

In your Facebook: Examining Facebook usage as misbehavior on perceived teacher credibility

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Abstract Teachers sometimes do things that negatively impact their own credibility in classroom settings. One way instructors maintain credibility among students is by keeping a veil between their personal and professional personas. The advent of Facebook presents new challenges for instructors seeking to keep their personal lives private in order to maintain credibility among students. In educational settings, Facebook communications can blur the personal and professional boundaries that students and professors are accustomed to. As such, instructors in higher education sometimes struggle with the implications of ‘friending’ students in the context of social networking. The purpose of this study was to examine whether or not educator usage of Facebook had any impact on student perceptions of instructor credibility. Facebook presence was examined in the context of teacher ‘misbehaviors’ (that is, actions by educators that negatively impact their credibility). A modified version of Teven and McCroskey’s (1997) Source Credibility Instrument was given to a sample of college students ($N=187$) to compare instructors that use Facebook with those who do not. While students appear to be generally accepting of instructor usage of the social tool, some findings suggest that there are probably ways to abuse it in a manner that could lead to negative perceptions of credibility. Ultimately, results from this study indicated that there were no significant differences among student perceptions of instructor credibility based on whether or not an educator used Facebook.

Keywords Facebook · Credibility · Misbehavior · Instructor · Communication · Social media

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1 Facebook as misbehavior?

As the twenty-first century enters its teens, Facebook has established itself as one of the biggest success stories in the brief history of the Internet (Vivian 2010). While students use the site as a means to communicate, socialize, and share information, it poses a new set of challenges for educators. From one perspective, using the tool to ‘friend’ students is a way for educators to enhance and personalize the educational experience (T. Dollard, personal communication, May 24, 2011). However, this line of communication can open doors to personal lives which neither student nor educator may want exposed. Educators must be especially guarded about the type of content that they post or risk having their credibility damaged.

The dangers herein are fairly evident. Obviously if students are exposed to pictures of their professor intoxicated at a party, this can lead to problems with how credible students view the instructor. However, given that Facebook primarily exists to facilitate social connections (with less emphasis on ‘professional’ relationships such as other networking sites like LinkedIn), one question that research to date has not explored is; can merely having a Facebook page affect credibility with students? Is it possible that by simply using the site, a certain mystique about the profession is lifted? Could it be that by socializing with students via social networking, the idea of ‘professional’ becomes diluted? After all, one could scarcely question student perceptions of a faculty member who shows up at a student’s party on Friday night to mingle and fraternize as though he or she were a student. Such actions could have serious consequences on the ability to judge and evaluate students’ work, performance, and behavior. Certainly, a mere presence on a networking website is (generally speaking) not so extreme as actually attempting to attend a party with undergraduate students. But could it impact perceptions of a professor’s professionalism? Does mingling on Facebook make the professional seem less professional?

The question of whether or not Facebook usage can be construed as misbehavior has not been explored in the literature. The purpose of this paper is twofold. The first goal is to establish whether or not having a Facebook account can negatively impact student perceptions of credibility. The second goal is to look beyond the mere presence of an instructor Facebook account to see if there is potential for specific behaviors to impact instructor credibility. The research goals of this paper do not extend beyond these two questions. Answers to these questions will help to determine future research goals in an effort to develop an overall understanding of how to professionally engage students via social media. To better understand the stated research questions and the approach taken to answer them, it is necessary to first examine research dealing with the concept of credibility and the factors that influence it within educational settings.

2 Misbehaviors

Considerable research has been conducted on classroom management and ways of dealing with student contempt, rebelliousness, and other undesirable behaviors (e.g. Morin and Battallio 2004; Ratcliff et al. 2010; Zhang et al. 2011). Disruptive students are sometimes able to create scenarios that jeopardize the effectiveness of the entire

classroom model. As such, there is an interest into what can lead students toward confrontational or otherwise disruptive behaviors.

While students can be disruptive for any number of social or psychological reasons, research has shown that they are not the only ones capable of misbehavior in a classroom. Teachers sometimes engage in behaviors that negatively impact the instructional process and, conversely, the ability for students to learn. What happens when the source of student contempt is the result of teacher behaviors? Kearney et al. (1991) state that “Because we know *what* teachers say and do can significantly affect *how* students think and behave, we might expect teacher misbehaviors to act as potential antecedents to a number of undesirable student consequents” (p. 310).

Over the past few decades a growing body of research has developed to examine the things that teachers (sometimes unknowingly) do that can create a negative impact on instructor credibility (Kelsey et al. 2004; McCroskey and Young 1981; Thweatt and McCroskey 1998). Kearney et al. (1991) successfully identified twenty-eight student-perceived ‘teacher misbehaviors.’ They were able to categorize these into three factors that impact the perceived credibility of an instructor. The first is the student perception of teacher ‘incompetence.’ Teachers deemed ‘incompetent’ by students exhibited behaviors such as giving confusing or unclear information during lectures and not appearing to fully understand the materials they were teaching. They used poor grammar or writing in assignment handouts, displayed a general lack of caring toward student concerns, and exhibited other behaviors that students ultimately attributed to the general incompetence of the instructor. The second label was ‘offensiveness.’ Those deemed ‘offensive’ by students often engaged in sarcastic and demeaning behavior during class, exhibited prejudice or favoritism toward individual students, were verbally abusive and/or angry at times, were considered to have unreasonable rules and expectations, were often arrogant, and so on. The final label was ‘indolence.’ Teachers perceived as ‘indolent’ displayed behaviors such as being tardy or absent from their own classes. They were frequently disorganized and unprepared for their presentations, often changed their syllabi, returned work late, and presented only small amounts of information considered underwhelming or simply too easy to have any real meaning. In short, ‘indolent’ teachers were perceived by students as not really caring about their job or profession.

