

Perceptions of Teachers' Disclosures on Facebook and their Impact on Credibility

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Abstract

This study examines the perceptions of 83 college students about their university professors who are Facebook friends. The relevance and valence of disclosures were compared between disclosures made in the classroom and those made on Facebook and were found to be significantly different. Students' perceptions of teacher credibility were shown to decrease as relevance of disclosures increased and as negativity increased.

Keywords: Self-Disclosure, Credibility, Facebook, Communication Privacy Management

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Facebook has brought social networking into a new era as evidenced by its continuous growth and success. Research is underway that examines teachers' use of computer-mediated-communication (CMC), including Facebook, and the effects CMC can have on students' perceptions of their teachers (e.g., DiVerniero & Hosek, 2011; Mazer Murphy, & Simonds, 2007, 2009). It is important that this new medium of communication be explored because of its prevalent use, including student-teacher connections. These mediated connections lead to positive educational outcomes such as higher levels of motivation, affective learning or positive evaluations of the classroom climate (Mazer et al., 2007). Students value the relational connection

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with teachers, as well (DiVerniero & Hosek, 2011). Further, students evaluated the climate of the teacher's classroom more positively than the students who viewed a teacher's Facebook page featuring limited self-disclosures (Mazer et al., 2007). Students who accessed a Facebook page of a teacher with high self-disclosure perceived those teachers as having higher credibility (Mazer et al., 2009). Thus, self-disclosures on Facebook can have positive consequences for teacher evaluations and student outcomes. However, the qualities of teacher self-disclosures need additional focus because of the recent addition of valence (positivity/negativity) and relevance (high/low) to the Teacher Self-Disclosure Scale (Cyanus & Martin, 2008). Cyanus and Martin (2008) found that amount, relevance, and valence of teacher self-disclosure impact students' motivation, teachers' clarity, course meaningfulness, or teachers' competence in distinct ways. Therefore, studies of teacher self-disclosures benefit from the inclusion of these two additional subscales. This study, in particular, examines the relationship between the relevance and valence of teacher self-disclosures on Facebook and students' perceived credibility of teachers.

Teacher Self-Disclosure

Self-disclosure is commonly described as the process of "disclosing personal or private information about oneself that others are unlikely to discover on their own" (Wood, 2000, p. 148). Altman and Taylor (1973) pointed out that this self-disclosure process usually leads to the development of personal relationships. It seems teachers would manage their privacy boundaries (Petronio, 2002) carefully when disclosing information to students because of the unique aspects of the student-teacher relationship. Cyanus and Martin (2008) clarify that teacher self-disclosure is different from interpersonal self-disclosure. For example, teacher self-disclosures are more illustrative than interpersonal (Nussbaum, Comadena, & Holladay, 1987). Early research in this vein showed that teachers who personalize the classroom environment through the use of humor, stories, enthusiasm, and self-disclosure are perceived by their students to be effective in explaining course content (Bryant, Comiskey, Crane, & Zillman, 1980).

Cyanus (2004) argued for the use of teacher self-disclosure as an instructional tool for student learning and suggested that teachers should be more aware of the importance of some self-disclosure and incorporate it into their instruction. Teachers spend substantial time lecturing in their classrooms, as well as telling stories and sharing their personal beliefs (Nussbaum et al., 1987). These disclosures have important consequences because students tend to evaluate teachers positively when they exhibit the intent to disclose positive messages that the student perceives to be honest (Nussbaum et al., 1987). Further, students take a more active role in the classroom when teachers talk about themselves compared with students enrolled in courses where teachers did not talk about themselves (Goldstein & Benassi, 1994).

