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The Influence of Classroom Cell Phone Policies on Instructor Credibility

by T. Kody Frey, M.A. and Nicholas T. Tatum, M.A.

Abstract
Considering the growth of cell phone usage in the classroom, instructors often attempt to regulate student behavior through specific technology policies in their syllabi. However, research offers little explanation regarding the influence of policies that try to restrict cell phone usage on perceptions of instructor credibility. Using the social influence (SI) model of technology use as a sensitizing lens, results from this study (N = 206) demonstrated that policies encouraging the use of cell phones for instructional purposes resulted in significantly greater student perceptions of instructor credibility than policies discouraging the use of cell phones for noninstructional (i.e. social) purposes.

KEY WORDS: SI model, instructor credibility, cell phones, classroom technology, syllabus

Student cell phone usage in the classroom has grown exponentially (Diamanduros, Jenkins, & Downs, 2007; Holtgraves, 2011). At the same time, both instructors and students generally consider classroom cell phone use a negative, unacceptable behavior (Campbell, 2006; Wei & Leung, 1999). Accordingly, instructors and course administrators routinely attempt to curb student behaviors (e.g., cell phone usage) by including legalistic policies about classroom rules and expectations in their syllabi (Slattery & Carlson, 2005). As mobile technology will continue to remain pervasive in university classrooms, the growing tension between the use of cell phones, acknowledged negative perceptions towards them, and course policies that facilitate or inhibit their use merits continued exploration. Furthermore, because the syllabi where classroom policies are housed play an important, communicative role in shaping students' perceptions of their instructors prior to beginning a course (Baecker, 1998; Parkes & Harris, 2002; Smith & Razzouk, 1993; Thompson, 2007), investigating and recognizing the influence of these written policies is of utmost importance. Instructional communication research surrounding technology policies has recently begun to consider the effects that such policies have on students' perceptions of their instructors. Research suggests that the way instructors enforce cell phone policies in the classroom is directly related to students' perceptions of their credibility (i.e., competence, caring, trustworthiness) (Finn & Ledbetter, 2013). While understanding instructors' enforcement of policies is important, little is known about how students perceive the actual text of cell phone policies.

Finn and Ledbetter (2013) identified three dimensions of classroom technology policies: *encouraging policies* (i.e., "teacher behaviors that encourage technology use for instructional purposes"; p. 33), *discouraging policies* (i.e., "teacher behaviors that discourage technology use for noninstructional purposes"; p. 34), and *laissez-faire policies* (i.e., "the teacher does not care how students use technology in the classroom"; p. 34).

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Their research suggests that encouraging policies are related to each of the three dimensions of instructor credibility; contrarily, discouraging policies and laissez-faire policies are not significantly related to instructor credibility. Additionally, the influence of the type of technology policy on instructor credibility was mediated by students' perceptions of instructor power bases. For example, the influence of encouraging cell phone policies on instructor caring appears to depend on increases in perceptions of instructor referent power (i.e., desire to comply in order to please or identify with an instructor; French & Raven, 1959).

In this initial study, Finn and Ledbetter relied on students' perceptions of instructor behaviors and attitudes surrounding cell phone policies (e.g., Teacher Technology Policies scale; Finn & Ledbetter, 2013). Importantly, these findings were not based on students' reactions to explicit, written policies (i.e., from a syllabus) through experimentation. Given the inability of such research to establish causal order between syllabi policies and student evaluations of their instructors (Finn & Ledbetter, 2013), research must explore if actual cell phone policy excerpts from syllabi function analogously through experimentation. Within instructional communication literature, a single case of experimentally investigating classroom cell phone policies excerpts was identified. Lancaster and Goodboy (2015) examined the influence of policy argumentation on students' attitudes towards the policy and resulting heuristic-systematic processing. Their findings provided support that students hold attitudes and judgments towards the actual text of cell phone policies in addition to how their instructor enforces it. Thus, the purpose of the present study is to extend previous research (Finn & Ledbetter, 2013) concerning the influence of classroom cell phone policies by experimentally examining the impact of both encouraging and discouraging policy texts on student perceptions of instructor credibility.