Labeled as ‘teacher misbehaviors,’ these common practices have two inherent dangers. First, they increase the likelihood of a variety of student misbehaviors. Burroughs et al. (1989) identified nineteen categories of potential student non-compliance or resistance misbehaviors that can result from teacher misbehaviors. They reveal that classroom resentment of teacher misbehaviors can lead to active resistance from students in such forms as avoiding the instructor, being noisy or disruptive during class, or openly challenging teachers during class time. The second danger is the potential negative impact on student perceptions of instructor credibility. The presence or absence of these categorized behaviors has been linked to student perceptions of instructor credibility (McCroskey and Young 1981). As the nature of each category differs, so too does its impact on a teacher’s credibility through the eyes of students. Thweatt and McCroskey (1998) were able to demonstrate that when students perceived instructors as incompetent, offensive, or indolent, perceptions of the credibility were subsequently impacted. This is a core concept of this study, as the

research herein was designed to see if merely having a Facebook account could impact perceptions of credibility in the same way as teacher misbehaviors.

3 Credibility

So what exactly is credibility and why is it a concern for classroom instruction? Credibility is the concept that a source of information is legitimate and believable (McCroskey 1992). Historically, studies on instructor credibility separated the construct into five distinct areas, however in recent years leading researchers in the field have narrowed these components down to three areas: competence, goodwill and trustworthiness (Myers and Bryant 2004). Competence relates to the perceived expertise and authoritativeness that an individual exhibits when teaching (Teven and McCroskey 1997). Goodwill deals with the level of concern an instructor exhibits about students' welfare (Banfield et al. 2006). Trustworthiness is how others perceive an individual's moral character, sagacity, and honesty (Teven 2007).

Perceptions of source credibility are believed to hold significant influence on the effectiveness of transfer of learning from teachers to students. For instance, Wheelless (1975) found that students who perceive their teachers as credible are more likely to be able to recall information presented by the instructor. Teven and McCroskey (1997) found that educators whom exhibited behaviors that enhanced credibility were more likely to receive positive student evaluations. Additionally, students giving high credibility ratings to teachers were more likely to report that they learned more in the class and were more likely to seek out that instructor for future courses.

Martin et al. (1997) examined the relationship between the socio-communicative style of an instructor with student perceptions of credibility and motivation to learn. Their method controlled for the assertiveness or responsiveness characteristics of teachers to measure the impact on student-perceived credibility as well as student motivation to learn from said teachers. Their findings were twofold. First, student perceptions of credibility were found to be significantly different between the teachers depending on whether or not an instructor was perceived to be assertive, responsive, both, or neither. Assertive, responsive instructors received the highest scores as credible sources of information. Variations in assertiveness and responsiveness affected credibility scores in goodwill and trustworthiness. Additionally, they found that high credibility was linked to higher student motivation.

An examination of instructor immediacy and student workload supported the idea that communicative style has more impact on credibility than variations in the amount of work placed on students (Mottet et al. 2007). Mottet et al. found that increased or decreased workloads (that is, the amount of work placed on students at a given time) did little to impact instructor credibility. Strangely, instructor use of nonverbal immediacy behaviors (such as eye contact, head nods, and forward body leans) appeared to account for the strongest differences in credibility among treatment groups in this study; the more they were used, the more credible the instructor was likely to be perceived.

An interesting study by Russ et al. (2002) found instructor sexual preference to have a significant impact on measures of credibility. This study used a real presenter as a guest lecturer giving a memorized presentation to multiple classes at a university.

In some versions the presenter referred three times to his partner ‘Jennifer’ while in others he referenced his partner ‘Jason’ three times. Their findings showed statistical significance. The ‘gay’ presenter was found to be less competent and less trustworthy than the ‘heterosexual’ presenter. Additionally, when asked for critical feedback on the presentation, a total of 39 critical comments were received for the heterosexual speaker. The gay speaker received 205 critical comments.

Other personal traits or characteristics have been shown to impact credibility. Pope and Chapa (2008) found that instructors with androgynous characteristics (freely exhibiting both masculine and feminine behaviors) received higher ratings of credibility with students than teachers perceived as being predominantly masculine or feminine. Semlak and Pearson (2008) found that differences in age were a factor in student perceptions of credibility. In their study, older instructors were rated by students as more credible in all three subcomponents of credibility than younger instructors. Additionally, their results suggest that, regardless of age, instructors exhibiting ‘offensiveness’ misbehaviors were perceived as more credible than those exhibiting ‘indolent’ or ‘incompetent’ misbehaviors.

Nasser et al. (2009) examined instructor use of humor in the classroom to see if there was an effect on credibility. They found that teachers who were perceived by students as funny were also perceived as more credible in all three areas of credibility. There were, however, some moderation effects in their study. Older teachers exhibiting a sense of humor in class were found to be less competent. Female teachers exhibiting humor in the classroom were found to be more trustworthy than male instructors.

