THE EFFECT OF TEACHER FACE-TO-FACE AND FACEBOOK MISBEHAVIOR ON STUDENT MOTIVATION AND AFFECTIVE LEARNING

A Thesis

Presented to the faculty of the Department of Communication Studies

California State University, Sacramento

Submitted in partial satisfaction of
the requirements for the degree of

MASTER OF ARTS

in

Communication Studies

by

Sarah Billingsley

SPRING
2013

THE EFFECT OF TEACHER FACE-TO-FACE AND FACEBOOK MISBEHAVIOR ON STUDENT MOTIVATION AND AFFECTIVE LEARNING

A Thesis

by

Sarah Billingsley

Approved by:

_____, Committee Chair
Kimo Ah Yun, Ph.D.

_____, Second Reader
Gerri Smith, Ph.D.

_____, Third Reader
Carmen Stitt, Ph.D.

_____
Date

Student: Sarah Billingsley

I certify that this student has met the requirements for format contained in the University format manual, and that this thesis is suitable for shelving in the Library and credit is to be awarded for the thesis.

_____, Graduate Coordinator _____
Michele Foss-Snowden, Ph.D. Date

Department of Communication Studies

Abstract

of

THE EFFECT OF TEACHER FACE-TO-FACE AND FACEBOOK MISBEHAVIOR ON STUDENT MOTIVATION AND AFFECTIVE LEARNING

by

Sarah Billingsley

Statement of the Problem

This study examined the effect of face-to-face and Facebook teacher misbehavior (incompetence, indolence, and offensiveness). Prior research supports that face-to-face teacher misbehavior negatively impact student perceptions. However, research has not examined the effect of teacher misbehavior on Facebook.

Sources of Data

A 2x2 factorial experimental design was used to test the extent to which the interaction between teacher incompetence and teacher competence, teacher indolence and teacher non-indolence, and teacher offensiveness and teacher inoffensiveness impact motivation and affective learning. Participants in the main experiment (N = 458) were exposed to one of 12 written scenarios that manipulated medium (face-to-face or Facebook) and teacher misbehavior (incompetence, indolence, and offensiveness).

Conclusions Reached

These data indicated that an interaction does occur when teacher misbehavior contradicts in different mediums. Each element of misbehavior was found to influence student motivation and affective learning. There was no difference between mixed conditions (for example teacher incompetence face-to-face/teacher competence Facebook). However, the presence of misbehavior (regardless of medium) negatively impacted motivation and affective learning.

_____, Committee Chair
Kimo Ah Yun, Ph.D.

_____
Date

ACKNOWLEDGMENTS

So many people have helped me in my journey. I feel ill-equipped to thank you all with enough grace and humility to fully acknowledge how much your support means to me.

To my parents, thank you for running marathons, polka dancing, and going back to college when I was in high school, for attending every play, every concert, and every game (home and away). You both set amazing examples for me and supported me throughout my life.

Dad, thank you for always being proud of me. I wish you were here. I miss you and I am proud to be your daughter.

Mom, thank you for performing Hula, knitting afghans, and baton twirling. Thank you for listening to every research idea and travelling to watch me present at conferences. You have always supported me and you have always been my hero.

To my brother Paul and sister-in-law Toni, thanks for always having my back and for making sure we see each other in person every now and then. We have been through a lot together, and Michael and I love you both.

To my teachers, I honestly love you all, and several of you have greatly impacted my life. Dr. Elaine Gale, I knew I liked you as soon as I walked into the first class I took from you, but I had no idea we would form a lifelong friendship. You and Roc are stuck with Michael and me forever. Dr. Mark Stoner, you opened my eyes and heart to a whole

new approach to scholarship. You were interested in my voice and my perspective, and I hope to always make you proud.

To Dr. Carmen Stitt, thank you for joining my committee and seeing me through the finish line. I am so grateful that we had an opportunity to work together.

To Dr. Gerri Smith, thank you for encouraging me to go to Grad school. It changed my life. I cherish our friendship and look forward to crashing at your lake house in Michigan someday.

Dr. Kimo Ah Yun, you are undoubtedly the best teacher I have ever known. You have challenged me like no other professor. I chronicled your smack downs on Facebook over the past several months, which all my "friends" thoroughly enjoyed. Watch out for my high school cheerleading coach, she may find you someday and give you a piece of her mind. In all seriousness, you have never let me down. I know I am a handful and I appreciate your patience and dedication to my success. I am proud to be included in an elite group of students who understand that you are the giver of light and all that is good, and that without you there is only darkness. Thank you for your guidance.

To my husband Michael, I owe it all to you. Thank you for seeing something in me so many years ago when I was but a puddle of tears and mascara. Thank you for the music, the friendship, the laughter, and the love. Knowing you has made me a better person, being loved by you has made me whole. I keep a card on my desk in which you wrote, "You deserve it all, my darling." I *have* it all, my darling, with you.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

Figures Page

CHAPTER 1

INTRODUCTION

I dealt with my first crying student today. It was so sad and I had no idea how to react. I'm just glad I didn't trust my first instinct to punch her in the mouth.

Facebook post by college professor,
October 22, 2012

Education is one of the most important tools a society can offer its citizens. History shows that when it is widely available, education benefits civilization by spurring economic growth, enabling social development, and enhancing the well being of the population (Vila, 2005). While it is generally believed that education is important, the upfront costs of providing access to education is expensive, and as a result, when the economy falters the educational system in the United States historically experiences disproportionately larger cuts than other state-funded sectors (Doyle & Delaney, 2009).

Currently, America faces the daunting task of climbing out of what has been labeled the great recession (Zumeta, 2011). Since December of 2007, the country has faced a sharp increase in unemployment, high foreclosure rates, and a large decline in the gross domestic product (Galambos, 2009; Mian & Sufi, 2010; Şahin, Kitao, Cororaton, & Laiu, 2011). As expected these factors have substantially reduced total dollars in state budgets and financial pressures on state-funded colleges and universities are growing (Powell, Gilleland, & Pearson, 2012). Given the current fiscal crisis, many colleges and

universities are experiencing some of the worst cuts ever. In an attempt to compensate for the reduced streams of income, colleges and universities across the country have been forced to replace full-time faculty with part-time lecturers, increase class sizes, cut courses, and in some cases, eliminate programs altogether (Marris, 2010).

Another strategy public colleges and universities are utilizing to reduce costs while simultaneously meeting the demands caused by a growing student body is to increase the use of teaching technology. Colleges and universities, for example, offer hybrid classes (a mix of in-person and online instruction) and fully online courses (Konetes, 2011). In recent years, the shift from traditional classes, in which students attend regular face-to-face classes to online environments, is growing at an astonishing pace (Lei & Gupta, 2010). In the middle of the 1990's, there were few students taking online courses. By 2002, over 1.5 million students were taking online classes (Doyle, 2009). Now the number of students who have taken at least one online course has grown to over 4.5 million, representing over 25% of the entire student population in the U.S. higher education (Liu, 2012).

Students now have the option of receiving accredited degrees from fully online universities, where they can receive an education without ever setting foot into a traditional classroom. Online teaching and learning is quickly becoming a popular alternative to traditional face-to face education (Bejerano, 2008). Because of this, it is increasingly difficult for students and teachers to interact face-to-face. Consequently, the

ways by which students interact with their instructors are changing. Increasingly, student-teacher interaction is occurring on digital platforms.

While the ways students and teachers interact are changing, the quality of the interactions remains important. One element that can affect the quality of these interactions is teacher behavior. The way a teacher behaves is crucial to student learning (Ellis, 2004), which is supported by numerous studies that have analyzed the effects of teacher behavior (Ellis, 2004; McCroskey, Valencic, & Richmond, 2004; Pozo-Munoz, Rebolloso-Pacheco, & Fernandez-Ramirez, 2000; Teven & McCroskey, 1997) and misbehavior (Goodboy & Bolkan, 2009; Kearney, Plax, Hays, & Ivey, 1991; Kelsey, Kearney, Plax, Allen, & Ritter, 2004; Thweatt & McCroskey, 1996, 1998) on student learning.

Considerable research has examined the effects of teacher behavior in the classroom, however not all interaction between teachers and students happens during class, or face-to-face. A great deal of student-teacher interaction occurs outside of class (Myers, Martin, & Knapp, 2005). Students and teachers may have unplanned interactions, such as passing in a hallway, meeting in line for a cup of coffee at the campus coffee shop, or attending a campus lecture. Students may also have planned visits, such as office hour visits, special requests for academic advising, or meeting immediately after a class session has ended. Both planned and unplanned interactions between student and teacher can happen outside the classroom context. These types of interactions are known as Out of Class Communication (OCC; Martin & Myers, 2006), and are defined as conversations

that happen before or after class, informal meetings on campus, or visits during office hours. OCC is an important component of student-teacher interaction (Dobransky & Frymier, 2004; Kuh, 1995; Martin & Myers, 2006).

Although OCC has historically been studied as a face-to-face phenomenon, that dynamic is shifting. In addition to face-to-face interaction outside of class, students and teachers now communicate regularly through electronic mediums, such as e-mail (Bolkan & Holmgren, 2012). A great deal of OCC happens electronically, via Computer Mediated Communication (CMC; Sherblom, 2010; Thompson, 2008; Turman & Schrodt, 2005). Classes are offered online, or as videocasts and podcasts, and colleges utilize learning management systems to host course information and assist with class interaction. Instructors are also beginning to rely on other free media to communicate with students, such as social networking sites (SNS; Wodzicki, Schwämmlein, & Moskaliuk, 2012).

Increasingly student-teacher interaction occurs via SNS, such as Facebook (Atay, 2009; Mazer, Murphy, & Simonds, 2007, 2009; Wodzicki et al., 2012). Social networking sites, like Facebook, are used by institutions of higher education for multiple purposes. Colleges and universities use Facebook to connect with and disseminate information to students, perspective students, and alumni (Malesky & Peters, 2012). Social media sites, such as Facebook, provide multiple opportunities for learning and knowledge processes (Wodzicki et al., 2012). Because teachers and students interact outside the classroom via CMC, and because much of this interaction may occur via social networking, this burgeoning student-teacher interaction is important to research.

One relevant area of SNS research examines how Facebook is utilized as a teaching and learning tool (Carter, Foulger, & Ewbank, 2008; Fife, 2010; Hew, 2011). For example, Fife (2010) described an assignment in which students were required to conduct a rhetorical analysis of Facebook posts. The students were initially skeptical that Facebook posts could be used for this kind of analysis. However the students realized that the "collage-like texts" offered opportunities for them to think critically about something they do every day that involves more complex rhetorical skills than they might have otherwise noticed.

Facebook as a teaching device, or more appropriately, a teaching *space*, is not the only area that researchers have examined. Researchers have begun to examine what happens when online activity reveals more than just professional information (Carter et al., 2008). Teachers, like their students, may use Facebook for personal reasons such as staying in touch with friends and sharing gossip (DiVerniero & Hosek, 2011). Therefore there is susceptibility for students and teachers to unintentionally interact on social networking sites which may create vulnerability for teachers. Sometimes when people post comments and photographs intended for only their friends to see, others (students, colleagues, administrators) come across the information, which may have unintended consequences.

There have been many instances when teachers and administrators have been disciplined, even terminated, for their behavior on SNS (Fulmer, 2010). For example, a New York City math teacher faced termination for posting an insensitive comment on her

Facebook page. Earlier in the year, a student had drowned during a school field trip to the beach. Out of frustration one day, teacher Christine Rubio posted, "After today, I'm thinking the beach is a good trip for my class…I hate their guts" (Zimmerman, 2011, p. 21). While this is an example of punitive action taken by administrators on an elementary school teacher, it is relevant because it demonstrates how an educator may mistakenly post something unintended for public viewing and then suffer a negative consequence.

Much of the research that has been done thus far about student-teacher interaction on Facebook has focused on self-disclosure (Carter et al., 2008; Foulger, Ewbank, Kay, Popp, & Carter, 2009; Hew, 2011; Kist, 2008; Maranto & Barton, 2010; Mazer et al., 2007, 2009; Read, 2007) and privacy rights of teachers (Maranto & Barton, 2010; Miller, 2011). For example, a recent study examined the effects of teacher self-disclosure on Facebook. The study found that images of teachers drinking alcohol and using emotionally-loaded language negatively influenced students' perception of teacher credibility (Novak, Scofield-Snow, Traylor, Zhou, & Wang, 2011).

Students and teachers develop expectations of each other's behaviors, whether it be face-to-face, or in a mediated context. A theory that is useful to understand these expectations is Expectancy Violations Theory (EVT; Burgoon & Jones, 1976). EVT predicts that as people communicate, they expect one another to adhere to certain normative behaviors. When these expectations are violated, one or both people in the interaction will become distracted, and the act of the violation will trump all other

contexts of the communication. Students develop expectations of how a teacher will and *should* behave both inside and outside the classroom. Just as the tone and content of face-face interactions may impact students' perceptions, so may the tone and content of online interactions. It stands to reason, therefore, that since students develop expectations of teacher behavior (and misbehavior) through face-to-face communication, when a teacher's online behavior violates the students' expectations (for example on Facebook), students' perceptions may be affected.

When a teacher behaves in a way that violates a norm, it is often considered teacher misbehavior. Teacher misbehavior is defined as teachers displaying incompetence, indolence, and offensiveness (Goodboy, Myers, & Bolkan, 2010) and has been shown to influence students' perceptions of teacher credibility (Thweatt & McCroskey, 1998), affective learning (Banfield, Richmond, & McCroskey, 2006; Toale, 2011), and motivation (Goodboy et al., 2010; Gorham & Christophel, 1992). Research thus far has investigated the effects of teacher misbehavior in class and face-to-face. However, as previously established, increasingly more student-teacher interaction is occurring online, therefore it is imperative to examine how teacher misbehaviors on SNS may influence students' perceptions. While researchers have examined how teacher misbehavior in the classroom affects students' perceptions, research has not examined how online misbehavior (specifically on SNS) affects student perceptions of their teacher.

Given that SNS provide unique opportunities for teachers and students to interact with one another outside of the classroom (either intentionally or unintentionally) many

questions arise. For example, what happens when teachers display misbehaviors on social networking sites? What happens when classroom behavior and social networking behavior (and misbehavior) are inconsistent with one another? This study, using EVT as a theoretical framework, examines how teacher behavior, or misbehavior, in the classroom interacts with behavior, or misbehavior, on Facebook to effect student motivation and affective learning.

CHAPTER 2

LITERATURE REVIEW AND HYPOTHESES

Teacher Misbehavior

Teacher misbehavior has been conceptualized as a form of classroom norm violation (Berkos, Allen, Kearney, & Plax, 2001; McPherson, Kearney, & Plax, 2003; Zhang, 2007) and tends to result in negative, undesirable, or even disastrous consequences for students and teachers (Kearney et al., 1991; Zhang, 2007). When teachers misbehave, student learning is negatively affected (Claus, Booth-Butterfield, & Chory, 2012; Goodboy & Bolkan, 2009; Kearney et al., 1991; Kelsey et al., 2004; Thweatt & McCroskey, 1996, 1998). Teacher misbehavior is generally identified using three broad categories; incompetence, indolence, and offensiveness (Claus et al., 2012; Goodboy et al., 2010; Kearney et al., 1991) and have been found to influence students' perceptions of instructor credibility (Teven & McCroskey, 1997; Thweatt & McCroskey, 1998), affective learning (Banfield et al., 2006; Toale, 2011; Wanzer & McCroskey, 1998), and motivation (Goodboy et al., 2010; Gorham & Christophel, 1992; Zhang, 2007).

Incompetent teachers demonstrate a lack of effective teaching skills and caring for students. According to the widely accepted definition, incompetent teachers deliver boring lectures, grade unfairly, and have limited knowledge of course material (Claus et al., 2012; Goodboy et al., 2010; Kelsey et al., 2004). In a post hoc comparison of the individual elements of teacher misbehavior, teacher incompetence is found to negatively

influence students' willingness to communicate for relational reasons, such as getting to know the instructor (Goodboy et al., 2010). One cross-cultural study that examined teacher misbehaviors in the U.S., China, Germany, and Japan found incompetence to be the most common form of teacher misbehavior and the greatest source of demotivation (Zhang, 2007).

