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College Student Learning, Motivation, and Satisfaction as a Function of Effective Instructor Communication Behaviors

Scott A. Myers, Alan K. Goodboy, & Members of COMM 600

The purpose of this study was to examine the extent to which instructors simultaneously engage in specific rhetorical (i.e., clarity, humor) and relational (i.e., immediacy, confirmation, and caring) communicative behaviors and how these behaviors are reflected in the learning outcomes (i.e., affective learning, cognitive learning, state motivation, and communication satisfaction) reported by students. Participants were 286 undergraduate college students who were enrolled in one of three sociology courses at a large Mid-Atlantic university. The results indicated that all four learning outcomes were affected in some combination by perceived instructor clarity, humor, confirmation, and caring. Future research should continue to examine effective instruction using multibehavioral assessments, but may consider whether these assessments are linked to class size and type of institution.

Since its inception as a discipline in 1972, instructional communication researchers have been interested in exploring the relationships between instructor classroom communicative behaviors and student learning (McCroskey & McCroskey, 2006). Collectively, this body of research has identified numerous instructional communicative behaviors that exert a positive influence on students' traditional learning outcomes, which

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include student self-reports of their affective learning, cognitive learning, state motivation, and, more recently, communication satisfaction (Goodboy, Martin, & Bolkan, 2009; Waldeck, Plax, & Kearney, 2010). These collective results have prompted instructional communication scholars to posit that effective teaching occurs when instructors use in-class behaviors "that are related directly either to positive student outcomes or positive evaluations of teaching" (Nussbaum, 1992, p. 167). Because effective teaching involves the use of simultaneous teaching practices in the classroom, in part because students perceive effective instructors to use a multitude of behaviors in congruence (Rice, Stewart, & Hujber, 2000), the purpose of this study is to examine how a set of instructional communicative behaviors contributes simultaneously to perceived student affective learning, cognitive learning, state motivation, and communication satisfaction using Mottet, Frymier, and Beebe's (2006) rhetorical/relational goal theory.

Review of Literature

According to Mottet and Beebe (2006), instructors arrive at the classroom with two simultaneous goals: rhetorical goals and relational goals. Instructors who teach to meet rhetorical goals focus primarily on using classroom communication as a way to influence or persuade their students so that student learning and understanding occurs. This goal is instructor centered in that instructors act primarily as sources of information and students act as passive receivers of information (Mottet & Beebe, 2006), with an emphasis placed on message design that facilitates effective instruction (Myers, 2008). Conversely, instructors who teach to meet relational goals focus primarily on engaging in classroom communication to develop a professional working relationship with their students (Myers, 2008). This goal is student centered in that instructors and students communicate together collaboratively with an emphasis placed on the role of shared emotions and feelings that enable both students and instructors to interact both effectively and affectively with each other (Mottet & Beebe, 2006; Myers, 2008).

Given that instructional communication behaviors do not occur in isolation but occur simultaneously (Kramer & Pier, 1999), effective teaching requires instructors to meet both their rhetorical goals and their relational goals. To communicate effectively with students (i.e., teach to meet rhetorical goals), instructors must engage in clarity (Titsworth & Mazer, 2010) and should integrate humor into their teaching (Booth-Butterfield & Wanzer, 2010). *Clarity*, which is considered to be the extent to which instructors effectively employ verbal and nonverbal messages to communicate knowledge in a way that facilitates student understanding (Chesebro & McCroskey, 1998a; Simonds, 1997), contains a content dimension and a structural dimension. Content clarity is demonstrated by speaking fluently and avoiding the use of vague or ambiguous statements and examples (Kennedy, Cruickshank, Bush, & Myers, 1978; Sidelinger & McCroskey, 1997), whereas structural clarity is demonstrated by organizing the presentation of material such as using previews, transitions, and summaries (Chesebro, 2003). *Humor*, which is considered to be intentional verbal and nonverbal communication aimed towards achieving a desired response in a receiver, typically in the form of laughter or other indicators of spontaneous pleasure or delight (Booth-Butterfield &

Wanzer, 2010), can range from the use of puns, jokes, and anecdotes to self- and student-disparagement (Bryant, Comisky, & Zillman, 1979; Wanzer, Frymier, Wojtaszczyk, & Smith, 2006) and is used by instructors as a way to clarify course content for their students (Downs, Javidi, & Nussbaum, 1988).