However, the majority of factors being examined within this context have dealt with circumstances and situations specific to the classroom environment. Increasingly, social media outlets are taking student-teacher interactions beyond the classroom. Since the advent of the Internet, scores of new technologies have emerged with perceived benefits to the education profession. One such technology has been the emergence of social media (Mason and Rennie 2008; Qualman 2011).

Social media has rapidly changed our lives and culture. The number of sites available for blogging, micro-blogging, sharing video and/or photography, dating, meeting new people, connecting with old friends, and sharing hobbies, interests, and lifestyles are too numerous (and change with such frequency) to name with any degree of accuracy. However, one company has enjoyed a meteoric rise above all other social media outlets: Facebook. While its reach and influence goes far beyond education, its roots originated in higher education, and indeed college students are a huge portion of its audience (Parry 2009; Selwyn 2009).

Given Facebook’s vast reach and potential as a tool for engagement, many educators are exploring ways to utilize it to enhance academic experiences (Mazer et al. 2007; Mazer et al. 2009; Parry 2009; Schwartz 2009; Young 2009). This is not such an easy task. While Facebook is heavily embraced by students of higher education, it presents some challenges for educators who seek to use it to engage their students. The following section explains Facebook’s origins and how its services pose challenges for educators interested in exploiting the many facets of the Facebook experience.

4 Facebook: A window to student perceptions

The unbridled success of Facebook has already secured a chapter in the pages of dot-com history. From multi-billion dollar investors (Ingram 2011) to dispelling company rumors (White 2011) to an Oscar-winning biopic about its founder and origins (Spacey and Fincher 2010), the company coverage pervades media outlets on a near daily basis. Even stories about changes regarding the website's interface design have been considered newsworthy enough to be covered by national media outlets such as CNN and USA Today (Smith and Harney 2012; Warren 2011). In less than a decade the company's value has soared to estimates nearing \$50 billion and its impact on society is considered to be one of the most important innovations of modern times (Grossman 2010).

Originally, its target audience consisted of college students, faculty, and staff. At its inception the site only allowed those using email addresses with .edu extensions to create accounts (Barber and Pearce 2008). That expanded several years later and now anyone with email can have a Facebook account. As with most new technological innovations, educators wonder what potential ways a phenomenon such as Facebook could benefit the educational process (Mazer et al. 2007; Parry 2009; Schwartz 2009; Young 2009). As the populace of Facebook users continues to expand, so too does the number of college and university faculty members that use the service. However, despite being accessible to students and faculty in its beginnings, recent studies have shown that students are not always comfortable with faculty members using it (Barber and Pearce 2008; Mazer et al. 2007). Boon and Sinclair (2009) state that "... students do not like parents and teachers in "their" space, especially if they are making embarrassing attempts to be cool" (p. 102).

The nature of how Facebook connects linked users, by allowing them to see postings and information about each other (and consequently others connected to them) can easily allow certain bits of information to become readily available to parties for whom they were never intended. Consider the scenario where an angry student (let's call him Joe) posts a derogatory message about an instructor. If that instructor is not on Joe's friend list, then in theory the instructor will never see the posting. However, if that instructor is a friend to a friend of Joe's (let's call her Jane), and Jane decides to comment on the original thread that Joe wrote, it is now possible for the instructor to see the original bad message posted about him or her because of the inadvertent link that has occurred with Jane posting a comment on Joe's thread. This is one example of ways that information never intended for certain parties can, unfortunately, still be seen by others.

The use of Facebook to vent against the actions of faculty members is nothing new. Selwyn (2009) stated that:

Much of students' 'educational' use of Facebook was... based around either the post-hoc critiquing of learning experiences and events, the exchange of logistical or factual information about teaching and assessment requirements, instances of supplication and moral support with regards to assessment or learning, or the promotion of oneself as academically incompetent and/or disengaged. (p. 170)

The complex nature of Facebook usage doesn't have to be as harsh as personal attacks. The very act of sharing personal lives in a public venue creates its own set of complications. Certainly most faculty members would not want students to see pictures of them intoxicated at a party. While many with those concerns would resist the temptation to post such content, consider that others in the faculty's Facebook circle with similar pictures taken at the same event can freely post such images and tag the faculty member in the image. Once again, a situation is created where information is being sent out to audiences that were never intended. The implications of these and other undesirable scenarios merit serious considerations when deciding whether or not to use the service to enhance teacher/student interactions. Atay (2009) stated that "Trying to reason a friend request from a student became one of the most complicated educational and pedagogical challenges of my teaching career" (p. 72).

Though little research has been conducted on the matter, it is worthwhile to consider whether or not educator use of Facebook has an impact on credibility. Barber and Pearce (2008) found some evidence suggesting that merely having a Facebook account can lower credibility perceptions among students. Using a sample of 60 students, they showed two groups two identical profiles of a fictional faculty member. One was provided to students on paper, the other was provided as a Facebook profile. The researchers measured student perceptions of two dimensions. Perceptions of instructor credibility were measured with the Teacher Credibility Scale (McCroskey and Young 1981). They also measured interpersonal attraction, defined as the degree to which individuals find others appealing, with the Interpersonal Attraction Scale (McCroskey and McCain 1974). Interpersonal attraction is comprised of three types of attraction: physical, social, and task (McCroskey and McCain 1974). Barber and Pearce (2008) stated that:

Physical attractiveness is physical beauty, or the extent of one's "good looks."
Social attractiveness is the degree to which one is interested in being friends with the person. Task attraction occurs when someone seems like a good person with whom to work. (p. 7)

While the researchers measured for social and task attraction, they did not measure for physical attraction, as neither the paper nor Facebook profile treatments contained pictures.