As currently recognized, the definitions of incompetence, indolence, and offensiveness are useful when theoretically conceptualizing how teacher misbehavior might affect student learning. However, most research does not manipulate each element of teacher misbehavior as a separate condition. In order to empirically examine the effects of each element of teacher misbehavior for this research, the definitions require narrowing. As it is currently conceptualized, it would be impossible to identify which element of teacher incompetence is the driving factor on an outcome variable, as there are several behaviors included in the definition. The definition contains behaviors such as the instructor demonstrating little understanding of course material *and* low teacher immediacy, which are separate constructs. Teacher immediacy is the extent to which a teacher's behavior reduces the psychological distance between teacher and student. Immediacy behaviors include eye contact, smiles, nods, relaxed body posture, forward leans, movement, referring to students by name, and gesturing while lecturing (Witt & Wheeless, 2001). In order to manipulate teacher incompetence for this study, immediacy behaviors must be eliminated from the description.

Therefore, for the purpose of this study, teacher incompetence will be defined as a teacher who demonstrates limited knowledge of course material. An instructor, for example, may be teaching a class that is within her field of study, but not her concentration, such as a professor who is an expert on rhetorical analysis teaching a class on quantitative research methods. This teacher may have written her dissertation in a rhetoric area and perhaps may have even written a text book on the subject. However while she would be considered an expert in one area of communication studies, she may demonstrate incompetence when dealing with topics covered in a traditional quantitative research methods course such as the threats to internal validity.

Indolent teachers are described as lazy, disorganized, and absent-minded. They tend to miss class, come to class late (and/or leave early), change due dates, and return assignments late, or never (Claus et al., 2012; Goodboy et al., 2010; Kelsey et al., 2004). One study found that students are unmotivated to communicate with indolent teachers for functional reasons, such as asking questions about an assignment or asking for help or advice. As such, students taking a class from an indolent teacher are more likely to turn to peers with class-related inquiries rather than the instructor (Goodboy et al., 2010). In another study, teacher indolence was found to be a trigger for student dissent. Students engage in expressive (venting feelings and frustrations), rhetorical (attempting to right perceived wrongs by the professor), and vengeful dissent (attempts to retaliate against an instructor) behaviors when taking a class from an indolent instructor (Goodboy, 2011).

Like teacher incompetence, the conceptual definition of teacher indolence includes multiple behaviors, and needs to be narrowed. For this study, teacher indolence is a lazy attitude towards teaching and is characterized by features such as offering little or no feedback on written work and putting minimal effort into creating class materials (such as PowerPoint slides).

Offensive teachers are described as embarrassing and insulting, and act superior or condescendingly to their students. Teachers who are offensive communicate cruel messages and are verbally abusive (Claus et al., 2012; Goodboy et al., 2010; Kelsey et al., 2004). As was the case with teacher indolence, offensive teacher behaviors have been found to negatively influence students' desire to communicate for functional reasons (Goodboy et al., 2010). Offensive behaviors (particularly when displayed alongside indolence) appear to mirror verbal aggressiveness (Goodboy et al., 2010) and have been found to demotivate students and negatively influence student affective learning (Myers & Rocca, 2001) and willingness to communicate outside of the classroom (Myers, Edwards, Wahl, & Martin, 2007). Even infrequent offensive behaviors result in negative outcomes (Claus et al., 2012).

Like teacher incompetence and teacher indolence, teacher offensiveness is an antisocial behavior that someone finds disagreeable. The behavior violates an expectation norm which creates a negative reaction. Teachers may find it offensive when a student leaves her cell phone on during class, even more so when she answers a phone call and carries on a conversation during class time. Similarly, teachers may display behaviors

that students find offensive, such as name calling, using foul language, and making racist remarks.

As with the other elements of teacher misbehavior, teacher offensiveness requires refinement. For this study, teacher offensiveness will be defined as teachers who use foul language and belittle, or show disrespect for their students, through name-calling and racist remarks.

Out of Classroom Communication (OCC)

Instructors can increase the likelihood that their students will participate in OCC by creating a rapport with them in class (Jaasma & Koper, 1999; Myers et al., 2005; Sidelinger, 2010). Students who communicate with their instructors outside the classroom report higher perceptions of intimacy than students who do not participate in OCC (Myers et al., 2005) and develop interpersonal relationships with their instructors. This leads to a feeling of empowerment for students (Dobransky & Frymier, 2004).

Face-to-face OCC increases students' perceptions of empowerment, however not all OCC occurs face-to-face. As students and teachers have less opportunity to communicate face-to-face, mediated interactions (such as via e-mail) increase, therefore research has examined OCC on e-mail (Hassini, 2006). One study examined the effect of the message quality (casual vs. formal tone) of student e-mails. The study found that students who send casual e-mail messages to their instructors are liked less and have lower credibility with their teachers (Stephens, Houser, & Cowan, 2009).

Another study examined e-mail usage in a distance learning environment found that students who received e-mails from instructors felt more supported and were more satisfied with the course than those that did not receive e-mails (Heiman, 2008). Students who received a welcoming e-mail from their professor before the start of a semester were more motivated and had a better attitude towards the instructor (Legg & Wilson, 2009). E-mail can be an effective form of communication for students and teachers.

While not all OCC occurs face-to-face, not all mediated OCC occurs via e-mail. Increasingly, students and teachers are interacting on less formal online environments (SNS) like Facebook (Plew, 2011). Therefore, this study will examine not only student-teacher interaction in face-to-face situations (both in class and out of class communication), but also OCC that does *not* occur face-to-face, more specifically, OCC that occurs on Facebook.

Facebook

Social networking sites are web-based services that allow individuals to construct a public (or semi-public) profile within a confined system, articulate a list of users with whom they share a connection, and view and traverse their list of connections and those made by others within the system (boyd & Ellison, 2007). SNS's provide spaces where people can creatively expand their personalities, activities, and opportunities for learning and communication (Boon & Sinclair, 2009).

Facebook is a SNS that individuals (and organizations) use to connect with others. First, a Facebook user creates a "wall" or a personalized webpage, called a "profile." This

profile can include photographs, personal information (relationship status, political/religious views), and other interests. In order to connect with other Facebook users, one must send a "friend request." The other person can then decide whether to accept the "friendship." As friends connect, activity and information can be seen by others, such as friends of friends. In this way, networks of connected people and groups are created. However, not all activity is seen only by people in a network. Users can select privacy settings to restrict how much of their wall is seen by non-friends, but interactions can be seen by people outside of the network in the "news feed." The news feed is an ongoing ticker of updates and photos posted by friends, and friends of friends. Users can not necessarily select who can see their activity in the newsfeed. Additionally, Facebook privacy settings periodically change, and it is up to the user to manage his or her "privacy."

Facebook is arguably the world's most popular SNS (Baltar & Brunet, 2012; Plew, 2011). According to the site's statistics, in August of 2012, there are over a billion users worldwide (Facebook, 2012). As Facebook usage increases and the amount of available time and resources for face-to-face communication between teachers and students decreases, it stands to reason that greater student-teacher interaction will occur on Facebook (Atay, 2009; Mazer et al., 2007, 2009; Wodzicki et al., 2012. Today's students are known as "digital natives" who are accustom to communicating with instructors beyond traditional class meetings, or strictly during office hours (Plew, 2011). Therefore students are more likely to want to interact with their instructors online. In

order to send messages to students, and create a place for students to interact, some teachers create Facebook groups or pages for instructional use (Atay, 2009) much like university learning management systems. These pages serve as spaces for students and teachers to discuss course information, clarify assignments, and provide a forum for class interaction.

Given that teachers are both experimenting with Facebook as a learning space as well as using Facebook for private, entertainment-related purposes, it stands to reason that there is potential for students to happen upon their teachers' personal online profiles. For many students, it can be surprising to encounter a teacher outside of the school setting, whether it is face-to-face or on Facebook. Based on expectations derived from experiences in the classroom, students may be confused by how a teacher behaves outside the classroom. As such, this study will examine how teacher behavior effects student perceptions, both face-to-face, and on Facebook, as well as the interaction that may occur when those behaviors contradict.

Expectancy Violations Theory

Expectancy Violations Theory (EVT) was introduced by Burgoon and Jones (1976). According to this theory, as people communicate they expect one another to adhere to certain normative behaviors. The theory asserts that people *anticipate* how others will act and react, and this anticipation is an integral component of communication (Burgoon & Jones, 1976). When an expectation is violated, one's ability to predict is

disrupted which can create uncertainty (Mendes, Hunter, Jost, Blascovich, & Lickel, 2007).

One of the principal nonverbal behaviors which communicators harbor expectations about is personal space. EVT, originally called Nonverbal Expectancy Violations Theory, initially focused on the study of space relations in communication, or proxemics, as a way to examine reactions to behavioral changes or violations of expectancies. Proxemics can be described as the distance one individual permits himself or herself from others (Karpf, 1980). When considering expectancy in proxemics, the physical distance between interactants is both an indicator of and a tool with which to establish a sort of comfort zone. EVT examines what happens when people do not behave as expected, for example, when a stranger stands too close in an elevator.

In the initial blueprint, EVT advanced two major propositions: (1) social norms and individual idiosyncrasies determine the expectancies we develop, and (2) the effects of the violations are a result of the amount of violation, the reward/punishment valance, and the threat threshold of the reactant. It was additionally proposed that the amount of deviation, the reward/punishment power, and the threat threshold influence both the amount and direction of the effects (Burgoon, 1978). In other words, how big the violation is over the threshold (e.g. Did the initiator slightly cross the line, or come bounding towards the reactant?) along with the strength of the valance (e.g. Does the reactant powerfully like or dislike the initiator?), will determine how strong the reaction will be in either direction (positive or negative).

When expectancies are violated an increase in awareness (referred to as arousal) of the violation itself occurs. The theory asserts that if expectations are violated interactants will become distracted, and the act of the violation will override all other contexts of the communication. As the expectancy is violated and arousal occurs (whether the arousal is cognitive, or physical, or both) a behavioral change will occur (La Poire & Burgoon, 1996) and this violation will be perceived as either positive or negative depending upon what is referred to as the "reward valence." The theory predicts that increased familiarity, involvement, and intimacy from a positively regarded communicator will be judged as desirable, while the same advances from a poorly regarded communicator may be deemed undesirable (Burgoon & Walther, 1990). If the initiator is perceived as someone who can offer a reward to the reactant (such as friendship, romance, or some other societal reward like a good grade in class) the violation will be assessed positively. If the initiator poses a threat to the reactant (physical or psychological) a negative assessment will be assessed to the violation.

When developing the theory, a pilot study was conducted with the goal of establishing normative distances and threat thresholds. The pilot study was conducted in an interview setting in which participants were told that the purpose of their participation was to examine "interaction norms" and to assist the researchers with practicing interview procedures. Upon entering the interview room, participants were instructed to place the available chair at a comfortable (normative) distance away from the interviewer who was already seated, and that distance was then measured. The interviewer then

began moving his or her chair closer to the participant who was asked to signal when the interview's distance made him or her uncomfortable (in order to establish a threat threshold).

Once the normative distances and threat thresholds were determined, the interview commenced. The interviewer provided the participant with a series of adjectives which participants were asked to use in sentences while receiving positive and negative feedback. Reward and punishment was therefore manipulated in the form of positive and negative feedback (Burgoon, 1978). During the interview, the researchers examined feedback variances by completing a recall test, as well as attraction and credibility scales (Burgoon, 1978). After conducting the pilot study, an experiment (utilizing nearly identical conditions) was executed considering different hypotheses which supported the model and the notion that violation of personal space expectations influence communication outcomes, such as recall, attraction, and credibility.

EVT has been studied for decades. Expectancy violations have been used to examine deception (Bond et al., 1992; Burgoon, Blair, & Strom, 2008), adult platonic relationships (Floyd & Voloudakis, 1999), perceptions of racist speech (Leets, 2001), health communication campaigns (Campo, Cameron, Brossard, & Frazer, 2004), communication in higher education (Houser, 2005, 2006; Lannutti, Laliker, & Hale, 2001; McPherson & Liang, 2007; Muhtaseb, 2007), communication in romantic relationships (Bachman & Guerrero, 2006; Lannutti & Camero, 2007), effects of modality switching (Ramirez & Wang, 2008), gender and conflict communication

(Jordan-Jackson, Lin, Rancer, & Infante, 2008), and communication in organizations (Bolkan & Daly, 2009).

In one study, deception was investigated with EVT by examining how odd, unexpected non-verbal behaviors effect the perception of message believability. In this study, participants were asked to determine if someone was lying based on their nonverbal behavior. Participants judged whether or not someone on a videotape was lying while sometimes exhibiting strange non-verbal behaviors. For example, in one segment, the video-taped person was asked to truthfully describe someone they liked while holding their left shoulder up to their left ear, in another they spoke while extending their arm up towards the ceiling. The researchers hypothesized that strange non-verbal behavior would make a person seem more deceptive, in accordance with EVT. Participants attributed more dishonesty to the people displaying "weird" behaviors than those who were behaving normally (Bond et al., 1992).

EVT has also been used to research the expectations of college students. One study examined the differences between the expectations of traditional versus non-traditional undergraduate college students. Students who did not fit into the "traditional" category, or those over the age of 25 and/or those who have children, work to support themselves or their family, had different expectations of their instructors than do traditional students. Non-traditional students cared less about instructor immediacy and affinity seeking behaviors than traditional students (Houser, 2005).

Clearly EVT is an acceptable tool for framing what happens when expectations are violated. In the present study, the logical assumption that student expectations about teacher behaviors and misbehaviors on Facebook are based on their face-to-face communication is examined. Further, based of EVT, it is predicted that violations of these expectations will interact to effect student motivation and affective learning.

Media Richness Theory

EVT is useful for understanding the interaction that occurs when expectations are violated on various media; however the theory cannot help predict whether one medium will be more impactful than another. For example, one may ask if face-to-face teacher misbehavior or teacher misbehavior on Facebook differentially impacts their perceived affect or ability to motivate others. A useful theory to help predict which medium will be more impactful is Media Richness Theory (MRT; Daft & Lengel, 1986).

MRT proposes that different mediums are effective for different types of messages. The richness of the media is determined by how much information can be shared in the media and is determined by many factors, including the availability for instant feedback, the medium's capacity to communicate multiple cues, the provision for the use of natural language, and the potential to convey personal focus (Timmerman & Kruepke, 2006; Trevino, Lengel, Bodensteiner, Gerloff, & Muir, 1990). The richer the media (and the more information is shared), the more likely it is that uncertainty will be reduced and shared meaning can occur between communicators (Byrne & LeMay, 2006; Caspi & Gorsky, 2005; Timmerman & Kruepke, 2006).

Media richness is preceded by McLuhan's (1964) theory of hot and cool media. Hot media are those that provide rich, full data, while cool media provide less information and require more involvement by the audience (McLuhan, 1964). MRT predicts that media that provide more cues require less work of the participants. For example, a photograph is hot media and a cartoon is cool media. The difference lies in the amount of visual information provided (McLuhan, 1964). Hot media, therefore, may be akin to rich media because more cues are provided.

MRT contends that face-to-face is the richest media because much information can be communicated. In face-to-face interactions, both verbal and nonverbal cues (body language, facial expressions, and tone of voice) are exchanged and both communicators receive instant feedback (Byrne & LeMay, 2006; Daft & Lengel, 1986). Media richness is considered progressively leaner based on less information that can be shared, such that face-to-face is richest followed by telephone, electronic messaging (e-mail), personal written text (letters and notes), formal written text (documents and bulletins) and formal numeric texts (statistical reports) (Sheer & Chen, 2004; Trevino, Lengel, & Daft, 1987). MRT was developed long before the advent of SMS such as Facebook. However because people post notifications on a virtual wall, it is reasonable to align Facebook posts with formal written text.