Communication privacy management theory (Petronio, 2002) explains the process of revealing private information as well as the criteria used to manage disclosures. Applied to the classroom environment, teachers have a responsibility to monitor their disclosures carefully when selecting personal information to reveal or conceal. While the research thus far has shown positive student outcomes when teachers self-disclose, it is possible that perceptions of too much disclosure or inappropriate disclosures could lead to negative student outcomes and/or negative evaluations of the teacher. College teachers acknowledge some risks of disclosing personal information, such as damaging credibility or creating student discomfort (Hosek & Thompson, 2009). Thus, the nature and quality of teachers' disclosures is important to understand, specifically the relevance and valence of the disclosures (Cayanus & Martin, 2004).

This suggestion was supported when Cayanus and Martin (2008) observed that amount, relevance, and valence of teacher self-disclosure positively related to affective learning, motivation to attend class, and teacher clarity. Relevant disclosures are seen as those where students perceive that the course content can meet their personal needs, personal goals, or career goals (Keller, 1983). Relevance is related to such classroom variables as verbal and nonverbal immediacy, student motivations, and affect for the course and instructor (Frymier & Shulman, 1995). Students report greater motivation when they perceive their teachers as communicating clearly and relevantly (Frymier & Shulman, 1995). Additionally, relevant teacher self-disclosure not only increases student clarity and understanding, but also increases student interest and motivation (Goldstein & Benassi, 1994).

Valence is also an issue that must be considered. Cayanus and Martin (2002) refer to valence as the positive and negative nature of the information disclosed. Valence is important because teachers who engage in positive self-disclosure are viewed more positively by students than teachers who engage in negative self-disclosure (Dalto, Ajzen, & Kaplan, 1979; Messman & Jones-Corley, 2001; Plax, Kearney, McCroskey, & Richmond, 1986; Sorensen, 1989). Therefore, teachers' relevant and positive self-disclosures in the classroom have positive outcomes. The intention of this study is to see if these positive outcomes prevail when teachers and students move their interactions to out-of-class communication, particularly on the social networking site of Facebook.

Teachers and Out-of-Class Communication

Out-of-classroom communication (OCC) includes advising, student organization-related interactions, and/or other discussions on various topics (Nadler & Nadler, 2001). These interactions are distinct because students report differences in their relationships with their

teachers when they communicate out of the classroom, such as increased levels of shared control, trust, and intimacy with their teacher (Dobransky & Frymier, 2004). Additionally, college students who received social support from teachers outside the classroom showed an increase in student satisfaction and motivation (Jones, 2008).

OCC occurs through various mediums. For example, teachers use email and instant messaging to communicate with their students, which students respond to positively suggesting further utilization of the internet as a means of communication (Edwards, 2009). Of these suggestions, many included the use of social networking sites such as Facebook. Facebook has an estimated 900,000,000 unique monthly visitors compared to the next most popular social networking site, Twitter, which has significantly fewer estimated unique monthly visitors at 310,000,000 (eBizMBA, 2014). Facebook is thought to be the most widely used social networking site by college students (Hew, 2011). Some surveys report more than 90% participation among undergraduate students in the USA (Ellison, Steinfield, & Lampe, 2007).

The use of Facebook for OCC has advantages and disadvantages for student-teacher relationships. While self-disclosures by teachers in OCC can foster richer relationships with students, they can also muddle the distinction between teacher self-disclosures and interpersonal self-disclosures (Fusani, 1994). Dobransky and Frymier (2004) argue that OCC is interpersonal in nature but acknowledge that power and control are unique attributes of the relationship that must be negotiated. It is acceptable for teacher self-disclosure to promote immediacy and some levels of intimacy in the classroom. However, the line between instructor and student must remain clear for the practice of teacher self-disclosure to be a positive influence in the classroom (Lannuti & Strauman, 2006). These findings suggest that teacher self-disclosure cannot be looked upon as a single dimension. Instead, a multi-dimensional approach must be taken to better understand the impact self-disclosure has in the classroom. It is for these reasons that Cayanus and Martin (2004) suggested that relevance and valence also be included when operationalizing teacher self-disclosure. Thus, the amount, relevance, and valence of teacher self-disclosures need further analysis in OCC, with a particular focus on the Facebook medium. To achieve this goal, the following research question was posed:

RQ1: Do amount, relevance, and valence of self-disclosure differ significantly between classroom and out of classroom (Facebook) communication?