No differences were found between the goodwill and trustworthiness components of credibility. However, results showed statistically significant differences between the competence treatments of credibility. Instructor profiles shown on Facebook were consistently ranked as being less competent than those with paper profiles. Barber and Pearce (2008) could not explain the discrepancy between the three subcategories of credibility.

Both areas measured for attraction showed significant differences. Instructors with Facebook profiles ranked lower in both social and task dimensions of attraction.

So is it possible that having a Facebook page in and of itself could be construed as a misbehavior? That is, can it lead to student perceptions of offensiveness, indolence,

or incompetence? The purpose of this research was to test the following null hypothesis:

H₀: There are no differences between student perceptions of instructor credibility for instructors that have a presence on Facebook compared to those that do not.

5 Method

One hundred eighty-seven students enrolled at the University of North Carolina at Pembroke were surveyed using a paper instrument. Just over half of the students (55 %) were female. All students sampled were undergraduates attending the university. Ages ranged from between 18 to 57 years of age, however since age is a factor in Facebook usage, it is worth noting that 83 % of the sample fell into the 18 to 24 years age bracket. The sample was ethnically diverse, with African Americans (40 %) and Caucasians (33 %) making up the majority of students surveyed. American Indians (7 %), Asians (5 %), Hispanics (5 %), and others (9 %) made up the remainder of the sample. One percent of those sampled did not indicate their ethnicity. One hundred seventy-two students within the sample (92 %) acknowledged that they had a Facebook account. Of those, seventy-six percent (76 %) indicated that they check the site at least once or twice per day.

A two by four experimental factorial design was used to manipulate instructor usage of Facebook (an account vs. no account) and teacher misbehaviors (incompetence, indolence, offensiveness, and a control with no misbehaviors). A description of an imaginary instructor was used with variations made for each condition. For conditions where the instructor used Facebook, the description read, “The instructor used a Facebook account to communicate information to students outside of class time.” For conditions where the instructor did not use Facebook, the description read, “The instructor does not have or use a Facebook account.” Misbehaviors were controlled by providing a list of sample comments from student evaluations of the instructor for each condition. The three misbehavior conditions were constructed by loading each one with at least three classic descriptions of incompetent, indolent, or offensive behaviors (Kearney, et al. 1991; Semlak and Pearson 2008).

Table 1 shows the breakdown of treatments for instructor credibility across both stages of analysis. For the “control” treatments, no comments were included in the instructor’s critique that would sway students to classify them as incompetent, uncaring, or untrustworthy. For the second stage of analysis, these groups were subdivided based on whether the instructor used Facebook.

Upon reading the description of the professor, students were asked to score the trustworthiness, competence, and caring of the instructor. The researchers employed Teven and McCroskey’s (1997) Source Credibility Instrument to measure student perceptions of competence, caring, and trustworthiness. Additionally, qualitative questions were asked about student Facebook usage habits and their opinions on whether or not educators should utilize it as a tool to engage students.

Table 1 Study treatments for analysis stages

Stage 1 Analysis Study Treatments	
Treatment	Condition
1	Control condition
2	“Incompetent” Instructor
3	“Uncaring” Instructor
4	“Untrustworthy” Instructor
Stage 2 Analysis Study Treatments	
Treatment	Condition
1	Control condition using Facebook
2	Control condition not using Facebook
3	“Incompetent” instructor using Facebook
4	“Incompetent” instructor not using Facebook
5	“Uncaring” using Facebook
6	“Uncaring” not using Facebook
7	“Untrustworthy” instructor using Facebook
8	“Untrustworthy” instructor not using Facebook

6 Results

Teven and McCroskey’s (1997) Source Credibility Instrument measures perceptions of credibility in three areas: competence, goodwill and trustworthiness. Each of these areas has six Likert scale items that students can rank from one to seven. Pearson Correlation matrices indicate that some components of the scales are correlated moderately with each other (see Table 2). This would be expected when using a previously developed instrument and indicates the need for some data reduction. The scales for the three dimensions of instructor credibility were each reduced into a single score using Principal Components Factor Analysis in order to simplify further analysis, including tests of the primary research question: are there differences between student perceptions of instructor credibility for instructors that have a presence on Facebook compared to those that do not?

To answer this question, we compared the differences in scores among the four groups created in Stage 1 and the eight groups in Stage 2 (see Table 1). Given the number of groups for comparison, a traditional student’s *t*-test of differences in means between two groups would not have been appropriate, since multiple comparisons between two groups at a time would have increased our chance of a Type I Error (Levin and Fox 2006). Instead, an Analysis of Variance (ANOVA) was conducted on collected data, analyzing the variation from the means of the three factors created by the factor analysis between and within the different treatment groups. First, it was important to examine the control groups compared to each of the misbehavior scenarios (regardless of presence of Facebook) in order to validate the instrument. Results in Table 3 indicated that there were significant differences in the control group and the three misbehavior scenarios on the scores of competence ($F_{3, 162} = 17.576, p < 0.01$), goodwill ($F_{3, 157} = 17.293, p < 0.01$), and trustworthiness ($F_{3, 161} = 19.611, p < .001$). These findings indicated that the Source Credibility Instrument appeared to be functioning in line with past studies.