According to MRT, rich media are most effective when communicating ambiguous or equivocal communication (Damian, Lanubile, & Mallardo, 2008). Face-to-face communication is more powerful than mediated communication,

particularly when a message may have multiple meanings. MRT has been studied in organizational communication (Daft & Lengel, 1986; Sheer & Chen, 2004; Timmerman & Kruepke, 2006; Trevino et al., 1990) and has been used to understand what media people choose to use when communicating. The theory was originally used to predict that effective and efficient managers use media that are as equivocally rich as the communication task, such that clearly defined tasks can be easily understood when explained in lean media (Sheer & Chen, 2004).

One study found that communicating via rich media (such as face-to-face meetings) resulted in the highest level of satisfaction in information about one's job, and in perceived quality of the information from a supervisor (Byrne & LeMay, 2006). Results from 598 full-time employees indicated that rich media were most powerful for creating trust of top management. The researchers suggested that because employees may have expected to receive information about their jobs through lean media (such as formal written memos), meeting face-to-face with managers may have positively violated their expectations, therefore raising satisfaction (Byrne & LeMay, 2006).

MRT has also been studied in the context of distance learning. In a study conducted in Israel, it was predicted that instructors would select media for communication based on the media's richness. For instructors, the media choice was actually based on convenience, rather than richness or message equivocality (Caspi & Gorsky, 2005). This may present a challenge for students, in that complex messages shared on lean media may be difficult to understand. Another study found that a course

with high uncertainty (literature, specifically studying a Chinese poem) requires that lessons are taught with high media richness (Sun & Cheng, 2007) in order to increase student learning satisfaction.

Lean media lead to uncertainty, in part because the benefit of nonverbal cues is lost. Rich media are more appropriate to create shared meaning. Face-to-face is the richest media, and therefore creates the most impact for students. Facebook is a lean media because it can considered formal written text. As identified previously, single Facebook posts are broadcasted to "all" the user's friends (and in some cases, friends of friends), like a note on a bulletin board. Therefore, it is reasonable to predict that face-to-face teacher behaviors and misbehaviors will have a greater impact on students' perceptions than teacher behaviors and misbehaviors on Facebook.

Teacher Misbehavior and Motivation

Student motivation is either trait, a predisposition towards learning, or state, attitude toward a specific class or instructor (Christophel, 1990; Pogue & Ah Yun, 2006). State motivation refers to student attempts to obtain academic knowledge or skills from classroom activities by finding these activities meaningful (Brophy, 1987; Goodboy & Bolkan, 2009; Myers, 2002). Instructors can influence student motivation which may increase student success (Pogue & Ah Yun, 2006). Student motivation appears to be a result of the process of "how" students are taught, rather than "what" they are taught (Christophel, 1990). State motivation to learn, therefore, is not a general predisposition but instead can be influenced by instructor behaviors in the classroom (Goodboy &

Bolkan, 2009; Goodboy & Myers, 2008; Myers, 2002; Myers & Rocca, 2001; Zhang, 2007). This study examines how teacher misbehaviors affect student state motivation.

Student motivation has been treated as both an independent and dependent variable, and has been found to be correlated with academic performance and effort exerted (Goodman et al., 2011). As a dependent variable, student motivation is positively influenced by teacher immediacy (Pogue & Ah Yun, 2006) and negatively influenced by teacher misbehaviors (Goodboy et al., 2010), perceived teacher aggression (Myers, 2002) and expectancy violations (Houser, 2006).

Teacher Incompetence and Motivation

Face-to-face teacher incompetence negatively affects student motivation (Zhang, 2007). Across four national cultures (U.S., China, Germany, and Japan), incompetence was found to be the most common form of teacher misbehavior, and the largest demotivator. These findings follow the established line of research and predict that teachers who demonstrate high levels of teacher incompetence in the classroom will negatively affect student motivation. However, researchers have yet to examine how online teacher incompetence interacts with teacher incompetence in face-to-face communication to affect student motivation.

This study examines how teacher incompetence in face-to-face communication interacts with teacher incompetence on Facebook to influence student motivation. Obviously students exposed to teachers who demonstrate competence both face-to-face and on Facebook will be the most motivated, as both data points are positive. Likewise,

teacher incompetence both face-to-face and on Facebook will result in the lowest level of motivation. MRT proposes that face-to-face is the most powerful media (and it is reasonable to consider Facebook a lean media) consequently, it is reasonable to predict that face-to-face teacher incompetence will have a stronger influence over student motivation than teacher incompetence on Facebook. As such, the following hypothesis is presented:

> H_{1a}: Face-to-face teacher incompetence interacts with teacher incompetence on Facebook to impact student motivation. It is predicted that students exposed to face-to-face/Facebook teacher incompetence will report the least amount of motivation, followed by students exposed to face-to-face teacher incompetence/Facebook teacher competence, face-to-face teacher competence/Facebook teacher incompetence, and face-to-face and Facebook teacher competence.

Figure 1 is a visual representation of H_{1a} (and subsequent sections of the hypotheses) for this study.

		Facebook	
		Competence	Incompetence
Face-to-Face	Competence	Most motivation	Higher motivation
	Incompetence	Lower motivation	Least motivation

Figure 1. Visual representation of H_{1a}.

Teacher Indolence and Motivation

Teacher indolence, as a component of teacher misbehavior, has been found to negatively affect student motivation. Students are unmotivated to communicate with teachers who are indolent for functional reasons (such as clarifying questions regarding course materials) (Goodboy et al., 2010). As is the case with teacher incompetence, researchers have yet to examine how online teacher indolence behaviors effect student motivation. Additionally, based on EVT, an interaction may occur when face-to-face teacher indolence and Facebook teacher indolence conflict, thereby effecting student motivation. According to MRT, face-to-face interactions are more powerful than mediated communication which means that face-to-face indolence may have a greater impact on student motivation than teacher indolence on Facebook. As such, the following hypothesis is presented:

> H_{1b}: Face-to-face teacher indolence interacts with teacher indolence on Facebook to impact student motivation. It is predicted that students exposed to face-to-face/Facebook teacher indolence will report the least amount of motivation, followed by students exposed to face-to-face teacher indolence/Facebook teacher non-indolence, face-to-face teacher non-indolence/Facebook teacher indolence, and face-to-face and Facebook teacher non-indolence.

Teacher Offensiveness and Motivation

Face-to-face teacher offensiveness has been found to negatively affect student motivation (Goodboy et al., 2010). As with teacher incompetence and teacher indolence, researchers have not examined how teacher offensiveness on Facebook affects student motivation, nor has the interaction that may occur when face-to-face teacher offensiveness contradicts with teacher offensiveness on Facebook been studied. As with teacher incompetence and teacher indolence, according to MRT, instances of face-to-face teacher offensiveness will likely have a greater impact on student motivation that Facebook offensiveness. As such, the following hypothesis is presented:

> H_{1c}: Face-to-face teacher offensiveness interacts with teacher offensiveness on Facebook to impact student motivation. It is predicted that students exposed to face-to-face/Facebook teacher offensiveness will report the least amount of motivation, followed by students exposed to face-to-face teacher offensiveness/Facebook teacher inoffensiveness, face-to-face teacher inoffensiveness/Facebook teacher offensiveness, and face-to-face and Facebook teacher inoffensiveness.

Teacher Misbehavior and Affective Learning

Affective learning involves students' attitudes and acceptance toward the content, course, and the teacher (Goodboy & Bolkan, 2009; Pogue & Ah Yun, 2006). Student affective learning is very powerful, and has been the subject of much research as an outcome of teacher behavior. (Baker, 2004; Messman & Jones-Corley, 2001; Mottet,

Parker-Raley, Beebe, & Cunningham, 2007; Pogue & Ah Yun, 2006; Witt & Schrodt, 2006; Witt & Wheeless, 2001; Witt, Wheeless, & Allen, 2004). Student affective learning is positively related to teacher caring (Comadena, Hunt, & Simonds, 2007; Horan, Martin, & Weber, 2012; Teven, 2007; Teven & McCroskey, 1997), clarity (Chesebro, 2003; Chesebro & McCroskey, 2001; Comadena et al., 2007; Horan et al., 2012), confirmation (Ellis, 2000; Goodboy & Myers, 2008; Horan et al., 2012), use of humor (Gorham & Christophel, 1990; Horan et al., 2012; Wanzer & Frymier, 1999), immediacy (Baker, 2004; Horan et al., 2012; Messman & Jones-Corley, 2001; Mottet et al., 2007; Pogue & Ah Yun, 2006; Witt & Schrodt, 2006; Witt & Wheeless, 2001; Witt et al., 2004), and self-disclosure (Horan et al., 2012; Mazer et al., 2007; Sorenson, 1989).

Affective learning is negatively related to teacher aggression (Horan et al., 2012; Myers, 2002; Myers & Knox, 2000), neuroticism (McCroskey et al., 2004), and teacher misbehaviors (Horan et al., 2012; Wanzer & McCroskey, 1998). Teacher misbehaviors compromise student affective learning which results in students communicating in undesirables manners and learning less (Goodboy & Bolkan, 2009).

Teacher Incompetence and Affective Learning

Face-to-face teacher incompetence has been found to negatively influence student affective learning (Banfield et al., 2006) yet researchers have yet to examine the effects of teacher incompetence on SNS such as Facebook on student affect. As such, this study examines how face-to-face teacher incompetence interacts with teacher incompetence on Facebook to influence student affective learning. It stands to reason that when teachers

demonstrate competence both in face-to-face interactions and on Facebook, students will report the highest level of affective learning. Likewise, teacher incompetence both face-to-face and on Facebook will result in the lowest level of affect. Using MRT, it is reasonable to predict that since face-to-face is the strongest media, face-to-face teacher incompetence will have a stronger influence over student affective learning than teacher incompetence on Facebook. As such, the following hypothesis is presented:

> $H_{2a:}$ Face-to-face teacher incompetence interacts with teacher incompetence on Facebook to impact student affective learning. It is predicted that students exposed to face-to-face/Facebook teacher incompetence will report the least amount of affective learning, followed by students exposed to face-to-face teacher incompetence/Facebook teacher competence, face-to-face teacher competence/Facebook teacher incompetence, and face-to-face and Facebook teacher competence.

Teacher Indolence and Affective Learning

Face-to-face teacher indolence has been found to negatively influence student affective learning (Banfield et al., 2006). As is the case with teacher incompetence, researchers have yet to examine how online teacher indolence behaviors influence student affective learning. Additionally, the interaction that may occur between face-to-face teacher indolence and Facebook teacher indolence to influence student affect has yet to be studied. Because MRT predicts that face-to-face interactions are more powerful than mediated communication, face-to-face teacher indolence will most likely

have a greater impact on student affective learning than teacher indolence on Facebook. As such, the following hypothesis is presented:

> H_{2b}: Face-to-face teacher indolence interacts with teacher indolence on Facebook to impact student affective learning. It is predicted that students exposed to face-to-face/Facebook teacher indolence will report the least amount of affective learning, followed by students exposed to face-to-face teacher indolence/Facebook teacher non-indolence, face-to-face teacher non-indolence/Facebook teacher indolence, and face-to-face and Facebook teacher non-indolence.

Teacher Offensiveness and Affective Learning

Face-to-face teacher offensiveness has been found to negatively influence student affective learning (Goodboy et al., 2010). Teacher offensiveness produces significantly lower student affect scores than teacher incompetence or teacher indolence (Banfield et al., 2006). As with teacher incompetence and teacher indolence, research has yet to investigate how teacher offensiveness on Facebook influences student affective learning. Also, the interaction that may occur when face-to-face teacher offensiveness contradicts with teacher offensiveness on Facebook to influence student affect has yet to be examined. Like teacher incompetence and indolence, face-to-face offensiveness will most likely have a greater impact on student affective learning than teacher offensiveness on Facebook. As such, the following hypothesis is presented:

H_{2c}: Face-to-face teacher offensiveness interacts with teacher offensiveness on Facebook to impact student affective learning. It is predicted that students exposed to face-to-face/Facebook teacher offensiveness will report the least amount of affective learning, followed by students exposed to face-to-face teacher offensiveness/Facebook teacher inoffensiveness, face-to-face teacher inoffensiveness/Facebook teacher offensiveness, and face-to-face and Facebook teacher inoffensiveness.

CHAPTER 3

METHODOLOGY

Method

This study used three 2x2 factorial experimental designs in which the three elements of teacher misbehavior (incompetence, indolence, and offensiveness) were manipulated along with medium of misbehavior (face-to-face or on Facebook). The dependent variables of student motivation and affective learning were examined. This study occurred in two phases; an induction check followed by the main experiment. The first phase was to assess inductions for each element of teacher misbehavior, both in face-to-face interactions, and on a fake Facebook wall, and subsequently test the conditions to assure that they were perceived as demonstrating incompetence or competence, indolence or non-indolence, and offensiveness or inoffensiveness. Once adequate inductions of the three independent variables were established for both face-to-face and Facebook conditions, the second phase of the study tested the interaction between teacher misbehavior and medium on student motivation and affective learning.

Induction Check

Participants

Three hundred ninety five participants that were not used in the main experiment were recruited for the induction checks (N = 130 for the teacher incompetence induction, N = 131 for teacher indolence, and N = 134 for teacher offensiveness). Participants were recruited from a large Western university. Students were randomly exposed to one of the

twelve conditions. Scores for each induction (teacher incompetence, teacher indolence, and teacher incompetence) were separately entered into SPSS 21.0, such that one data set contained one set of behaviors (e.g. teacher incompetence and competence) both face-to-face and on Facebook.

The teacher incompetence induction check included 59 males (45.4%), 69 females (53.1%), and two respondents (1.5%) that did not report their sex. The average age for participants in the teacher incompetence induction check was 22.89 years old (*SD* = .94) and the class composition of participants included 20 freshmen (15.4%), 12 sophomores (9.2%), 45 juniors (34.6%), 50 seniors (38.5%), and two students that identified their year in school as "other" (1.5%). Sixty four participants identified themselves as Caucasian (49.2%), seven African American (5.4%), 20 Latino (15.4%), one Native American (.8%), three Pacific Islander (2.3%), 17 Asian (13.1%), two Middle Eastern (1.5%), and 15 participants identified themselves as other (11.5%).

The teacher indolence induction check included 53 males (40.5%), 76 females (58%), and two respondents (1.5%) that did not report their sex. The average age for participants in the teacher indolence induction check was 22.05 years old (*SD* = 4.43) and the class composition of participants included 24 freshmen (18.3%), 11 sophomores (8.4%), 47 juniors (35.9%), 41 seniors (31.3%), and six students that identified their year in school as "other" (4.65%). Sixty participants identified themselves as Caucasian (45.8%), 12 African American (9.2%), 26 Latino (19.8%), one Native American (.8%),

five Pacific Islander (3.8%), 15 Asian (11.5%), two Middle Eastern (1.5%), and nine participants identified themselves as other (6.9%).

The teacher offensiveness induction check included 50 males (37.4%), 83 females (61.9%), and one respondents (.7%) that did not report their sex. The average age for participants in the teacher offensive induction check was 22.78 years old (*SD* = 5.71) and the class composition of participants included 18 freshmen (13.4%), 19 sophomores (14.2%), 40 juniors (29.9%), 50 seniors (37.3%), and seven students that identified their year in school as "other" (5.2%). Forty three participants identified themselves as Caucasian (32.1%), 14 African American (10.4%), 32 Latino (23.9%), one Native American (.7%), four Pacific Islander (3.0%), 25 Asian (18.7%), and 15 participants identified themselves as other (11.2%).

Procedures

Participants were informed that their participation in the study was anonymous and voluntary, and that no extra credit would be offered for their involvement. Participants were asked to sign a waiver acknowledging that their standing in class would not be impacted by participating in the study (see Appendix A). Included in the waiver was a warning that the study may contain foul language.

First, participants provided basic demographic information including age, sex, class level, and ethnicity (see Appendix B). Participants were then be randomly exposed to one of 12 written stimuli in which teacher incompetence or competence, indolence or non-indolence, offensiveness or inoffensiveness were manipulated, either in face-to-face

or Facebook scenarios. After reading one fictitious scenario, students were asked to complete a seven item seven-point Likert-type scale measuring the presence of the induced behavior.