Theoretical Framework

This study integrates Fulk's (1993; Fulk, Schmitz, & Ryu, 1995) *social influence (SI) model* as a theoretical perspective for understanding how students form impressions of their instructors in reaction to differing classroom cell phone policies. The SI model argues that "the social shaping of attitudes and behaviors related to communication technology" (Fulk, 1993, p. 941) likely affects individuals' technology usage habits. Eventually, these attitudes become shared by members of a social network. In other words, perceptions and uses of communication technologies (i.e., cell phones) are shaped in some capacity by the attitudes, behaviors, and statements of others (i.e., peers) within the social context (Campbell & Russo, 2003; Schmitz & Fulk, 1991). The bulk of research concerning the SI model has evaluated the social construction of technology use in organizational settings between supervisors and subordinates (Fulk, 1993; Fulk et al., 1995; Jian, 2007; Schmitz & Fulk, 1991); however, Campbell and Russo (2003) applied the framework to the acceptance and use of mobile phone technologies. Since then, a notable line of research (Finn & Ledbetter, 2013; Finn & Ledbetter, 2014; Ledbetter & Finn, 2013) has used this conceptual framework to evaluate the social construction of technology use in the instructional context. Thus, in regard to cell phones, the SI model proposes that "students possess a culture that values access to such technology" (Finn & Ledbetter, 2013, p. 28), which may be reflected in the attitudes and behaviors they carry with them into the classroom.

Research indicates that students have certain expectations regarding the role of personal and content-related technologies in shaping the instructional context (Schrodt & Turman, 2005; Schrodt & Witt, 2006; Turman & Schrodt, 2005; Witt & Schrodt, 2006). The SI model offers a coherent perspective on the development of these expectations, positing that they form in large part from the social construction of technology use among college students. That is, college students

may rate the effectiveness of instructional technology use as a function of their jointly constructed expectations. As noted by Finn and Ledbetter (2013), this process of social construction likely leads to technological access for college students "as a general expectation in both interpersonal and instructional contexts" (p. 29). In support of this notion, Fulk et al. (1995) noted that the influence of "like others" (i.e., peers) often has more substantial effects on media adoption and usage than those of supervisors (i.e., instructors); accordingly, students may have more pronounced expectations for cell phone usage patterns adopted by their personal social networks rather than those dictated by their respective instructors. Consequently, perhaps instructors who outlaw the use of technology in their classrooms through syllabi policies are really violating the technological expectations of their students (Ledbetter & Finn, 2013).

As noted by Wei and Wang (2010), the consistent practice of and expectation for cell phones within the classroom may be attributed to students' habitual media usage. For example, their study implies that students send text messages in the classroom to satisfy their social needs (i.e., pleasure, inclusion, affection, p. 488). Moreover, the "everywhere and at any time" communication capabilities of mobile technology (Liccope, 2004, p. 152) enable uninterrupted, routine usage by students inside and outside the classroom (Wei & Wang, 2010). Consequently, a student's constant connection to their social network through a personal phone (e.g., texting, social media) is likely demonstrative of strong attitudes towards that technology (Fulk, 1993). From the perspective of the SI model, an instructor's adoption of a particular position concerning cell phones that contradicts students' jointly-constructed attitudes about acceptance and usage may result in negative evaluations from students.

Interestingly, students also understand that technology use has the potential to diminish learning outcomes (Campbell, 2006; Kuznekoff, Munz, & Titsworth, 2015). As originally forwarded by Finn and Ledbetter (2013), the application of the SI model reveals an inherent tension amid students' social construction of technology use in the instructional context. Students "expect access to wireless technology in the classroom" but simultaneously "believe it should not interfere with their learning" (Finn & Ledbetter, 2013, p. 30). Instructors often find themselves in a difficult position when trying to manage this dichotomy, as their actions may ultimately affect how they are viewed by students. Particularly, because research suggests that instructor enforcement of cell phone policies is directly related to students' perceptions of their credibility (Finn & Ledbetter, 2013), it seems logical that cell phone policy experts would influence students similarly.

