

The Credible Hulk: Smashing Student Expectations through Instructor Credibility

James Gilbreath
Research and Instruction Librarian
University of Alabama

Katherine Eastman
Library Director
Brown Mackie College at Birmingham

University Libraries
The University of Alabama
Box 870266
Tuscaloosa, AL 35487

Keywords: instructor credibility, face threat mitigation, nonverbal immediacy, knowledge gaps, prurient interest, student expectations, student engagement, student-teacher relationships,

THE CREDIBLE HULK: SMASHING STUDENT EXPECTATIONS THROUGH INSTRUCTOR CREDIBILITY

JAMES N. GILBREATH AND KATHERINE S. EASTMAN

INTRODUCTION

Every time we go before a new class to engage students in learning, walls of apathy, disinterest, and boredom loom before us as ephemeral obstructions to completing the task of instruction. Alas, we cannot simply channel our frustration into a building-smashing rage to pulverize these walls. What if we could use a more nuanced tool, such as instructor credibility, to obviate these obstructions? Literature outside of library science has been used to bring great change within our discipline, such as the use of an idea originating in Economics—threshold concepts—to construct the ACRL Framework. Another idea from outside our literature, instructor credibility, has been used to great effect in other disciplines but remains unexamined in our literature. Here we will explore the literature of these other disciplines to discuss the utility and impact of instructor credibility and will include suggestions for integrating this smashing concept into your instruction.

EXPECTATION DISCONFIRMATION THEORY

Expectation disconfirmation theory, drawn from the business literature, highlights the importance of exceeding student expectations (Schrodt & Turman, 2005; Serenko, Dettlor, Julien, & Booker, 2012). Moreover, significant—albeit potentially problematic—meta-analytic research into the efficacy of over 138 distinct instructional methods places student expectations as one of the most effective interventions (Hattie, 2012). As student expectations of instructors vary by discipline it seems prudent to identify and define student expectations of library instructors and library instruction (Obermiller, Ruppert, & Atwood, 2012); however, definitions and discussions of student expectation in the existing disciplinary literature relies largely on inference, anecdote and opinion (Bawden & Vilar, 2006). Our attempts to locate and define concrete student expectations of library instructors required synthesis from multiple disparate and often unrelated sources, and so we must rely on tertiary definitions of this construct until we conduct further primary research on expectations specific to information literacy instruction.

Student Expectations of Instructors

In general, college students expect their instructors to be organized, well-spoken and knowledgeable regarding the seminal works, theories and elements of their discipline (Myers, Brann, & Members of COMM 600, 2009; Obermiller et al., 2012; Sebastian & Bristow, 2008). For instructors of record, there is a baseline assumption of credibility from their employment at a college or university. This creates a situation in which credibility is an attribute that is unstated and given freely prior to contact, and which can be either reinforced or lost by instructor actions and misbehavior (Myers, 2004; Sendlak & Pearson, 2008; Thweatt & McCroskey, 1998). The foundational work on student perceptions of librarians as instructors reinforces the idea that the majority of students do not see librarians as teachers (Nimon, 2002; Polger & Okamoto, 2010). Among the subset of students who do view librarians as instructional faculty, students identified that teaching occurs outside of designated instruction sessions during one-on-one assistance with the research process or at the reference desk (*ibid*). This view is substantiated within the disciplinary literature of information literacy and library instruction (Budd, 1982; Elmborg, 2002). The recognition that informed learning often occurs as part of the reference interaction also reflects the need for librarians to engage in tactics to enhance credibility outside of targeted instruction sessions.

INSTRUCTOR CREDIBILITY

As a construct, instructor credibility has been extensively studied over the course of the past three decades in the field of communication, while education research has identified it as one of several key factors which affect cognitive learning outcomes (Finn et al., 2009; Hattie, 2012). Deriving from Aristotelian definitions of source credibility, the defining characteristics of instructor credibility have evolved over time with the three-part model taking precedence through high statistical correlation and demonstrably greater effect size (Finn et al., 2009). The three elements that define instructor credibility are competence, character and caring. Competence focuses on perceived subject matter expertise and knowledge (McCroskey & Young, 1981), whereas character focuses on the moral rectitude—otherwise outlined as goodness, honesty or trustworthiness—of an instructor (Frymier & Thompson, 1992; McCroskey & Teven, 1999), while perceived caring is the degree to which students feel an instructor is concerned for their well-being (Teven & McCroskey, 1997).

Table 1: Average Effects Of Three-Item Assessment of Credibility

Instructor credibility has been linked to a broad variety of benefits for both instructor and student: namely, students communicate more outside of class (Myers, 2004), report greater learning gains (Frymier & Thompson, 1992; Russ, Simonds, & Hunt, 2002; Zhang, 2009), evaluate their instructors highly (Johnson, Narayanan, & Sawaya, 2013; Obermiller et al., 2012; Teven & McCroskey, 1997) and feel more understood by their instructors (Schrodt et al., 2009). Students who rate their instructors as more credible express higher interest in lectures and subject matter and higher levels of engagement in course material (Imlawi, Gregg, & Karimi, 2015; Johnson et al., 2013).

First Impressions and Inferences of Credibility

Humans are surprisingly proficient at forming valid, albeit non-predictive, first impressions based on scant information (Ambady & Rosenthal, 1993; Carney, Colvin, & Hall, 2007). With as little as 39 milliseconds of exposure to neutral images of faces, a statistically significant number of people can correctly attribute a pre-assessed level of threat (Bar, Neta, & Linz, 2006). It takes a little as a tenth of a second for people to assign attributes like trustworthiness, likeability and competence based on facial characteristics and other non-verbal cues: in half a second their initial mostly-positive view will become more negative, an effect which only increases as more time is given (Willis & Todorov, 2006). Nonverbal immediacy cues—relaxed or open body posture, smiling, nodding, non-confrontational eye contact and body movement—allow students to form accurate and consistent impressions from as little as a six second silent video clip (Ambady & Rosenthal, 1993; Ambady, 2010; Chan, Rogers, Parisotto, & Biesanz, 2011). Further study has shown that in a thin-slice of instructor behavior, as little as 24 seconds in length, students will form impressions of teacher effectiveness that mirror perceptions after an entire semester of exposure (Wiedmann, Reineking, Sponsor, & Vanvoorhis, 2006).

Student expectations of instructor professional appearance vary by discipline, with a stronger expectation for formal business attire and a well-manicured appearance as indicative of competence among business students toward communication and marketing professors than toward accounting or physics instructors (Obermiller et al., 2012). Student perceptions of instructor credibility based on style of dress indicate that it increases judgments of competence, intelligence and professionalism, but also serves to decrease likeability and approachability (Sebastian & Bristow, 2008). Additionally, while students perceive female instructors who wear business formal attire as more competent, intelligent and knowledgeable, their likeability scores when wearing informal attire showed greater gains than those experienced by their male colleagues (Carr, Davues, & Lavin, 2009; Lightstone, Francis, & Kocum, 2011; Sebastian & Bristow, 2008). Therefore, to increase perceptions of competence, dress more formally, but doing so is likely to reduce perceptions of instructor immediacy and caring, which are elements of credibility that may show higher gains in student learning outcomes (Finn et al., 2009).

Much of the literature on the impact of instructor appearance on perceptions of competence and credibility sounds like the meme derived from an SNL skit: be attractive, don't be unattractive (Lorenzo, Biesanz, & Human, 2010; Riniolo, Johnson, Sherman, & Misso, 2006). To make matters worse, in the case of instructor credibility attractiveness is paired with constructs like whiteness (Hendrix, 1997; Perry, Moore, Edwards, Acosta, & Frey, 2008), heterosexuality (Russ et al., 2002), maleness (Nadler & Nadler, 2001; Pope & Chapa, 2008; Schrodt & Turman, 2005), age (Jennings & Greenberg, 2009; Sendlak & Pearson, 2008) and lack of foreign accent (McLean, 2007).

Don't despair. All is not lost. Even if you aren't a ruggedly handsome, white, heterosexual cis-male librarian with silver temples and patches on your tweed blazer, there's still hope. Utilizing methods to increase the three facets of instructor credibility can mitigate any initial appearance-based inferences and impressions (Finn et al., 2009).

COMPETENCE

Inferred characteristics of instructors who are perceived as competent include descriptions such as intelligent or bright, knowledgeable, organized and well-spoken (Myers & Bryant, 2004). As information literacy instruction librarians, we enter the stage with a negative perception of our expertise and role as legitimate teaching faculty (Polger & Okamoto, 2010). Rather than focus on techniques for preparing for instruction sessions, we will instead focus on methods suggested by our literature review to increase student perceptions of competence at the point of teaching. We have divided these suggested methods into three basic categories: appearance, curiosity and elocution

Appearance

- Wear a suit to increase perceptions of competence, but at the risk of seeming less approachable, likeable or caring – especially if you present as female (Carr et al., 2009; Lightstone et al., 2011; Sebastian & Bristow, 2008)
- Have a relaxed body position and pleasant facial expression, make eye contact and use calm gestures (Witt & Kerksen-Griep, 2011).

Curiosity and Informal Validity Testing

- Begin with a question to solve, an open-ended mystery or a topic of prurient interest, utilize information gaps to drive student engagement in you and your material (Heath & Heath, 2007; Loewenstein, 1994).
- Allow students to verify claims for themselves through testable credentials: for example, let students vote on whether tornadoes or tuberculosis kill more people each year before discussing availability bias (Heath & Heath, 2007).

Elocution

- Speak at a slightly faster rate of speed – between 140 and 160 words per minute – but not too quickly (Carli, LaFleur, & Loeber, 1995; Fircă, 1969; Wiedmann et al., 2006).
- Avoid verbal hesitations, interjections or check-in statements like: right, okay, um, err, ah, like, whatever, so to speak, that's very interesting (Fircă, 1969).
- Speak slowly enough that you avoid mispronunciations and stumbling over words, or play missteps off with appropriate humor to decrease the potential loss of credibility (Myers & Bryant, 2004; Wanzer, Frymier, Wojtaszczyk, & Smith, 2006)

CHARACTER

Characteristics of character include instructor immediacy, flexibility, promotion of understanding, and trustworthiness (Myers & Bryant, 2004). Flexibility and promotion of understanding are primarily relevant to student engagement with faculty of record, so it appears that there is some limit to how much an instruction librarian can provide influence in this manner; however, librarians can focus on behaviors related to engagement and follow-through (ibid.).

Engaging

- Make it obvious that you care what students have to say in a fair and equitable way (Myers et al., 2009; Myers & Bryant, 2004; Witt & Kerksen-Griep, 2011)
- Follow-through: if you offer to send out an email, provide a paragraph worksheet or be available for office hours—do so (Myers & Bryant, 2004).
- Stay late for extra individualized attention if anyone requires it, or schedule a time for the student to work with you (Myers & Bryant, 2004).

Feedback

- Give face-adroit feedback utilizing smiles, walking toward the student, encouraging vocal expressiveness and non-threatening eye contact (Witt & Kerksen-Griep, 2011).

CARING

Of the three major facets of instructor credibility, caring has the greatest demonstrated impact on student learning outcomes (Finn et al., 2009). Caring as a concept encompasses several constructs examined in the literature, including rapport, empathy, and student-teacher relationships (Kerksen-Griep & Witt, 2012; Lincoln, 2004; Owens, 2013). It is important to note, however, that improved student learning and experiential outcomes derived from instructor caring can only be gained when students first perceive their instructor to be competent and knowledgeable (Semlak & Pearson, 2008; Thweatt & McCroskey, 1998). Thus, while it is critical to develop methods for conveying empathy and connection to and with students, it is equally

important to preserve impressions of competence and aptitude as it is to have a winning and positive attitude. Methods to increase perceptions of credibility through demonstrations of caring include non-verbal immediacy, face-threat mitigation in feedback, and relevant self-disclosure.

Non-verbal Immediacy

- Move away from objects like lecterns, podiums or desks as you speak with students, moving toward students in a non-threatening way to decrease distance (Kerssen-Griep & Witt, 2012; Miller, Katt, Brown, & Sivo, 2014; Schrodt et al., 2009).
- Maintain a relaxed body position, feel comfortable and not stiff at the front of the class, smile, make eye-contact, move around the room as you teach and avoid closed-off body language (Miller et al., 2014; Witt & Kerssen-Griep, 2011)
- Imagine that you genuinely like every single student in your class, and that you would love to go out to lunch or for a drink after work with each and every one, not because you do or should, but because your body language will convey that emotion unconsciously (Witt & Kerssen-Griep, 2011).