Induction of Independent Variables

Teacher incompetence is defined as a teacher who appears unqualified by demonstrating limited knowledge of course material. For the induction check, fictitious face-to-face and Facebook scenarios were created. The face-to-face scenario was a written description of an instructor name Dr. Pat Smith who is teaching a class she is not qualified to teach. The Facebook scenario was a visual representation of the face-to-face written scenario. Each Facebook scenario was prefaced with a short description about how the participant happened to see the teacher's Facebook posting.

The face-to-face teacher incompetence scenario was:

> You are taking a class from a professor named Pat Smith who is intelligent but is often unable to answer basic questions about the concepts in the course she is teaching. When asked to clarify what she means about key course concepts, Dr. Smith tends to simply read definitions out of the text book. She does not provide any examples and appears to not have a good understanding of the course concepts.

The face-to-face teacher competence scenario was:

> You are taking a class from a professor named Pat Smith who is intelligent and well versed on the course topics. When asked to clarify what she means about

basic course concepts, Dr. Smith is able to provide thorough explanations, and she often elaborates by giving examples in order to help students better understand the concepts.

Facebook teacher incompetence and competence was constructed via postings on a fictitious Facebook page belonging to the "professor." Other people posting on the page were Dr. Smith's "students." For each Facebook scenario, the professor either posted comments, or responded to comments posted by students.

The Facebook incompetence scenario was:

You are taking a class from a professor named Pat Smith. Dr. Smith is Facebook friends with some of her students. One of your friends (who goes by the name "Sam I Am") is Facebook friends with Dr. Smith. One day, you see the following exchange between Dr. Smith and "Sam I Am" on your Facebook newsfeed (see Figure 2).

The Facebook competence scenario was:

You are taking a class from a professor named Pat Smith. Dr. Smith is Facebook friends with some of her students. One of your friends (who goes by the name "Sam I Am") is Facebook friends with Dr. Smith. One day, you see the following exchange between Dr. Smith and "Sam I Am" on your Facebook newsfeed (see Figure 3).

Teacher indolence is a lazy attitude towards teaching and can be characterized by features such as offering little or no feedback on written work and putting minimal

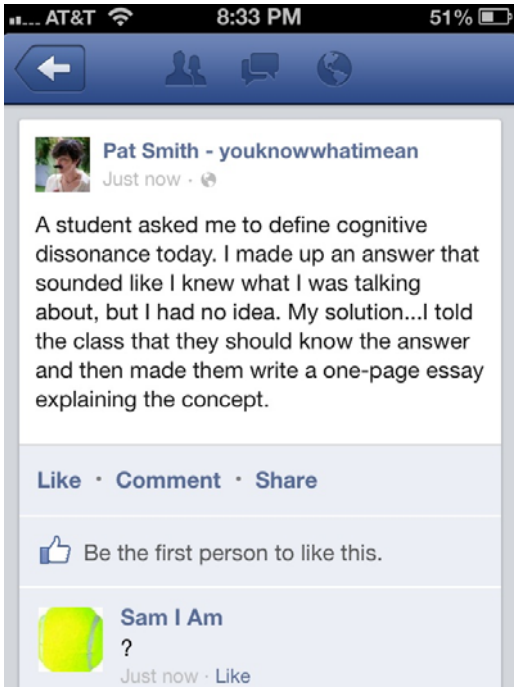


Figure 2. Facebook incompetence scenario.

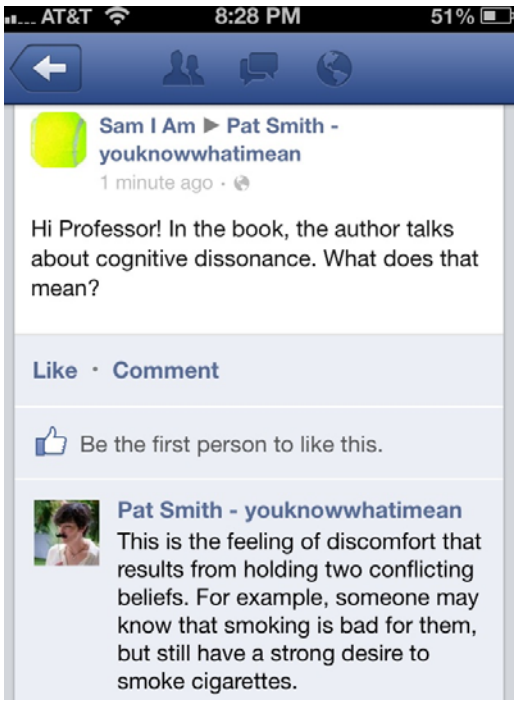


Figure 3. Facebook competence scenario.

effort into creating class materials (such as PowerPoint slides). Like teacher incompetence, fictitious face-to-face and Facebook scenarios for teacher indolence were created.

The face-to-face teacher indolence scenario was:

> You are taking a class from a professor named Pat Smith. Dr. Smith puts very little effort into creating visual aids for class. Her PowerPoint slides contain long paragraphs copied directly out of the text book and do not have colorful images or video clips. Also, Dr. Smith returns papers and homework with only a grade and little or no feedback about what you did well or how you can improve.

The face-to-face teacher non-indolence scenario was:

> You are taking a class from a professor named Pat Smith. Dr. Smith puts a great deal of effort into creating visual aids for class. For example, her PowerPoint slides contain colorful images and video clips, and the slides are not too wordy. Also, Dr. Smith returns papers and homework with helpful feedback about what you did well and how you can improve (not just a grade).

Like teacher incompetence and competence, Facebook teacher indolence and non-indolence was constructed via postings on a fictitious Facebook page belonging to Dr. Smith. Other people posting on the page were Dr. Smith's fictitious students.

In order to create Facebook indolence, two posts were created. The Facebook indolence scenario was:

You are taking a class from a professor named Pat Smith. Dr. Smith is Facebook friends with some of her students. One of your friends (who goes by the name "Sam I Am") is Facebook friends with Dr. Smith. One day, you see the following exchange between Dr. Smith and "Sam I Am" on your Facebook newsfeed (see Figure 4).

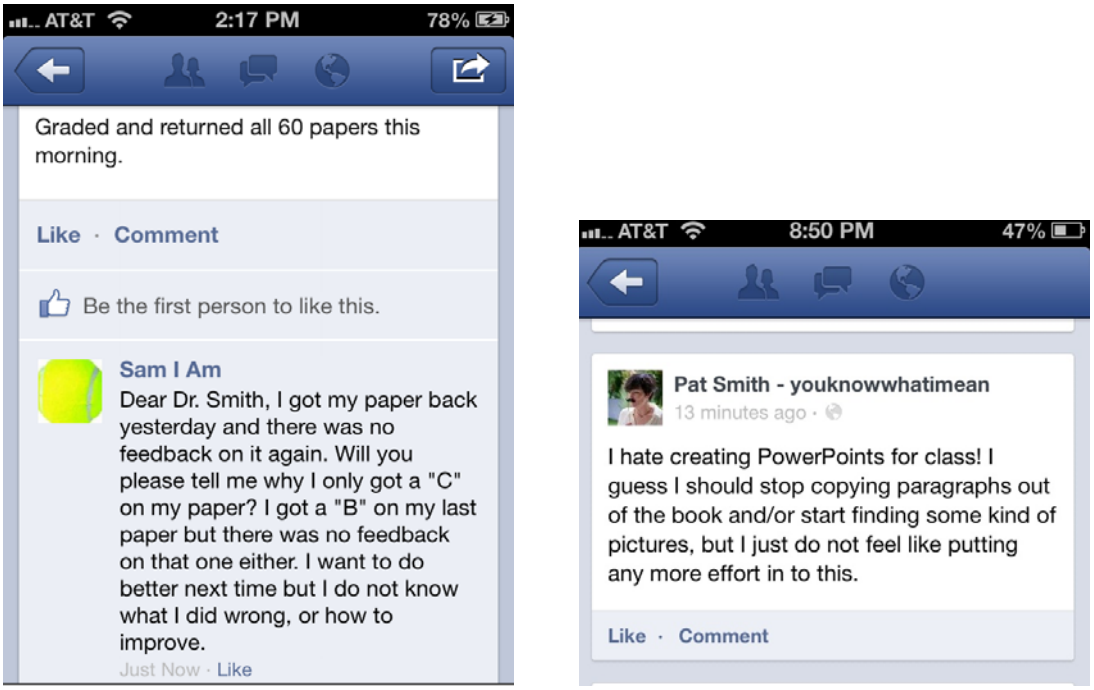


Figure 4. Facebook indolence scenario.

The Facebook non-indolence scenario was:

You are taking a class from Pat Smith. Dr. Smith is Facebook friends with some of her students. One of your friends, who goes by "Sam I Am" is Facebook friends with Dr. Smith. One day, you see the following two exchanges on your Facebook newsfeed (see Figure 5).

Figure 5. Facebook non-indolence scenario.

Teacher offensiveness is defined as teachers who use foul language and belittle, or show disrespect for their students, through name calling and racist remarks. Like the other independent variables in this study, fictitious face-to-face and Facebook scenarios for teacher offensiveness and inoffensiveness were created for the induction check and main experiment.

The face-to-face teacher offensive scenario was:

You are taking a class from Pat Smith. Dr. Smith tends to use foul language in class and belittle her students. For example, during a recent lecture, a student asked her to clarify something she had just said. Dr. Smith's response was, "Really Sam, what the fuck? Didn't you read that in the book? Oh, that's right. You're Hmong. You can't read." When Sam was obviously upset by her

comments, Dr. Smith told Sam she was just kidding and that he better toughen up or he'll never survive college.

The face-to-face teacher inoffensive scenario will be:

You are taking a class from Pat Smith. Dr. Smith never uses foul language in class or belittles her students. For example, during a recent lecture, a student asked her to clarify something she had just said. He said, "Dr. Smith, I have a dumb question, but will you explain that again?" Dr. Smith's response was courteous and respectful. She told the student there are no dumb questions, thanked him for speaking up, and then rephrased her answer. After she went over the concept again, she asked the student her explanation was clearer.

Like the other independent variables, Facebook teacher offensiveness and inoffensiveness were constructed via postings on the fictitious Dr. Smith's Facebook page in the manner previously described. Each scenario was prefaced by a statement that explained to the participant how they happened upon Dr. Smith's Facebook postings.

The Facebook offensiveness scenario was:

You are taking a class from Pat Smith. Dr. Smith is Facebook friends with some of her students. One of your friends, who goes by "Sam I Am" is Facebook friends with Dr. Smith. One day, you see the following two exchanges on your Facebook newsfeed (see Figure 6).

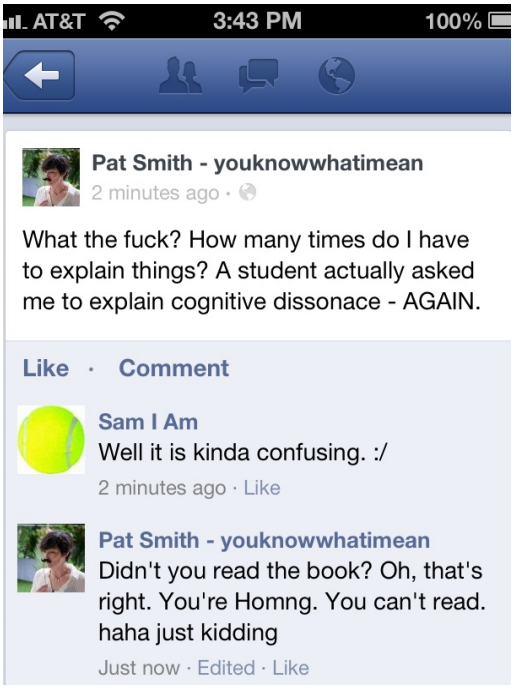


Figure 6. Facebook offensive scenario.

The Facebook inoffensive scenario was:

> You are taking a class from Pat Smith. Dr. Smith is Facebook friends with some of her students. One of your friends, who goes by "Sam I Am" is Facebook friends with Dr. Smith. One day, you see the following two exchanges on your Facebook newsfeed (see Figure 7).

Measures

Teacher incompetence. To ensure that the above scenarios induced either competence or incompetence (face-to-face or on Facebook), after reading a scenario participants were asked to complete a seven-item seven-point Likert-type scale. Example scale items included: "This teacher does not know the material for this class" and "This teacher is able to answer questions about course topics" (see Appendix C). A

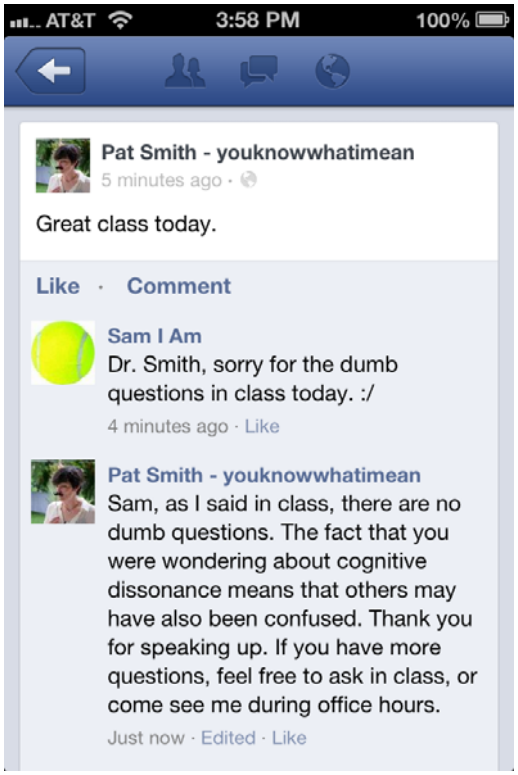


Figure 7. Facebook inoffensive scenario.

confirmatory factor analysis of the seven items indicated that the items were consistent with a uni-dimensional model. All the errors for the internal consistency and parallelism check were below the .10 exclusion level. Further, the reliability was high ($\alpha = .97$). Given the findings from the confirmatory factor analyses and reliability check, the seven items were summed to form the measure. As predicted, students reading the teacher incompetence induction reported higher levels of incompetence ($M = 5.98$, $SD = .94$) while students reading the competence condition reported lower levels of incompetence ($M = 2.23$, $SD = 1.10$). The differences between competence and incompetence were in the expected direction and significant, $t(128) = 20.92$, $p < .001$, $r = .88$.

It could be suggested that the differences in conditions could be attributed to the medium in which they were delivered. To test for a potential interaction between teacher incompetence/competence on face-to-face and on Facebook, Analysis of Variance (ANOVA) was conducted and no interaction was found. $F(1,126) = .004$, $p = .95$. The absence of an interaction indicates that both mediums effectively induced the conditions. Table 1 illustrates the descriptive statistics for all 12 conditions by medium.

Table 1

Descriptive Statistics for Induction Test by Medium

	Medium	
	Face-to-Face	Facebook
	M (*SD*)	M (*SD*)
Incompetence	6.42 (.64)	5.57 (.99)
Competence	2.67 (1.14)	1.80 (.88)
Indolence	5.96 (1.29)	5.88 (1.56)
Non-Indolence	1.79 (1.04)	2.03 (0.87)
Offensiveness	6.42 (.73)	6.46 (.67)
Inoffensiveness	1.21 (.44)	1.34 (.45)

Teacher indolence. To ensure that the above scenarios induced either indolence or non-indolence (face-to-face or on Facebook), participants were asked to complete a seven-item seven-point Likert-type scale after reading the scenario. Example scale items included: “This teacher has a lazy attitude towards teaching” and “This teacher offers

helpful feedback on written work." (see Appendix D). A confirmatory factor analysis of the seven items indicated that the items were consistent with a uni-dimensional model. All the errors for the internal consistency and parallelism check were below the .10 exclusion level. Further, the reliability was high ($\alpha = .97$). Given the findings from the confirmatory factor analyses and reliability check, the seven items were summed to form the measure.

As predicted, students reading the teacher indolence induction reported higher levels of indolence ($M = 5.92$, $SD = 1.22$) while students reading the non-indolence condition reported lower levels of indolence ($M = 1.91$, $SD = .96$). The differences between indolence and non- indolence were in the expected direction and significant, $t(126) = 20.61$, $p < .001$, $r = .88$.