Instructor Credibility

Instructor credibility represents one of the most studied concepts within instructional communication (Finn et al., 2009). McCroskey and Teven (1999) conceptualized source credibility as "the image of the source in the minds of receivers" (p. 90). More specific to the classroom, instructor credibility refers to "students' attitudes toward the instructor as a source of communication" (Schrodt et al., 2009, p. 351). Although the wealth of research surrounding this concept includes some mixed results, instructor credibility has been associated with a tremendous number of classroom-oriented variables, indicating the importance of such a construct in predicting and facilitating student learning (Finn et al., 2009). While instructional scholars have relied on various conceptualizations of instructor credibility over time, today's scholars rely primarily on the three-dimensional construct put forth by McCroskey and Teven (1999) comprised of caring, trustworthiness, and competence, which shows evidence of a meaningful internal structure through the consistent replication and confirmation across multiple studies (Mottet, Parker-Raley, Beebe & Cunningham, 2007; Schrodt, 2013; Witt, Schrodt, Wheeless, & Bryand, 2014). Furthermore, in a meta-analytical review of instructor credibility, Finn et al. (2009) found that each identified dimension of credibility produced similar, moderate effect sizes for their association with

student outcomes. Clearly, caring, trustworthiness, and competence are important factors in understanding students' perceptions of instructors and their subsequent interest, motivation, and perhaps, learning.

Hypotheses and Research Questions

Campbell (2006) found that younger students tend to hold more favorable assessments of mobile phones in the classroom and less favorable attitudes towards policies restricting their use, suggesting that students hold 'general' attitudes towards cell phone policies. Thus, students' general attitudes toward cell phone policies may directly influence their individual reactions to the policies embedded in their class syllabi. For instance, students with greater intrinsic motivation to learn may inherently abide by self-imposed behavioral rules, rather than those offered in the course syllabus, to help facilitate their learning. At the same time, extrinsically motivated students may depend on the rules and guidelines offered by course instructors to structure their classroom behavior. Ultimately, intrinsically and extrinsically motivated students may hold different attitudes regarding their instructor's syllabi policies. Thus, students' general attitudes towards cell phone policies should be controlled to better account for the possibility of this confounding effect.

Instructor Caring

Instructor caring refers to perceived instructor concern for the well-being of students (McCroskey, 1992; Teven & McCroskey, 1997). Meyers (2009) noted that "effective, caring faculty members balance their connection with students…by enforcing classroom policies in consistent and equitable ways" (p. 207). There is an inherent connection between the policies put in place by instructors and students' perceptions of caring; however, existing research is unclear whether instructors' attempts to prohibit certain behaviors are actually perceived as more or less caring by students. Instructors who include policies that prohibit any cell phone use in the classroom may oppose students' socially-constructed expectations towards technology; accordingly, instructors may

perceived as more caring. This becomes especially relevant in light of students' attitudes about mobile phone usage in the classroom. Students appear to acknowledge the negative implications of cell phone usage in the classroom (Campbell, 2006; Wei & Leung, 1999). Therefore, the following hypothesis is proposed:

H1: When controlling for students' general attitudes toward course policies, instructors who incorporate *encouraging* policies in their syllabus will be perceived as more caring than instructors who include *discouraging* policies.

Instructor Character/Trustworthiness

Instructor character is the extent to which students perceive their instructor to have trustworthiness or goodwill (Chory, 2007; Frymier & Thompson, 1992). Przybylski and Weinstein (2012) experimentally evaluated how cell phones influence the quality of face-to-face interactions and shape relationships. Their results demonstrated that the mere presence of mobile phones may hinder the development of trust and closeness in relationships. Extending these ideas directly to students in the classroom, cell phones could present unique challenges for the instructor-student relationship. In terms of policies, if students are expected to abide by a policy with which they disagree, they may respond "with an attempt to regain autonomy by exerting control in the form of venting disagreement with course policies and practices and attempting to influence the classroom culture" (Ball & Goodboy, 2014, p. 203). As students expect to be able to use technology in the classroom (Schrodt & Turman, 2005; Schrodt & Witt, 2006; Turman & Schrodt, 2005; Witt & Schrodt, 2006), discouraging policies that restrict any type of cell phone use could result in negative student responses. Such an attempt to regain control may be indicative of less trust in the instructor in helping students meet their classroom goals. Consequently, the following hypothesis is forwarded:

H2: When controlling for students' general attitudes toward course policies, instructors who incorporate encouraging policies in their classroom syllabus will be perceived as more trustworthy than instructors who include discouraging policies.

Instructor Competence

Instructor competence refers to perceived expertise or knowledge of course material (Frymier & Thompson, 1992). Goodboy (2011a) found a positive association between instructor misbehaviors (i.e. incompetence) and student instructional dissent. Specifically, when students perceive instructors as incompetent, they are more likely to act out in response to that perception. Furthermore, Goodboy (2011b) also identified *classroom policies* as a triggering agent leading to student instructional dissent. Thus, if students perceive classroom technology policies that contradict their socially-constructed expectations as misbehaviors, then this belief may affect their view of the instructor's competence. As Goodboy (2011b) noted, students dissent "to seek revenge and to hurt the credibility of a professor among their students and colleagues" (p. 305). Clearly, the classroom technology policies that instructors implement into their syllabi have the potential to shape students' perceptions of their teaching skill and ability; however, the nature of this influence may vary according to the language within the policy.

RQ1: When controlling for students' general attitudes toward course policies, do encouraging or discouraging technology policies in classroom syllabi result in greater levels of perceived instructor competence?

Method

Participants

Participants (N = 206) were undergraduate students from a large southeastern university enrolled in a basic communication course. Of the participants, a majority identified as female (n = 135; 65.5%) and a minority identified as male (n = 71; 31.5%) with ages ranging from 18 to 29 (M = 19.49, SD = 1.50). The sample included students identifying as Caucasian (n = 169; 82%), African American (n = 18; 8.7%), Asian or Hispanic (n = 13; 6.3%), Native American (n = 1; 0.5%), and other (n = 5; 2.5%). Participants included first year students (n = 98, 47.6%), sophomores (n = 53, 25.7%), juniors (n = 35, 17%), and seniors (n = 20, 9.7%), and reported 32 unique majors across the university. Participants reported predominately using mobile phones during class for texting (M = 46.91, SD = 27.37), browsing the internet (M = 44.57, SD = 31.19), and social media (M = 41.21, SD = 29.05), but rarely for playing games (M = 10.51, SD = 19.93) or streaming videos (M = 5.51, SD = 13.99), with responses measured from (0) *never* to (100) *always*.

Sampling Procedure

Following IRB approval, participants were recruited through a research participation system in two separate iterations of the basic communication course at the respective university. A description of the study was provided to students, including how much time they should expect for participation; students received minimal extra credit for participating. All participants completed the same questionnaire through a secure and unique link hosted by Qualtrics, an online survey system.

Manipulation

In this study, cell phone policy excerpts were manipulated in an experimental design; participants were randomly administered one of two policies from a hypothetical syllabus: an encouraging policy or a discouraging policy (see Figure 1). To develop these conditions, a sample of 30 example classroom cell phone policies from course syllabi were reviewed to model common semantic structure and promote ecological validity. Then, the encouraging or discouraging valence of each policy was modeled after Finn and Ledbetter's (2013) Teacher Technology Policy Instrument (TTPI). Specifically, the encouraging policy incorporated language to "encourage technology use for instructional purposes" (p. 33), while the discouraging policy outlined ramifications to "discourage technology use for noninstructional purposes" (p. 34). After describing the scenario in detail and viewing the excerpt, the participants were asked a series of questions regarding their perceptions of the given policy.

