

Students' Academic Competitiveness and Their Involvement in the Learning Process

Stephanie Shimotsu-Dariol, Daniel H. Mansson, & Scott A. Myers

The purpose of this study was to examine the relationship between students' academic competitiveness and their involvement behaviors (i.e., student motives for communicating with their instructors, out-of-class communication with their instructors, and classroom participation). Considering the desire inherent among academically competitive students to outperform other students, it was predicted that students' academic competitiveness would be related positively to their involvement behaviors. Participants (N=246) completed a series of self-report measures. The results of Pearson correlation analyses largely provided support for the hypothesized association among students' academic competitiveness and their involvement in the learning process.

Keywords: Academic Competitiveness; In-Class Participation; Out-of-Class Communication; Student Involvement; Student Motives

Traditionally, competitiveness has been described as a general personality disposition in which individuals possess a maladaptive desire to win at any cost (Horney, 1937). More recently, researchers (Ryckman, Libby, van den Borne, Gold, & Lindner, 1997)

A previous version of this article was presented at the 2010 National Communication Association's annual meeting in San Francisco, California.

Stephanie Shimotsu-Dariol (PhD, West Virginia University, 2012) is an Instructor in the School of Communication at Loyola University Chicago, Chicago, Illinois. Daniel H. Mansson (PhD, West Virginia University, 2011) is an Assistant Professor in the Department of Communication Arts & Sciences at Penn State–Hazleton, Hazleton, Pennsylvania. Scott A. Myers (PhD, Kent State University, 1995) is a professor in the Department of Communication Studies at West Virginia University, Morgantown, West Virginia. *Correspondence:* Stephanie Shimotsu-Dariol, School of Communication at Loyola University Chicago, Chicago, IL 60611; E-mail: stephks16@gmail.com

have argued that competitiveness could also be viewed positively, including a desire for personal growth. This desire for personal growth may be triggered by specific situations (Kohn, 1992). The academic setting often serves as a competitive environment because it provides opportunities for students to compare their performance and compete for rewards (Bing, 1999). Students who demonstrate academic competitiveness desire positive outcomes such as high grades and praise from their instructors (Bing, 1999). Not surprisingly, then, competitive students often report high levels of achievement motivation (Smither & Houston, 2002).

Students who possess high levels of academic competitiveness also strive to outperform themselves (i.e., personal improvement) or others. The ambition to succeed may influence competitive students to take proactive measures toward achievement (Ryckman et al., 1997), such as effective study habits and frequent contact with their instructors. Bing (1999) studied competitiveness in the academic setting and found that students' academic competitiveness was associated positively with achieving valued scholastic goals, such as high GPA. Furthermore, he suggested that students who possess high levels of academic competitiveness also are willing to perform behaviors that contribute to their own success. Although a positive relationship between academic competitiveness and student success is suggested, the specific behaviors these students may enact to achieve their academic goals have not yet been explored. One way that competitive students may attempt to maximize their chances for academic success is to be communicatively involved in the learning process.

Three types of student involvement commonly studied by instructional communication scholars are students' motives for communicating with their instructors, out-of-class communication with instructors, and in-class participation, all of which have been associated positively with students' learning outcomes (Dobransky & Frymier, 2004; Frisby & Myers, 2008; Martin, Mottet, & Myers, 2000). Students' motives for communicating refer to reasons why students interact with their instructors, and include functional, relational, participatory, excuse-making, and sycophantic motives. The functional motive refers to clarification of course materials or assignments. The relational motive refers to a desire to get to know the instructor on a personal level. The participatory motive refers to attempts to express interest in the course and understanding of the course content. The excuse-making motive refers to explanations of why assignments are late or incomplete. The sycophantic motive refers to goal-driven communicative attempts to get on the instructor's "good side" (Martin, Myers, & Mottet, 1999).

Students who report high levels of assertiveness, argumentativeness, and self-perceived communication competence tend to communicate with their instructors for relational, functional, and participatory reasons, whereas students who are high in Machiavellianism and verbal aggressiveness often communicate with their instructors for sycophantic and excuse-making reasons (Mansson, Myers, & Martin, 2011; Martin, Byrnes, & Myers, 2009; Martin, Myers, & Mottet, 2006). Conversely, students who are high in communication apprehension (CA) often are reluctant to engage in relational, participatory, and functional communication with their instructors (Martin, Valencic, & Heisel, 2002). Moreover, learning-oriented students communicate with

their instructors to establish personal relationships (i.e., the relational motive) with their instructors, but grade-oriented students communicate with their instructors to justify their poor academic performance or to get on their instructors' "good side" (i.e., excuse-making and sycophantic motives; Williams & Frymier, 2007).

Student out-of-class communication (OCC) with instructors refers to both structured and unstructured student-instructor interactions that are not a part of the course requirements (Terenzini, Pascarella, & Blimling, 1996). OCC typically is initiated by students (Bippus, Kearney, Plax, & Brooks, 2003) and includes casual conversations before or after class (Jaasma & Koper, 1999; Williams & Frymier, 2007) and office visits to discuss class-related issues, course performance, or to request letters of recommendation (Cotton & Wilson, 2006). However, OCC does not include informal greetings in passing (Nadler & Nadler, 2001). These student-instructor out-of-class interactions, or lack thereof, have been found to be influenced by students' communication traits. For instance, students who are motivated and high in trait-based argumentativeness, assertiveness, and cognitive flexibility have been found to be more willing to engage in OCC with their instructors than students low in these traits (Jaasma & Koper, 1999; Mansson, Myers, & Martin, 2012; Martin & Myers, 2006). On the other hand, students who report high levels of trait-based CA are more reluctant to engage in OCC with their instructors than students who report low levels of CA (Martin & Myers, 2006).

Student participation refers to questions or comments that students provide during class (Fassinger, 1995), including peer interactions (Bippus & Young, 2000). Students who participate in class tend to be interested in the course content, confident in their ability to participate (Fassinger, 1996), motivated, satisfied (Frisby & Myers, 2008), willing to communicate (Chan & McCroskey, 1987), and report high self-esteem (Williams, 1971). However, students' CA (Mansson & Myers, 2009), fear of appearing unintelligent, inability to organize thoughts, tension (Fassinger, 1997), and classroom communication apprehension (Neer & Kircher, 1989) often limit their in-class participation.

Collectively, these studies bolster two fundamental arguments that have guided much of the instructional communication research. First, student involvement fosters learning (Frymier, 2005; Junn, 1994; Terenzini et al., 1996). Second, students' traits are associated closely with their involvement in the learning process (McCroskey & Richmond, 2006). To extend this line of research and to corroborate Bing's (1999) claim that academically competitive students are likely to enact behaviors that contribute to their academic success, the following hypotheses are forwarded:

- H1: Students' self-reported academic competitiveness will be related positively to their motives for communicating with their instructors.*
- H2: Students' self-reported academic competitiveness will be related positively to their OCC with their instructors.*
- H3: Students' self-reported academic competitiveness will be related positively to their classroom participation.*

Method

Participants

Undergraduate students ($N = 246$; 136 males, 100 females, and 10 students who failed to identify their sex) who were enrolled in communication courses at a large mid-Atlantic university participated in this study. The participants were two first-year students, 49 sophomores, 96 juniors, 93 seniors, and six students who did not report their academic status. Their ages ranged from 18 to 31 years ($M = 20.75$, $SD = 1.71$).

Procedures and Instruments

Upon approval from the Institutional Review Board, students were asked to complete a two-part survey. The first part included demographic items as detailed above, and the second part included a series of four questionnaires. The questionnaires used were as follows: The Hypercompetitiveness in Academia Scale (Bing, 1999), The Student Communication Motives Scale (Martin et al., 1999, 2000), The Out-of-Class Interaction Scale (Knapp & Martin, 2002; Myers, Martin, & Knapp, 2005), and a modified version of The Classroom Participation Scale (Fassinger, 1995).

The Hypercompetitiveness in Academia Scale consists of 18 items that measure the extent to which the respondents strive to out-perform themselves and other students. Sample items include the following: "Sometimes, I view a test as an opportunity to prove that I am intellectually superior to others" and "Academic competition inspires me to excel." Responses were solicited on a 7-point Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Bing (1999) reported a coefficient reliability of .86 for this scale.

The Student Communication Motives Scale consists of 30 items that measure the respondents' tendencies to communicate with their instructors for relational, functional, excuse-making, participatory, and sycophancy reasons. Sample items include the following: "to learn about him/her personally" and "to build a personal friendship" (relational), "to clarify the material" and "to get academic advice" (functional), "to explain absences" and "to explain why work is late" (excuse-making), "to appear involved in class" and "to demonstrate I understand the material" (participatory), "to pretend I am interested in the course" and "to give the impression that I think the instructor is an effective teacher" (sycophancy). Responses were solicited on a 5-point Likert-type scale ranging from 1 (*not at all like me*) to 5 (*exactly like me*). Mansson and Myers (2009) reported reliability coefficients ranging from .87 to .93 for the five dimensions of this scale.

The Out-of-Class Interaction Scale consists of nine items that measure the respondents' tendencies to interact with their instructors outside of class. Sample items include the following: "I frequently talk to my instructors outside of the classroom" and "I often talk to my instructors during their office hours." Responses were solicited on a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Goodboy, Martin, and Bolkan (2009) reported a reliability coefficient of .84 for this scale.

The Classroom Participation Scale consists of six items that measure the respondents' tendencies to participate in class. In this study, the last question was eliminated due to the possibility that responses inflated or diluted responses (see Myers & Rocca, 2007). Sample items include the following: "I often contribute to class" and "I contribute in class without hesitation" Responses were solicited on a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Frisby and Myers (2008) reported a reliability coefficient of .91 for this scale.

Results

Table 1 contains a correlation matrix and reports the means, standard deviations, and reliability coefficients for all scales used in this investigation. The hypotheses predicted that students' self-reported academic competitiveness would be related positively to their motives for communicating with their instructors (H1), their OCC with their instructors (H2), and their in-class participation (H3). The results of Pearson correlations indicated significant positive relationships between students' academic competitiveness and the following motives: relational ($r = .19, p < .01$), excuse-making ($r = .21, p < .001$), participatory ($r = .33, p < .001$), and sycophantic ($r = .35, p < .001$). Students' academic competitiveness and the functional motive were not significantly correlated ($r = -.12, p = .06$). Additionally, students' academic competitiveness was related positively to their OCC with instructors ($r = .18, p < .01$) and their in-class participation ($r = .17, p < .01$). Thus, H1 was partially supported, and H2 and H3 were fully supported.

Discussion

This study establishes a positive association between students' academic competitiveness and four motives for communicating with instructors (i.e., relational, participatory, excuse-making, sycophancy), their OCC with instructors, and their in-class

Table 1 Means, Standard Deviations, Reliability Coefficients, and Correlation Matrix

| Variable | <i>M</i> | <i>SD</i> | α | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|-------------------------------|----------|-----------|----------|--------|--------|--------|--------|--------|--------|--------|---|
| 1. Academic competitiveness | 68.81 | 13.28 | .80 | – | | | | | | | |
| 2. Relational | 14.51 | 5.03 | .87 | .19*** | – | | | | | | |
| 3. Functional | 22.39 | 4.92 | .86 | -.12 | .14* | – | | | | | |
| 4. Excuse making | 14.41 | 5.58 | .86 | .21*** | .32*** | .18*** | – | | | | |
| 5. Participatory | 14.64 | 5.35 | .87 | .33*** | .56*** | .21*** | .46*** | – | | | |
| 6. Sycophancy | 14.01 | 5.20 | .88 | .35*** | .60*** | .10 | .49*** | .74*** | – | | |
| 7. Out-of-class communication | 24.48 | 5.73 | .75 | .18*** | .50*** | .20* | .23*** | .44*** | .36*** | – | |
| 8. In-class participation | 14.70 | 4.22 | .87 | .17* | .45*** | .24*** | .24*** | .51*** | .41*** | .34*** | – |

Note. * $p < .05$ ** $p < .01$ *** $p < .001$.

participation. Students who communicate for the relational motive do so to establish personal relationships with their instructors (Martin et al., 1999). Highly competitive individuals often seek out relationships with others who are viewed as beneficial (Ryckman et al., 1997). In the classroom setting, students who are high in competitiveness may desire to establish deeper personal relationships with their instructors because it aids them in achieving their high goals for academic achievement. Moreover, highly competitive students will likely experience positive outcomes associated with deeper student–instructor relationships, such as increased motivation and learning (Frymier & Houser, 2000), to a greater extent than less competitive students. Students who communicate for the participatory motive do so to express interest and understanding of the course content (Martin et al., 2000). Thus, students who are high in competitiveness may communicate with their instructors for participatory reasons due to their desire to perform well and to express competence (Bing, 1999).

Students who communicate for the excuse-making motive explain why assignments are not completed or submitted late (Martin et al., 1999). Competitive students may engage in excuse-making in an attempt to ensure that their failure to complete assigned tasks on time will not affect their grades negatively. In fact, Fletcher, Major, and Davis (2008) argued that competitive individuals engage in excuse-making to achieve their high task performance goals. Students who communicate for sycophantic reasons do so to be perceived favorably by their instructors (Martin et al., 1999). It is possible that academically competitive students communicate with their instructors for sycophantic reasons because it is a way of acquiring affirmation and praise from their instructors. Although academically competitive students strive for high academic achievement, they also possess a desire to be perceived as high achievers by their instructors (Bing, 1999).

Students' excuse-making and sycophantic reasons for communicating with their instructors may also be attempts to influence the student–instructor relationship in favor of the students. In fact, Martin et al. (1999) found positive relationships between students' self-reported interpersonal control motive and their tendencies to communicate with their instructors for excuse-making and sycophantic reasons. Similarly, students who are high in Machiavellianism, which inherently involves controlling and self-serving behaviors, often communicate with their instructors for excuse-making and sycophantic reasons (Mansson et al., 2011; Martin et al., 2006). Thus, it is not surprising that academically competitive students also engage in excuse-making and sycophantic conversations with their instructors.

Although the results of this study provided support for the anticipated positive associations between students' academic competitiveness and four motives for communicating with their instructors, the results did not indicate a statistically significant relationship between academic competitiveness and the functional motive. Thus, it appears that academic competitiveness is not associated with the mechanism that influences students to engage in communication with their instructors to ask questions about the information in the class or clarify course material.

Moreover, the more academically competitive students are, the more likely they are to participate in class and to engage in OCC with their instructors. Similar to

students' motives for communicating with their instructors, students' in-class participation and OCC with their instructors may, in part, be communicative attempts to fulfill their needs for academic achievement. Hurt, Scott, and McCroskey (1978) argued that students have both academic and interpersonal needs in the learning process. While the instructor relevance literature (e.g., Frymier & Shulman, 1995; Frymier, Shulman, & Houser, 1996) suggests that instructors should communicate in a manner that fulfills students' needs, Richmond and Gorham (1992) proposed that students also communicate with their instructors to fulfill their own needs. Because competitive students inherently have a need to perform well, to improve (Ryckman et al., 1997), and to receive positive feedback (Smither & Houston, 2002), it is possible that highly competitive students participate in class and engage in OCC with their instructors to fulfill their academic and interpersonal needs. Moreover, prior research (Frisby & Myers, 2008) indicates that student involvement is associated positively with enhanced student learning outcomes. Thus, academically competitive students may ask more questions and raise comments in class (i.e., in-class participation; Fassinger, 1995) as a means of improving their understanding of the course content and subsequently fulfilling their needs for personal growth and improvement.

Considering that instructional strategies are becoming more student-centered (Huba & Freed, 2000), that student involvement is desirable (Goodboy & Myers, 2008), and that student academic competitiveness is associated positively with student involvement, future research may include the exploration of instructor communicative behaviors that are associated with students' academic competitiveness. Prior studies (Christophel, 1990; Richmond, 1990) indicate that students become more academically motivated when instructors are nonverbally immediate. Because competitiveness can be triggered by specific situations (Kohn, 1992), it is possible that instructor behaviors (e.g., affinity-seeking, clarity, nonverbal immediacy) that are associated positively with student motivation may, in fact, also trigger students' academic competitiveness. To explore this idea, additional research studies on students' academic competitiveness is warranted.

Additionally, it should be noted that the data collection procedure (i.e., self-report) is indicative of a series of interrelated limitations. While researchers examining the relationship between personality traits and communicative behaviors rely primarily on self-reports for data collection (Frey, Botan, & Kreps, 2000), self-reports are subject to social desirability biases and self-deceptive personality responses (i.e., honest, "but overly favorable self-presentations"; Fisher & Katz, 2000, p. 109). In terms of the behavioral components (i.e., students' communicative behaviors) of this study, it should be noted that self-reports of previously enacted behaviors require participants to both remember and scale those behaviors (Stayman & Aaker, 1999), which may result in either inflated or diluted responses. For instance, Myers and Rocca (2007) noted that students' responses of their average number of in-class contributions ranged from zero to 32 times per class period. Thus, to corroborate the findings obtained in this study, future research utilizing both self-reports and trained coders to examine the relationship between students' traits and their communicative behaviors is warranted (McCroskey, 1997).

In sum, the results of this study provide support for the notion that students' traits are associated with their communicative behaviors (Mansson et al., 2011; Mottet, Martin, & Myers, 2004), in that students who possess trait competitiveness seem to enact involvement behaviors that have been associated with desirable learning outcomes. However, considering the relatively large sample size in conjunction with the weak magnitude of the correlations, these findings should be interpreted with reluctance (Martin et al., 2006), which warrants continued exploration of the relationships between students' traits and their academic involvement.

References

- Bing, M. N. (1999). Hypercompetitiveness in academia: Achieving criterion-related validity from item context specificity. *Journal of Personality Assessment*, 73, 80–99.
- Bippus, A. M., Kearney, P., Plax, T. G., & Brooks, C. F. (2003). Teacher access and mentoring abilities: Predicting the outcome value of extra class communication. *Journal of Applied Communication Research*, 31, 260–275.
- Bippus, A. M., & Young, S. L. (2000). What behaviors reflect involvement in a course? Students' perceptions and differences between high and low communication apprehension. *Communication Research Reports*, 3, 310–319.
- Chan, M. B., & McCroskey, J. C. (1987). The WTC as a predictor of classroom apprehension. *Communication Research Reports*, 4, 47–50.
- Christophel, D. M. (1990). The relationship among teacher immediacy behaviors, student motivation, and learning. *Communication Education*, 39, 232–341.
- Cotton, S. R., & Wilson, B. (2006). Student-faculty interactions: Dynamics and determinants. *Higher Education*, 51, 487–519.
- Dobransky, N. D., & Frymier, A. B. (2004). Developing teacher-student relationships through out of class communication. *Communication Quarterly*, 52, 211–223.
- Fassinger, P. A. (1995). Understanding classroom interaction: Students' and professors' contributions to students' silence. *Journal of Higher Education*, 66, 82–96.
- Fassinger, P. A. (1996). Professors' and students' perceptions of why students participate in class. *Teaching Sociology*, 24, 25–33.
- Fassinger, P. A. (1997). Classes are groups. *College Teaching*, 45, 22–25.
- Fisher, R. J., & Katz, J. E. (2000). Social-desirability bias and the validity of self-reported values. *Psychology & Marketing*, 17, 105–120.
- Fletcher, T. D., Major, D. A., & Davis, D. D. (2008). The interactive relationship of competitive climate and trait competitiveness with workplace attitudes, stress, and performance. *Journal of Organizational Behavior*, 29, 899–922.
- Frey, L. R., Botan, C. H., & Kreps, G. L. (2000). *Investigating communication: An introduction to research methods* (2nd ed.). Boston: Allyn & Bacon.
- Frisby, B. N., & Myers, S. A. (2008). The relationships among perceived instructor rapport, student participation, and student learning outcomes. *Texas Speech Communication Journal*, 33, 27–34.
- Frymier, A. B. (2005). Students' classroom communication effectiveness. *Communication Quarterly*, 53, 197–212.
- Frymier, A. B., & Houser, M. L. (2000). The teacher-student relationship as an interpersonal relationship. *Communication Education*, 49, 207–219.
- 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.

- Goodboy, A. K., & Myers, S. A. (2008). The effect of teacher communication and students communication on learning outcomes. *Communication Education, 57*, 153–179.
- Goodboy, A. K., Martin, M. M., & Bolkan, S. (2009). The development and validation of the student communication satisfaction scale. *Communication Education, 58*, 372–396.
- Horney, K. (1937). *The neurotic personality of our time*. New York, NY: Norton.
- Huba, M. E., & Freed, J. E. (2000). *Learner-centered assessment on college campuses: Shifting the focus from teaching to learning*. Boston, MA: Allyn & Bacon.
- Hurt, H. T., Scott, M. D., & McCroskey, J. C. (1978). *Communication in the classroom*. Reading, MA: Addison-Wesley.
- Jaasma, M. A., & Koper, R. J. (1999). The relationship of student-faculty out-of-class communication to instructor immediacy and trust to student motivation. *Communication Education, 48*, 41–47.
- Junn, E. (1994). