$ ). A test of proportions within categories supports these findings by showing a significantly higher portion of Hispanics in category 1 (several times a day,  $p < .05$ ), no significant difference in proportion in categories 2 or 3 (about once a day, 3-5 days a week), and significantly higher proportions of African Americans in categories 4, 5, and 6 (1-2 days a week, every few weeks, less often,  $p < .05$ ).

		African Americans (HBCU) N= 187	Hispanics (HSI) N = 96
Year Joined Facebook	after 2011	0 (0%)	3 (3%)
	2011	6 (3%)	6 (6%)
	2010	28 (15%)	30 (31%)
	2009	39 (21%)	18 (19%)
	before 2009	114 (61%)	39 (41%)
Log In Frequency	1: Several times a day	35 (19%)	55 (57%)
	2: About once a day	48 (26%)	24 (25%)
	3: 3 – 5 days a week	24 (13%)	7 (7%)
	4: 1 – 2 days a week	26 (14%)	5 (5%)
	5: Every few weeks	15 (8%)	0 (0%)
	6: Less often	39 (21%)	5 (5%)
	Categorical Mean	<b>3.29</b> (SD=1.81)	1.81 (SD=1.29)
Stay Length Per Visit	1: < 15 minutes	109 (58%)	50 (52%)
	2: ≥ 15 min but < 30 min	52 (28%)	35 (36%)
	3: ≥ 30 min but < 1 hour	17 (9%)	8 (8%)
	4: ≥ 1 hour but < 3hours	8 (4%)	2 (2%)
	5: ≥ 3 hours	1 (1%)	1 (1%)
	Categorical Mean	1.61 (SD=0.86)	<b>1.64</b> (SD=0.81)
Number Of Friends	1: < 25	2 (1%)	2 (2%)
	2: 25 – 50	2 (1%)	4 (4%)
	3: 51 – 100	2 (1%)	12 (13%)
	4: 101 – 200	18 (10%)	17 (18%)
	5: 201 – 500	52 (28%)	29 (30%)
	6: > 500	111 (59%)	32 (33%)
Categorical Mean	<b>5.40</b> (SD=0.81)	4.70 (SD=1.28)	

**Table 2: Facebook Account and Usage Statistics.**

The difference in distribution for Stay Length per Visit is not statistically significant ( $X^{2(Yates)}_{(5)}=2.03$ ,  $p=.730$ ). Both African American and Hispanic students indicate an average Stay Length per Visit of less than fifteen minutes (mean categorical value is 1.61 for African Americans and 1.64 for Hispanics). Although the categorical means indicate that Hispanics tend to spend

slightly more time in Facebook per visit than African Americans, the difference is not statistically significant ( $p=.808$ ).

The difference in distribution for Number of Friends is statistically significant ( $X^{2(Yates)}_{(5)}=26.92$ ,  $p<.001$ ). The mean categorical value for African American students is 5.40 (in the 201-500 range) and 4.70 (in the 101-200 range) for the Hispanic students. The difference in categorical mean is statistically significant ( $p<.001$ ). A test of proportions supports this finding by showing a higher proportion of Hispanic students in categories 2 (25-50 friends,  $p<.10$ ), 3 (51-100 friends,  $p<.05$ ) and 4 (101-200 friends,  $p<.05$ ), while African Americans have a higher proportion of respondents in category 6 (over 500 friends,  $p<.05$ ).

Responses also were collected for questions regarding social use of online media not related directly to Facebook. A statistically significant difference ( $p=.031$ ) was found in the average amount of time spent daily on all social media (2.41 hours for Hispanic students versus 2.09 hours for African American students). A marginally statistically significant difference ( $p=.072$ ) also was found in the average amount of time spent on email (2.12 hours for African American students versus 1.84 hours for Hispanic students).

## PERCEPTIONS

Table 3 presents a summary of the responses for survey items related to student perceptions of Facebook use in academics. The items, presented in the form of statements, fall into three general categories: how students use Facebook to interact with others within the academic setting, students' habits for personal use of Facebook within the academic setting, and students' perceptions of the impact that their use of Facebook has on their academic performance. The items are measured on a five point Likert-type scale where 1 represents "Strongly Disagree" and 5 represents "Strongly Agree." The table shows the mean response value for each item along with its standard deviation (SD).

Hispanic students agree more or disagree less (mean values are higher) than the African American students with all the statements related to their perceptions regarding Facebook use in academics. The difference in perceptions is statistically significant for all statements except the last, which is marginally significant. When compared to African American students, Hispanic students use Facebook more to interact with others to learn about their classes, communicate with their friends about their courses, arrange study groups, get information about their school work, and communicate with their professors. Hispanic students also check their Facebook pages more than the African American students, both in class and out of the classroom, and to keep up with what is happening on campus.

Neither African American nor Hispanic students believe that their Facebook use has much effect, positive or negative, on their academic performance, although Hispanics disagree less strongly than African Americans. The African Americans' disagreement with the academic impact of Facebook is reflected in their disagreement with the statement that Facebook distracts them from their studies. Hispanic students, while tending to agree that Facebook distracts them from their studies, apparently don't think this distraction has any effect on their academic performance.

	African Americans (HBCU) N=187	Hispanics (HSI) N=96	Significant Difference
<b>Interaction with Others</b>			
I use Facebook to learn about other people in my classes on campus.	2.87 (SD=1.19)	<b>3.48</b> (SD=1.16)	p<.001
I use Facebook to communicate with my friends about my courses.	2.74 (SD=1.18)	<b>3.66</b> (SD=1.00)	p<.001
I use Facebook to arrange study groups.	2.30 (SD=1.00)	<b>3.21</b> (SD=1.11)	p<.001
I use Facebook for getting information about school work.	2.42 (SD=1.06)	<b>3.28</b> (SD=1.12)	p<.001
I use Facebook for communicating with teachers.	1.94 (SD=0.88)	<b>2.20</b> (SD=1.03)	p<.001
<b>Personal Habits</b>			
I frequently check and use Facebook while I am in class.	2.12 (SD=1.09)	<b>2.67</b> (SD=1.25)	p<.001
I frequently check Facebook while I am at work, at home, or at other locations.	2.66 (SD=1.21)	<b>3.33</b> (SD=1.22)	p<.001
I spend time on Facebook when I should be doing other things.	2.43 (SD=1.17)	<b>3.24</b> (SD=1.25)	p<.001
I use Facebook to find out about things happening on campus.	2.91 (SD=1.19)	<b>3.60</b> (SD=1.09)	p<.001
<b>Academic Performance Impact</b>			
My Facebook use distracts me from my studies.	2.07 (SD=0.95)	<b>3.25</b> (SD=1.16)	p<.001
My Facebook use negatively affects my academic performance.	1.93 (SD=0.82)	<b>2.77</b> (SD=1.17)	p<.001
My Facebook use positively affects my academic performance.	2.34 (SD=0.94)	<b>2.55</b> (SD=1.01)	p<.10

**Table 3: Facebook use in Academics – Means and Standard Deviations.**

## PERCEPTION VERSUS REALITY

As was shown in Table 3, significant differences exist between Hispanic and African American students' perceptions about the academic performance impact arising from Facebook use. Hispanic students tend to think Facebook is a distraction from studies and are much less certain than African American students that their Facebook use has no effect on their academic performance. Prior research, however, suggests that perceptions about a system's use may not be related to the system's usage outcomes (Hogarth 1980; Langer; 1983; Marsden and Mathiyalakan, 1997). The intent is to determine if there is a difference in the students' perceptions of the effect of Facebook on academic performance and their actual academic performance. Since the surveys were

completed and submitted anonymously, self-reported students Grade Point Averages (GPAs) were used as a surrogate for academic performance.

Table 4 presents a summary of the respondents' self-reported GPAs. There is no statistically significant difference in distribution of respondents by Self-reported GPA. Although proportion of Hispanic students indicating grades in the 3.000 to 3.499 range is significantly higher than for African Americans (Hispanics = 34%, African Americans = 24%,  $p < .043$ ), the mean categorical GPA for Hispanics is only slightly higher (Hispanics = 3.42, African Americans = 3.39) and the difference is not statistically significant. The difference in the students' perceptions about the academic impact of Facebook is not reflected by a difference in their academic performance.

		African Americans (HBCU) N= 187	Hispanics (HSI) N = 96
Self-reported GPA	1: < 2.000	5 (03%)	2 (02%)
	2: 2.000 – 2.499	34 (18%)	18 (19%)
	3: 2.500 – 2.999	67 (36%)	28 (29%)
	4: 3.000 – 3.499	45 (24%)	34 (35%)
	5: 3.500 – 4.000	36 (19%)	14 (15%)
	Categorical Mean	<b>3.39</b> (SD=1.07)	<b>3.42</b> (SD=1.02)

**Table 4: GPA Statistics.**

## DISCUSSION

Facebook can be used for a multitude of purposes such as relationship management, organization and communication, sharing of information and resources, self-presentation, entertainment, playing games and having fun. While the use of Facebook for socialization among college students is extremely popular, the same cannot be said of its use in classrooms. While enhancing the educational experience may not be a predominant theme among Facebook users, there is some research that indicates it can be useful. Studies also show that if properly designed and utilized, benefits may accrue.

This investigation was motivated by a desire to gain insight into differences in Facebook usage and perceptions among various groups of minority students, and how their use of social media might be related to their learning outcomes. More specifically, this study compares and contrasts how African American students and Hispanic students use Facebook for academics and their perception of its impact on their learning.

Significant differences exist between the two groups. While African American students tend to have been on Facebook longer and have more friends, Hispanic students tend to use Facebook more frequently. Even so, the amount of time they spend on each Facebook session is about the same. The results indicate that, when compared to African American students, Hispanic students use Facebook more for academics and perceive it to have a negative impact on academics. This perceived negative impact of Facebook is not directly translated into actual differences in self-

reported GPA. Thus, there exists a mismatch between perception and reality. This mismatch is related to the concept of “illusion of control” (Hogarth 1980, Langer, 1983), but in reverse. Illusion of control is “an expectancy of a personal success probability inappropriately higher than the objective probability would warrant” (Langer, 1983). Prior researchers, when looking at the use of a Decision Support System, found that even when a system did not provide an advantage, users of the system had a positive perception toward it and thereby exhibited a mismatch between perception and reality. Marsden and Mathiyalakan (1997) suggested such illusion of control exists because users were unaware of the system development / usage costs and urged caution when developing systems based on user preferences alone.

Cultural differences of technology use may lend an explanation to perceptions of social media use in academics. Facebook’s original intent was not for academic use, but for social activities. The perception and value of using this technology to increase intellectual mobility is not yet a reality to these demographic groups, as compared to majority groups or people from higher socioeconomic groups. As noted by Putman (2015) in his book examining the growing inequality gap in America, young people from upper-class backgrounds are more likely to use the Internet for jobs, education, political and social engagement, health and news gathering, and less for entertainment and recreation than their poorer counterparts. Since the two student groups studied in this research are typically not from the upper echelons of affluence, their use of this technology tool is not predominantly for access to higher education or in mobility-enhancing ways.

As with other academic research that uses students, this study has some limitations. The sample for this study consists of students from one HBCU and one HSI. Before any generalizations can be made, a larger sample from other HBCUs and HSIs is needed. Additionally, the survey respondents were from a convenience sample, and thus the findings may not be applicable to the larger population. Despite these shortcomings, several interesting outcomes were noted.

To expand the generalizability of these findings, a larger sample group could be used and a student population with different demographic characteristics could be examined. Further research could be conducted to determine if the findings hold for students at “majority student” institutions and at institutions serving other minorities. This would expand the comparisons to include both majority students and a wider variety of minority student groups. Future research might also include studies across various sets of majors.

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## APPENDIX

### SURVEY MEASURES

The survey items, presented in the form of statements, fall into three general categories of how students use Facebook:

1. Interaction with others within the academic setting,
2. Habits for personal use within the academic setting, and
3. Perceptions of the impact that their use has on their academic performance.

The items are measured on a five point Likert-type scale where 1 represents “Strongly Disagree” and 5 represents “Strongly Agree.”

#### **Interaction with Others**

- I use Facebook to learn about other people in my classes on campus.
- I use Facebook to communicate with my friends about my courses.
- I use Facebook to arrange study groups.
- I use Facebook for getting information about school work.
- I use Facebook for communicating with teachers.

#### **Personal Habits**

- I frequently check and use Facebook while I am in class.
- I frequently check Facebook while I am at work, at home, or at other locations.
- I spend time on Facebook when I should be doing other things.
- I use Facebook to find out about things happening on campus.

#### **Academic Performance Impact**

- My Facebook use distracts me from my studies.
- My Facebook use negatively affects my academic performance.
- My Facebook use positively affects my academic performance.

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