Credibility

More than three decades of research have been devoted to understanding teacher credibility. McCroskey, Holdridge, and Toomb (1974) first pointed out the importance credibility has for instructors in the classroom by positing that increasing teacher credibility leads to several positive outcomes. For example, students who perceived their teachers as more credible were more likely to take another course by that professor and recommend the course to someone else. Furthermore, students were also more likely to recall information from their teachers' lectures with greater ease and accuracy. These findings encouraged further study of teacher credibility (Finn, Schrod, Witt, Elledge, Jernberg, & Larson, 2008).

Initially, McCroskey and colleagues (1974) considered source credibility, which stemmed from a teacher's exhibition of his or her competence. In this vein, researchers were focused primarily on the student outcomes of teacher credibility rather than looking at how to increase credibility itself. Then, McCroskey and Young (1981) posed that credibility was not based on competence alone, but instead, it must also take character into consideration. This insight prompted further research on the student outcomes affected by teacher credibility. However, by the early 1990s, there was still little research available on how teachers might increase their credibility in the classroom (Frymier & Thompson, 1992). This deficit led to the research of characteristics and actions that assist instructors in increasing their credibility. As a result, a wide variety of methods were found to increase teacher credibility. For example, instructors are perceived as more credible by their students when they present information in the correct manner (Kearney, Plax, Hays & Ivey, 1991), use affinity seeking behaviors (Frymier & Thompson, 1992), are assertive and responsive (Martin, Chesebro, & Mottet, 1997), are argumentative (Schrod, 2003), engage in immediacy (Thweatt & McCroskey, 1998; Johnson & Miller, 2002; Teven & Hanson, 2004), exhibit competence (Teven & Hanson, 2004), engage in out-of-class communication with their students (Myers & Bryant, 2004), use technology in the classroom (Schrod & Turman, 2005; Schrod & Witt, 2006), or provide confirmation to their students (Schrod, Turman, & Soliz, 2006).

Next, McCroskey (1992) showed that caring was another key component to credibility, and students who perceived their professors as more caring would evaluate them as more credible. McCroskey and Teven (1999) built upon this finding and provided their version of the teacher credibility scale, an 18-item measure of three dimensions of credibility—competence, caring, and trustworthiness. The current study seeks to find out how the relevance and valence of self-disclosures on Facebook influence students' perceptions of teacher credibility using McCroskey and Teven's three dimensions of credibility with the following hypotheses:

H1: Disclosures relevant to course content on social networking sites lead to high ratings of teacher credibility.

H2: Negative self-disclosure on social networking sites leads to low ratings of teacher credibility.

Method

Procedure

This study focused on gauging students' perceptions of their teachers because Cayanus and Martin (2008) assert that their perspectives are needed to supplement the literature on teacher self-disclosure. Without having strong indications of the prevalence of faculty-student Facebook friendships, nonprobability sampling procedures were selected. Initially, a convenience sample of college students enrolled in Introduction to Public Speaking courses at a regional, major comprehensive university in the midsouth were recruited. Students who completed an online survey were offered 5 points of extra credit. An alternative assignment was available for those who chose not to participate. Data were collected using a trial version of Qualtrics software, which has a limitation of 200 respondents. When 200 students had completed surveys, only 55 (27.5%) of them had faculty members who were Facebook friends. This small percent of student respondents who had a faculty Facebook friend suggested that such relationships are not pervasive. Therefore, new recruitment techniques were needed to solicit respondents for the study. Thus, the recruitment procedure was modified to use purposive sampling in two ways. First, snowball sampling techniques were used to (a) contact authors' Facebook friends who were students via Facebook, (b) ask colleagues to contact their Facebook friends who were students, (c) contact former students via e-mail, (d) advertise on the university's internal, weekly announcement board, (e) and distribute paper surveys to students for either them or their friends to complete. Second, a criterion to participate was added to include "must have at least one Facebook friend who is a faculty member."