Table 2 Pearson correlation matrices for source credibility instrument scales ($N=165$)

Competence Scale	1	2	3	4	5	6
1.	1.000					
2.	.427***	1.000				
3.	.491***	.692***	1.000			
4.	.484***	.425***	.523***	1.000		
5.	.420***	.635***	.610***	.431***	1.000	
6.	.449***	.410***	.461***	.618***	.495***	1.000
Goodwill Scale	1	2	3	4	5	6
1.	1.000					
2.	.832***	1.000				
3.	.562***	.616***	1.000			
4.	.725***	.813***	.537***	1.000		
5.	.485***	.552***	.506***	.501***	1.000	
6.	.603***	.548***	.600***	.524***	.682***	1.000
Trust Scale	1	2	3	4	5	6
1.	1.000					
2.	.600***	1.000				
3.	.709***	.616***	1.000			
4.	.655***	.511***	.729***	1.000		
5.	.459***	.671***	.537***	.647***	1.000	
6.	.584***	.614***	.616***	.612***	.593***	1.000

* $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

In addition to the ANOVA, a post hoc test, Tukey's Honestly Significant Difference (or HSD), was conducted, comparing each of the misbehavior conditions with the control group on the relevant scale in order to provide a more specific test of the instrument. The control group was compared to the "Incompetent Instructor" condition on the measure of competency, the "Uncaring Instructor" condition on the measure of goodwill, and the "Untrustworthy Instructor" on the measure of trustworthiness. These tests showed significant differences in the means of the respective scales between the misbehavior conditions and the control group. The results for these post-hoc tests indicated that participants in the survey did perceive differences between the categories of misbehaviors, which indicated that the unmodified version of the instrument worked in the manner for which it was designed, and detected conditions of instructor misbehavior within this sample.

The second step in the analysis was to analyze the modified version of the instrument, which subdivided the categories through the presence or absence of a Facebook account. This created eight total treatment groups, as indicated in Table 1. As with the previous strategy, an ANOVA was conducted, examining each of the three factors from the Source Credibility Instrument (see Table 4). Results showed significant differences between the eight treatment groups on scores of competence ($F_{7, 158} = 7.825, p < 0.01$), goodwill ($F_{7, 153} = 8.222, p < 0.01$), and trustworthiness ($F_{7, 157} = 8.889, p < 0.001$). As the original instrument is designed to create these differences

Table 3 ANOVA summary table and post-hoc tests (Stage 1)

ANOVA Summary Table					
		Sum of squares	<i>df</i>	Mean Square	<i>F</i>
Competence	Between	40.517	3	13.506	17.576***
	Within	124.483	162	.768	
	Total	165.000	165		
Goodwill	Between	39.739	3	13.246	17.293***
	Within	120.261	157	.766	
	Total	160.000	160		
Trustworthiness	Between	43.890	3	14.630	19.611***
	Within	120.110	161	.746	
	Total	164.000	164		
Post-Hoc Tests (Tukey's HSD)					
Group Comparison				Mean Difference (Std. Error)	
Control vs. "Incompetent" on Competence Scale				1.223*** (.213)	
Control vs. "Uncaring" on Goodwill Scale				.705*** (.193)	
Control vs. "Untrustworthy" on Trust Scale				1.423*** (.188)	

* $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

(e.g. student ratings of 'competent instructors are supposed to be different from ratings of 'trustworthy' instructors), this outcome was predictable and shows that the instrument worked in accordance with past studies. Post hoc tests were again conducted using Tukey's HSD, comparing differences between each of the treatment conditions based on presence or absence of Facebook. These results showed no significant difference in the factors based on the presence or absence of Facebook, indicating that the mere presence of an instructor Facebook account does not significantly alter student perceptions of their instructor's credibility (see Table 4).

Information was also collected for further insight into how students felt about using Facebook to interact with teachers. When asked if they would mind if educators required students to friend them on Facebook, over 73 % of those surveyed indicated that they disapprove of this practice. Comments made by disapproving individuals frequently stressed the desire to keep their Facebook content hidden from the eyes of educators. One student stated that Facebook is "personal and I do not want professors in my personal life." Another student stated that Facebook "is a student's release from the daily stresses of life and classwork. If it becomes a class requirement, it would take away my getaway and give out personal info that I may not want professors to know." Underscoring the idea that Facebook pages are like personal property, one questionnaire-taker stated "that is my personal space and a teacher is like a parent so I would not want them to have access to my page."

Respondents were asked if they had ever had professors require them to friend their Facebook accounts. Only one percent of the sample indicated that this practice had occurred during their education. A larger number (14 %) stated that at some point during their education a professor had requested to friend them. Many responses indicated that students do not mind interacting with professors through Facebook. One student liked the idea because it allows students and educators to "connect on a

Table 4 ANOVA summary table and post-hoc tests (Stage 2)

ANOVA Summary Table					
		<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>
Competence	Between	42.475	7	6.068	7.825***
	Within	122.525	158	.775	
	Total	165.000	165		
Goodwill	Between	43.735	7	6.248	8.222***
	Within	116.265	153	.760	
	Total	160.000	160		
Trustworthiness	Between	46.550	7	6.650	8.889***
	Within	117.450	157	.748	
	Total	164.000	164		
Post-Hoc Tests (Tukey's HSD)					
Group Comparison				Mean Difference (Std. Error)	
"Incompetent" – Facebook vs. No Facebook				.045 (.317)	
"Uncaring" – Facebook vs. No Facebook				.469 (.257)	
"Untrustworthy" – Facebook vs. No Facebook				.118 (.250)	

* $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

more personal level." Others who agreed with this perspective cited their frequency of use as a reason for using Facebook to communicate with educators. One student stated "I'm always on Facebook and would be able to see what's happening in class all the time." Some students like the fact that Facebook updates on their mobile devices and believe that they would be able to more quickly receive messages or notifications from educators by being linked to them. Still, statements such as these are in the minority, with the majority of the sample wanting to keep professors separate from their Facebook pages. Those students receptive to friending professors also indicated that they prefer this as an option and not a requirement for course interaction.

