King, D. (2016). Millennials, faith and philanthropy: Who will be transformed? *Bridge/Work, 1*(1), 2.

Ladson-Billings, G. (1995). But that's just good teaching! The case for culturally relevant pedagogy. *Theory into Practice, 34*(3), 159–165.

Lapinski, S., Gravel, J., & Rose, D. (2012). Tools for practice: The universal design for learning guidelines. In T. Hall, A. Meyer, & D. Rose (Eds.), *Universal design for learning in the classroom: Practical applications* (pp. 9–24). New York, NY: Guilford.

Levy, J., Rodriguez, R., & Wubbels, T. (1992, April). *Instructional effectiveness, communication style and teacher development.* Paper presented at the meeting of the American Educational Research Association, San Francisco, CA.

McNeill, R. (2011). Adapting teaching to the millennial generation: A case study of a blended/hybrid course. Retrieved from http://scholarworks.umass.edu/refereed/ICHRIE_2011/Thursday/3

Nardi, P. (2006). *Doing survey research: A guide to quantitative methods.* Boston, MA: Pearson.

Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3rd ed.). Thousand Oaks, CA: Sage.

Pinder-Grover, T., & Growscurth, C. (2009). Principles for teaching the millennial generation: Innovative practices of U-M faculty. Retrieved from http://www.crlt.umich.edu/op26

Price, C. (2009). Why don't my students think I'm groovy? *The Teaching Professor, 23*(1), 7–8.

Rawnsley, D. G. (1997). *Associations between classroom learning environments, teacher interpersonal behaviour and student outcomes in secondary mathematics classrooms* (Unpublished doctoral dissertation). Curtin University of Technology, Perth, Australia.

Roach, K., Richmond, V., & Mottet, T. (2006). Teachers' influence messages. In T. P. Mottet, V. P. Richmond & J. C. McCroskey (Eds.), *Handbook of instructional communication: Rhetorical and relational perspectives* (pp. 117–139). Boston, MA: Allyn & Bacon.

Seemiller, C. & Grace, M. (2016). *Generation Z goes to college.* San Francisco, CA: John Wiley & Sons.

Sharer, E., Jones, C. J., Morris, A., Harpel, A., Miesle, A., & Dixon, J. (2016). Recruiting and maintaining millennial talent for the JM Smucker company. Retrieved from http://ideaexchange.uakron.edu/cgi/viewcontent.cgi?article=1383&context=honors_research_projects

Sikes, P. (2010). The ethics of writing life histories and narratives in educational research. In A. Bathmaker & P. Hartnett (Eds.), *Exploring learning, identity and power through life history and narrative research* (pp. 11–24). New York, NY: Routledge.

Sorcinelli, M. D., & Jung, Y. (2007). From mentor to mentoring networks: Mentoring in the new academy. *Change, 39*(6), 58–61.

Stewart, J., Oliver, E., Cravens, K., & Oishi, S. (2017). Managing millennials: Embracing generational differences. *Business Horizons, 60*(1), 45–54.

Stewart, K. (2009). Lessons from teaching millennials. *College Teaching, 57*(2), 111–118.

Sweet, J., Sweet, L., & Fedel, F. (2013). Millennial teachers blending technologies for the millennium student. *Chronicle of Kinesiology & Physical Education in Higher Education, 24*(2), 14–20.

Turner, A., Prihoda, T., English, D., Chismark, A., & Jacks, M. E. (2016). Millennial dental hygiene students' learning preferences compared to non-millennial faculty members' teaching methods: A national study. *Journal of Dental Education, 80*(9), 1082–1090.

van der Want, A., den Brok, P., Beijaard, D., Brekelmans, M., Claessens, L., Pennings,

C., & Helena, J. M. (2015). Teachers' interpersonal role identity. *Scandinavian Journal of Educational Research, 59*(4), 424–442.

Waddell, J., Martin, J., Schwind, J., & Lapum, J. (2016). A faculty-based mentorship circle: Positioning new faculty for success. *Canadian Journal of Higher Education, 46*(4), 60–75.

Webster, L., & Mertova, P. (2007). *Using narrative inquiry as a research method: An introduction to using critical event narrative analysis in research on learning and teaching.* New York, NY: Routledge.

Wubbels, T., Créton, H. A., & Hooymayers, H. P. (1985, March). *Discipline problems of beginning teachers: Interactional teacher behaviour mapped out.* Paper presented at the meeting of the American Education Research Association, Chicago, IL.

Zhu, C. (2013). Students' and teachers' thinking styles and preferred teacher behavior. *Journal of Educational Research, 106*, 399–407.

ESSAYS

Dialogic Pedagogy in the College Classroom: Overcoming Students' Negative Perceptions of the Talkaholic Teacher
— Robert Sidelinger

Robert J. Sidelinger (Ed.D., West Virginia University, 2008) is an Associate Professor in the Department of Communication and Journalism at Oakland University. Inquiries concerning this manuscript should be made to the author, sideling@oakland.edu.

Abstract

From a dialogic pedagogical perspective, this study examined the associations between instructors' compulsive communication and student communication satisfaction and engagement. Results revealed students (N = 361) who perceived their instructors as compulsive communicators also reported lower levels of student communication satisfaction and engagement. Next, using ARCS (attention, relevance, confidence, and satisfaction) model of motivation, we tested whether content relevance mediates the negative associations between instructors' compulsive communication and student communication satisfaction and engagement. Results showed content relevance partially mediated the negative relationship between compulsive communication and student communication satisfaction, and fully mediated the negative associations between compulsive communication and engagement outcomes.

Keywords

Compulsive Communication, Content Relevance, Student Communication Satisfaction, Student Engagement

The National Survey on Student Engagement (NSSE, 2007) stressed that instructors must become involved in high impact activities that center on purposeful tasks in order to get students engaged in higher education. Similarly, Weaver and Qi (2005) stated that students become more academically successful when they are actively engaged in the learning process. Essentially, this approach demands that students frequently interact with faculty and peers through continued dialogue and meaningful communication. Yet, the traditional college classroom positions instructors to talk more frequently than their students (McBride & Wahl, 2005). Consequently, this lecture format frames the classroom as a graveyard – rows and rows of silent student bodies (Butin, 2010). In this lecture format, Bok (2006) argued that instructors dominate class time with too much talk and, in turn, silence students. Hence, the compulsively communicating instructor may undermine the interactive and learner-centered classroom and hinder student educational outcomes.

The shift from instructor-centered to student-centered approaches gave rise to an array of possibilities for fostering dynamic communication processes (Huba & Freed, 2000), engendering democratic classroom spaces (Dallimore, Hertenstein, & Platt, 2008), developing new ways of engaging students (Strange & Banning, 2001), recognizing the instructor-student relationship as interpersonal (Frymier & Houser, 2000), and, for some instructors, theorizing their method of teaching as

friendship (Rawlins, 2000). This is not to say that effective instructors no longer utilize lecture in their instruction or that unless an instructor has fully embraced one of the ideas mentioned here, they are not student-centered. Instead, as instructors continue to engage tenets of, or commit themselves to, pedagogies of student-centered instruction, the landscape and relationships of the classroom will remain in flux.

This study explored the possibility that instructors who talk too much may negatively affect student communication satisfaction and student engagement. Yet, it is also recognized that the type of instructor talk may mediate negative associations between instructors' compulsive communication and student communication satisfaction and engagement. Therefore, using the ARCS (attention, relevance, confidence, and satisfaction) model of motivation, the aim was to determine if instructor content relevance mediates the associations between instructor compulsive communication and student communication satisfaction and student engagement.

Compulsive Communication

McCroskey and Richmond (1993) identified compulsive communicators as those individuals who consistently over communicate and essentially take talkativeness too far. Existing research on compulsive communication in the classroom focuses on students talking too much (e.g., Fortney, Johnson, & Long, 2001). For example, Fortney et al. (2001) found that students' compulsive communication in the classroom hinders their fellow classmates' communication and negatively affects the classroom climate. Likewise, McPherson and Liang (2007) framed compulsive communication in the classroom as a student misbehavior that interferes with others' active learning. McPherson and Liang noted that instructors and students are aware of classroom talkaholics and reported that student reactions include eye rolling and sighing. Moreover, McCroskey and Richmond (1995) found talkaholic students still talk even when it gets them into trouble. Indeed, McPherson and Liang found talkaholic students disrupt class, distract the in-

structor and classmates, and erode learning. From the standpoint that students misbehave and talk too much in the classroom, research has shown the potential harm compulsive communication has on the classroom experience. Yet, little is known about instructors who are perceived by students as compulsively communicating in the classroom.

Although students are more likely to learn and retain information when they have the opportunity to talk in class (Weaver & Qi, 2005), instructors are positioned to talk more because of their instructional and often authoritative role. However, an instructor who talks a lot may limit the space in which students can express their voice. Thus, instructors' quantity of talk may impede upon the goals of dialogic pedagogy and negatively impact educational outcomes. Therefore, previous literature is extended by exploring student perceptions of instructor compulsive communication to determine if it negatively affects student communication satisfaction and engagement.

In general, individuals may negatively evaluate talkaholics who dominate interactions (McCroskey & Richmond, 1993). It is likely that instructor compulsive communication would be perceived similarly to students who compulsively communicate. For example, Sidelinger and Bolen (2016) found that students who reported their instructors as compulsively communicating in class also perceived them as less credible in the classroom. Recent research indicated that the current population of college students, the Millennials, desire interactive classes that include in-class discussions and group work (Roehling, Vander Kooi, Dykema, Quisenberry, & Vandlen, 2011). Millennial students are easily bored with lecture-based classes, and in turn, prefer participative-based learning (Allred & Swenson, 2006). Garko, Kough, Pignata, Kimmel, and Eison (1994) suggested that effective instruction includes an instructor's willingness to listen to her/his students. Therefore, the compulsively communicating instructor may deter student communication, negatively affect climate, elicit negative responses from students, and interfere with student learning. Given the potential for instructor com-

munication to positively affect student communication satisfaction and student engagement (Goodboy, Martin, & Bolkan, 2009), it is also possible that particular communication behaviors would negatively affect student communication satisfaction and engagement.

Student Communication Satisfaction

The instructor-student relationship is an interpersonal one that develops over time as a direct result of effective and appropriate relational communication in the classroom (Frymier & Houser, 2000). Rossiter and Pearce (1975) stated, "satisfying relationships with other people are established through communication, and our ability to communicate well is important" (p. 3). Communication satisfaction represents an ongoing interest and involvement in a communicative interaction and the perception that the interaction met expectations of the communicators (Hecht, 1978, 1984). Zakahi and Duran (1984) found a strong link between communication competence and communication satisfaction in close relationships.

Recently, the construct of communication satisfaction has been extended into the college classroom. In this context, student communication satisfaction is linked to students' affect for instructor and course (Goodboy et al., 2009), and trait and state motivation (Frymier & Shulman, 1995). Student communication satisfaction is a positive reaction to achieving communication and relational goals with an instructor (Goodboy et al., 2009). For example, research found students are more likely to experience communication satisfaction with instructors who engage in clear instruction (Johnson, 2013), treat them fairly (Holmgren & Bolkan, 2014) and appear confirming and caring (Myers, Goodboy, & Members of COMM 600, 2014). Overall, Goodboy and Myers (2007) stated that instructors must consider students' communication satisfaction in the classroom because if students become dissatisfied with the instructor-student relationship, they may be more likely to negatively evaluate the course and instructor. To date, student communication satisfaction has received limited attention and little, if any, research has focused on instructors'

ineffective communication and student communication satisfaction.

Petress (2006) stressed that learning should be an active, not a passive, process. Likewise, Kendrick and Darling (1990) stated interactive instructor-student(s) communication is crucial to the effective classroom experience. In contrast, compulsively communicating instructors may undermine students' active, participatory learning and lead to student communication dissatisfaction. Hence, the following is proposed:

H1: Students' perceptions of instructors' compulsive communication will be negatively related to self-reported student communication satisfaction.

Student Engagement

Student engagement represents a range of student behaviors that occur in and out of the classroom (Mazer, 2012, 2013a, 2013b). Student engagement centers on behaviors and activities students take part in (Rocca, 2010), which indicate learning (Pintrich & Garcia, 1991). It represents active involvement in one's own learning (McCombs & Marzano, 1990). When students are engaged in academic life, they become involved participants who effectively control their own learning experiences and environments in a variety of ways (Schunk & Zimmerman, 1998). They are likely to organize and rehearse information to be learned, have positive perceptions about their learning capabilities, and value learning in general. Overall, student engagement is a proactive, self-initiated action that requires learners to set goals, monitor themselves and their environments, and manage social interactions (Zimmerman & Risenberg, 1997). Mazer (2013a) noted that engaged students regularly display a variety of academic-related behaviors, which include participating in class, listening attentively, reading assigned chapters, reviewing course notes, and talking to peers about course content. Engaged students spend a significant amount of time taking part in the learning process, which in turn is one of the best predictors of learning (Frymier & Houser, 1999).

Student engagement is likely to happen in an actively engaged, dialogic classroom environment of student-centered approaches that encourage collaborative talk (Newman, 2017). Dialogic pedagogy promotes democratic classrooms that encourage students to take ownership of their own learning (Matusov, von Duyke, & Kayumova, 2016). Indeed, through discourse and continued interactions, engaged students add "life" to the classroom (Rocca, 2010). Students become more engaged in the learning process when instructors personalize students' learning and allow them to show their capabilities (Goldman, Goodboy, & Weber, 2017). Considering the changes in classroom and relational dynamics (Huba & Freed, 2000), the notion that instructors who talk too much may deter student engagement is explored. Student-centered approaches advocate for more democratic classrooms and fostering environments for student voices to be heard (Fassett & Warren, 2007). For example, Mazer (2017) reported that students report greater engagement in classes with instructors who offer emotional support and are willing to listen to students' needs and concerns. Likewise, Millennials prefer variety, collaboration, and interactive inquiry in the classroom (Roehling et al., 2011). According to Newman (2017), to facilitate student engagement, instructors must model the desired interactive, collaborative talk they want to promote in the classroom. In contrast, because compulsive communication is often perceived as a dominating communicator characteristic or behavior (McCroskey & Richmond, 1993), compulsively communicating instructors may interfere with students' active, participatory learning and may, in turn, erode student engagement. Therefore, the following is proposed:

H2: Students' perceptions of instructors' compulsive communication will be inversely related to self-reported student engagement.

The ARCS Model of Motivation and Content Relevance

Keller (1983) forwarded the ARCS model of motivation as a more effective way to understand and practically solve instructor issues with student motivation and influence in learning. Building from the theory of motivation and design, the ARCS model is based on expectancy-value theory (Tolman, 1932). The general premise of expectancy-value theory is that "people are motivated to engage in an activity if it is perceived to be linked to the satisfaction of personal needs (the value aspect), and if there is a positive expectancy for success (the expectancy aspect)" Keller, 1987a, pp. 2-3). Keller (1983) initially expanded value to interest (arousal of student's curiosity) and relevance (originating from student's goals), maintained expectancy (student's prediction of ability to succeed), and added outcomes (outcome influences likelihood to repeat behaviors). In articulating the ARCS model, these four components respectively became attention, relevance, confidence, and satisfaction (ARCS).

In order to motivate students to learn, they must first be paying attention. Students will have a difficult time learning if they are not paying attention. When students are paying attention, it is important for instructors to make the content relevant by connecting it to their past experiences, present life, and goals for the future. When students feel like content is relevant to their personal life, they become open to learning. Learning can be perceived as difficult, so it is important that instructors work to foster confidence that students will be successful. Finally, the interactions following success are critical in establishing that the student has had a satisfying experience.

Beyond outlining components of motivation in learning, ARCS provides teaching strategies to align with the four components. For instance, to gain attention, an instructor can "introduce a fact that seems to contradict the learner's past experience" (Keller, 1983, p. 4). Strategies for establishing content relevance include "find out what the learners' interests are and relate them to the instruction" and "state explicitly how the instruction relates to future activities of the learner" (p. 4). From the strategies Keller (1983; 1987a; 1987b) offered and additional research on content relevance (Sass, 1989), Frymier and Shulman (1995) operationalized content relevance as an instructor communication behavior. Keller (2010) positioned content as a content-oriented quality of communication—opposed to a relationship oriented behavior like nonverbal immediacy, which is characterized by its impact on instructor-student relationships (Anderson, 1979). Content relevance is now defined as "a student perception of whether the course instruction/content satisfies personal needs, personal goals, and/or career goals" (Frymier & Shulman, 1995, p. 42).

Content relevance research in instructional communication remains scarce. The initial research by Frymier and Shulman (1995) supported the ARCS model in that content relevance has the potential to motivate learners within a particular course (i.e., state motivation) when the instructor exhibits the relevance communication quality. These findings were supported by subsequent research by Frymier et al. (1996). Frymier and Shulman (1995) originally revealed an unexpected link between content relevance and immediacy and failed to produce results that would indicate that content had an impact on motivation and learning. However, Muddiman and Frymier (2009) recognized the possibility of a faulty operationalization of content relevance, which had previously been constructed without student involvement. Muddiman and Frymier re-examined content relevance by asking students to identify strategies instructors use to increase relevance. Their findings suggested that content relevance is not a component or quality of communication present in effective teaching. Instead, the strategies that emerged indicated that relevance might be an outcome of effective teaching. Coupled with the observation that efforts to make content relevant may create a relational context between instructors and students (Schrodt, 2013), it is worth suggesting that motivation may be the result of content made relational. If that is the case, relevance may be as much relationship oriented as content oriented. It is in this space where the ARCS model provides an apt lens for examining communication behaviors in the classroom.

Frymier and colleagues argued that instructor efforts to make content relevant is empowering for students and found that content relevance was associated with affective learning, effective learning behaviors, and student empowerment. Schrodt (2013) found that content relevance moderates the positive association between disclosure appropriateness of instructors and credibility (i.e., competence, trustworthiness, goodwill), noting that "content relevance and students' comfort with instructor disclosures mitigate the potentially damaging effects that disclosing inappropriate information can have on perceptions of credibility" (p. 368). Taken together, relevance is related to positive student outcomes and has the potential to alleviate negative instructor behaviors, which may include talkaholic instructors.

This presents a sort of social paradox because in general, being talkative is desired. This paradox becomes more pronounced in a classroom where, as noted, instructors are positioned to talk more than their students (McBride & Wahl, 2005). Instructors have to talk to fulfill their roles of managers of the classroom (Frymier et al., 1996), but dialogic pedagogy advocates a more open and interactive relationship between instructor and student (Chow, Fleck, Fan, Joseph, & Lyter, 2003). Shulman and Luechauer (1993) suggest involving students in designing the course interactively. Indeed, if students are active in the creation of the course, content relevance will increase when course content complements student experiences and goals (Keller, 1987b). However, it is difficult to think of a compulsive communicating instructor effectively facilitating an interactive process and fostering satisfying relationships with students.

Recall that student communication satisfaction is a relational accomplishment of achieving communication/relational goals with an instructor (Goodboy et al., 2009). Similarly, student engagement can be a relational accomplishment through rapport (Frisby & Martin, 2010). Schrodt (2013) found that efforts to make content relevant increases the latitude of personal disclosures that an instructor could make when a disclosure might otherwise be deemed inappropriate. In the creation of a relational context with students, instructors are able to make more personal disclosures that may typify an increase in student communication satisfaction. When content is relevant, students may be mo-

tivated to be engaged in the classroom and experience communication satisfaction despite an instructor who compulsively communicates. Given these arguments and previous research in which content relevance mediated relationships between disclosure and credibility (Schrodt, 2013), the following predications are offered:

H3: Instructor content relevance will mediate the relationship between instructors' compulsive communication and student communication satisfaction with the instructor.

H4: Instructor content relevance will mediate the relationship between instructors' compulsive communication and student engagement.

Method

Participants and Procedures

Participants were 361 (n = 222 females, n = 134 males, n = 6 no response) undergraduate students across academic ranks (n = 66 first years, n = 113 sophomores, n = 89 juniors, n = 88 seniors, n = 5 no response), enrolled in introductory communication courses at a mid-size, public university. The mean age of students was 19.82 (SD = 1.74, range = 18 to 48). Instrument administration took place during normal class time, and students received minimal course credit for their voluntary participation in this IRB approved study. Students completed the measures in reference to the class that they attended immediately prior to the research session to ensure that they reported on a variety of traditional courses (N = 43) and instructors (202 students reported on a female instructor while 154 reported on a male instructor). Information about class size (i.e., small, medium, large) followed Gorham's (1988) study in which students were asked approximately how many students were in the class: 1-25, 26-50, or more than 51. For class size, 198 students reported on a small class, 120 on a medium class, and 24 on a large class.1 Students were surveyed during the 13th week of a 15-week semester to allow them ample opportunity to develop perceptions of their instructors and classroom experiences.

Instrumentation

Compulsive communication. The Talkaholic Scale operationalized self-reported compulsive communication (McCroskey & Richmond, 1993). For this study, the Long et al.'s (2000) 14-item observer-report version was adopted, and asked participants to rate their instructors' in-class communication (e.g., "My instructor is a talkaholic," "In general, my instructor talks more than he or she should") using a scale from 1 (strongly disagree that it applies) to 5 (strongly agree that it applies). The researchers reported that the reliability coefficient for the adapted instrument was .91, and that it has strong internal reliability, content validity, and construct validity. For this study, the scale was reliable: a = .84 (M = 40.13, SD = 9.50).

Content relevance. The 12-item, Likert-type instructor content relevance measure assesses students' perceptions of how instructors can make course content relevant (Frymier & Shulman, 1995). On a 4-point scale ranging from 0 (never) to 4 (very often), students reported on explicit instructor content relevance behaviors in the classroom (e.g., "Use examples to make the content relevant to me"). Frymier and Shulman reported a reliability coefficient of .88 for the measure. For this study, the scale was reliable: a = .94 (M = 30.31, SD = 12.28).

Student communication satisfaction. Goodboy et al.'s (2009) 8-item student communication satisfaction with an instructor instrument measures students' perceptions of global communication satisfaction with a specific instructor (e.g., "My conversations with my instructor are worthwhile"). Students responded to a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). The original study yielded a reliability of .98. For this study, the scale was reliable: a = .94 (M = 39.53, SD = 11.55).

Student engagement. Mazer's (2012) 13-item Student Engagement Scale measured student self-report engagement on four dimensions including silent in-class behaviors (e.g., "Listened attentively to the instructor during class"), oral in-class behaviors (e.g., "Orally (verbally) participated during class discussions"), thinking

about course content (e.g., "Thought about how the course material related to your life"), and out-of-class behaviors (e.g., "Talked about the course material with others outside of class"). Students were asked to report how frequently they took part in each of the engagement activities using a 7-point Likert scale ranging from 1 (never) to 7 (always). Mazer (2013c) reported coefficient reliabilities of .77 for silent in-class behaviors; .91 for oral in-class behaviors; .92 for thinking about course content; and .81 for out-of-class behaviors. For this study, coefficient reliabilities were .84 (M = 22.20, SD = 4.46) for silent in-class behaviors; .92 (M = 10.09, SD = 3.25) for oral in-class behaviors; .93 (M = 14.38, SD = 5.23) for thinking about course content; and .77 (M = 20.75, SD= 5.20) for out-of-class behaviors.

Results

Hypotheses one and two stated that there would be negative relationships between students' perceptions of instructors' compulsive communication and student communication satisfaction and student engagement. A series of Pearson correlations supported hypotheses one and two. For hypothesis one, compulsive communication negatively related to student communication satisfaction r = -.41, p < .0001. For hypothesis two, compulsive communication negatively related to student engagement: silent in-class behaviors (r = -.25, p < .0001), oral in-class behaviors (r = -.24, p < .0001), thinking about course content (r = -.27, p < .0001), and out-of-class behaviors (r = -.24, p < .05, see Table 1 for correlations among all variables).

Hypothesis three predicted that perceived teacher relevance would mediate the association between instructor compulsive communication and student communication satisfaction. Using the Preacher and Hayes (2008) PROCESS macro based on 5,000 bootstrap samples, the model was significant F(2, 330) = 133.44, p < .0001, R2 = .44. The confidence intervals were entirely below zero supporting the predicted mediated model (see Table 2), and results showed instructors' compulsive communication significantly affected student communication satisfaction both directly (c' = -5.81, p < .0001) and indirectly through content relevance (ab =

-.1711; 95% CI: -0.233, -0.115). Hypothesis three was supported.

Hypothesis four predicted that teacher relevance would mediate the association between instructor compulsive communication and student engagement. Using the same mediation analysis, the second predicted mediation model was also supported, F(2, 327) = 64.03, p < .0001, R² = .28. The confidence intervals were entirely below zero, supporting the predicted mediated model (see Table 2), and results showed instructors' compulsive communication significantly affected student engagement both directly (c' = 1.80, p < .05) and indirectly through content relevance (ab = -.152; 95% CI: -0.220, -0.190). Hypothesis four was supported.

Discussion

The purpose of this study was twofold. First, the associations between instructors' compulsive communication and student communication satisfaction and engagement were determined. Dialogic pedagogy and the actively engaged classroom environment of student-centered approaches served as the impetus for investigating how instructors' compulsive communication is linked with students' perceptions and outcomes in the college classroom. Informed by the body of compulsive communication research, it was reasoned that students would report lower levels of communication satisfaction and engagement in classrooms with talkaholic instructors. Second, using the framework of the ARCS model of motivation, the extent to which instructor content relevance mediated the negative associations between compulsive communication and student communication satisfaction was examined, as well as compulsive communication and student engagement. The results indicated that instructor content relevance tempers the negative associations between instructors' compulsive communication and student communication satisfaction and engagement. These findings extend current research on compulsive communication in the classroom, and specifically extend the research on student perceptions of instructor behaviors, which generates several implications for educators and researchers.

Results are supported by earlier research related to compulsive communication in the classroom. In general, it appears students experience lower levels of communication satisfaction and engagement in classrooms with talkaholic instructors. Prior research established that compulsively communicating students garner negative evaluations from their peers and instructors (McPherson & Liang, 2007). Likewise, instructors whom students perceive to talk too much may reduce student communication satisfaction and engagement. In turn, talkaholic instructors may "teach" students to tune out and become passive, disengaged learners. In support, prior research established that students are likely to tire of listening to an instructor's voice during a long lecture (Apple, Streeter, & Krauss, 1979). Therefore, students may not only become wary of their compulsively communicating peers, but they may also become wary of compulsively communicating instructors.

Importantly, results also indicated instructor content relevance tempered the negative associations between instructors' compulsive communication and student communication satisfaction and engagement. If instructors perceive themselves as talkaholics, they may consider demonstrating content relevance to neutralize the negative consequences of compulsive communication. Based on the results of this study, content relevance partially mediated the negative association between instructors' compulsive communication and student communication satisfaction. Therefore, ensuring content covered in class is relevant to students' personal lives, academic needs, or career goals may be especially important for instructors who spend a significant amount of time in class talking. In order to emphasize content relevance, instructors need to connect content of material covered in class to students' goals, interests, and learning styles (Frymier & Shulman, 1995). Keller (1987b) suggested that instructors should relate course content to the students' future career or academic requirements. Indeed, when students perceive material in class as relevant, they may in turn "like" the material more and remain satisfied with instructor communication.

Results also indicated that content relevance fully mediated the negative associations between instructors' compulsive communication and the student engagement outcomes: silent in-class behaviors, oral in-class behaviors, thinking about course content, and out of class behaviors. Following the ARCS model of motivation, content relevance is concerned with the oft-asked student question, "What's in it for me?" (Frymier & Shulman, 1995). Indeed, instructors must establish content relevance during instruction to increase and maintain student motivation. Using the ARCS model of motivation, Keller (1983) offered a range of instructional strategies to demonstrate content relevance to students in the classroom, including: 1) relate new learning to existing skills, 2) show worth or value of the topic in the present, and 3) display future usefulness of material covered – how it may become essential later in a student's career or personal life. In support, McCroskey (1992) stated, "we certainly are going to listen more attentively to a person who we believe has our best interests at heart" (p. 110). Therefore, instead of possibly tuning out a talkaholic instructor, content relevance may get students' attention and motivate students to remain engaged in the classroom as well as outside of the classroom.

It appears students may prefer instructors who do not compulsively communicate. Rocca (2010) demonstrated that student participation was part of optimal classroom management and effectiveness. Likewise, perceptions of instructor effectiveness and student learning are based on teaching methods employed in the classroom (Papo, 1999). Faculty who incorporate an interactive teaching style may encourage student involvement and enhance student affective learning (Sidelinger & Booth-Butterfield, 2010) more than compulsively communicating instructors who dominate class time. In general, students are more comfortable and learn more in classrooms with confirming instructors who respond to student questions and use an interactive teaching style (Schrodt, Turman, & Soliz, 2006). No matter their origins, this points to certain prosocial expectations that students have of their instructors' teaching styles.

As stated earlier, Johnson (2013) reported a positive link between instructor clarity and student communication satisfaction; therefore, the more efficient and direct instructors are with their words, the more satisfied students may become with communication in the classroom. Likewise, instructors should also emphasize content relevance within instruction to increase student motivation by using concrete language and examples with which the learners are familiar (Frymier & Houser, 1998). Thus, it is critical for instructors to consider their approach to students in the classroom if they want to maintain student communication satisfaction and engagement.

This study highlights that when an instructor knows he or she is talking too much, there are strategic communication decisions that can be made to overcome students' negative perceptions of compulsive communication. Although it may not be possible to curb the communication quantity of an instructor, it is possible to make course content relevant to alleviate the negative outcomes that may occur from compulsive communication. Following the outcomes of this study, instructors should communicate in ways that enhance student perceptions of content relevance.

Limitations and Future Research Directions

In light of the results of this study, limitations and future research directions are worth noting. First, students were surveyed near the end of the semester to ensure they had ample opportunity to develop perceptions about the particular course and instructor that they assessed. The time of data collection may have influenced students' perceptions of their instructor's compulsive communication. Howard and Henney (1998) stated that instructors attempt to draw students in and encourage participation at the beginning of a semester, but as the semester progresses their efforts diminish over time. Therefore, as the semester progresses, faculty may fall back on the traditional lecture format as efforts to encourage student participation earlier in the semester fails. Similarly, Sidelinger and Booth-Butterfield (2010) found students must first feel comfortable in class before

they are willing to respond to instructors' questions. Instructors' quantity of talk may increase over the course of the semester. Future research should consider students' perceptions of instructors' compulsive communication over several points in the semester to determine if instructors talk more as a semester progresses.

Second, data on class size, meeting length, or course level were not gathered. Students in larger classes report a lack of involvement, lack of individualized attention from instructors, and an inhibition of instructor-student communication (Smith, Kopfman, & Ahyun, 1996). Larger class sizes can negatively affect the classroom experience for students (Chatman, 1997). Therefore, instructors' compulsive communication may, in part, be influenced by class size. Classroom logistics such as size and meeting times should be monitored in future research. Neer and Kircher (1989) found that class participation and discussion were affected by interpersonal familiarity and acceptance. Faculty who teach in larger classes may need to employ more tactics to create a student-centered environment than those in smaller classes.

Third, the study only included content relevance as a possible mediator between compulsive communication and student outcomes. Compulsively communicating instructors who are engaging, interesting, and/or confirming may overcome students' negative perceptions of compulsive communication. For example, funny instructors can get away with more norm violations than instructors who are not funny (Wanzer, Frymier, & Irwin, 2010). Therefore, as a continuation of this exploratory research, future research might examine the associations between instructors' compulsive communication and instructors' use of humor, self-disclosure, and confirmation behaviors in the classroom. Instructors may be able to employ a range of effective communication strategies to overcome students' negative evaluations of compulsive communication.

Finally, this study only examined two components (i.e., relevance and satisfaction) of the ARCS model of motivation as it relates to compulsive communication, student communication satisfaction, and student en-

ESSAYS   Dialogic Pedagogy in the College Classroom *continued*

gagement. Future research should also examine attention and confidence to determine how, if at all, those components may influence student perceptions of talkaholic teachers and affect student outcomes. Testing all four components of the model to understand student motivation in a classroom that is not interactive, dialogic, and student centered would provide insight into ways to improve classrooms in which these issues exist.

Conclusion

Ultimately, there may be times when instructors talk too much in the classroom. An upcoming test date, especially important course material, or the approaching end to a semester may pressure instructors to dominate class time with too much talk. Instructors should be aware that their quantity of talk not only provides students with course material but also affects how students perceive them as individuals. When instructors find themselves talking too much in class, it is essential that they demonstrate the relevance of the content covered. As a practical implication, instructors who compulsively communicate need to temper students' negative perceptions by emphasizing the usefulness and importance of course content. Applying course content to students' personal needs and career goals may offer talkaholic instructors an opportunity to maintain student communication satisfaction and engagement in the college classroom. This study found content relevance to be a useful instructional technique that offsets students' negative perceptions of instructors' compulsive communication. Instructors need to consider teaching methods employed in the classroom and strive to maintain classroom environments that allow all voices to be heard and allow students to achieve positive academic outcomes.

References

Allred, C. R., & Swenson, M. J. (2006). Using technology to increase student preparation for and participation in marketing courses: The random selector model. *Marketing Education Review, 16,* 15-21.

Anderson, J. F. (1979). Teacher immediacy as a predictor of teaching effectiveness. In D. Nimmo (Ed.), *Communication yearbook 3* (pp. 543-559). New Brunswick, NJ: Transaction Books.

Apple, W., Streeter, L. A. & Krauss, R. M. (1979). Effects of pitch and speech rate on personal attributions. *Journal of Personality and Social Psychology, 37,* 715-727. doi:10.1037/0022-3514.37.5.715

Bok, D. (2006). *Our underachieving colleges: A candid look at how much students learn and why they should be learning more.* Princeton, NJ: Princeton University Press.

Butin, D. W. (2010). *Service-learning in theory and practice: The future of community engagement in higher education.* New York, NY: Palgrave MacMillan.

Chatman, S. (1997). Lower-division class size at U.S. postsecondary institutions. *Research in Higher Education, 38,* 615-630. doi:10.1023/A:1024900714326

Chow, E. N., Fleck, C., Fan, G., Joseph, J., & Lyter, D. M. (2003). Exploring critical feminist pedagogy: Infusing dialogue, participation, and experience in teaching and learning. *Teaching Sociology, 31,* 259-275.

Dallimore, E. J., Hertenstein, J. H., & Platt, M. B. (2008). Using discussion pedagogy to enhance oral and written communication skills. *College Teaching, 56,* 163-172.

Fassett, D. L., & Warren, J. T. (2007). *Critical communication pedagogy.* Thousand Oaks, CA: Sage.

Fortney, S. D., Johnson, D. I., & Long, K. M. (2001). The impact of compulsive communicators on the self-perceived competence of classroom peers: An investigation and test of instructional strategies. *Communication Education, 50,* 357-373. doi:10.1080/03634520109379261

Frymier, A. B., & Houser, M. L. (2000). The teacher-student relationship as an interpersonal relationship. *Communication Education, 49,* 207-219. doi:10.1080/03634520009379209

Frymier, A. B., & Houser, M. L. (1999). The revised learning indicators scale. *Communication Studies, 50,* 1-12. doi:10.1080/10510979909388466

Frymier, A. B., & Houser, M. L. (1998). Does making content relevant make a difference in learning? *Communication Research Reports, 15,* 121-129.