After reading the consent form, students were asked how many professors they were friends with on Facebook. Then, they were instructed to think of the classroom communication of one of these university professors who was a Facebook friend and respond to items assessing this individual's self-disclosure and credibility. Next, students were directed to think about this same professor/Facebook friend and answer the same items about self-disclosure and credibility but to reflect on the disclosures made on the professor's Facebook site. Finally, the students were led to the demographic information and thanked for their participation in the survey.

Participants

College students with faculty members as friends on Facebook responded to the survey ($N = 83$). Of these participants, 68% ($n = 56$) were female, 27% ($n = 21$) were male, and the remaining 5% did not respond to this item. Eighty percent of the student respondents were non-Hispanic white, 5% were international students, 11% were African, Latin, or Asian American, and 4% did not respond to this item. Requests for age were listed in two year increments: 18-19 (41%, $n = 34$), 20-21 (28%, $n = 23$), 22-23 (8%, $n = 7$), 24-25 (7%, $n = 6$), with the remaining (12%, $n = 10$) over age 25. Thirty-five percent of the students ($n = 29$) reported having one faculty member as a Facebook friend, 15% ($n = 13$) had two faculty member friends, 7% ($n = 6$) had three faculty member friends, and 3.5% ($n = 3$) had more than four.

Instruments

Self-Disclosure was measured using Cayanus and Martin's (2008) measure of teacher self-disclosure. The instrument contains 14 items collapsed in the three subscales of amount, relevance, and negativity. Anchors of 1-7 were employed where 1 indicated complete disagreement and 7 represented complete agreement. Sample items include "My instructor often presents his/her attitudes toward events occurring on campus" and "My instructor has told some unflattering stories about him/herself." These items were asked twice—once in response to teachers' self-disclosures in the classroom and once to evaluate teachers' self-disclosures on Facebook. The reliability for items assessing classroom self-disclosures was acceptable ($\alpha = .85$). The scale mean was 51.09 ($SD = 13.84$). Reliability for items evaluating disclosures on Facebook was also acceptable ($\alpha = .90$). The scale mean was 42.03 ($SD = 17.13$).

Teacher credibility was measured using McCroskey and Teven's (1999) measure of ethos/credibility. This instrument relies on semantic differential scaling, or what McCroskey and Teven refer to as bipolar adjective items, to assess perceptions of competence, goodwill, and trustworthiness. For example, to measure competence, respondents indicated on a scale of 1-7 the degree of perceived intelligence/unintelligence. An example to assess goodwill shows respondents indicating on a scale of 1-7 perceptions of the teacher being self-centered or not self-centered. Cronbach's alpha for overall teacher credibility on the scale was .81 with each factor's alpha at .86 for competence, .39 for goodwill, and .90 for trustworthiness. The scale mean was 110 ($SD = 15.70$). Means for the subscales were 37.12 ($SD = 5.44$) for competence, 35.82 ($SD = 7.61$) for goodwill, and 37.61 ($SD = 5.30$) for trustworthiness. One of the items on the goodwill subscale, understanding/not understanding, had very low correlations with the other items on

this subscale. When this item was removed, the reliability for goodwill increased to .81. The reliability measures for these items when assessing credibility of Facebook disclosures were overall .94, competence .90, goodwill .84, and trustworthiness .92. Scale means and standard deviations were 105.80 ($SD = 15.31$) overall, 35.73 ($SD = 5.48$) for competence, 33.40 ($SD = 6.17$) for goodwill, and 36.38 ($SD = 6.09$) for trustworthiness.

Results

The small sample size prompted assumption tests of normality, specifically for kurtosis and skew. The one-sample Kolmogorov-Smirnov test showed no signs of non-normality.