Figure 1. *Cell Phone Policy Manipulations*

Encouraging Policy:

Cell phones should not be used for noninstructional purposes during class. Use of cell phones during class (texting, social media, internet use, gaming, etc.) for noninstructional purposes could lead to minor deductions in participation points.

However, cell phones may be left on vibrate for emergency notification purposes. If you expect an important phone call, please inform me before class and quietly excuse yourself when you receive it. Additionally, there are a variety of reasons you will be permitted to use cell phones for learning purposes during class. You are encouraged to use cell phones for note taking purposes during class. Additionally, cell phones may be used to record lectures and take pictures of course content. Finally, feel free to use your cell phone to look up pertinent information that relates to class content during lectures or activities on social media or the internet. I am confident that you can use discernment to use cell phones in a nondistracting, productive way during class.

Discouraging Policy:

There is a zero tolerance policy for noninstructional cell phone use during class. Use of cell phones during class (texting, social media, internet use, gaming, etc.) for noninstructional purposes will lead to major point deductions and consequences. A first violation of this policy will result in a reduction of 10 points from your final grade in the course and immediate dismissal from class. A second violation of this policy will result in being dropped from the course and receiving a failing grade. Receiving a failing grade for this course could result in delayed graduation, loss of financial aid or scholarships, and a significantly lowered GPA.

However, cell phones may be left on vibrate for emergency notification purposes. If you expect an important phone call, please inform me before class and quietly excuse yourself when you receive it. If you need a cell phone for taking notes or otherwise participating in class, please ask permission before class begins and sit on one of the front two rows.

Measures

Instructor Technology Policies. Student perceptions of instructor technology policies were operationalized using two dimensions of Finn and Ledbetter's (2013) Teacher Technology Policy Instrument (TTPI). For the purposes of the current study, this 7-item instrument asked students to evaluate the extent to which they expected the instructor who provided the policy to employ behaviors of encouraging policies (4 items, e.g., "The instructor encourages technology use as long as it helps student learning.") or discouraging policies (3 items, e.g., "The instructor believes that technology distracts students from learning."). Responses were measured using a 7-point Likert-type scale ranging from strongly disagree (1) to strongly agree (7). Both dimensions had acceptable reliability ($\alpha_{encouraging}$ = .87, $\alpha_{discouraging}$ = .77).

Instructor Credibility. Teven and McCroskey's 1997) Caring Scale (CS) and McCroskey and Young's (1981) Teacher Credibility Scale (TCS) were used in conjunction to operationalize instructor credibility. Teven and McCroskey's 9-item instrument asks students to report perceptions of instructor caring using semantic differential items with opposing adjectives placed at opposite ends of a 7-point scale (e.g., "Not understanding - understanding"). McCroskey and Young's 12-item TCS asks students to report perceptions of instructor credibility (competence and trustworthiness) using semantic differential items with contrasting adjectives placed at opposite ends of a 7-point scale; six items measure instructor competence (e.g., "Intelligent - Unintelligent), and six items measure instructor character (e.g., "Untrustworthy - Trustworthy"). All three dimensions were highly reliable (α_{caring} = .91; $\alpha_{competence}$ = .89; $\alpha_{trustworthiness}$ = .91).

General Attitude Towards Policy. Students' general attitude towards cell phone policies was operationalized using a 4-item instrument developed for this study. This measure asked students to report the extent to which they believe universities should implement cell phone policies in college classrooms. Items included (1) students should be able to use their phones whenever they want during class; (2) all classrooms should have cell phone policies for students to follow; (3) I don't think my instructor should be able to tell me how to use my cell phone during class; and (4) I think that students should be given a cell phone policy to follow in the classroom. Responses were measured using a 7-point Likert-type scale ranging from strongly disagree (1) to strongly agree (7). Items were subjected to an exploratory factor analysis (EFA). Criteria for item and factor retention were: (1) eigenvalues greater than 1.0 for retained factors, (2) primary factor loadings of .50 or greater, (3) no secondary factor loadings exceeding .30, (4) loading on a factor with a minimum of two items, and (5) theoretical interpretability (Comrey & Lee, 1992). The EFA revealed all items loaded on a single factor accounting for 62.98% of the variance. Both the KMO measure (.71) and Bartlett's test [$\chi 2$ (6) = 291.96, p < .01] were acceptable (Marshall et al., 2007). Finally, the measure was reliable (α = .80).

Manipulation Check

To ensure policies were manipulated effectively, manipulation checks were conducted. Two independent samples *t*-tests revealed that students viewing the encouraging policy (*M* = 5.02, *SD* = .86) reported significantly higher encouraging behaviors than those viewing the discouraging policy (*M* = 3.82, *SD* = 1.48) [$t(204)$ = 7.19, *p* < .05]; additionally, students viewing the discouraging policy (*M* = 5.06, *SD* = 1.29) reported significantly higher discouraging behaviors than those viewing the encouraging policy (*M* = 4.12, *SD* = 1.12) [$t(204)$ = 5.63, *p* < .05]. Thus, both conditions were manipulated successfully.

Data Analysis

The data were analyzed using a one-way multivariate analysis of covariance (MANCOVA), controlling for the influence of students' general attitudes toward cell phone policies. Furthermore, considering the theorized and empirically-validated relationship between the three dimensions of instructor credibility, the MANCOVA also provides the researchers with increased protection "against inflated Type 1 error due to multiple tests of (likely) correlated DVs" (Tabachnick & Fidell, 2013, p. 286). Consequently, it makes sense to test for group differences using a single MANCOVA rather than a series of ANCOVAs, despite the acknowledged potential for decreases in statistical power in doing so (Tabachnick & Fidell, 2013).

Results
Research Questions and Hypotheses

A one-way MANCOVA was conducted with the type of cell phone policy (i.e., encouraging vs. discouraging) entered as the independent variable and the three dimensions of instructor credibility (i.e., caring, trustworthiness, and competence) entered as dependent variables, controlling for students' general attitudes towards cell phone policies. Box's M test was significant (Box's M = 53.76, *p* < .001), indicating that there may be a significant difference among the resulting covariance matrices. However, the approximately equal sample sizes between conditions increases the robustness of this specific significance test, meaning the outcome may be disregarded as it is overly sensitive (Tabachnick & Fidell, 2013). Thus, Pillai's criterion was utilized as a more stringent interpretation of statistical significance for the multivariate analysis (Olson, 1979). The model was significant [Pillai's trace = .122, $F(3, 200)$ = 9.23, *p* < .05, partial η^2 = .12].

H1 predicted that instructors who included encouraging policies in their syllabi would be perceived as more *caring* than instructors who included discouraging policies. After adjustment by the covariate, a univariate F test with post hoc Bonferroni analysis revealed significant differences between the policies on perceived instructor caring [$F(1, 202)$ = 25.79, *p* < .05, partial η^2 = .11], with participants assigned to the encouraging policy condition (*M* = 4.78, *SD* = .95, n = 99) perceiving the instructor to be more caring than those assigned to the *discouraging* policy condition

(M = 3.89, SD = 1.31, n = 106). In addition to the moderately strong effect size, regression analysis revealed that the covariate accounted for 10.9% of the variance in instructor caring [$F(1, 203)$ = 24.76, $p < .05$, β = .33]. Thus, H1 was supported.