To communicate affectively with students (i.e., teach to meet relational goals), instructors should engage in immediacy behaviors (Witt, Schrodt, & Turman, 2010), communicate in a confirming manner (Goodboy & Myers, 2008) and express caring toward their students (Teven, 2007). *Immediacy* consists of behaviors that reduce physical and psychological distance between students and instructors (Andersen, 1979) through instructor use of nonverbal behaviors such as eye contact, smiling, use of gestures, and vocal variety (Richmond, Gorham, & McCroskey, 1987) and verbal behaviors such as addressing students by name, asking students questions, and praising student work (Gorham, 1988). *Confirmation* occurs when instructors communicate to their students that they are worthwhile and significant individuals by responding to students' questions and comments, demonstrating an interest in their students, and teaching in an interactive style (Ellis, 2000). *Caring* signifies to students that their instructors are concerned with their welfare (Teven & McCroskey, 1997) by communicating in a manner that is understanding, empathic, and responsive (McCroskey, 1998).

Traditionally, as a way to study effective teaching, instructional communication researchers have been interested in exploring the link between students' perceptions of instructor communicative behaviors and student affective and cognitive learning (Myers, 2010). Affective learning involves student feelings, emotions, and degrees of acceptance toward the subject matter (Krathwohl, Bloom, & Masia, 1964), whereas cognitive learning ranges from the simple retention of information to complex synthesis of material (Bloom, Hastings, & Madaus, 1971). As researchers have noted, positive relationships exist between perceived instructor clarity, humor, immediacy, confirmation, and caring and both student reports of their affective learning and cognitive learning (Chesebro & McCroskey, 2001; Goodboy & Myers, 2008, Teven & McCroskey, 1997; Wanzer & Frymier, 1999). At the same time, however, researchers have found that positive relationships exist among several of these behaviors. For example, instructors who are immediate are considered to be clear, confirming, caring, and humorous (Chesebro & McCroskey, 1998b, 2001; Ellis, 2000; Gorham & Christophel, 1990; Houser & Frymier, 2009; Teven & McCroskey, 1997) and instructors who are humorous are considered to be caring (Dunleavy, 2006). Given the interrelationships that exist among these instructional communication behaviors, it is likely that instructors who aim to meet both their rhetorical goals and their relational goals simultaneously use clarity, humor, immediacy, confirmation, and caring to affect students' self-reports of their affective learning and cognitive learning. Moreover, the extent to which instructors simultaneously engage in these behaviors should be reflected in the amount of affective learning and cognitive learning students report. To explore this idea, the following research questions were posed:

RQ_1: To what extent are students' self-reports of their affect toward the course influenced by perceived instructor simultaneous use of rhetorical (i.e., clarity, humor) and relational (i.e., immediacy, confirmation, caring) instructional communicative behaviors?

RQ_2: To what extent are students' self-reports of their affect toward the instructor influenced by perceived instructor simultaneous use of rhetorical (i.e., clarity, humor) and relational (i.e., immediacy, confirmation, caring) instructional communicative behaviors?

RQ_3: To what extent are students' self-reports of their cognitive learning influenced by perceived instructor simultaneous use of rhetorical (i.e., clarity, humor) and relational (i.e., immediacy, confirmation, caring) instructional communicative behaviors?

Two additional behaviors that have garnered attention from instructional communication scholars are student state motivation and student communication satisfaction. Student state motivation refers to student attempts to obtain academic knowledge or skills from classroom activities by finding these activities meaningful (Brophy, 1987), whereas student communication satisfaction refers to a contextual satisfaction resulting from the fulfillment of student concerns through conversations with an instructor (Goodboy et al., 2009). Similar to the relationships observed between instructor communication behaviors and student learning, student state motivation and student communication satisfaction are related positively to perceived instructor clarity, humor, immediacy, confirmation, and caring (Chesebro & McCroskey, 2001; Christensen & Menzel, 1998; Comadena, Hunt, & Simonds, 2007; Goodboy & Myers, 2008; McCroskey, Richmond, & Bennett, 2006; Teven & Monte, 2008). To explore also whether instructors who simultaneously engage in these behaviors is reflected in the amount of state motivation and communication satisfaction students report, the following research questions are posed:

RQ_4: To what extent are students' self-reports of their state motivation influenced by perceived instructor simultaneous use of rhetorical (i.e., clarity, humor) and relational (i.e., immediacy, confirmation, caring) instructional communicative behaviors?

RQ_5: To what extent are students' self-reports of their communication satisfaction influenced by perceived instructor simultaneous use of rhetorical (i.e., clarity, humor) and relational (i.e., immediacy, confirmation, caring) instructional communicative behaviors?

Method

Participants

Participants were 286 undergraduate students (162 men, 124 women) enrolled in one of three sociology courses at a large Mid-Atlantic university. The ages of the participants ranged from 18 to 28 years (M=18.81, SD=1.28). Two hundred (n=200) participants were first-year students, 51 participants were sophomores, 32 participants were juniors, and 3 participants were seniors. Participants represented 39 academic disciplines (e.g., English, Physics, Finance) across courses taught by 154 male instructors and 127 female instructors. As indicated by the participants, these courses had an average enrollment of 144 students (M=143.53, SD=102.10; range 9–350 students).

The majority of students ($n=259$, or 91%) was Caucasian. No other demographic data were collected.

Procedures and Instrumentation

Participants were instructed to complete a series of instruments in reference to the instructor of the course they attended immediately prior to the research session (Plax, Kearney, McCroskey, & Richmond, 1986). These instruments were the Teacher Clarity Short Inventory (Chesebro & McCroskey, 1998a), the Instructor Humorousness Measure (Wanzer, Frymier, & Irwin, 2010), the Nonverbal Immediacy Behavior Scale (Richmond et al., 1987), the Verbal Immediacy Behaviors Instrument (Gorham, 1988), the Teacher Confirmation Scale (Ellis, 2000), the Teacher Caring Scale (McCroskey & Teven, 1999), the Instructional Affect Assessment Instrument (McCroskey, 1994), the Revised Learning Indicators Scale (Frymier & Houser, 1999), the State Motivation Scale (Christophel, 1990), and the Student Communication Satisfaction Scale (Goodboy et al., 2009). These instruments were completed in one of two sequences to control for order effects. Data collection occurred during Week 14 of a 16-week semester, ensuring that participants were familiar with their instructors.

The *Teacher Clarity Short Inventory* is a 10-item scale that asks respondents to indicate their instructor's use of content and process clarity behaviors in the classroom. Responses are solicited using a 5-point Likert scale ranging from *strongly disagree* (1) to *strongly agree* (5). Previous alpha reliability coefficients ranging from .89 to .91 have been obtained for the scale (Schrodt et al., 2009; Zhang & Huang, 2008).

The *Instructor Humorousness* measure is a three-item scale that asks respondents to indicate how humorous they consider their instructor to be (i.e., "This instructor is one of funniest instructors I know," "This instructor is humorous," and "This is not a funny instructor"). Responses are solicited using a 5-point Likert scale ranging from *strongly disagree* (1) to *strongly agree* (5). A previous alpha reliability coefficient of .89 has been obtained for the scale (Wanzer et al., 2010).

The *Nonverbal Immediacy Behavior Scale* is a 14-item scale that asks respondents to indicate the frequency with which their instructor engages in nonverbal immediacy behaviors. Responses are solicited using a 5-point Likert scale ranging from *never* (0) to *very often* (4). Previous alpha reliability coefficients ranging from .75 to .85 have been obtained for the scale (Burroughs, 2007; Houser & Frymier, 2009; Johnson, 2009).

The *Verbal Immediacy Behaviors Instrument* is a 17-item instrument that asks respondents to indicate the frequency with which their instructor engages in verbal immediacy behaviors. Responses are solicited using a 5-point Likert scale ranging from *never* (0) to *very often* (4). Previous alpha reliability coefficients ranging from .71 to .87 have been obtained for the scale (Gendrin & Rucker, 2007; Park, Lee, Yun, & Kim, 2009; Wei & Wang, 2010).

The *Teacher Confirmation Scale* is a 16-item scale that asks respondents to indicate the extent to which they perceive their instructors to demonstrate confirming behaviors in the classroom across three dimensions (i.e., instructors' response to students' questions and comments, demonstration of interest toward students,

and interactive teaching style). Responses are solicited using a 5-point Likert scale ranging from *strongly disagree* (1) to *strongly agree* (5). Previous alpha reliability coefficients of .94 and .95 have been obtained for the summed scale (Goodboy & Myers, 2008; Hsu, 2012).

The *Teacher Caring Scale* is a six-item, seven-point bipolar scale that asks respondents to indicate their perceptions of their instructor's level of caring. Previous alpha reliability coefficients ranging from .89 to .94 have been obtained for the scale (Edwards & Myers, 2007; Malachowski & Martin, 2011; Zhang & Sapp, 2009).

The *Instructional Affect Assessment Instrument* is a 24-item, 7-point bipolar instrument that measures student affect toward the course content (eight items), student affect toward the instructor (eight items), and student affect toward the recommended course behaviors (eight items). In this study, only the items that measured student affect toward the course content and student affect toward the instructor were used. Previous reliability coefficients ranging from .84 to .94 have been obtained for the subscales (Myers, 2012; Weber, Martin, & Myers, 2011).

The *Revised Learning Indicators Scale* is a seven-item scale that asks respondents to indicate the extent to which they agree that they engage in learning activities. Responses are solicited using a 5-point Likert scale ranging from *strongly disagree* (1) to *strongly agree* (5). Previous reliability coefficients of .83 and .85 have been obtained for the scale (Hsu, 2012; Kranstuber, Carr, & Hosek, 2012).

The *State Motivation Scale* is a 12-item, 7-point bipolar scale that asks respondents to indicate their state motivation toward a specific course and instructor. A previous reliability coefficient of .95 has been obtained for the scale (Myers, 2002; Myers & Bryant, 2002).

The *Student Communication Satisfaction Scale* is an eight-item scale that asks respondents to rate the extent to which they are satisfied with their communication with their instructors. Responses are solicited using a 5-point Likert scale ranging from *strongly disagree* (1) to *strongly agree* (5). Previous reliability coefficients ranging from .93 to .98 have been obtained for the scale (Goodboy, 2011; Goodboy & Bolkan, 2009; Goodboy et al., 2009).

Data Analysis

The five research questions were each answered using a hierarchical multiple regression analysis. For each analysis, perceived instructor clarity, humor, nonverbal immediacy, verbal immediacy, confirmation, and caring served simultaneously as the independent variables, whereas students' self-reports of affect toward the course, affect toward the instructor, cognitive learning, state motivation, and communication satisfaction served alternately as the dependent variable. For each analysis, multicollinearity was assessed through an examination of the tolerance statistic and the variance inflation factor (VIF) statistic for each independent variable. Tolerance statistics that are .10 or less and VIF statistics that are greater than 10 are indicators that multicollinearity is an issue (Mertler & Vannatta, 2002). In this study, the lowest tolerance statistic was .28 and the highest VIF statistic was 3.60, indicating that multicollinearity was not an issue.