In Class and Facebook Self-disclosure Comparisons

A one-sample t test was used on overall self-disclosure to determine the difference between classroom and Facebook disclosures, showing a significant difference between conditions, $t(75) = 32.19, p < .05; r = .55$. Students perceived that teachers' disclosures in the classroom ($M = 51.09, SD = 13.84$) were significantly different from those on teachers' Facebook pages ($M = 42.03, SD = 17.13$). Further analyses show the differences on the subscales of the self-disclosure instrument. A one-sample t test showed a significant difference between amount of self-disclosure in the classroom ($M = 16.78, SD = 5.95$) and amount of self-disclosure on Facebook ($M = 14.94, SD = 6.92$), $t(79) = 25.21, p < .05, r = .48$. A one-sample t test showed a significant difference between the perceived relevance of teachers' self-disclosures in the classroom ($M = 24.25, SD = 7.06$) compared to self-disclosures on Facebook ($M = 17.49, SD = 8.51$), $t(78) = 30.52, p < .05, r = .31$. A one-sample t test showed a significant difference between perceived negativity of teachers' self-disclosures in the classroom ($M = 9.84, SD = 6.48$) and on Facebook ($M = 9.21, SD = 6.24$), $t(79) = 13.59, p < .05, r = .77$. In sum, students perceived that teachers' self-disclosures made in the classroom were different in the amount, relevance, and negativity from disclosures made on Facebook.

Disclosures on Facebook and Credibility

The first hypothesis asserted that disclosures relevant to course content on social networking sites would lead to high ratings of teacher credibility. The relevance and valence subscales of teachers' self-disclosures on Facebook were first correlated with perceptions of credibility in class and perceptions of credibility on Facebook.

Table 1
Correlation between Relevance of Teachers' Self-disclosures and Credibility

	1	2	3
1. Relevance of Self-Disclosure	1.00		
2. In-class credibility	-.32**	1.00	
3. Facebook credibility	-.04	.71**	1.00

** $p < .01$

Table 2

Correlation between Valence of Teachers' Self-disclosures and Credibility

	1	2	3
1. Valence of Self-Disclosure	1.00		
2. In-class credibility	-.69**	1.00	
3. Facebook credibility	-.44**	.71**	1.00

** $p < .01$

The correlation between relevance of Facebook disclosures and classroom credibility was significant, $r(70) = -.32, p < .01$, but the correlation between relevance of disclosures on Facebook and credibility on Facebook was not significant $r(68) = -.04, p > .05$. However, the correlation between perceived teacher credibility in the classroom was correlated with perceived credibility on Facebook, $r(68) = .71, p < .01$. The correlation between valence of disclosures and classroom credibility was significant, $r(70) = -.69, p < .01$, and the correlation between valence of disclosures and credibility on Facebook was also significant $r(68) = -.44, p < .01$.

Table 3

Predictors of Teacher Credibility

Variable	<i>B</i>	<i>SE B</i>	β	95% CI
Relevance	-0.63**	0.23	-0.32**	[-1.09, -0.17]
Valence	-1.92**	0.24	-0.69**	[-2.40, -1.44]
R^2	0.09	.71**	0.48	
<i>F</i>	7.48**		64.16**	

** $p < .01$

Simple linear regression was used to regress credibility on relevance of self-disclosure. Relevance of self-disclosures on Facebook was a moderate, significant predictor of perceptions of classroom credibility, $F(1, 68) = 7.48, p < .01$. R^2 for the model was .10 and adjusted R^2 was .09, accounting for approximately 9% of the variance. The analysis indicated that as relevance of teachers' self-disclosures on Facebook increased, perceptions of credibility in the classroom decreased (95% CI: -1.09, -.17, $\beta = -.32$), which fails to support the hypothesis.