In order to test if the difference in indolence and non-indolence could be attributed to medium, ANOVA was conducted and there was no interaction $F(1,124) = .679$, $p = .41$. The absence of an interaction indicates that the condition was effectively induced in both mediums (face-to-face and Facebook).

Teacher offensiveness. To ensure that the above scenarios induced either offensiveness or inoffensiveness (face-to-face or on Facebook), participants were asked to complete a seven-item seven-point Likert-type scale. Example scale items included: "This teacher is rude" and "This teacher uses foul language" (see Appendix E).

A confirmatory factor analysis of the seven items indicated that the items were consistent with a uni-dimensional model. All the errors for the internal consistency and

parallelism check were below the .10 exclusion level. Further, the reliability was high ($\alpha = .98$). Given the findings from the confirmatory factor analyses and reliability check, the seven items were summed to form the measure.

As predicted, students reading the teacher offensiveness induction reported higher levels of offensiveness ($M = 6.44$, $SD = .70$) while students reading the inoffensiveness condition reported lower levels of offensiveness ($M = 1.27$, $SD = .96$). The differences between offensiveness and non- offensiveness were in the expected direction and significant, $t(128) = 50.11$, $p < .001$, $r = .95$.

In order to determine if the differences in the conditions could be attributed to the medium in which the message was delivered, ANOVA was conducted and no interaction was found. $F(1,127) = .180$, $p = .67$. The absence of an interaction indicates that the condition was effectively induced in both mediums (face-to-face and Facebook).

Main Experiment

Participants

Four hundred fifty eight students from a large Western university were recruited to participate in the main experiment (N = 154 for the teacher incompetence conditions, N = 150 for teacher indolence, and N = 154 for teacher offensiveness). Participants were recruited from a large Western university. Students were randomly exposed to one of the 12 conditions. Scores for each condition (teacher incompetence, teacher indolence, and teacher incompetence) were separately entered into SPSS 21.0, such that one data set

contained one set of behaviors (e.g., teacher incompetence and competence) both face-to-face and on Facebook.

Participants who read the teacher incompetence conditions included 78 males (50.6%), 75 females (48.7%), and one respondent (.6%) that did not report their sex. The average age for participants in the teacher incompetence conditions was 22.17 years old (*SD* = 4.78) and the class composition of participants included 34 freshmen (22.1%), 16 sophomores (10.4%), 66 juniors (42.9%), 34 seniors (22.1%), and 4 students that identified their year in school as "other" (2.6%). Seventy two participants identified themselves as Caucasian (46.8%), 15 African American (9.7%), 25 Latino (16.2%), three Native American (1.9%), one Pacific Islander (.6%), 13 Asian (8.4%), three Middle Eastern (1.9%), and 22 participants identified themselves as other (14.3%).

Participants who read the teacher indolence conditions included 59 males (39.3%), 90 females (60.0%), and one respondent (.7%) that did not report their sex. The average age for participants in the teacher incompetence induction check was 22.05 years old (*SD* = 3.67) and the class composition of participants included 35 freshmen (23.3%), 18 sophomores (12.0%), 57 juniors (38.0%), 29 seniors (19.3%), and 10 students that identified their year in school as "other" (6.7%). Fifty nine participants identified themselves as Caucasian (39.3%), seven African American (4.7%), 26 Latino (17.3%), seven Pacific Islander (4.7%), 26 Asian (17.3%), three Middle Eastern (2.0%), and 18 participants identified themselves as other (12.0%).

Participants who read the teacher offensiveness conditions included 71 males (46.1%), 83 females (53.9%). The average age for participants in the teacher offensiveness conditions was 22.18 years old (*SD* = 4.21) and the class composition of participants included 29 freshmen (18.8%), 18 sophomores (11.7%), 62 juniors (40.3%), 40 seniors (26.0%), and five students that identified their year in school as "other" (3.2%). Seventy seven participants identified themselves as Caucasian (50%), 10 African American (6.5%), 24 Latino (15.6%), one Native American (.6%), two Pacific Islander (1.3%), 17 Asian (11.0%), three Middle Eastern (1.9%), and 19 participants identified themselves as other (12.3%).

Procedures

Participants were informed that their participation in the study was anonymous and voluntary, and they were to sign a consent form stating that their standing in class will not be affected by participating, and that they will not receive extra credit for their involvement in the study. Included in the form was a warning that the study may contain foul language.

Students were exposed to one of 12 written stimuli. First they read a face-to-face scenario, and then they read a Facebook scenario on the next page. Students were then asked to complete questionnaires measuring student motivation and affective learning. Finally, the participants provided basic demographic information including age, sex, class level, and ethnicity.

Independent Variables

Each participant was randomly exposed to one face-to-face teacher behavior or misbehavior, and one Facebook behavior or misbehavior. Teacher misbehavior elements were not crossed for this study. In other words, the participant was only exposed to the presence or absence of one element (for example competence or incompetence), rather than one element (such as incompetence) in one condition and a different element (such as offensiveness) in the other.

For example, below is the face-to-face competent condition paired with the Facebook incompetent condition (see Appendix F for another sample condition):

> You are taking a class from Pat Smith. Dr. Smith is intelligent and well-versed on the course topics. When asked to clarify what she means about basic course topics, Dr. Smith offers thorough explanations, and often elaborates by giving examples in order to help students understand the concepts.
>
> Dr. Smith is Facebook friends with some of her students. One of your friends, who goes by "Sam I Am" is Facebook friends with Dr. Smith. One day, you see the following two exchanges on your Facebook newsfeed (see Figure 8).

Measures

Student state motivation. The student state motivation measure (Christophel, 1990) was used in this study. The instrument is an eleven item, seven-point semantic differential scale (see Appendix G). Sample questions from the measure are "This teacher makes me feel motivated/unmotivated" and "This teacher makes me feel excited/

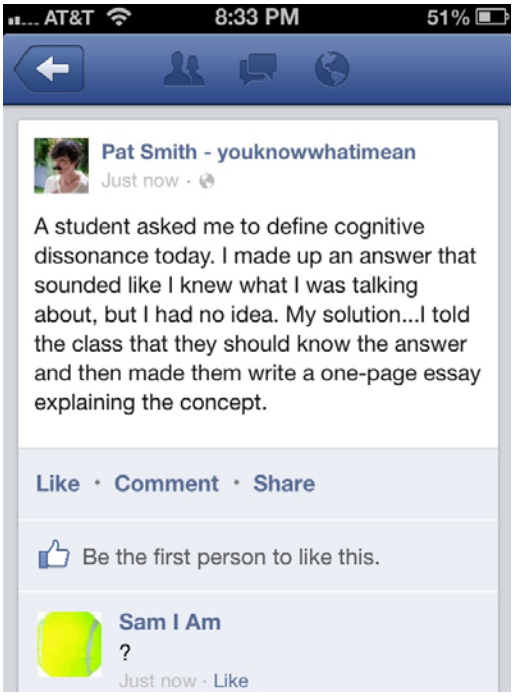


Figure 8. Facebook incompetent condition.

indifferent." Further, the reliability for the scale was very high for all three teacher behavior/misbehavior elements (α = .96 for incompetence, *M* = 3.30, *SD* = 1.63, α = .97 for indolence, *M* = 3.28, *SD* = 1.65, and α = .96 for offensiveness, *M* = 3.87, *SD* = 1.76). Confirmatory factor analysis of the eleven items indicated that the items were consistent with a uni-dimensional model. All the errors for the internal consistency and parallelism check were below the .10 exclusion level. Given the findings from the confirmatory factor analyses and reliability check, the eleven items were summed to form the measure.

Student affective learning. McCroskey's (1994) student affective learning and teacher evaluation scale was used to assess affective learning (see Appendix H). Only the first eight items in the 16 item semantic differential scale was used to measure affective

learning, as the last eight questions deal with teacher evaluation (although data for the last eight items was collected). The scale contains questions such as "I feel the class content is bad/good" and "My likelihood of taking future classes in this content area is improbable/probable." The reliability for the scale was very high for all three teacher behavior/misbehavior elements ($\alpha = .96$ for incompetence, $M = 3.53$, $SD = 1.60$, $\alpha = .93$ for indolence, $M = 3.83$, $SD = 1.85$, and $\alpha = .87$ for offensiveness, $M = 3.85$, $SD = 2.10$). Confirmatory factor analysis of the eight items indicated that the items were consistent with a uni-dimensional model. All the errors for the internal consistency and parallelism check were below the .10 exclusion level. Given the findings from the confirmatory factor analyses and reliability check, the eight items were summed to form the measure.

Data Analysis

SPSS version 21.0 was used to compute and analyze the results. Given the proposed hypotheses, a contrast analysis was conducted to investigate if an interaction occurs when teacher behaviors and misbehaviors contradict face-to-face and on Facebook. The findings and conclusions will be discussed in the subsequent chapters of this study.

CHAPTER 4

RESULTS

Hypothesis 1_a predicted face-to-face teacher incompetence would interact with teacher incompetence on Facebook to impact student motivation. It was predicted that students exposed to face-to-face/Facebook teacher incompetence would report the least amount of motivation, followed by students exposed to face-to-face teacher incompetence/Facebook teacher competence, face-to-face teacher competence/Facebook teacher incompetence, and face-to-face and Facebook teacher competence.

Results of this a priori contrast indicated that participants in the incompetent face-to-face, incompetent Facebook condition (coefficient = -2) reported less motivation than participants in the incompetence face-to-face, competence Facebook condition (coefficient = -1), who exhibited similar motivation to participants in the competent face-to-face, incompetent Facebook condition (coefficient = 1), who reported less motivation than participants in the competent face-to-face, competent Facebook condition (coefficient = 2), $t(147) = 9.81$, $p < .001$, $r = .63$ (see Table 2 for descriptive statistics and confidence intervals).

An examination of the means suggested that the results were driven by an interaction and these data are generally consistent with the predictions. However, there was no difference between the scores in the conditions in which the competence conditions were mixed, e.g., face-to-face incompetence and Facebook competence.

Table 2

Descriptive Statistics for Student Motivation by Teacher Incompetence and Medium

		Facebook	
		Incompetence	Competence
Face-to-Face	Incompetence	$\mu = 2.05$ $[P(2.05 \leq \mu \leq 2.38) = .95]$	$\mu = 2.93$ $[P(2.55 \leq \mu \leq 3.32) = .95]$
	Competence	$\mu = 3.38$ $[P(2.86 \leq \mu \leq 3.91) = .95]$	$\mu = 4.94$ $[P(4.52 \leq \mu \leq 5.36) = .95]$

A review of these data suggests that incompetence negatively impacts motivation (both face-to-face and on Facebook), and competence positively impacts motivation (both face-to-face and on Facebook). These data also suggest that when incompetence is introduced on Facebook, even though the teacher demonstrates competence in the classroom, student motivation is negatively impacted. Likewise, when a teacher who is incompetent in the classroom demonstrates competence on Facebook, student motivation is positively impacted.

Hypothesis 1_b predicted face-to-face teacher indolence would interact with teacher indolence on Facebook to impact student motivation. It was predicted that students exposed to face-to-face/Facebook teacher indolence would report the least amount of motivation, followed by students exposed to face-to-face teacher indolence/Facebook teacher non-indolence, face-to-face teacher non-indolence/Facebook teacher indolence, and face-to-face and Facebook teacher non-indolence.

Results of this a priori contrast indicated that participants in the indolent face-to-face, indolent Facebook condition (coefficient = -2) reported lower motivation than participants in the indolent Facebook, non-indolent face-to-face condition (coefficient = -1), who exhibited similar motivation to participants in the non-indolent Facebook, indolent face-to-face condition (coefficient = 1), who reported less motivation than participants in the non-indolent face-to-face, non-indolent Facebook condition (coefficient = 2), $t(142) = 10.42$, $p < .001$, $r = .66$ (see Table 3 for descriptive statistics and confidence intervals).

Table 3

Descriptive Statistics for Student Motivation by Teacher Indolence and Medium

		Facebook	
		Indolence	Non-Indolence
Face-to-Face	Indolence	$\mu = 2.00$ $[P(1.65 \leq \mu \leq 2.34) = .95]$	$\mu = 2.75$ $[P(2.36 \leq \mu \leq 3.13) = .95]$
	Non-Indolence	$\mu = 3.31$ $[P(2.85 \leq \mu \leq 3.78) = .95]$	$\mu = 5.02$ $[P(4.60 \leq \mu \leq 5.43) = .95]$

An examination of the means suggested that the results were driven by an interaction and these data are generally consistent with the predictions. However there was no difference between the scores in the conditions in which the indolence conditions were mixed, e.g., face-to-face indolence and Facebook non-indolence.

As was the case with competence and incompetence, a review of these data suggests that indolence negatively impacts motivation (both face-to-face and on Facebook), and non-indolence positively impacts motivation (both face-to-face and on Facebook). These data also suggest that when indolence is introduced on Facebook, even though the teacher demonstrates non-indolence in the classroom, student motivation is negatively impacted. Likewise, when a teacher who is indolent in the classroom demonstrates non-indolence on Facebook, student motivation is positively impacted.

Hypothesis 1_c predicted face-to-face teacher offensiveness interacts with teacher offensiveness on Facebook to impact student motivation. It was predicted that students exposed to face-to-face/Facebook teacher offensiveness would report the least amount of motivation, followed by students exposed to face-to-face teacher offensiveness/Facebook teacher inoffensiveness, face-to-face teacher inoffensiveness/Facebook teacher offensiveness, and face-to-face and Facebook teacher inoffensiveness.

Results of this a priori contrast indicated that participants in the offensive face-to-face, offensive Facebook condition (coefficient = -2) reported lower motivation than participants in the offensive Facebook, inoffensive face-to-face condition (coefficient = -1), who exhibited similar motivation to participants in the inoffensive Facebook, offensive face-to-face condition (coefficient = 1), who reported less motivation than participants in the inoffensive face-to-face, inoffensive Facebook condition (coefficient = 2), $t(144) = 9.72$, $p < .001$, $r = .63$ (see Table 4 for descriptive statistics and confidence intervals).

Table 4

Descriptive Statistics for Student Motivation by Teacher Offensiveness and Medium

		Facebook	
		Offensive	Inoffensive
Face-to-Face	Offensive	$\mu = 2.57$ $[P(2.19 \leq \mu \leq 3.0) = .95]$	$\mu = 3.45$ $[P(3.01 \leq \mu \leq 3.89) = .95]$
	Inoffensive	$\mu = 3.61$ $[P(3.13 \leq \mu \leq 4.10) = .95]$	$\mu = 5.78$ $[P(5.33 \leq \mu \leq 6.22) = .95]$

An examination of the means suggested that the results were driven by an interaction and similar to incompetence and indolence, these data are generally consistent with the predictions. However there was no difference between the scores in the conditions in which the offensiveness conditions were mixed, e.g., face-to-face teacher offensiveness and Facebook teacher inoffensiveness.

A review of these data suggests that when offensiveness is introduced on Facebook, even though the teacher demonstrates inoffensiveness in the classroom, student motivation is negatively impacted. Likewise, when a teacher who is offensive in the classroom demonstrates inoffensiveness on Facebook, student motivation is positively impacted.

Hypothesis 2_a predicted face-to-face teacher incompetence would interact with teacher incompetence on Facebook to impact affective learning. It was predicted that students exposed to face-to-face/Facebook teacher incompetence would report the least

amount of affective learning, followed by students exposed to face-to-face teacher incompetence/Facebook teacher competence, face-to-face teacher competence/Facebook teacher incompetence, and face-to-face and Facebook teacher competence.

Results of this a priori contrast indicated that participants in the incompetent face-to-face, incompetent Facebook condition (coefficient = -2) reported lower affective learning than participants in the incompetence face-to-face, competence Facebook condition (coefficient = -1), who exhibited similar affective learning to participants in the competent face-to-face, incompetent Facebook condition (coefficient = 1), who reported less affective learning than participants in the competent face-to-face, competent Facebook condition (coefficient = 2), $t(145) = 6.60$, $p < .001$, $r = .48$ (see Table 5 for descriptive statistics and confidence intervals).