Nearly 17 % of the sample indicated that they, at some point, had posted negative comments about teachers or educators on Facebook. This number is surprisingly low, based on research conducted by Selwyn (2009). Similarly, only nine percent of the sample indicated that they had ever read anything negative about a professor or educator on Facebook by fellow students. This could simply indicate a difference between the samples of two separate studies. One could speculate that as students become savvier about the interconnected nature of information on Facebook, perhaps they are using it in a more conservative manner, but it is more likely that they simply aren't using it for academic purposes.

It also appears that most of the educators whom the sample has been in contact with are not using Facebook in ways that upset students. When asked "Has a teacher ever posted something on Facebook that has offended or upset you in any way?" only three percent responded that this had occurred. Several of those who responded "yes" to this statement elaborated on the nature of their frustration. One student stated "It was something an elementary school teacher posted about politics. It had nothing to do with me, but the opinion expressed was kind of offensive to me." Another stated

“A teacher friended my girlfriend and would comment on her pictures in an unprofessional way.” A third respondent stated that a professor “made a post about the ignorance of their students and how they don’t like them.”

Students were also asked a question about student versus educator responsibilities concerning content posted on Facebook. Students were asked to choose one of the following statements: (a) teachers have a greater responsibility than students to filter the type of content they post on Facebook; (b) students have a greater responsibility than teachers to filter the type of content they post on Facebook; or (c) students and teachers are both equally responsible for filtering the type of content they post on Facebook.

Students overwhelmingly believe that both educators and students share the burden of responsibility when it comes to posting content to Facebook. Seventy-six percent stated that responsibility was equal between the two compared to twenty-one percent who believe that educators bear the brunt of this burden. Barely three percent of those who responded to this question believe that students have the greater responsibility.

7 Discussion

This study was an examination of whether or not the use of Facebook to interact with students could have an impact on student perceptions of credibility. The results suggest that creating a Facebook account does not automatically mean that instructors will be perceived as less credible by students. The findings herein were somewhat surprising, as they do not directly support Barber and Pearce’s (2008) outcomes where using Facebook resulted in lowered student perceptions of competence. Other research has demonstrated that students are leery of teacher presences on Facebook (Boon and Sinclair 2009; Selwyn 2009). It is possible that the discrepancies found herein were due to the heightened sensibilities of viewing instructor information through a medium that they are wary of an instructor utilizing. Perhaps students in Barber and Pearce’s study were more critical of instructors because they were viewing teacher information via a medium where they don’t want the instructor’s presence. This leads to an interesting question: does the medium make a difference? If a student knows that Dr. Jim has a Facebook page, is Dr. Jim’s credibility automatically affected, or could there be a contextual difference between knowing about it, perhaps through word-of-mouth, versus actually seeing it and interacting with it online? After all, just because a professor has a Facebook page does not mean that students are necessarily required to add it as a friend or interact with it in any way. If students know a teacher uses it, but they never see it, is credibility affected?

There were several limitations within the study. First, students responded to a hypothetical scenario on paper. This was necessary as it is the basis for the measurement instrument. However, reactions to living, breathing individuals might have made the experience more tangible for participants in a way where they would react differently to the variables of the study. Second, nearly half (44.3 %) of the sample consisted of mass communication majors. It is possible that this portion of the sample could, in some way, skew the data given the amount of attention that mass communication studies focus on the growing influence of social media and its underpinnings,

business models, etc. Lastly, additional theoretical perspectives might help to interpret the results. The researchers were surprised that the findings did not support prior outcomes suggesting that Facebook usage could be a misbehavior. One possible reason for the discrepancy could lie within the context of the instrument: a paper survey versus an actual Facebook page. Theories related to the psychological, cognitive, and affective aspects of different communication media could help determine if differing media affect perceptions of credibility.

Results of this study help to shed some light on how apprehensive educators should be about engaging students via Facebook. Other research has suggested that students regard Facebook as ‘their domain’ (Selwyn 2009). However, it does not appear that entering this domain has much impact on student perceptions of instructor credibility. Students in this study indicated that, overall, they don’t mind that teachers use Facebook.

This study contributes new insight to the newly emerging understanding of the implications of utilizing social media to engage students. The findings herein support the idea that opening a Facebook account does not automatically devalue instructor credibility in the eyes of students. As educators fret about the appropriateness of using Facebook to interact and engage students, this study should offer some peace of mind to those currently utilizing (or considering adopting it) as a tool for communication. Barber and Pearce (2008) found that a Facebook presence had some damaging effects on teacher credibility. However, their Facebook treatment involved students actually viewing the hypothetical instructor’s Facebook page. Results of this study could illustrate a difference in perceptions of credibility between knowing that an instructor is available on Facebook compared to actually going to it and digging around in the profile.