The second hypothesis asserted that negative self-disclosures on social networking sites would lead to low ratings of teacher credibility. A simple linear regression was used to regress classroom credibility on valence of self-disclosures made on Facebook. Valence of self-disclosures on Facebook was a moderately high, significant predictor of perceptions of classroom credibility, $F(1, 69) = 64.16, p < .01$. R^2 for the model was .48 and adjusted R^2 was .47, accounting for approximately 47% of the variance. The analysis indicated that as negativity of teachers' self-disclosures on Facebook increases, perceptions of credibility in the classroom decrease (95% CI: -2.40, -1.44, $\beta = -.69$), thus supporting the hypothesis.

Discussion

Discussion of the results centers on the comparison between classroom and Facebook disclosures using the boundary management framework from CPM (Petronio, 2002). Specifically, the implications of Facebook disclosures, particularly on perceived teacher credibility, will be discussed.

Boundary Linkage: In-class and Facebook Disclosures

Students co-own their teachers' information following a teacher's disclosure. Teachers must carefully evaluate the information, the students, and the risk: benefit ratio of revealing information to students because of the vulnerability teachers may have if students re-tell teachers' information or attempt to use the information against the teacher. Teachers indicate that they disclose personal information when it is relevant to course content or to foster relationship development (Hosek & Thompson, 2009). As such, students can benefit from teachers' information. Teachers further understand the risks of damaging credibility or causing student discomfort (Hosek & Thompson, 2009). Thus, because of the risks and benefits to teachers and students of co-ownership of information, teachers' disclosures may differ in the classroom setting compared to social networking sites. The results of this study support this argument as these students perceive a difference between the disclosures teachers make in the classroom and those they make on Facebook.

More to the point, this study contributes to the extant research by indicating that students perceive the attributes of amount, relevance, and valence of self-disclosure to differ between the classroom and Facebook. Relevance and valence are particularly salient because their inclusion in operationalizing teacher self-disclosure is relatively new (Cayanus & Martin, 2008). The mean scores for each subscale were higher for the classroom setting than on Facebook, suggesting each of

these attributes was perceived to be stronger in class than on Facebook.

The differences could be a reflection of teachers' modification in their disclosures to adapt to their audience, knowing that Facebook pages likely have a larger, more diverse audience than a classroom. The difference in the amount of disclosures seems reasonable because of audience adaptation or the medium specifically. Teachers may see students 2-3 times per week for a specified period of time. However, teachers are not required to regularly log in or use a Facebook account, nor are students equally likely to view the disclosures teachers make on their pages. The difference in the relevance of disclosures is also reasonable because teachers may regulate the type of information they share about themselves with their students, and may alter the rules of their boundary regulation when they make disclosures on Facebook sites where friends and family members are likely to be part of the audience.

The different perceptions of positive/negative disclosures are surprising. This difference suggests that teachers switch the valence of their disclosures when shifting from the classroom to Facebook. Perhaps teachers who make positive disclosures in the classroom use Facebook as a venue to complain or critique. Or, teachers may want to disclose negative information in the classroom, but regulate disclosures to provide only positive information on Facebook with its larger audience. Cayanus, Martin, and Goodboy (2009) suggest that sharing only positive disclosures may be perceived by students as unrelatable when compared to some of their own negative life experiences, indicating that some negative disclosures could be well-received by students. Thus, teachers who disclose negative information in class might use Facebook to present a counter-point from classroom disclosures or engage in face-saving strategies.

By comparison, teachers may not change the valence of their disclosures, but students perceive differences just by the change in context. Students acknowledge the benefits of faculty Facebook connections, such as getting to know a professor better or seeking similarity with a professor (DiVerniero & Hosek, 2011). However, students also associate awkwardness with faculty Facebook friends and note the salience of age when observing professors' Facebook profiles (DiVerniero & Hosek, 2011).

Through a CPM framework, this difference could be explained using linkage rules (Petronio, 2002). A discloser considers the confidant before deciding to reveal information. Teachers are encouraged to share only positive information with student-confidants (Cayanus, 2004). By comparison, Facebook friend-confidants are composed of people from several aspects of teachers' lives. Teachers who disclose on their pages are likely aware of this diverse audience.

Furthermore, friends might post on teachers' walls, which students can read and evaluate. In these instances, the teacher cannot control this information, yet students might take these posts into account in their perceptions of their teachers' disclosures.

Petronio (2002) describes three kinds of confidants—deliberate, inferential, and reluctant. In the classroom environment, students could be any of these three, where deliberate confidants ask questions to get information, inferential confidants expect to hear private information because of the nature of the relationship, and reluctant confidants are those who do not want to receive disclosures. This complexity creates potential reward and risk for the teacher who has linked information with students without consideration for the various roles students could take in becoming a co-owner of information. Hosek and Thompson (2009) identified themes of role risks, teacher-student face risks, personal network face risks, and stigma risks in a study of teachers who disclose personal information to their students. While their study was not directed toward online contexts, the findings attest to teachers' awareness of the risks of disclosure to students. Some confidants may enjoy this type of connection with a teacher, while others may find the information inappropriate. Thus, teachers need to carefully consider their students, both individually and collectively, before deciding to reveal personal information. Also, further research with CPM is needed to explore the boundary coordination processes when there are multiple confidants. CPM discusses the family unit, which also has multiple members. However, trust, power, and dependence differentiate the family context from the classroom environment, warranting particular attention for each situation.

From the three aspects of disclosure, relevance of disclosures seems to be the strongest predictor on several student indicators on teacher evaluations (e.g., a meaningful course and capability of success; Cayanus & Martin, 2008). Studies have shown that valence explains a small portion of the variance in student outcomes such as affect or motivation (i.e., Cayanus & Martin, 2008), but further analysis of valence of disclosures is necessary because it has implications for educational interactions. For example, valence has been shown to be a predictor of teacher clarity (Cayanus & Martin, 2008). However, the valence of disclosures may not be as important to examine as other facets of teacher self-disclosures such as amount and relevance. Indeed, in the current analysis, the mean scores for valence ($M = 9.84$ in the classroom and 9.21 online) were considerably lower than amount ($M = 16.78$ in the classroom and 14.94 online) and relevance ($M = 24.25$ in the classroom and 17.49 online). In brief, the results from the current study show that students perceive teachers' disclosures differently when comparing information available on Facebook with that provided in the classroom. This difference supports the notion that teachers manage their privacy boundaries differently based on the context and target of who will link with the information. The implications of these differences are further explained by examining

the results of perceptions of teacher credibility.

Boundary Coordination: Disclosure and Credibility

Once information is revealed to students, they become co-owners of the information, which warrants an understanding of the connection between disclosures and credibility. In this study, the relevance of disclosures on Facebook did not correlate with perceptions of credibility on Facebook, but they did correlate with classroom credibility. Further, the correlation between relevance of Facebook disclosures and classroom credibility was weak; Facebook disclosures explained only 9% of the variance in classroom credibility. Disclosures made by teachers on their Facebook sites that students perceive as relevant seem to have a slight impact on students' perceptions of teachers' classroom credibility. However, the relationship between relevance of disclosures on Facebook and perceptions of credibility were inversely related, indicating that as relevance of disclosures on Facebook increases, credibility in the classroom decreases. Previous research contradicts this finding by showing the positive impact that relevant disclosures can have on their students (e.g., Frymier & Shulman, 1995). Perhaps students are not impressed with teachers who disclose information on Facebook, even when their Facebook disclosures are relevant to course material. Or, perhaps students perceive the use of Facebook by teachers as trying to invade "their space," or they believe being on Facebook shows a lack of professionalism that they expect from a university professor. Yet another explanation could be that students don't expect to receive information relevant to course content on Facebook. Future research should parcel out the content of disclosures in the classroom and on Facebook and the expectations for disclosures in each milieu to contribute to this finding.