Frymier, A. B., & Shulman, G. M. (1995). "What's in it for me?": Increasing content relevance to enhance students' motivation. *Communication Education, 44,* 40-50.

Frymier, A. B., Shulman, G. M., & Houser, M. (1996). The development of a learner empowerment measure. *Communication Education, 45,* 181-199.

Garko, M. G., Kough, C., Pignata, G., Kimmel, E. B., & Eison, J. (1994). Myths about student-faculty relationships: What do students really want? *Journal of Excellence in College Teaching, 5,* 51-65.

Goodboy, A. K., Martin, M. M., & Bolkan, S. (2009). The development and validation of the Student Communication Satisfaction Scale. *Communication Education, 58,* 372-396. doi:10.1080/03634520902755441

Goodboy, A. K., & Myers, S. A. (2007). Student communication satisfaction, similarity, and liking as a function of attributional confidence. *Ohio Communication Journal, 45,* 1-12.

Goodman, Z. W., Goodboy, A. K., & Weber, K. (2017). College students' psychological needs and intrinsic motivation to learn: An examination of self-determination theory. *Communication Quarterly, 65,* 167-191. doi:10.1080/01463373.2016.1215338

Hecht, M. L. (1978). The conceptualization and measurement of interpersonal communication satisfaction. *Human Communication Research, 4,* 253-264.

Hecht, M. L. (1984). Satisfying communication and relational labels: Intimacy and length of relationship as perceptual frames of naturalistic communication. *Western Journal of Speech Communication, 48,* 201–216.

Holmgren, J. L., & Bolkan, S. (2014). Instructor responses to rhetorical dissent: Student perceptions of justice and classroom outcomes. *Communication Education, 63,* 17-40. doi:1080/03634523.2013.833644

Howard, J. R., & Henney, A. L. (1998). Student participation and instructor gender in the mixed-age college classroom. *Journal of Higher Education, 69,* 384-405.

Huba, M. E., & Freed, J. E. (2000). *Learner-centered assessment on college campuses: Shifting the focus from teaching to learning.* Boston, MA: Allyn and Bacon.

Johnson, D. I. (2013). Student in-class texting behavior: Associations with instructor clarity and classroom relationships. *Communication Research Reports, 30,* 57-62. doi:10.1080/08824096.2012.723645

Keller, J. M. (1983). Motivational design of instruction. In C. M. Reogeluth (Ed.), *Instructional design theories: An overview of their current status* (pp. 383-434). Hillsdale, NJ: Lawrence Erlbaum.

Keller, J. M. (1987a). Development and use of the ARCS model of motivational design. *Journal of Instructional Development, 10,* 2-10.

Keller, J. M. (1987b). Strategies for stimulating the motivation to learn. *Performance and Instruction, 26,* 1-7.

Keller, J. M. (2010). *Motivational design for learning and performance: The ARCS model approach.* New York, NY: Springer.

Kendrick, W. L., & Darling, A. L. (1990). Problems of understanding in classrooms: Students' use of clarifying tactics. *Communication Education, 39,* 15-29. doi:10.1080/03634529009378784

Long, K. M., Fortney, S. D., & Johnson, D. I. (2000). An observer measure of compulsive communication. *Communication Research Reports, 17,* 349-356.

Matusov, E., von Duyke, K., & Kayumova, S. (2016). Mapping concepts of agency in educational contexts. *Integrative Psychological and Behavioral Science, 50,* 420-446. doi:10.1007/s12124-015-9334-2

Mazer, J. P. (2012). Development and validation of the student interest and engagement scales. *Communication Methods and Measures, 6,* 99-125.

Mazer, J. P. (2013a). Associations among teacher communication behaviors, student interest, and engagement: A validity study. *Communication Education, 62,* 86-96.

Mazer, J. P. (2013b). Student emotional and cognitive interest as mediators of teacher communication behaviors and student engagement: An examination of direct and interaction effects. *Communication Education, 62,* 1-25.

Mazer, J. P. (2013c). Validity of the student interest and engagement scales: Associations with student learning outcomes. *Communication Studies, 64,* 125-140.

Mazer, J. P. (2017). Associations among classroom emotional support processes, student interest, and engagement: A convergent validity test. *Communication Education, 66,* 350-360. doi:10.1080/03634523.2016.1265134

McBride, M. C., & Wahl, S. T. (2005). "To say or not to say": Teachers' management of privacy boundaries in the classroom. *Texas Speech Communication Journal, 30,* 8-22.

McCombs, B. J., & Marzano, R. J. (1990). Putting the self in self-regulated learning: The self as agent in integrating will and skill. *Educational Psychologist, 25,* 51-69. doi:10.1207/s15326985ep2501_5

McCroskey, J. C. (1992). *An introduction to communication in the classroom.* Edina, MN: Bugress.

McCroskey, J. C., & Richmond, V. P. (1993). Identifying compulsive communicators: The talkaholic scale. *Communication Research Reports, 10,* 107-114. doi:10.1080/08824099309359924

McCroskey, J. C., & Richmond, V. P. (1995). Correlates of compulsive communication: Quantitative and qualitative characteristics. *Communication Quarterly, 43,* 39-52. doi:10.1080/01463379509369954

ESSAYS   Dialogic Pedagogy in the College Classroom *continued*

McPherson, M. B., & Liang, Y. J. (2007). Students' reactions to teachers' management of compulsive communicators. *Communication Education, 56*, 18-33. doi:10.1080/03634520601016178

Muddiman, A., & Frymier, A. B. (2009). What is relevant? Student perceptions of relevance strategies in college classrooms. *Communication Studies, 60*, 130-146.

Myers, S. A., Goodboy, A. K., & Members of COMM 600 (2014). College student learning, motivation, and satisfaction as a function of effective instructor communication behaviors. *Southern Communication Journal, 79*, 14-26. doi:10.1080/1041794X.2013.815266

National Survey of Student Engagement (NSSE). (2007). *Student engagement: Pathways to collegiate student success*. Retrieved from www.indiana.edu/~nsse

Neer, M. R., & Kircher, F. W. (1989). Apprehensives' perceptions of classroom factors influencing their participation. *Communication Research Reports, 6*, 70-77. doi:10.1080/08824098909359836

Newby, T. J. (1991). Classroom motivation: Strategies for first-year teachers. *Journal of Educational Psychology, 83*, 195-200.

Newman, R. C. (2017). Engaging talk: One teacher's scaffolding of collaborative talk. *Language & Education, 31*, 130-151. doi:10.1080/09500782.2016.1261891

Papo, W. D. (1999). Large class teaching: Is it a problem to students? *College Student Journal, 33*, 354-358.

Petress, K. (2006). An operational definition of class participation. *College Student Journal, 40*, 821-823.

Pintrich, P. R., & Garcia, T. (1991). Student goal orientation and self-regulation in the college classroom. In M. L. Maehr & P. R. Pintrich (Eds.), *Advances in motivation and achievement: Goals and self-regulatory processes* (Vol. 7, pp. 371-402). Greenwich, CT: JAI Press.

Preacher, K. J., & Hayes, A. F. (2008). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods, Instruments, & Computers, 36*, 717–731. doi:10.3758/BF03206553

Rawlins, W. K. (2000). Teaching as a mode of friendship. *Communication Theory, 10*, 5-26. doi:10.1111/j.1468-2885.2000.tb00176.x

Rocca, K. A. (2010). Student participation in the college classroom: An extended multidisciplinary literature review. *Communication Education, 59*, 185-213. doi:10.1080/03634520903505936

Roehling, P. V., Vander Kooi, T. L., Dykema, S., Quisenberry, B., & Vandlen, C. (2011). Engaging the millennial generation in class discussions. *College Teaching, 59*, 1-6. doi:10.1080/87567555.2010.484035

Rossiter, C. M., Jr., & Pearce, W. B. (1975). *Communicating personally: A theory of interpersonal communication and human relationships*. Indianapolis: Bobbs-Merrill.

Sass, E. J. (1989). Motivation in the college classroom: What students tell us. *Teaching of Psychology, 16*, 86-88.

Schrodt, P. (2013). Content relevance and students' comfort with disclosure as moderators of instructor disclosures and credibility in the college classroom. *Communication Education, 62*, 352-375.

Schrodt, P., Turman, P., & Soliz, J. (2006). Perceived understanding as a mediator of perceived teacher confirmation and students' rating of instruction. *Communication Education, 55*, 370-388. doi:10.1080/03634520600879196

Schunk, D. H., & Zimmerman, B. J. (1998). *Self-regulated learning: From teaching to self-reflective practices*. New York: Guilford.

Shulman, G., & Luechauer, D. (1993). The empowering educator: A CQI approach to classroom leadership. In D. Hubbard (Ed.), *Continuous quality improvement: Making the transition to education* (pp. 424-453). Maryville, MO: Prescott Publishing.

Sidelinger, R. J., & Bolen, D. M. (2016). Instructor credibility as a mediator of instructors' compulsive communication and student communication satisfaction in the college classroom. *Communication Research Reports, 33*, 24-31. doi:10.1080/08824096.2015.1117438

Sidelinger, R. J., & Booth-Butterfield, M. (2010). Co-constructing student involvement: An examination of teacher confirmation and student-to-student connectedness in the college classroom. *Communication Education, 59*, 165-184. doi:10.1080/03634520903390867

Smith, S. W., Kopfman, J. E., & Ahyun, J. (1996). Encouraging feedback in the large college class: The use of a question/comment box. *Journal of the Association for Communication Administration, 3*, 219-230.

Strange, C. C., & Banning, J. H. (2001). *Educating by design: Creating campus learning environments that work*. San Francisco, CA: Jossey-Bass.

Tolman, E. C. (1932). *Purposive behavior in animals and men*. New York, NY: Century.

Wanzer, M. B., Frymier, A. B., & Irwin, J. (2010). An explanation of the relationship between instructor humor and student learning: Instructional humor processing theory. *Communication Education, 59*, 1-18. doi:10.1080/03634520903367238

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

Weaver, R. R., & Qi, J. (2005). Classroom organization and participation: College students' perceptions. *The Journal of Higher Education, 76*, 570-601. doi:10.1353/jhe.2005.0038

Zakahi, W. R., & Duran, R. L. (1984). Attraction, communicative competence, and communication satisfaction. *Communication Research Reports, 1*, 54-57.

Zimmerman, B. J., & Risenberg, R. (1997). Self-regulatory dimensions of academic learning and motivation. In G. D. Phye (Ed.), *Handbook of academic learning: Constructional knowledge* (pp. 105-125). San Diego, CA: Academic Press.

Table 1

Pearson Correlations between Student Outcome Variables and Predictor Variables

Variable	1	2	3	4	5	6	7
1. Student Communication Satisfaction	--						
2. Silent In-class Behaviors	.37*	--					
3. Oral In-class Behaviors	.34*	.53*	--				
4. Thinking About Course Content	.42*	.45*	.45*	--			
5. Out of Class Behaviors	.25**	.46*	.26*	.46*	--		
6. Compulsive Communication	-.41*	-.25*	-.24*	-.27*	-.24^	--	
7. Relevance	.63*	.58*	.41*	.58*	.25*	-.31*	--

Note. *p < .0001, ** p < .001, ^ p < .05

Table 2: Mediating Effects of Teacher Content Relevance

Pearson Correlations between Student Outcome Variables and Predictor Variables

Mediated Effect	B	SE	95% CI (lower, upper)
CC — Relevance — Communication Satisfaction	-.21	.04	-.28, -.13
CC — Relevance — Student Engagement	-.22	.05	-.32, -.13

Note. *p < .0001, ** p < .001, ^ p < .05

*Indirect effect is significant at p <.001 (excluding 0)