Face-Threat Mitigation

- Be aware of situations that require students to put themselves out on a metaphorical limb, such as answering open-ended questions or responding to questions that you have posed to the class. If a student answers in an incorrect manner, praise them for an element that is correct, and use phrases like “you might consider” or “if we go further along that thought” to direct the student toward the correct answer while not implying they are wrong (Witt & Kerssen-Griep, 2011).

Self-Disclosure

- Make statements like “I always hated it when my instructors did ‘x’, so I try not to with you guys” or similar methods of creating a shared identity and showing concern for the student’s time and immediate needs (Klinger-Vartabedian & O’Flaherty, 1989; Myers et al., 2009).
- Avoid negative self-disclosures, such as personal failures and character weaknesses, which can negatively impact credibility and promote student incivility (Miller, Katt, Brown, & Sivo, 2014; Myers et al., 2009).
- For best effect, time disclosure so that it comes at infrequent intervals, used sparingly to highlight a particular concept with concrete examples from your professional or collegiate life as a student or faculty member (Myers et al., 2009).

As librarians, we provide instruction both in formal didactic settings as well as at the reference desk or point-of-need through informed learning (Budd, 1982; Elmborg, 2002; Polger & Okamoto, 2010). Interestingly, caring as a construct also influences the perceived competence and reported satisfaction of patrons during reference transactions, regardless of the positive or negative outcome of the transaction (Harris & Michell, 1986; Quinn, 1994). Given the increases that demonstrating empathy, concern and caring for students has on learning outcomes and overall satisfaction, it seems crucial for librarians to cultivate caring as a high impact tool-set.

FURTHER RESEARCH

In conducting research around instructor credibility, we identified several areas where further research can be conducted. The findings of Polger and Okamoto’s 2010 study need further examination by additional studies exploring students’ prior expectations of librarians as instructors. Furthermore, no research has been conducted on students’ prior expectations of information literacy instruction. The concept of instructor credibility is new to the field of library and information instruction, so foundational studies need to be conducted in this area.

REFERENCES

- Ambady, N. (2010). The Perils of Pondering: Intuition and Thin Slice Judgments. *Psychological Inquiry*, 21, 271–278. <http://doi.org/10.1080/1047840X.2010.524882>
- Ambady, N., & Rosenthal, R. (1993). Half a minute: Predicting teacher evaluations from thin slices of nonverbal behavior and physical attractiveness. *Journal of Personality and Social Psychology*, 64(3), 431–441. <http://doi.org/10.1037/0022-3514.64.3.431>
- Bar, M., Neta, M., & Linz, H. (2006). Very first impressions. *Emotion (Washington, D.C.)*, 6(2), 269–278. <http://doi.org/10.1037/1528-3542.6.2.269>