Results

Table 1 contains the mean, standard deviation, and Cronbach alpha reliability coefficient of each scale as well as a correlation matrix of all the variables examined in this study. The first research question inquired about students' self-reports of their affect toward the course. A significant model was obtained, $R^2 = .38$, $F(6, 256) = 25.95$, $p < .001$, with caring ($\beta = .30$, $t = 4.54$, $p < .001$) and confirmation ($\beta = .30$, $t = 2.97$, $p < .01$) emerging as significant predictors.

The second research question inquired about students' self-reports of their affect toward the instructor. A significant model was obtained, $R^2 = .66$, $F(6, 256) = 81.12$, $p < .001$, with caring ($\beta = .36$, $t = 7.36$, $p < .001$), clarity ($\beta = .24$, $t = 4.73$, $p < .001$), confirmation ($\beta = .21$, $t = 3.05$, $p < .01$), and humor ($\beta = .17$, $t = 3.43$, $p < .001$) emerging as significant predictors.

The third research question inquired about students' self-reports of their cognitive learning. A significant model was obtained, $R^2 = .40$, $F(6, 256) = 28.28$, $p < .001$, with confirmation ($\beta = .43$, $t = 4.72$, $p < .001$) and caring ($\beta = .13$, $t = 2.08$, $p < .05$) emerging as significant predictors.

The fourth research question inquired about students' self-reports of their state motivation. A significant model was obtained, $R^2 = .42$, $F(6, 253) = 29.99$, $p < .001$, with caring ($\beta = .38$, $t = 5.89$, $p < .001$), nonverbal immediacy ($\beta = .15$, $t = 2.22$, $p < .05$), humor ($\beta = .16$, $t = 3.00$, $p < .05$), and clarity ($\beta = .13$, $t = 2.04$, $p < .05$) emerging as significant predictors.

The fifth research question inquired about students' self-reports of their communication satisfaction. A significant model was obtained, $R^2 = .64$, $F(6, 254) = 75.48$, $p < .001$, with confirmation ($\beta = 0.33$, $t = 4.68$, $p < .001$), caring ($\beta = .30$, $t = 5.93$,

Table 1 Correlation Matrix

Variable	*M*	*SD*	α	1	2	3	4	5	6	7	8	9	10
1. Clarity	3.79	0.70	.82	—									
2. Humor	2.95	1.33	.90	.47	—								
3. Nonverbal immediacy	2.46	0.67	.84	.50	.63	—							
4. Verbal immediacy	1.61	0.73	.88	.36	.47	.51	—						
5. Confirmation	3.41	0.89	.93	.64	.54	.64	.71	—					
6. Caring	4.51	1.40	.88	.46	.48	.50	.48	.65	—				
7. Affect for course	4.93	1.60	.92	.41	.41	.42	.40	.56	.56	—			
8. Affect for instructor	4.96	1.90	.96	.62	.60	.59	.47	.70	.70	.71	—		
9. Cognitive learning	3.29	0.97	.88	.48	.43	.43	.42	.61	.49	.65	.58	—	
10. State motivation	4.22	1.24	.88	.43	.47	.49	.38	.51	.59	.56	.64	.51	—
11. Communication satisfaction	3.41	1.00	.93	.57	.57	.55	.57	.75	.68	.55	.77	.63	.56

Note. All correlations are significant at $p < .001$.

$p<.001$), clarity ($\beta=0.16$, $t=3.00$, $p<.01$), and humor ($\beta=.15$, $t=3.00$, $p<.01$) emerging as significant predictors.

Discussion

The purpose of this study was to determine how perceived instructor simultaneous use of rhetorical and relational instructional communicative behaviors delineates students' levels of affective learning, cognitive learning, state motivation, and communication satisfaction. The findings suggest that all four learning outcomes are affected, somehow, by effective and concurrent instructor behavior. High affect for the course students and high learning students were influenced by instructors who appeared confirming and showed caring. High affect for the instructor students and highly communicatively satisfied students were influenced by instructors who communicated clarity, used humor, appeared confirming, and showed caring. Highly motivated students were influenced by instructors who communicated clarity, used humor and nonverbal immediacy, and showed caring.

Collectively, these results suggest that when students perceive their instructors as using a variety of rhetorical and relational teaching behaviors simultaneously, their learning outcomes can be enhanced. Two of the three relational behaviors examined in this study—appearing to be confirming and showing caring—provide the most delineation in traditional learning outcomes. In this study, when instructors were considered to be confirming and caring, students were likely to be higher in course and instructor affect, cognitive learning indicators, and communication satisfaction. Research suggests that students perceive these types of teaching behavior as a motivator in the classroom as students appreciate instructors who listen to class comments and want to be involved with them (Gorham & Millette, 1997), in part because when instructors respond to student questions, solicit participation and take student opinion into consideration, they are communicating to students that their input is valued. As such, instructors who are perceived as responding to student questions, demonstrating an interest in their students, and utilizing an interactive teaching style (all components of instructor confirmation) as well as caring share one common element: They recognize that students are an essential component of the instructional process. By being both task and relationally oriented in their teaching, confirming and caring instructors implicitly inform their students that they are interested in their students' academic success (Teven & Gorham, 1998).

At the same time, both clarity and humor emerged as rhetorical teaching behaviors that students reported as affecting their learning outcomes. When instructors were perceived as clear and humorous, students were more likely to report higher instructor affect, motivation, and communication satisfaction. For many students, instructor clarity may be important simply because it is fundamental to their classroom performance and is considered to be a motivator in the classroom (Gorham & Christophel, 1992). Instructors who are unclear in their message behaviors may implicitly suggest that they are not interested in their students' academic success (Civikly, 1992).

Wanzer et al. (2010) found that instructors high in humorousness exhibit a wide range of humorous messages, which are enjoyed and appreciated by students. A humorous approach to teaching creates a positive classroom climate (Stuart & Rosenfeld, 1994) and has been tied to student affective learning outcomes across many studies (Booth-Butterfield & Wanzer, 2010). In this study, humorousness was measured so that the participants reported on how funny their instructors were rather than the types of humor they enacted. Funny instructors yielded high student responses on all three learning outcomes.

Interestingly, two effective instructor behaviors—nonverbal immediacy (with one exception) and verbal immediacy—did not uniquely explain differences in student learning outcomes. Although much research has linked immediacy to student learning outcomes (Witt et al., 2010; Witt, Wheeless, & Allen, 2004), when immediacy was measured in tandem with many other effective teaching behaviors, it lost predictive power. This may be due to the fact that student-generated immediacy perceptions are intercorrelated with all of the other effective behaviors measured in this study (Chesebro & McCroskey, 2001; Ellis, 2000; Gorham & Christophel, 1990; Teven & McCroskey, 1997). For example, it is difficult to be a humorous instructor who does not smile, a clear instructor who does not use vocal variety, or a confirming instructor who does not address students by name. These immediacy behaviors, although still very important to enact in the classroom, may share too much variance with other effective teaching behaviors to uniquely produce significant effects. This finding (or lack thereof) is important, however, as previous research suggests that many effective teaching behaviors create interdependent perceptions that are attributed by students in, perhaps, a global and positive sense.

One limitation of this study was that many effective instructional behaviors (e.g., relevance, prosocial power use, responsiveness, argumentativeness) were excluded from measurement. Unfortunately, it is methodologically impossible to study all effective instructional behaviors in tandem, as students would develop a response fatigue to such a lengthy survey. The teaching behaviors chosen for this study were selected specifically because each behavior either is a rhetorical or a relational behavior based on rhetorical/relational goal theory. Nonetheless, the results of this study imply that, of the teaching behaviors examined in this study, engaging in confirmation and caring may be two of the most important ones. Because instructors cannot engage realistically in every effective teaching behavior at the same time, instructors would be well advised to take the time to communicate to their students that they view them as important while simultaneously demonstrating that they are concerned with their students' welfare. Instructors who do just that will have students who value their classroom experience and perceive that traditional learning is a top priority in their class.

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