H2 predicted that instructors who included encouraging policies would be perceived as more *trustworthy* than instructors who included discouraging policies. A univariate F test with post hoc Bonferroni analysis revealed significant differences between the policies on perceived instructor trustworthiness after adjustment by the covariate [$F(1, 202)$ = 9.75, $p < .05$, partial η^2 = .05] with participants assigned to the encouraging policy condition (M = 4.91, SD = .99, n = 99) reporting higher levels of perceived instructor trustworthy than those assigned to the discouraging policy condition (M = 4.36, SD = 1.17, n = 106). The small effect size is likely due to covariance between students' general attitudes toward cell phone policies and their perceptions of instructor trustworthiness [$F(1, 203)$ = 21.72, $p < .05$, β = .31]. The covariate alone explained 9.7% of the variance in instructor trustworthiness. Accordingly, H2 was supported.

RQ1 explored whether participants viewing the encouraging or discouraging policies would report significantly different levels of perceived instructor competence. After adjustment by the covariate, a univariate F test with post hoc Bonferroni analysis revealed significant differences between the policies on perceived instructor competence [$F(1, 202)$ = 4.62, $p < .05$, partial η^2 = .02], with participants viewing the encouraging policy condition (M = 5.21, SD = 1.07, n = 99) perceiving the instructor to be more competent than participants viewing the discouraging policy condition (M = 4.79, SD = 1.26, n = 106). Like results obtained for H2, the small effect size is potentially due to covariance between students' general attitudes toward cell phone policies and their perceptions of instructor competence [$F(1, 203)$ = 13.47, $p < .05$, β = .25]. The covariate alone explained 6.2 % of the variance in instructor competence.

Discussion

Results revealed that the type of technology policy significantly influenced students' perceptions of instructor credibility. Specifically, encouraging policies appear to result in greater perceptions of instructor caring, competence, and trustworthiness than discouraging policies. However, small effect sizes, in light of controlling for students' general attitudes toward cell phone policies, suggest that technology policies work in tandem with other instructional variables to influence how students' perceive their instructors. Considering the importance of instructor credibility in the classroom context, these findings suggest several important implications.

First, these findings provide an empirical link between syllabi policies and student perceptions of instructors. As evidenced through the wording of the questions within the Teacher Technology Policies scale (Finn & Ledbetter, 2013), students' perceptions of a policy are a direct reflection of an instructor's intention to enforce that policy (i.e. "The instructor encourages technology use as long as it helps student learning"). In the current study, students were asked to (1) imagine what the instructor who enforces the policy might be like and (2) provide their perceptions of the instructor who the policy belongs to. Thus, in addition to building from previous literature (Baecker, 1998; Parkes & Harris, 2002; Smith & Razzouk, 1993; Thompson, 2007), this study suggests that perceptions of the syllabus as a contextual, communicative document should precede students' evaluations of their instructors.

Second, the SI model provides an effective and appropriate framework for understanding the influence of instructor technology policies on students' perceptions of instructor credibility. Although the theory was not tested directly, the propositions within the SI model seem to indicate that students' hold specific attitudes regarding technology usage in the classroom, and these attitudes form specific expectations for instructor behaviors. When instructors violate these

expectations, their credibility may be subsequently affected. The results herein support this notion, indicating that when instructors rely on policies discouraging the use of phones for noninstructional purposes, students react less favorably than when instructors encourage the use of cell phones for instructional purposes. In terms of the language of the SI model, it may be that instructors who allow cell phones to permeate the classroom space to a certain degree violate students' expectations to a lesser extent by more closely aligning with the attitudes of the social network. Hellweg (1978) found that subordinates' ideal supervisors were similar to them in both attitudes and values. Perhaps students experience greater similarity with instructors who encourage the use of cell phones in the classroom, albeit for instructional purposes, than instructors who discourage the usage of cell phones for any reason. Future research should expand upon this concept by examining the influence of classroom cell phone policies on perceived homophily (i.e. similarity) between instructors and students.