- Bawden, D., & Vilar, P. (2006). Digital libraries: to meet or manage user expectations. *Aslib Proceedings*, 58(4), 346–354. <http://doi.org/10.1108/00012530610687713>
- Budd, J. (1982). Librarians are teachers. *Library Journal*. Retrieved from <http://scholar.google.com/scholar?hl=en&btnG=Search&q=intitle:librarians+are+teachers#8>
- Carli, L. L., LaFleur, S., & Loeber, C. (1995). Nonverbal behavior, gender, and influence. *Journal of Personality and Social ...*, 68(6), 1030–1041. <http://doi.org/10.1037/0022-3514.68.6.1030>
- Carney, D. R., Colvin, C. R., & Hall, J. A. (2007). A thin slice perspective on the accuracy of first impressions. *Journal of Research in Personality*, 41(5), 1054–1072. <http://doi.org/10.1016/j.jrp.2007.01.004>
- Carr, D., Davues, Th., & Lavin, A. (2009). The effect of business faculty attire on student perceptions of the quality of instruction and program quality. *College Student Journal*, 43(1), 45.
- Chan, M., Rogers, K. H., Parisotto, K. L., & Biesanz, J. C. (2011). Forming first impressions: The role of gender and normative accuracy in personality perception. *Journal of Research in Personality*, 45(1), 117–120. <http://doi.org/10.1016/j.jrp.2010.11.001>
- Elmborg, J. K. (2002). Teaching at the desk: Toward a reference pedagogy. *Libraries and the Academy*, 2(3), 455–464.
- Finn, A. N., Schrod, P., Witt, P. L., Elledge, N., Jernberg, K. a., & Larson, L. M. (2009). A Meta-Analytical Review of Teacher Credibility and its Associations with Teacher Behaviors and Student Outcomes. *Communication Education*, 58(4), 516–537. <http://doi.org/10.1080/03634520903131154>
- Firică, M. C. (1969). THE COMPONENTS OF NONVERBAL COMMUNICATION. *Applied Journal of Economic Sciences*, 370–374.
- Frymier, A. B., & Thompson, C. A. (1992). Perceived Teacher Affinity-Seeking in Relation to Perceived Teacher Credibility. *Communication Education*, 41(October).
- Harris, R. M., & Michell, B. G. (1986). The social context of reference work: assessing the effects of gender and communication skill on observers' judgement of competence. *Library and Information Science Research*, 8(1). Retrieved from <http://search.proquest.com/docview/57260855?accountid=14656>
- Hattie, J. (2012). *Visible learning for teachers: Maximizing impact on learning*. New York: NY: Routledge.
- Heath, C., & Heath, D. (2007). *Made to stick: Why some ideas survive and others die*. New York: NY: Random House.
- Hendrix, K. G. (1997). Student Perceptions of Verbal Nonverbal Cues Leading to Images of Black and White Professor Credibility. *Howard Journal of Communications*, 8(3), 251–273. Retrieved from <http://offcampus.lib.washington.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=ufh&AN=16280682&site=ehost-live>
- Imlawi, J., Gregg, D., & Karimi, J. (2015). Student engagement in course-based social networks: The impact of instructor credibility and use of communication. *Computers and Education*, 88, 84–96. <http://doi.org/10.1016/j.compedu.2015.04.015>
- Jennings, P. a., & Greenberg, M. T. (2009). The Prosocial Classroom: Teacher Social and Emotional Competence in Relation to Student and Classroom Outcomes. *Review of Educational Research*, 79(1), 491–525. <http://doi.org/10.3102/0034654308325693>
- Johnson, M. D., Narayanan, A., & Sawaya, W. J. (2013). Effects of course and instructor characteristics on student evaluation of teaching across a college of engineering. *Journal of Engineering Education*, 102(2), 289–318. <http://doi.org/10.1002/jee.20013>
- Kerssen-Griep, J., & Witt, P. L. (2012). Instructional Feedback II: How Do Instructor Immediacy Cues and Facework Tactics Interact to Predict Student Motivation and Fairness Perceptions? *Communication Studies*, 63(4), 498–517. <http://doi.org/10.1080/10510974.2011.632660>
- Lightstone, K., Francis, R., & Kocum, L. (2011). University Faculty Style of Dress and Students' Perception of Instructor Credibility.