The findings also indicated a negative correlation between valence of disclosures and classroom and Facebook credibility. This finding is not surprising because the items on the self-disclosure instrument ask about perceptions of negativity. As scores on valence increase, they indicate disagreement with negative disclosures and support for positive disclosures. Thus, as credibility increases, valence of disclosures decreases (toward the negative).

This study also showed that credibility in the classroom was highly correlated with perceptions of credibility on Facebook. Perhaps the medium itself does not have a strong connection to perceptions of credibility, but the credibility established in the classroom carries over into out-of-classroom environments, such as Facebook. Thus, it seems that perceptions of teachers' credibility remain similar whether disclosures are made in the classroom or on Facebook. Teachers should carefully consider the boundary coordination properties of CPM (i.e., confidants, linkage, boundary permeability, and access and protection rules). Regardless of

the perceived credibility students have of teachers who self-disclose, teachers need to consider the co-ownership that students possess of their private information. For example, explicitly stating the rules for protecting teachers' private information, such as not repeating a particular example, could lead to students respecting this request and protecting the private information. By contrast, students might not respect this request and could leak the information to others. An area for further analysis would be to assess teacher credibility and its impact on protecting or revealing teachers' information. In other words, if students perceive their teachers to be credible, will they be more likely to protect the teachers' information they now co-own? Similarly, if students perceive a teacher to have little credibility, will they be less likely to protect the teacher's information? These aspects of boundary coordination would add new insight to the study of teachers' self-disclosures to students.

Limitations and Future Research

This study was limited by a small sample size. Numerous factors could have contributed to this problem, two of which are discussed here. First, recruitment began in required, large classes to seek a cross-section of majors on campus. These courses are typically taken by freshmen who may not have had time to establish a Facebook friendship with a college professor. However, even after the recruitment protocol was changed to recruit from upper division courses, the responses were still low. A second reason could be that social networking sites are not as pervasive for relationship maintenance between professors and students as initially believed. Nadler and Nadler (2001) indicated that out-of-classroom communication is relatively infrequent as reported by students. Only 15% of college students in one study reported accessing a teacher's Facebook or MySpace site (Mazer et al., 2007). Additionally, professors might maintain various boundary rules for OCC via Facebook. The two professors on the research team provide anecdotal evidence that shows the contrast in approaches by faculty members. Neither faculty member of the research team initiates friend requests with current or former students. However, one member accepts friend requests initiated by students at any time, whereas the other accepts friend requests after the students have graduated. These boundary rules established by professors may limit the number of students who maintain relationships with teachers on Facebook. Despite this limitation, the results found here contribute to a growing body of research on instructional communication that examines out-of-classroom communication and the use of social networking sites, such as Facebook.

This study also provokes questions about characteristics of students who elect a Facebook friendship connection with a college professor. The sample of students with faculty Facebook friends potentially biases the sample. For example, students who seek Facebook

friendships with faculty members may have more positive perceptions of the teacher, higher levels of curiosity, or stronger affinity-seeking behaviors than other students, among other possible explanations. While Facebook users broadly seek belonging and self-preservation (Nadkarni & Hofmann, 2012) and virtual community, companionship, exhibitionism, relationship maintenance, and passing time (Hollenbaugh & Ferris, 2014), future research on qualities and characteristics of students who befriend faculty members on Facebook and faculty who reciprocate would distinguish the specific motivations and message content in this relational context.

Summary Remarks

Facebook captured the attention of the university environment very quickly and rapidly expanded to other sectors of the population. The implications of its usage are important because of its prevalence and its unique way of helping humans connect without face-to-face interaction. This study examined one, specific relationship that is maintained through Facebook. The unique focus for this student-teacher relationship study compared the perception of disclosures made in class to those made on Facebook. Overall, students perceive differences in the disclosures their teachers make in the classroom to those made on Facebook. Future research should tease out these differences and their implications. This study also examined the implications of students' perceptions of teachers' disclosures on their credibility, with particular attention on perceived credibility with Facebook disclosures.

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