Table 5

Descriptive Statistics for Affective Learning by Teacher Incompetence and Medium

		Facebook	
		Incompetence	Competence
Face-to-Face	Incompetence	$\mu = 2.66$ $[P(3.70 \leq \mu \leq 2.38) = .95]$	$\mu = 3.39$ $[P(2.98 \leq \mu \leq 3.80) = .95]$
	Competence	$\mu = 2.92$ $[P(2.55 \leq \mu \leq 3.97) = .95]$	$\mu = 5.09$ $[P(4.63 \leq \mu \leq 5.55) = .95]$

An examination of the means suggested that the results were driven by an interaction and these data are generally consistent with the predictions. However there

was no difference between the scores in the middle conditions. Additionally, these data are not sequentially ordered in the predicted direction. These data suggest that incompetence negatively impacts affective learning (both face-to-face and on Facebook), and competence positively impacts affective learning (both face-to-face and on Facebook). They also suggest that when incompetence is introduced on Facebook, even though the teacher demonstrates competence in the classroom, affective learning is negatively impacted. Likewise, when a teacher who is incompetent in the classroom demonstrates competence on Facebook, affective learning is positively impacted.

Hypothesis 2_b predicted face-to-face teacher indolence would interact with teacher indolence on Facebook to impact affective learning. It was predicted that students exposed to face-to-face/Facebook teacher indolence would report the least amount of affective learning, followed by students exposed to face-to-face teacher indolence/Facebook teacher non-indolence, face-to-face teacher non-indolence/Facebook teacher indolence, and face-to-face and Facebook teacher non-indolence.

Results of this a priori contrast indicated that participants in the indolent face-to-face, indolent Facebook condition (coefficient = -2) reported similar affective learning to participants in the indolent Facebook, non-indolent face-to-face condition (coefficient = -1), who exhibited similar affective learning to participants in the non-indolent Facebook, indolent face-to-face condition (coefficient = 1), who reported less affective learning than participants in the non-indolent face-to-face, non-indolent

Facebook condition (coefficient = 2), $t(143) = 8.35$, $p < .001$, $r = .57$ (see Table 6 for descriptive statistics and confidence intervals).

Table 6

Descriptive Statistics for Affective Learning by Teacher Indolence and Medium

		Facebook	
		Indolence	Non-Indolence
Face-to-Face	Indolence	$\mu = 2.57$ [$P(2.04 \leq \mu \leq 3.10) = .95$]	$\mu = 3.44$ [$P(2.96 \leq \mu \leq 3.92) = .95$]
	Non-Indolence	$\mu = 3.76$ [$P(3.20 \leq \mu \leq 3.92) = .95$]	$\mu = 5.64$ [$P(5.25 \leq \mu \leq 6.02) = .95$]

An examination of the means suggested that the results were driven by an interaction and these data are generally consistent with the predictions. However there was no difference between the scores in the conditions in which the indolence conditions were mixed, e.g., face-to-face teacher indolence and Facebook teacher non-indolence.

Like indolence and student motivation, these data suggest that indolence negatively impacts affective learning (both face-to-face and on Facebook), and non-indolence positively impacts affective learning (both face-to-face and on Facebook). These data also suggest that when indolence is introduced on Facebook, even though the teacher demonstrates non-indolence in the classroom, affective learning is negatively impacted. Likewise, when a teacher who is indolent in the classroom demonstrates non-indolence on Facebook, affective learning is positively impacted.

Hypothesis 2_c predicted face-to-face teacher offensiveness interacts with teacher offensiveness on Facebook to impact affective learning. It was predicted that students exposed to face-to-face/Facebook teacher offensiveness would report the least amount of affective learning, followed by students exposed to face-to-face teacher offensiveness/ Facebook teacher inoffensiveness, face-to-face teacher inoffensiveness/Facebook teacher offensiveness, and face-to-face and Facebook teacher inoffensiveness.

Results of this a priori contrast indicated that participants in the offensive face-to-face, offensive Facebook condition (coefficient = -2) reported similar affective learning to participants in the offensive Facebook, inoffensive face-to-face condition (coefficient = -1), who exhibited similar affective learning to participants in the inoffensive Facebook, offensive face-to-face condition (coefficient = 1), who reported less affective learning than participants in the inoffensive face-to-face, inoffensive Facebook condition (coefficient = 2), $t(146) = 11.90$, $p < .001$, $r = .70$ (see Table 7 for descriptive statistics and confidence intervals).

An examination of the means suggested that the results were driven by an interaction and these data are generally consistent with the predictions. However there was no difference between the scores in the conditions in which the offensiveness conditions were mixed, e.g., face-to-face teacher offensiveness and Facebook teacher inoffensiveness.

As was the case with offensiveness and student motivation, a review of these data suggests that offensiveness negatively impacts affective learning (both face-to-face and

Table 7

Descriptive Statistics for Affective Learning by Teacher Offensiveness and Medium

		Facebook	
		Offensive	Inoffensive
Face-to-Face	Offensive	$\mu = 2.37$ $[P(1.96 \leq \mu \leq 2.77) = .95]$	$\mu = 3.05$ $[P(2.56 \leq \mu \leq 3.54) = .95]$
	Inoffensive	$\mu = 3.57$ $[P(3.09 \leq \mu \leq 4.04) = .95]$	$\mu = 6.42$ $[P(5.92 \leq \mu \leq 6.93) = .95]$

on Facebook), and inoffensiveness positively impacts affective learning (both face-to-face and on Facebook). They also suggest that when offensiveness is introduced on Facebook, even though the teacher demonstrates inoffensiveness in the classroom, affective learning is negatively impacted. Likewise, when a teacher who is offensive in the classroom demonstrates inoffensiveness on Facebook, affective learning is positively impacted.

CHAPTER 5

DISCUSSION

As previously discussed, there is considerable research that examines how teacher behaviors (and misbehaviors) affect student perceptions. This study built upon prior research that has examined how teacher behaviors and misbehaviors on SNS (as well as in the classroom) affect student perceptions. In particular, this study tested what happens when teachers display misbehaviors both face-to face and on Facebook, and what happens when those behaviors and misbehaviors are inconsistent with one another. This study is unique in several ways; it is the first to manipulate teacher misbehavior experimentally, the first to operationalize teacher misbehaviors on Facebook, and the first to test if an interaction occurs when teacher behaviors and misbehavior are inconsistent across different mediums (face-to-face or Facebook). This chapter discusses the theoretical and conceptual implications of this study, identifies limitations, and provides directions for future research.

Theoretical and Conceptual Implications

Researchers have conceptualized teacher misbehavior (incompetence, indolence, and offensiveness) using descriptors containing several behaviors. For example, according to the commonly accepted definition of teacher misbehaviors, incompetent teachers are those who deliver boring lectures, grade unfairly, and have limited knowledge of course material (Claus et al., 2012; Goodboy et al., 2010; Kelsey et al., 2004), a conceptualization that contains several behaviors. In prior research, in order to

examine how teacher misbehaviors affect student perceptions, participants have been asked to recall the behaviors of a teacher whose class they most recently left. For example, a scale item in the teacher misbehavior scale (Kearney et al., 1991) is, "My teacher from my *last class* is not an enthusiastic lecturer, speaks in monotone and rambles, is boring or too repetitive, and/or employs no variety in lectures."

The understanding of teacher misbehaviors as described above has been useful when asking participants to recall their last teacher's behavior and then garnering students' perceptions of those teachers relative to various outcomes. However, in order to manipulate specific behaviors for this study, it was necessary to narrow the scope of each element of teacher misbehavior. Conditions were created in which a teacher was incompetent or competent, indolent or non-indolent, or offensive of inoffensive, either face-to-face or on Facebook (or both).

This new approach to testing teacher misbehaviors has the potential to revolutionize the way the phenomenon is studied. By teasing out specific behaviors and manipulating them, researchers can test the effect of each element (alone or combined) on many different learning outcomes, such as credibility and affect for teacher. Researchers can also combine specific elements of teacher misbehavior (such an indolence) with other behaviors (such as humor) to determine driving forces behind student perceptions. For example, what happens if a teacher who is humorous in the classroom also demonstrates indolence? Does the presence of humor moderate the effect of teacher indolence? Does

the degree to which a student *likes* a teacher explain a decrease in motivation when a teacher demonstrates indolence?

As it has been traditionally conceptualized, teacher indolence contains several behaviors. A teacher who is indolent may come to class late, or cancel classes without notice. She may also be inconsistent in her grading and offer little feedback on written work. Using the new approach, researchers will be better equipped to combine behaviors and test their effects. For example, researchers can test teacher indolence (a lazy attitude towards teaching) combined with teacher immediacy (or the extent to which a teacher's behavior reduces the psychological distance between teacher and student) to determine what might explain student perceptions. Prior to this study, it would be difficult to determine what specific teacher misbehavior could be attributed to students' perception changes. Narrowing the definition of each element of teacher misbehavior is an important step in advancing the research as it allows for a better understanding of what specific behaviors may affect student perceptions.

Results from this study revealed that there is an interaction when teacher behaviors and misbehaviors contradict in different mediums. Findings indicate that Expectancy Violation Theory (EVT; Burgoon & Jones, 1976) is an acceptable tool for framing what happens when teacher behaviors and misbehaviors contradict. As predicted, student motivation and affect were highest in the presence of competence, non-indolence, and inoffensiveness, and lowest in the presence of incompetence, indolence, and offensiveness. Also, when the teacher contradicted herself motivation and affect were

influenced. Whether the misbehavior occurred face-to-face or on Facebook, both student motivation and affective learning were negatively impacted when incompetence, indolence, or offensiveness was present (regardless of medium).

According to Media Richness Theory (MRT; Daft & Lengel, 1986), face-to-face student-teacher interactions should be more powerful than interactions on SNS. This is due to the amount and quality of information that can be shared during face-to-face communication. MRT contends that face-to-face is the richest media, and it is argued that Facebook is lean media, therefore it was predicted that face-to-face misbehavior would have a greater impact on students' perceptions than misbehavior on Facebook. However these data are inconsistent with the theory because there was no difference based on medium.

According to McLuhan (1964) the medium *is* the message, meaning that messages change as a result of the medium by which they are delivered. This study contradicts that notion. Findings of this study suggest that teacher behaviors and misbehaviors in both mediums equally impact student motivation and affective learning. While this means that teacher misbehavior on Facebook can negatively impact students' opinions, this also means that instructors who misbehave in the classroom are able to undo negative student perceptions by demonstrating competence, non-indolence, or inoffensiveness on Facebook. For example, a teacher with a reputation for belittling students in the classroom may begin to change students' perceptions by respectfully and

thoughtfully answering students questions in a more public medium (Facebook). The findings of this study suggest that media *richness* is inconsequential.

In the above example, perception changes may be attributed to a positive expectancy violation, perhaps due to a reward valence. This study did not test for other (moderating) variables, therefore it is unknown if the perception changes were *solely* due to the positive expectancy violation. However an important take-away from this study is that teachers who demonstrate competence, non-indolence, or inoffensiveness on Facebook can positively impact their reputation, even if they have demonstrated contradicting behaviors in the classroom. Likewise, instructors should beware that they can negatively impact students' perceptions simply by misbehaving on Facebook.

Student-teacher interaction on Facebook is a burgeoning area of research (Plew, 2011). Research has examined teacher self-disclosure on Facebook (Carter et al., 2008; Foulger et al., 2009; Hew, 2011; Kist, 2008; Maranto & Barton, 2010; Mazer et al., 2007, 2009; Read, 2007) and privacy rights of teachers (Maranto & Barton, 2010; Miller, 2011). This study was the first to examine how specific teacher behaviors and misbehaviors on Facebook influence student perceptions.

A new insight gained in this study is that teacher behaviors and misbehaviors on Facebook can, in fact, affect student perceptions. This is important because the current undergraduate student body is made up of digital natives, or young people who are native speakers of a digital language (Atay, 2009; Plew, 2011). Activity on SNS is undoubtedly going to continue to increase. Future college professors will ultimately emerge from this

cohort and it will be beneficial for them to understand that misbehaviors on SNS are equally as powerful when it comes to influencing their future students' perceptions. Likewise, current professors who are experimenting with Facebook either for entertainment or as a new teaching space should understand and appreciate the possible consequences of demonstrating misbehaviors online.

Findings from this study indicate that current and future teachers should use caution when using Facebook. They should be cognizant that their posts and comments may be seen by students whether they are "friends" or "friends of friends." Even if a teacher consciously chooses not to "friend" her students, her colleagues may not share the same philosophy; therefore she may be unintentionally connected with her students. Similarly, teachers may want to consider how to strategically use Facebook as a way to either enhance their good reputation, or mend some damage done by face-to-face misbehavior.

Limitations

As with all research, there are limitations of this study. This study utilized an experimental design with fictitious written stimuli. By controlling the independent variable, this design simplifies what is naturally a complex communication phenomenon (Frey, Botan, & Kreps, 2000). A potential limitation of this design is external validity, or the generalizability of the findings. It can be argued that the reactions of the participants in this particular sample may not be the same for others. While some participants in this study were recruited from other disciplines, the vast majority of participants were

Communication Studies students at a Western university. The findings in this study may not be true for students in other disciplines, from other Colleges or Universities, or from other cultures.

Further, the tightly controlled experimental design may not mirror what occurs in real-life situations, which is a potential threat to the study's ecological validity (Frey et al., 2000). In order to assess students' reactions to teacher behaviors and misbehaviors on Facebook, a scenario explaining *how* the participant saw the teacher's Facebook posting had to be created. This may have seemed unlikely to the participants in the study. While it is reasonable and easy for a college student to imagine a teacher in the classroom, it may have been a stretch for some students to imagine teacher Facebook behaviors, particularly if they had not previously seen a teacher on Facebook.

In a study examining the readiness of young learners to use SNS such as Facebook to embrace e-learning, Baran (2010) found that students think it is appropriate for teachers to have Facebook profiles for personal and professional uses. However some students may have never considered that their teacher would use Facebook (Plew, 2011). For this study, it may have been beneficial to establish whether or not the participants had ever interacted with a teacher on Facebook.

Also, it may have been more realistic for participants to view the Facebook condition from a computer or mobile device. Reading a fictitious Facebook scenario on a printed piece of paper may not have mirrored a real-life scenario. This may have

decreased the students' willingness to believe a teacher would actually display behaviors (and misbehaviors) on that medium.

Directions for Future Research

The current study adds to the vast body of research that examines how teacher behaviors (and misbehaviors) affect student perceptions. As previously mentioned, this study was the first to examine what happens when teacher misbehaviors in one medium contradict with behaviors and misbehaviors in another. It was also the first to operationalize the three elements of misbehavior in such a way that they could be manipulated and tested empirically. Using this approach, there are a number of ways that future research can add to this current study.

This study did not cross behaviors and misbehaviors. In other words, students were only exposed to the presence or absence of incompetence and/or competence, indolence and/or non-indolence, or offensiveness and/or inoffensiveness. Using these narrowly defined elements of misbehaviors, future research should consider testing the effects of mixed behaviors and misbehaviors in varying mediums. For example, what happens when a teacher is competent and inoffensive face-to-face, but offensive on Facebook?

Future research should consider the sex of the teacher in the scenarios. Students tend to stereotype their teachers based on their sex (Bachen, McLoughlin, & Garcia, 1999; Rester & Edwards, 2007). Students expect female teachers to be more caring and encouraging, and less authoritarian than men (Bachen et al., 1999; Rester & Edwards,

2007). The teacher in this study was a female based on the assumption that the sex stereotypes for women allow fewer misbehavior affordances.

When teachers behave contrary to what is stereotypically expected and accepted based on their sex, an expectancy violation occurs (Meltzer & McNulty, 2011). It was assumed that it would be more shocking for a female teacher to use foul language and make racist comments than if a male teacher exhibited the same rude behavior. Future research should test if the sex of the teacher demonstrating misbehaviors effects student perceptions.