- Lincoln, D. J. (2004). Drama in the Classroom: How and Why Marketing Educators Can Use Nonverbal Communication and Enthusiasm To Build Student Rapport. *Research Journal of the Academy of Marketing Science Journal of Marketing Education Industrial Marketing Management Journal of Advertising, Marketing Education Review, and the Journal of Business Research*, 18(3).
- Loewenstein, G. (1994). The psychology of curiosity: A review and reinterpretation. *Psychological Bulletin*, 116(1), 75–98. <http://doi.org/10.1037/0033-2909.116.1.75>
- Lorenzo, G. L., Biesanz, J. C., & Human, L. J. (2010). What Is Beautiful Is Good and More Accurately Understood: Physical Attractiveness and Accuracy in First Impressions of Personality. *Psychological Science*, 21(12), 1777–1782. <http://doi.org/10.1177/0956797610388048>
- McCroskey, J. C., & Teven, J. (1999). Goodwill: A reexamination of the construct and its measurement. *Communication Monographs*. <http://doi.org/10.1080/03637759909376464>
- McCroskey, J. C., & Young, T. J. (1981). Ethos and credibility: The construct and its measurement after three decades. *Central States Speech Journal*, 32(1), 24–34. <http://doi.org/10.1080/10510978109368075>
- McLean, C. A. (2007). Establishing credibility in the multicultural classroom: When the instructor speaks with an accent. *New Directions for Teaching and Learning*, 2007(110), 15–24. <http://doi.org/10.1002/tl.270>
- Miller, A. N., Katt, J. a, Brown, T., & Sivo, S. a. (2014). The Relationship of Instructor Self-Disclosure, Nonverbal Immediacy, and Credibility to Student Incivility in the College Classroom. *Communication Education*, 63(1), 1–16. <http://doi.org/10.1080/03634523.2013.835054>
- Myers, S. A. (2004). The Relationship Between Perceived Instructor Credibility and College Student In-class and Out-of-class Communication. *Communication Reports*, 17(2), 129–137. <http://doi.org/10.1080/08934210409389382>
- Myers, S. A., Brann, M., & Members of COMM 600. (2009). College Students' Perceptions of How Instructors Establish and Enhance Credibility Through Self-Disclosure. *Qualitative Research Reports in Communication*, 10(1), 37–41. <http://doi.org/10.1080/17459430902751808>
- Myers, S. A., & Bryant, L. E. (2004). College Students' Perceptions of How Instructors Convey Credibility. *Qualitative Research Reports in Communication*, 5(4), 22–27. <http://doi.org/Article>
- Nadler, M. K., & Nadler, L. B. (2001). The Roles of Sex, Empathy, and Credibility in Out-of-Class Communication Between Faculty and Students. *Women's Studies in Communication*, 24(2), 241–261. <http://doi.org/10.1080/07491409.2001.10162436>
- Nimon, M. (2002). Developing lifelong learners: Controversy and the educative role of the academic librarian. *Australian Academic & Research Libraries*, 33(1), 14–24. <http://doi.org/10.1080/00048623.2002.10755176>
- Obermiller, C., Ruppert, B., & Atwood, A. (2012). Instructor Credibility Across Disciplines: Identifying Students' Differentiated Expectations of Instructor Behaviors. *Business Communication Quarterly*, 75(2), 153–165. <http://doi.org/10.1177/1080569911434826>
- Owens, T. M. (2013). Communication, Face Saving, and Anxiety at an Academic Library's Virtual Reference Service. *Internet Reference Services Quarterly*, 18(2), 139–168. <http://doi.org/10.1080/10875301.2013.809043>
- Perry, G., Moore, H., Edwards, C., Acosta, K., & Frey, C. (2008). Maintaining Credibility and Authority as an Instructor of Color in Diversity-Education Classrooms: A Qualitative Inquiry. *The Journal of Higher Education*, 80(1), 80–105. <http://doi.org/10.1353/jhe.0.0030>
- Polger, M. A., & Okamoto, K. (2010). “Can't anyone be a teacher anyway?": Student Perceptions of Academic Librarians as Teachers. *Library Philosophy and Practice*, 1–16.
- Pope, M., & Chapa, J. (2008). The Gender Connection: Instructor Credibility and Gender in the Classroom. In *Conference Papers -*

National Communication Association (pp. 1–19).