The original idea for this research was to determine if using Facebook damages instructor credibility. If the findings had supported this, it would have been a step toward establishing Facebook as a form of teacher misbehavior. However, it does not appear that creating a Facebook account automatically damages an educator’s credibility. While responses to some of the instrument’s questions support research that suggests students prefer a degree of separation from their professors within the Facebook environment, it appears that the potential for credibility damage is probably more related to the way Facebook is used, if done so in an inappropriate manner.

Prior research into teacher credibility has identified numerous ways that it can be damaged, often with complex interactions (Martin et al. 1997; Russ et al. 2002; Wheeless 1975). Future research on social media interaction with students should seek to identify types of online misbehaviors that can impact credibility, as well as what subsets of credibility they affect. Perhaps these interactions will occur in newer, more nuanced manifestations than those of various ‘classroom’ misbehaviors that much of the prior research has investigated.

Additional studies into the use of social media to engage students are needed to educate instructors about proper etiquette for interacting with students in these environments. Research of this nature could prevent teachers from making critical errors that negatively impact their ability to transfer learning to students. As online education continues to grow in popularity, it will be important for the next generation of instructors, those who may never meet their students face-to-face, to understand how to represent themselves through social media in ways that will preserve their credibility when engaging students in online social settings.

References

- Atay, A. (2009). Facebooking the student-teacher relationship: how Facebook is changing student-teacher relationships. *Rocky Mountain Communication Review*, 6(1), 71–74. Retrieved January 11, 2011 from Communication and Mass Media Complete database.
- Banfield, S. R., Richmond, V. P., & McCroskey, J. C. (2006). The effect of teacher misbehaviors on teacher credibility and affect for the teacher. *Communication Education*, 55(1), 63–72. Retrieved April 16, 2012 from Education Research Complete database.
- Barber, L., & Pearce, K. (2008). The effect of instructor Facebook participation on student perceptions of teacher credibility and teacher attractiveness. *International Communication Association 2008 Annual Meeting*. (pp. 1–14). Retrieved January 11, 2011 from Communication & Mass Media Complete.
- Boon, S., & Sinclair, C. (2009). A world I don't inhabit: disquiet and identity in second life and Facebook. *Educational Media International*, 46(2), 99–110. Retrieved January 11, 2011 from Communication and Mass Media Complete database.
- Burroughs, N. F., Kearney, P., & Plax, T. G. (1989). Compliance-resistance in the college classroom. *Communication Education*, 38(3), 214–229. Retrieved April 13, 2012 from Education Research Complete database.
- Grossman, L. (2010, December 27). 2010 Person of the Year Mark Zuckerberg. *Time*, 176, 26. (Retrieved September 27, 2011 from Academic Search Complete.)
- Ingram, M. (2011). *Facebook and Goldman Sachs: Inflating a new bubble?* Retrieved January 11, 2011 from http://www.businessweek.com/technology/content/jan2011/tc20111013_185170.htm.
- Kearney, P., Plax, T. G., Hays, E. R., & Ivey, M. J. (1991). College teacher misbehaviors: what students don't like about what teachers say and do. *Communication Quarterly*, 39(4), 309–324. Retrieved January 15, 2011 from Communication and Mass Media Complete database.
- Kelsey, D. M., Kearney, P., Plax, T. G., Allen, T. H., & Ritter, K. J. (2004). College students' attributions of teacher misbehaviors. *Communication Education*, 53(1), 40–55. Retrieved January 15, 2011 from Communication and Mass Media Complete database.
- Levin, J., & Fox, J. A. (2006). *Elementary statistics in social research* (10th ed.). Boston: Pearson Education.
- Martin, M. M., Chesebro, J. C., & Mottet, T. P. (1997). Students' perceptions of instructors sociocommunicative style and the influence on instructor credibility and situational motivation. *Communication Research Reports*, 14(4), 431–440. Retrieved January 16, 2011 from Communication and Mass Media Complete database.
- Mason, R., & Rennie, F. (2008). *E-Learning and social networking handbook: Resources for higher education*. New York: Routledge.
- Mazer, J. P., Murphy, R. E., & Simonds, C. J. (2007). I'll see you on "Facebook": the effects of computer-mediated teacher self-disclosure on student motivation, affective learning, and classroom climate. *Communication Education*, 56(1), 1–17. Retrieved January 11, 2011 from Communication and Mass Media Complete database.
- Mazer, J. P., Murphy, R. E., & Simonds, C. J. (2009). The effects of teacher self-disclosure via Facebook on teacher credibility. *Learning, Media and Technology*, 34(2), 175–183. Retrieved September 26, 2011 from Communication and Mass Media Complete database.
- McCroskey, J. C. (1992). *An introduction to communication in the classroom*. Edina: Burgess International Group.
- McCroskey, J. C., & McCain, T. A. (1974). The measurement of interpersonal attraction. *Speech Monographs*, 41(3), 261–266. Retrieved April 17, 2012 from PsycINFO database.
- McCroskey, J. C., & Young, T. J. (1981). Ethos and credibility: the construct and its measurement after three decades. *Central States Speech Journal*, 32(2), 24–34. Retrieved January 16, 2011 from <http://www.jamescmccroskey.com/publications/096.pdf>.
- Morin, J., & Battalio, R. (2004). Construing misbehavior: the efficacy connection in responding to misbehavior. *Journal of Positive Behavior Interventions*, 6(4), 251–254. Retrieved September 30, 2011 from Education Research Complete database.
- Mottet, T. P., Parker-Raley, J., Beebe, S. A., Cunningham, C. (2007). Instructors who resist "college lite": The neutralizing effect of instructor immediacy on students' course-workload violations and perceptions of instructor credibility and affective learning. *Communication Education*, 56(2), 144–167. Retrieved April 26, 2012 from Communication and Mass Media Complete database.