Finally, Facebook is not the only SNS used by teachers. Future research should examine the effect of teacher misbehaviors on other SNS, such as Twitter and YouTube. Once a video is uploaded for public viewing on YouTube, it can be "shared" on multiple sites. Even if the original poster of a video takes it off YouTube, it is nearly impossible to eliminate forever once it has been shared. Similarly, a "tweet" (or a message sent on the SNS Twitter) can be limitlessly "re-tweeted." Teachers may want to learn from public officials who have mistakenly sent what was intended to be a private "tweet" to all of their contacts.

Concluding Remarks

The conditions in this study were inspired by real life. The Facebook posts were based on real posts made by real college professors. The college professor who posted, "Oh, that's right, you're Hmong, you can't read" had pasted a section of one of his student's essays on this wall. He and his "friends" then proceeded to mock the student's

writing. Someone in the comment thread asked what was so bad about the excerpt and the teacher made the above comment, thus inspiring the offensive condition for this study. The indolence Facebook scenario was based on a college teacher's complaint about having to grade 60 papers at the end of the semester. A student replied to the teacher's post and asked for more feedback on the final paper than he had received throughout the semester.

Most recently, a University of Pennsylvania admissions officer was terminated after posting and mocking excerpts from applicants' admissions essays to her Facebook page (Zweifler, 2013). The admissions offer posted quotations taken from student essays, and then wrote comments like, "another gem," and, "stop the madness." Along with firing the admissions officer, the incident prompted the University to publish social media guidelines explicitly stating that the same privacy standards for the University applied to Facebook posts.

Examining the effects of teacher misbehavior on Facebook is timely and relevant. This study provided evidence that teacher behaviors and misbehaviors on Facebook significantly affect student perceptions. Therefore, just as teachers should be cognizant of their behaviors and misbehaviors during face-to-face interactions, they should know that their Facebook behaviors and misbehaviors may also be extremely powerful. Teachers should carefully consider the potential ramifications of both their behaviors and misbehaviors on Facebook, and act accordingly.

APPENDIX A

Participant Consent Form

It is my understanding that my participation in this study, conducted by Sarah Billingsley, guarantees me the following rights:

1. My name will not be reported with any information I provide.
2. My participation in this study is completely voluntary.
3. I may withdraw from this study at any time I wish without any type of penalty.
4. I may decline to answer any question I wish.

*THIS STUDY MAY CONTAIN FOUL LANGUAGE

I am willing to contribute information concerning my thoughts and beliefs for this research project. All information provided will be confidential and at no time will my answers be associated with my name.

Date: _____ Print Participant Name _____

Participant Signature _____

Date: _____ Researcher Signature _____

APPENDIX B

Participant Demographics Scale

Thank you for your time. I am a Sacramento State Graduate student conducting a research study about student- teacher interactions, and I am inviting you to participate in the following experiment. Participation is voluntary, and all answers will remain strictly confidential

1. My age is _____ years.

2. I am female / male (Circle one)

3. Please indicate your year in school:

Freshman Sophomore Junior Senior Other

4. Please indicate your ethnicity:

Caucasian African American Latin American

Native American Pacific Islander Asian

Middle Eastern other_____

APPENDIX C

Incompetence Measure

Please indicate the degree to which you agree with the following statements:

1) This teacher is capable of teaching this class.*
Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

2) This teacher is very knowledgeable about the concepts in this class.*
Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

3) This teacher does not know much about the material for this class.
Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

4) This teacher is able to answer questions about course concepts.*
Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

5) This teacher is an expert on the course topics.*
Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

6) This teacher is skilled at teaching this class.*
Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

7) This teacher is not qualified to teach this class.
Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

* item reverse coded

APPENDIX D

Indolence Measure

Please indicate the degree to which you agree with the following statements:

1) This teacher has a lazy attitude towards teaching.
Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

2) This teacher offers helpful feedback on written work.*
Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

3) This teacher does not put much effort into teaching.
Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

4) This teacher does the bare minimum when teaching.*
Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

5) This teacher works hard to tell me what I have done wrong so I can improve.*
Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

6) This teacher does not work hard at teaching.
Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

7) This teacher does not care much working to be a better teacher.
Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

* item reverse coded

APPENDIX E

Offensiveness Measure

Please indicate the degree to which you agree with the following statements:

1) This teacher is rude.
Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

2) This teacher uses foul language.
Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

3) This teacher is respectful to all students.*
Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

4) This teacher makes racist comments.
Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

5) This teacher belittles students.
Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

6) This teacher is insulting.
Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

7) This teacher is considerate.*
Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

*item reverse coded

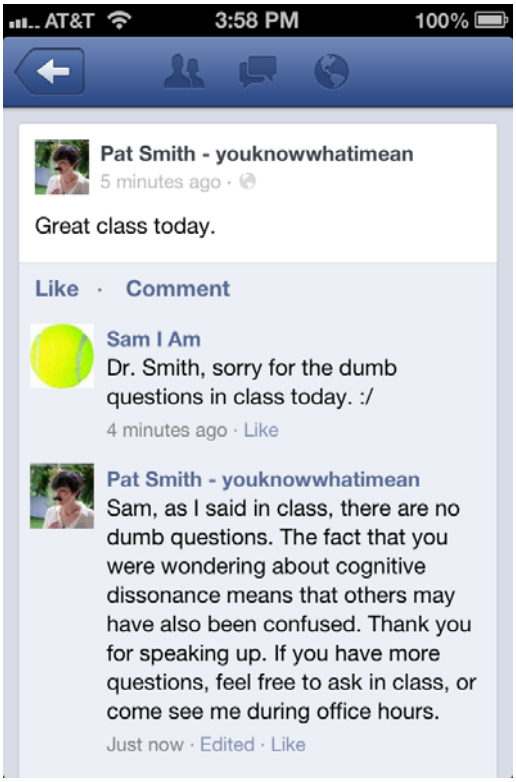
APPENDIX F

Main Experiment Example Scenario

Face-to-Face Offensiveness/Facebook Inoffensiveness

You are taking a class from a professor named Pat Smith. Dr. Smith tends to use foul language in class and belittle her students. For example, during a recent lecture, a student asked her to clarify something she had just said. Dr. Smith's response was, "Really Sam, what the fuck? Didn't you read that in the book? Oh, that's right. You're Hmong. You can't read." When Sam was obviously upset by her comments, Dr. Smith told Sam she was just kidding and that he better toughen up or he'll never survive college.

Dr. Smith is Facebook friends with some of her students. One of your friends (who goes by the name "Sam I Am") is Facebook friends with Dr. Smith. One day, you see the following exchange between Dr. Smith and "Sam I Am" on your Facebook newsfeed…



APPENDIX G

Student Motivation Scale

This teacher makes me feel

1. Motivated	1	2	3	4	5	6	7	Unmotivated
2. Interested	1	2	3	4	5	6	7	Bored
3. Involved	1	2	3	4	5	6	7	Uninvolved
4. Stimulated	1	2	3	4	5	6	7	Not stimulated
5. Want to study	1	2	3	4	5	6	7	Do not want to study
6. Inspired	1	2	3	4	5	6	7	Uninspired
7. Challenged	1	2	3	4	5	6	7	Unchallenged
8. Invigorated	1	2	3	4	5	6	7	Tired
9. Enthused	1	2	3	4	5	6	7	Pessimistic
10. Excited	1	2	3	4	5	6	7	Indifferent
11. Fascinated	1	2	3	4	5	6	7	Apathetic

APPENDIX H

Student Affective Learning Scale

I feel the class content is:

1. Bad	1	2	3	4	5	6	7	Good
2. Valuable	1	2	3	4	5	6	7	Worthless
3. Unfair	1	2	3	4	5	6	7	Fair
4. Positive	1	2	3	4	5	6	7	Negative

My likelihood of taking future courses in this content area is:

5. Unlikely	1	2	3	4	5	6	7	Likely
6. Possible	1	2	3	4	5	6	7	Impossible
7. Improbable	1	2	3	4	5	6	7	Probable
8. Would	1	2	3	4	5	6	7	Would not

Overall, the instructor I have in the class is:

9. Bad	1	2	3	4	5	6	7	Good
10. Valuable	1	2	3	4	5	6	7	Worthless
11. Unfair	1	2	3	4	5	6	7	Fair
12. Positive	1	2	3	4	5	6	7	Negative

If I were to have the opportunity, my likelihood of taking future courses with this specific teacher would be:

13. Unlikely	1	2	3	4	5	6	7	Likely
14. Possible	1	2	3	4	5	6	7	Impossible
15. Improbable	1	2	3	4	5	6	7	Probable
16. Would	1	2	3	4	5	6	7	Would not

REFERENCES

Atay, A. (2009). Facebooking the student-teacher relationship: How Facebook is changing student-teacher relationships. *Rocky Mountain Communication Review, 6*, 71-74.

Bachen, C. M., McLoughlin, M. M., & Garcia, S. S. (1999). Assessing the role of gender in college students' evaluations of faculty. *Communication Education, 48*, 193-210.

Bachman, G. F., & Guerrero, L. K. (2006). Relational quality and communicative responses following hurtful events in dating relationships: An expectancy violations analysis. *Journal of Social and Personal Relationships, 23*, 943-963.

Baker, J. (2004). An investigation of relationships among instructor immediacy and affective and cognitive learning in the online classroom. *Internet & Higher Education*, *7*, 1-13. doi:10.1016/j.iheduc.2003.11.006

Baltar, F., & Brunet, I. (2012). Social research 2.0: Virtual snowball sampling method using Facebook. *Internet Research, 22*, 57-74. doi:10.1108/10662241211199960

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*, 63-72. doi:10.1080/03634520500343400

Baran, B. (2010). Facebook as a formal instructional environment. *British Journal of Educational Technology*, *41*, 146-149. doi:10.1111/j.1467-8535.2010.01115.x

Bejerano, A. R. (2008). The genesis and evolution of online degree programs: Who are they for and what have we lost along the way? *Communication Education, 57,* 408-414. doi:10.1080/03634520801993697

Berkos, K. M., Allen, T. H., Kearney, P., & Plax, T. G. (2001). When norms are violated: Imagined interactions as processing and coping mechanisms. *Communication Monographs, 68*, 289-300.

Bolkan, S., & Daly, J. A. (2009). Organizational responses to consumer complaints: An examination of effective remediation tactics. *Journal of Applied Communication Research, 37,* 21-39.

Bolkan, S., & Holmgren, J. (2012). "You are such a great teacher and I hate to bother you but…": Instructors' perceptions of students and their use of email messages with varying politeness strategies. *Communication Education, 61*, 253-270. doi:10.1080/03634523.2012.667135

Bond, C. F., Omar, A., Pitre, U., Lashley, B. R., Skaggs, L. M., & Kirk, C. T. (1992). Fishy-looking liars: Deception judgment from expectancy violation. *Journal of Personality and Social Psychology, 63*, 969-977.

Boon, S., & Sinclair, C. (2009). A world I don't inhabit: Disquiet and identity in Second Life and Facebook. *Educational Media International*, *46*, 99-110. doi:10.1080/09523980902933565

boyd, d., & Ellison, N. B. (2007). Social network sites: Definition, history and scholarship. *Journal of Computer-Mediated-Communication, 13,* 210-230.

Brophy, J. (1987). Synthesis of research on strategies for motivating students to learn. *Educational Leadership, 45*, 40-48.

Burgoon, J. K. (1978). A communication model of personal space violations: Explication and an initial test. *Human Communication Research, 4,* 129-142.

Burgoon, J. K., Blair, J. P., & Strom, R. E. (2008). Cognitive biases and nonverbal cue availability in detecting deception. *Human Communication Research, 34,* 572-599.

Burgoon, J. K., & Jones, S. B. (1976). Toward a theory of personal space expectations and their violations. *Human Communication Research, 2,* 131-146.

Burgoon, J. K., & Walther, J. B. (1990). Nonverbal expectancies and the evaluative consequences of violations. *Human Communication Research, 17*, 232-265.

Byrne, Z., & LeMay, E. (2006). Different media for organizational communication: Perceptions of quality and satisfaction. *Journal of Business & Psychology, 21*, 149-173. doi:10.1007/s10869-006-9023-8

Campo, S., Cameron, K. A., Brossard, D., & Frazer, M. S. (2004). Social norms and expectancy violation theories: Assessing the effectiveness of health communication campaigns. *Communication Monographs, 71*, 448-470.

Carter, H. L., Foulger, T. S., & Ewbank, A. (2008). Have you Googled your teacher lately? *Phi Delta Kappan, 89*, 681-685.

Caspi, A., & Gorsky, P. (2005). Instructional media choice: Factors affecting the preferences of distance education coordinators. *Journal of Educational Multimedia and Hypermedia, 14*, 169-198.

Chesebro, J. L. (2003). Effects of teacher clarity and nonverbal immediacy on student learning, receiver apprehension, and affect. *Communication Education, 52*, 135-147. doi:10.1080=03634520302471

Chesebro, J. L., & McCroskey, J. C. (2001). The relationship of teacher clarity and immediacy with student state receiver apprehension, affect, and cognitive learning. *Communication Education, 50*, 59-68. doi:10.1080=03634520109379232

Christophel, D. M. (1990). The relationships among teacher immediacy behaviors, student motivation, and learning. *Communication Education, 39*, 323-340.

Claus, C. J., Booth-Butterfield, M., & Chory, R. M. (2012). The relationship between instructor misbehaviors and student antisocial behavioral alteration techniques: The roles of instructor attractiveness, humor, and relational closeness. *Communication Education, 61,* 161-183. doi:10.1080/03634523.2011.647922

Comadena, M. E., Hunt, S. K., & Simonds, C. J. (2007). The effects of teacher clarity, nonverbal immediacy, and caring on student motivation, affective, and cognitive learning. *Communication Research Reports, 24*, 241-248. doi:10.1080=08824090701446617

Daft, R. L., & Lengel, R. H. (1986). Organizational information requirements: Media richness and structural design. *Management Science , 32*, 554-571.

Damian, D., Lanubile, F., & Mallardo, T. (2008). On the need for mixed media in distributed requirements negotiations. *IEEE Transactions on Software Engineering, 34*, 116-132.

DiVerniero, R. A., & Hosek, A. M. (2011). Students' perceptions and communicative management of instructors' online self-disclosure. *Communication Quarterly, 59*, 428-449. doi:10.1080/01463373.2011.597275

Dobransky, N. D., & Frymier, A. B. (2004). Developing teacher-student relationships through out of class communication. *Communication Quarterly, 52,* 211-223.

Doyle, W. R. (2009). Online education: The revolution that wasn't. *Change*, *41*, 56-58.

Doyle, W. R., & Delaney, J. A. (2009). Higher education funding: The new normal. *Change*, *41*, 60-62.

Ellis, K. (2000). Perceived teacher confirmation: The development and validation of an instrument and two studies of the relationship to cognitive and affective learning. *Human Communication Research, 26*, 264-291. doi:10.1111=j.1468-2958.2000.tb00758.x

Ellis, K. (2004). The impact of perceived teacher confirmation on receiver apprehension, motivation, and learning. *Communication Education*, *53*, 1-20.

Facebook. (2012, August). *Press room: Statistics*. Retrieved from http://www.facebook.com/press/info.php?statistics

Fife, J. (2010). Using Facebook to teach rhetorical analysis. *Pedagogy, 10*, 555-551. doi:10.1215/15314200-2010-007

Floyd, K., & Voloudakis, M. (1999). Affectionate behavior in adult platonic friendships: Interpreting and evaluating expectancy violations. *Human Communication Research, 25*, 341-369.

Foulger, T. S., Ewbank, A., Kay, A., Popp, S., & Carter, H. (2009). Moral spaces in MySpace: Preservice teachers' perspectives about ethical issues in social networking. *Journal of Research on Technology in Education*, *42*, 1-28.

Frey, L. R., Botan, C. H., & Kreps, G. L. (2000). *Investigating communication: An introduction to research methods*. Needham Heights: Allyn & Bacon.

Fulmer, E. H. (2010). Privacy expectations and protections for teachers in the internet age. *Duke Law & Technology Review, 14*, 1-30.