Interestingly, the type of technology policy produced the greatest overall effect on instructor caring. This finding provides support for the argument by Finn et al. (2009) identifying caring as a "key dimension" of instructor credibility (p. 531). McCroskey (1992) suggested that instructor caring is made up of empathy, understanding, and responsiveness; for the purposes of this study, reactions to technology policies could be strongly connected to perceived instructor understanding. Cahn and Shulman (1984) defined perceived understanding as "the communicator's assessment of his/her success or failure when attempting to communicate with another person" (p. 122). When instructors communicate their policies and structure their courses in a manner that more closely aligns with students' attitudes and values, students may perceive those instructors to understand their ideas, feelings, and needs. Consequently, encouraging technology policies appear to act as prosocial mechanisms that help instructors exhibit understanding of their students.

In turn, this perceived understanding might lead students to perceive the instructor to care more about them.

Ultimately, the present research experimentally extends claims by Finn and Ledbetter (2013) that instructor technology policies are directly linked to instructor credibility. Instructors should be mindful of the type of policy that they choose to implement into their syllabi, but they must also consider the way that such policies are enforced. Finn and Ledbetter (2013) noted that "it is likely a combination of (a) the policy and (b) the way the instructor communicates and enforces classroom policies and procedures that influences students' perceptions" (Finn & Ledbetter, 2013, p. 39). Practically, this means that instructors must carefully navigate the line between meeting students' expectations for using technology and simultaneously managing cell phone use. The current research also emphasizes the important role that student attitudes' play in shaping their learning experiences. Clearly, syllabi policies are complex communicative resources that blend language, behavior, and attitude to structure and guide the classroom experience.

Limitations and Future Directions

The current student was not without limitations. First, as emphasized in this research, classroom policies and the instructor's enforcement of them are undoubtedly linked (Finn & Ledbetter, 2013). While this study explores Finn and Ledbetter's (2013) typology through textual means, findings lack some ecological validity due to the exclusion of instructor behavior and policy implementation. Research should seek to couple policy texts and instructor's enforcement of classroom cell phone policies to more fully understand their impact on students in the classroom. Second, the study relied on a convenience sample of participants. This decision may lead to a lack of accuracy in generalizing the results of the study. Finally, limitations of scenario-based research designs are well-documented (see Schrodt & Witt, 2006; Thweatt & McCroskey, 1998; Trad, Katt, & Miller,

2014). Although the textually-based policies were developed from existing syllabi, the scenarios limit external validity by placing students in an interaction with a fictional instructor whom they have never met.

In the future, research should evaluate the extent to which students intend to comply with instructors' encouraging or discouraging syllabus policies. Classroom policies are established to communicate legalistic guidelines and expectations for classroom behavior (Slattery & Carlson, 2005), so instructors should benefit from greater understanding of the ways in which their policies directly contribute to students' behavioral responses. Second, future research should seek to establish stronger causal linkages between technology policies, instructor prosocial and antisocial power bases, perceived instructor understanding, and instructor credibility. Third, research should longitudinally extend the current findings over the course of the semester to investigate whether students' initial perceptions of credibility change in conjunction with instructors intentions to enforce their policies. Lastly, Finn

and Ledbetter (2013) also identified *laissez-faire* technology policies that suggest the instructor does not care about how technology is used in the classroom. More research is needed to better comprehend student reactions to policies perceived as laissez-faire compared with encouraging and discouraging policies.

Conclusion

Technology policies are important in the classroom context. As findings from this study suggest, instructor behavior and written classroom policies both play a notable role in shaping students' perceptions in the classroom. Particularly, the encouraging or discouraging nature of a policy seemingly shapes students' perceptions of instructors as more or less caring. Teven and McCroskey (1996) note that "it is not the caring that counts; it is the perception of caring that is critical" (p. 1). Whether an instructor is effectively competent, genuinely trustworthy, or truly caring is inconsequential; however, students' perceptions often become their reality, even in the case of classroom technology policies.

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