- Myers, S. A., & Bryant, L. E. (2004). College students' perceptions of how instructors convey credibility. *Qualitative Research Reports in Communication*, 5, 22–27. Retrieved April 16, 2012 from Communication and Mass Media Complete database.
- Nasser, K., Rold, M., Mapp, C., Bannon, B., & Ratcliff, R. (2009, November). *Joking can be serious: Students' attributions moderating teacher humor and credibility*. Paper presented at the 95th annual convention of the National Communication Association, Chicago, IL. Retrieved January 16, 2011 from Communication and Mass Media Complete database.
- Parry, M. (2009, November 12). Course requirement: Find your professor on Facebook. *The Chronicle of Higher Education*. Retrieved September 27, 2011 from <http://chronicle.com/blogs/wiredcampus/course-requirement-friend-your-professor-on-facebook/8827>.
- Pope, M., & Chapa, J. (2008, November). *The gender connection: Instructor credibility and gender in the classroom*. Paper presented at the 94th annual convention of the National Communication Association, San Diego, CA. Retrieved January 16, 2011 from Communication and Mass Media Complete database.
- Qualman, E. (2011). *Socialnomics: How social media transforms the way we live and do business (Rev. ed.)*. Hoboken: Wiley.
- Ratcliff, N., Jones, C. R., Costner, R. H., Savage-Davis, E., & Hunt, G. H. (2010). The elephant in the classroom: the impact of misbehavior on classroom climate. *Education*, 131(2), 306–314. Retrieved September 30, 2011 from Education Research Complete database.
- Russ, T. L., Simonds, C. J., & Hunt, S. K. (2002). Coming out in the classroom, an occupational hazard? The influence of sexual orientation on teacher credibility and perceived student learning. *Communication Education*, 51(3), 311–325. Retrieved January 16, 2011 from Communication and Mass Media Complete database.
- Schwartz, H. L. (2009, September 28). Facebook: The new classroom commons? *The Chronicle of Higher Education*. Retrieved September 27, 2011 from <http://chronicle.com/article/Facebook-The-New-Classroom/48575/>.
- Selwyn, N. (2009). Faceworking: exploring students' education-related use of Facebook. *Learning, Media and Technology*, 34(2), 157–174. Retrieved January 12, 2011 from Communication and Mass Media Complete database.
- Semlak, J. L., & Pearson, J. C. (2008). Through the years: an examination of instructor age and misbehavior on perceived teacher credibility. *Communication Research Reports*, 25(1), 76–85. Retrieved January 10, 2011 from Communication and Mass Media Complete database.
- Smith, M. W., & Harney, M. (2012, March 29). USA Today debuts new Facebook timeline page. *USA Today*. Retrieved April 13, 2012 from http://content.usatoday.com/communities/technologylive/post/2012/03/usa-today-facebook-timeline/1#.T4g8Bo4_fw8.
- Spacey, K. (Executive Producer), & Fincher, D. (Director). (2010). *The social network* [Motion picture]. United States: Sony Pictures.
- Teven, J. J. (2007). Teacher caring and classroom behavior: relationships with student affect and perceptions of teacher competence and trustworthiness. *Communication Quarterly*, 55(4), 433–450. Retrieved April 16, 2007 from Education Research Complete database.
- Teven, J. J., & McCroskey, J. C. (1997). The relationship of perceived teacher caring with student learning and teacher evaluation. *Communication Education*, 46(1), 1–9. Retrieved February 11, 2011 from Communication and Mass Media Complete database.
- Thweatt, K. S., & McCroskey, J. C. (1998). The impact of teacher immediacy and misbehaviors on teacher credibility. *Communication Education*, 47, 348–358.
- Vivian, J. (2010). *The media of mass communication* (10th ed.). New York: Allyn & Bacon.
- Warren, C. (2011). *Facebook pushes new profile to all users*. Retrieved January 11, 2011 from <http://www.cnn.com/2011/TECH/social.media/01/11/facebook.new.profile.mashable/index.html?iref=allsearch>.
- Wheless, L. R. (1975). Relationship of four elements to immediate recall and student-instructor interaction. *Western Speech Communication*, 39, 131–140.
- White, C. (2011). *Facebook NOT shutting down March 15*. Retrieved January 11, 2011 from <http://www.cnn.com/2011/TECH/social.media/01/10/fb.shutdown.rumor.mashable/index.html?iref=allsearch>.
- Young, J. R. (2009, February 6). How not to lose face on facebook, for professors. *The Chronicle of Higher Education*. Retrieved September 27, 2011 from <http://chronicle.com/article/How-Not-to-Lose-Face-on/24101/>.
- Zhang, Q., Zhang, J., & Castelluccio, A. (2011). A cross-cultural investigation of student resistance in college classrooms: the effects of teacher misbehaviors and credibility. *Communication Quarterly*, 59(4), 450–464. Retrieved September 30, 2011 from Education Research Complete database.