Galambos, C. (2009). From the editor: A dialogue on the economic decline and higher education. *Journal of Social Work Education*, *45*, 1-5.

Goodboy, A. K. (2011). Instructional dissent in the college classroom. *Communication Education*, *60*, 296-313. doi:10.1080/03634523.2010.537756

Goodboy, A., & Bolkan, S. (2009). College teacher misbehaviors: Direct and indirect effects on student communication behavior and traditional learning outcomes. *Western Journal of Communication*, *73*, 204-219. doi:10.1080/10570310902856089

Goodboy, A. K., & Myers, S. A. (2008). The effect of teacher confirmation on student communication and outcomes. *Communication Education*, *57*, 153-179. doi:10.1080/03634520701787777

Goodboy, A. K., Myers, S. A., & Bolkan, S. (2010). Student motives for communicating with instructors as a function of perceived instructor misbehaviors. *Communication Research Reports, 27*, 11-19. doi:10.1080/08824090903526604

Goodman, S., Keresztesi, M., Mamdani, F., Mokgatle, D., Musariri, M., Pires, J., & Schlechter, A. (2011). An investigation of the relationship between students' motivation and academic performance as mediated by effort. *South African Journal of Psychology, 41*, 373-385.

Gorham, J., & Christophel, D. M. (1990). The relationship of teachers' use of humor in the classroom to immediacy and student learning. *Communication Education, 39*, 46-62. doi:10.1080=03634529009378786

Gorham, J., & Christophel, D. M. (1992). Students' perceptions of teacher behaviors as motivating and demotivating factors in college classes. *Communication Quarterly, 40*, 239-252.

Hassini, E. (2006). Student-instructor communication: The role of email. *Computers & Education, 47*, 29-40.

Heiman, T. (2008). The effects of e-mail messages in a distance learning university on perceived academic and social support, academic satisfaction, and coping. *Quarterly Review of Distance Education*, *9*, 237-248.

Hew, K. (2011). Students' and teachers' use of Facebook. *Computers in Human Behavior*, *27*, 662-676. doi:10.1016/j.chb.2010.11.020

Horan, S. M., Martin, M. M., & Weber, K. (2012). Understanding emotional response theory: The role of instructor power and justice messages. *Communication Quarterly, 60,* 210-233. doi:10.1080/01463373.2012.669323

Houser, M. L. (2005). Are we violating their expectations? Instructor communication expectations of traditional and nontraditional students. *Communication Quarterly, 53*, 213-228.

Houser, M. L. (2006). Expectancy violations of instructor communication as predictors of motivation and learning: A comparison of traditional and nontraditional students. *Communication Quarterly*, *54*, 331-349.

Jaasma, M., & Koper, R. (1999). The relationship of student-faculty out-of-class communication to instructor immediacy and trust and to student motivation. *Communication Education*, *48*, 41-47.

Jordan-Jackson, F. F., Lin, Y., Rancer, A. S., & Infante, D. A. (2008). Perceptions of males and females' use of aggressive affirming and nonaffirming messages in an interpersonal dispute: You've come a long way baby? *Western Journal of Communication, 72*, 239-258.

Karpf, R. J. (1980). Nonverbal components of the interpretive process in psychoanalytic psychotherapy. *American Journal of Psychotherapy, 34*, 477-486.

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*, 309-324.

Kelsey, D., Kearney, P., Plax, T., Allen, T., & Ritter, K. (2004). College students' attributions of teacher misbehaviors. *Communication Education*, *53*, 40-55.

Kist, W. (2008). "I gave up MySpace for lent": New teachers and social networking sites. *Journal of Adolescent & Adult Literacy*, *52*, 245-247.

Konetes, G. D. (2011). Distance education's impact during economic hardship: How distance learning impacts educational institutions and businesses in times of economic hardship. *International Journal of Instructional Media, 38*, 7-15.

Kuh, G. (1995). The other curriculum. *Journal of Higher Education*, *66*, 123-155.

La Poire, B. A., & Burgoon, J. K. (1996). Usefulness of differentiating arousal responses within communication theories: Orienting response or defensive arousal within nonverbal theories of expectancy violation. *Communication Monographs, 63,* 208-230.

Lannutti, P. J., & Camero, M. O. (2007). Women's perceptions of flirtatious nonverbal behavior: the effects of alcohol consumption and physical attractiveness. *Southern Communication Journal, 72*, 21-35.

Lannutti, P. J., Laliker, M., & Hale, J. L. (2001). Violations of expectations and social-sexual communication in student/professor interactions. *Communication Education, 50,* 69-82.

Leets, L. (2001). Explaining perceptions of racist speech. *Communication Research, 28*, 676-706.

Legg, A., & Wilson, J. (2009). E-mail from professor enhances student motivation and attitudes. *Teaching of Psychology*, *36*, 205-211. doi:10.1080/00986280902960034

Lei, S. A., & Gupta, R. K. (2010). College distance education courses: Evaluating benefits and costs from institutional, faculty, and students' perspectives. *Education*, *130*, 616-631.

Liu, O. (2012). Student evaluation of instruction: In the new paradigm of distance education. *Research In Higher Education, 53*, 471-486. doi:10.1007/s11162-011-9236-1

Malesky, L. L., & Peters, C. (2012). Defining appropriate professional behavior for faculty and university students on social networking websites. *Higher Education, 63*, 135-151. doi:10.1007/s10734-011-9451-x

Maranto, G., & Barton, M. (2010). Paradox and promise: MySpace, Facebook, and the sociopolitics of social networking in the writing classroom. *Computers & Composition*, *27*, 36-47. doi:10.1016/j.compcom.2009.11.003

Marris, E. (2010). US students pay for downturn. *Nature, 465*, 678-679. doi:10.1038/465678a

Martin, M. M., & Myers, S. A. (2006). Students' communication traits and their out-of-class communication with their instructors. *Communication Research Reports, 23,* 283-289.

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*, 1-17.

Mazer, J. P., Murphy, R. E., & Simonds, C. J. (2009). The effects of teacher self-disclosure via Facebook on teacher credibility. *Learning, Media & Technology, 34*, 175-183. doi:10.1080/17439880902923655

McCroskey, J. C. (1994). *Assessment of affect toward communication and affect toward instruction in communication.* In S. Morreale, & M. Brooks (Eds.), *1994 SCA summer conference proceedings and prepared remarks: Assessing college student competence in speech communication*. Annandale, VA: Speech Communication Association.

McCroskey, J. C., Valencic, K., & Richmond, V. (2004). Toward a general model of instructional communication. *Communication Quarterly*, *52*, 197-210.

McLuhan, M. (1964). *Understanding media: The extensions of man.* New York: McGraw-Hill Book Co.

McPherson, M. B., & Liang, Y. J. (2007). Students' reactions to teachers' management of compulsive communicators. *Communication Education, 56,* 18-33.

McPherson, M. B., Kearney, P., & Plax, T. G. (2003). The dark side of instruction: Teacher anger as classroom norm violations. *Journal of Applied Communication Research, 31*, 76-90.

Meltzer, A. L., & McNulty, J. K. (2011). Contrast effects of stereotypes: "Nurturing" male professors are evaluated more positively than "nurturing" female professors. *Journal of Men's Studies, 19*, 57-64.

Mendes, W. B., Hunter, S. B., Jost, J. T, Blascovich, J., & Lickel, B. (2007). Threatened by the unexpected: Physiological responses during social interactions with expectancy-violating partners. *Journal of Personality & Social Psychology, 92*, 698-716.

Messman, S. J., & Jones-Corley, J. (2001). Effects of communication environment, immediacy, and communication apprehension on cognitive and affective learning. *Communication Monographs, 68,* 184-200.

Mian, A., & Sufi, A. (2010). Household leverage and the recession of 2007-09. *IMF Economic Review, 58*, 74-117. doi:10.1057/imfer.2010.2

Miller, R. A. (2011). Teacher Facebook speech: Protected or not? *Brigham Young University Education & Law Journal*, *2*, 637-665.

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*, 145-167.

Muhtaseb, A. (2007). From behind the veil: Students' resistance from different directions. *New Directions for Teaching and Learning, 110*, 25-33.

Myers, S. A. (2002). Perceived aggressive instructor communication and student state motivation, learning, and satisfaction. *Communication Reports, 15*, 113-121.

Myers, S. A., Edwards, C., Wahl, S. T., & Martin, M. M. (2007). The relationship between perceived instructor aggressive communication and college student involvement. *Communication Education, 56*, 495-508. doi:10.1080/03634520701466398

Myers, S. A., & Knox, R. L. (2000). Perceived instructor argumentativeness and verbal aggressiveness and student outcomes. *Communication Research Reports, 17*, 299-309. doi:10.1080=08824090009388777

Myers, S. A., Martin, M. M., & Knapp, J. L. (2005). Perceived instructor in-class communicative behaviors as a predictor of student participation in out of class communication. *Communication Quarterly, 53*, 437-450. doi:10.1080/01463370500102046

Myers, S. A., & Rocca, K. A. (2001). Perceived instructor argumentativeness and verbal aggressiveness in the college classroom: Effects on student perceptions of climate, apprehension, and state motivation. *Western Journal of Communication, 65*, 113-137.

Novak, H., Scofield-Snow, H., Traylor, S., Zhou, Y. Y., & Wang, Z. (2011). *Excessive self-disclosure on Facebook: Student's perception of teacher credibility*. Paper presented at the National Communication Association Conference, New Orleans, LA.

Plew, M. (2011). *"If students are not ashamed to have me as a friend, that's good enough for me" vs. "I'm not their friend, I'm their professor:" An exploration of how college and university instructors decide whether or not to allow students as Facebook friends.* Paper presented at the National Communication Association Conference, New Orleans, LA.

Pogue, L., & Ah Yun, K. (2006). The effect of teacher nonverbal immediacy and credibility on student motivation and affective learning. *Communication Education, 55*, 331-344. doi:10.1080/03634520600748623

Powell, B. A., Gilleland, D., & Pearson, L. (2012). Expenditures, efficiency, and effectiveness in U.S. undergraduate higher education: A national benchmark model. *Journal of Higher Education, 83*, 102-127.

Pozo-Munoz, C., Rebolloso-Pacheco, E., & Fernandez-Ramirez, B. (2000). The 'ideal teacher': Implications for student evaluation of teacher effectiveness. *Assessment & Evaluation in Higher Education*, *25*, 253-264.

Ramirez, A., & Wang, Z. (2008). When online meets offline: An expectancy violations theory perspective on modality switching. *Journal of Communication, 58,* 20-39.

Read, B. (2007). A MySpace photo costs a student a teaching certificate. *The Chronicle of Higher Education*. Retrieved from http://chronicle.com/wiredcampus/article/2029/a-myspace-photo-costs-a-student-a- teaching-certificate

Rester, C. H., & Edwards, R. (2007). Effects of sex and setting on students' interpretation of teachers' excessive use of immediacy. *Communication Education, 56*, 34-53. doi:10.1080/03634520600954619

Şahin, A., Kitao, S., Cororaton, A., & Laiu, S. (2011). Why small businesses were hit harder by the recent recession. *Current Issues in Economics & Finance, 17*, 1-7.

Sheer, V. C., & Chen, L. (2004). Improving media richness theory: A study of interaction goals, message valence, and task complexity in manager-subordinate communication. *Management Communication Quarterly, 18*, 76-93. doi:10.1177/0893318904265803

Sherblom, J. (2010). The computer-mediated communication (CMC) classroom: a challenge of medium, presence, interaction, identity, and relationship. *Communication Education, 59*, 497-523. doi:10.1080/03634523.2010.486440

Sidelinger, R. (2010). College student involvement: An examination of student characteristics and perceived instructor communication behaviors in the classroom. *Communication Studies, 61*, 87-103. doi:10.1080/10510970903400311

Sorenson, G. (1989). The relationship among teachers' self-disclosive statements, students' perceptions, and affective learning. *Communication Education, 38*, 259-276. doi:10.1080=03634528909378762

Stephens, K. K., Houser, M. L., & Cowan, R. L. (2009). R u able to meat me: The impact of students' overly casual email messages to instructors. *Communication Education, 58*, 303-326.

Sun, P., & Cheng, H. (2007). The design of instructional multimedia in e-learning: A media richness theory-based approach. *Computers & Education, 49*, 662-676.

Teven, J. J., & McCroskey, J. C. (1997). The relationship of perceived teacher caring with student learning and teacher evaluation. *Communication Education, 46*, 1-9.

Thompson, B. (2008). Characteristics of parent-teacher e-mail communication. *Communication Education*, *57*, 201-223. doi:10.1080/03634520701852050

Thweatt, K. S., & McCroskey, J. C. (1996). Teacher nonimmediacy and misbehavior: Unintentional negative communication. *Communication Research Reports, 13*, 198-204.

Thweatt, K. S., & McCroskey, J. C. (1998). The impact of teacher immediacy and misbehaviors on teacher credibility. *Communication Education, 47*, 348.

Timmerman, C., & Kruepke, K. A. (2006). Computer-assisted instruction, media richness, and college student performance. *Communication Education, 55*, 73-104. doi:10.1080/03634520500489666

Toale, M. C. (2001). *Teacher clarity and teacher misbehaviors: Relationships with students' affective learning and teacher credibility*. (Unpublished doctoral dissertation). West Virginia University, Morgantown, West Virginia.

Trevino, L., Lengel, R. H., Bodensteiner, W., Gerloff, E. A., & Muir, N. (1990). The richness imperative and cognitive style. *Management Communication Quarterly, 4*, 176-197.

Trevino, L., Lengel, R. H., & Daft, R. L. (1987). Media symbolism, media richness, and media choice in organizations. *Communication Research, 14*, 553-574.

Turman, P., & Schrodt, P. (2005). The influence of instructional technology use on students' affect: Do course designs and biological sex make a difference? *Communication Studies*, *56*, 109-129. doi:10.1080/00089570500078726

Vila, L. E. (2005). The outcomes of investment in education and people's well-being. *European Journal of Education, 40*, 3-11. doi:10.1111/j.1465-3435.2005.00206.x

Wanzer, M. B., & Frymier, A. B. (1999). The relationship between student perceptions of instructor humor and students' reports of learning. *Communication Education, 48*, 48-62. doi:10.1080=03634529909379152

Wanzer, M., & McCroskey, J. C. (1998). Teacher socio-communicative style as a correlate of student affect toward teacher and course. *Communication Education, 47,* 43-52.

Witt, P., & Schrodt, P. (2006). The influence of instructional technology use and teacher immediacy on student affect for teacher and course. *Communication Reports, 19*, 1-15. doi:10.1080/08934210500309843

Witt, P., & Wheeless, L. (2001). An experimental study of teachers' verbal and nonverbal immediacy and students' affective and cognitive learning. *Communication Education*, *50*, 327-342.

Witt, P., Wheeless, L., & Allen, M. (2004). A meta-analytical review of the relationship between teacher immediacy and student learning. *Communication Monographs*, *71*, 184-207. doi:10.1080/036452042000228054

Wodzicki, K., Schwämmlein, E., & Moskaliuk, J. (2012). "Actually, I wanted to learn": Study-related knowledge exchange on social networking sites. *Internet & Higher Education, 15*, 9-14. doi:10.1016/j.iheduc.2011.05.008

Zhang, Q. (2007). Teacher misbehaviors as learning demotivators in college classrooms: A cross-cultural investigation in China, Germany, Japan, and the United States. *Communication Education*, *56*, 209-227. doi:10.1080/03634520601110104

Zimmerman, J. (2011, June 4). When teachers talk out of school. *New York Times.* Retrieved from http://www.nytimes.com/2011/06/04/opinion/04zimmerman.html

Zumeta, W. (2011). The great recession: Implications for higher education. *The NEA 2010 Almanac of Higher Education*. Retrieved from http://www.nea.org/assets/img/PubAlmanac/Zumeta_2010.pdf

Zweifler, S. (2013, February 26). Former admissions officer mocked applicant essays; Nadirah Farah Foley's case raises questions about social media in admissions. *The Daily Pennsylvanian*. Retrieved from http://www.thedp.com/article/2013/02/former-admissions-officer-mocked-applicants-on-facebook