- Quinn, B. (1994). Beyond efficacy: the exemplar librarian as a new approach to reference evaluation. *Illinois Libraries*, 76(3), 163–173. Retrieved from <http://search.proquest.com/docview/57327835?accountid=14656>
- Riniolo, T. C., Johnson, K. C., Sherman, T. R., & Misso, J. A. (2006). Hot or not: do professors perceived as physically attractive receive higher student evaluations? *J Gen Psychol*, 133(1), 19–35. <http://doi.org/10.3200/genp.133.1.19-35>
- Russ, T. L., Simonds, C. J., & Hunt, S. K. (2002). Coming Out in the Classroom...An Occupational Hazard?: The Influence of Sexual Orientation on Teacher Credibility and Perceived Student Learning. *Communication Education*, 51(3), 311–324.
- Schrodt, P., & Turman, P. D. (2005). The Impact of Instructional Technology Use, Course Design, and Sex Differences on Students' Initial Perceptions of Instructor Credibility. *Communication Quarterly*, 53(2), 177–196. <http://doi.org/10.1080/01463370500090399>
- Schrodt, P., Witt, P. L., Turman, P. D., Myers, S. a., Barton, M. H., & Jernberg, K. a. (2009). Instructor Credibility as a Mediator of Instructors' Prosocial Communication Behaviors and Students' Learning Outcomes. *Communication Education*, 58(3), 350–371. <http://doi.org/10.1080/03634520902926851>
- Sebastian, R. J., & Bristow, D. (2008). Formal or Informal? The Impact of Style of Dress and Forms of Address on Business Students' Perceptions of Professors. *Journal of Education for Business*, 83(4), 196–201. <http://doi.org/10.3200/JOEB.83.4.196-201>
- Semlak, J. L., & Pearson, J. C. (2008). Through the Years: An Examination of Instructor Age and Misbehavior on Perceived Teacher Credibility. *Communication Research Reports*, 25(1), 76–85. <http://doi.org/10.1080/08824090701831867>
- Serenko, A., Detlor, B., Julien, H., & Booker, L. (2012). A Model of Student Learning Outcomes of Information Literacy Instruction in a Business School. *Journal of the American Society for Informaiton Science and Technology*, 63(4), 671–686. <http://doi.org/10.1002/asi>
- Teven, J. J., & McCroskey, J. C. (1997). The relationship of perceived teacher caring with student learning and teacher evaluation. *Communication Education*, 46(1), 1–9. <http://doi.org/10.1080/03634529709379069>
- Thweatt, K. S., & McCroskey, J. C. (1998). Impact of Teacher Immediacy and Misbehaviors on Teacher Credibility. *Communication Education*, 47(4).
- Wanzer, M., Frymier, A., Wojtaszczyk, A. M., & Smith, T. (2006). Appropriate and Inappropriate Uses of Humor by Teachers. *Communication Education*, 55(2), 178–196. <http://doi.org/10.1080/03634520600566132>
- Wiedmann, A., Reineking, J., Sponsor, F., & Vanvoorhis, B. A. (2006). In the Blink of an Eye : Estimates of Teacher Effectiveness from a 24- second Thin-Slice of Behavior. *Methods*, (1993), 1–4.
- Willis, J., & Todorov, A. (2006). First impressions: Making up your mind after a 100-ms exposure to a face. *Psychological Science*, 17(7), 592–598. <http://doi.org/10.1111/j.1467-9280.2006.01750.x>
- Witt, P. L., & Kerssen-Griep, J. (2011). Instructional Feedback I: The Interaction of Facework and Immediacy on Students' Perceptions of Instructor Credibility. *Communication Education*, 60(1), 75–94. <http://doi.org/10.1080/03634523.2010.507820>
- Zhang, Q. (2009). Perceived Teacher Credibility and Student Learning: Development of a Multicultural Model. *Western Journal of Communication*, 73(3), 326–347. <http://doi.org/10.1080/10570310903082073>

Images for Tables and Figures (Editor will put in body of the text later)

Table 1

Table 1: Average Effects Of Three-Item Assessment of Credibility

Dimension of credibility		Teacher behaviors	Student outcomes
Competence	Average r	0.477	0.503
	Variance	0.027	0.048
	k	33	12
	N	10,236	3,460
	Homogeneity of variance	$\chi^2(32) = 253.88$ $p < .05$	$\chi^2(11) = 135.66$ $p < .05$
Character	Average r	0.485	0.539
	Variance	0.035	0.073
	k	33	13
	N	10,195	3,755
	Homogeneity of variance	$\chi^2(32) = 274.75$ $p < .05$	$\chi^2(12) = 216.51$ $p < .05$
Caring	Average r	0.542	0.622
	Variance	0.034	0.033
	k	17	9
	N	5,949	2,950
	Homogeneity of variance	$\chi^2(16) = 169.09$ $p < .05$	$\chi^2(8) = 87.26$ $p < .05$

Descriptive note. Adapted from "A Meta-Analytical Review of Teacher Credibility and its Associations with Teacher Behaviors and Student Outcomes" by A.N. Finn, P. Schrodt, P. L. Witt, N. Elledge, K. A. Jernberg and L.M. Larson, 2009. *Communication Education*, 58, p. 528. ©2009 by Taylor and Francis, LTD. Adapted with permission.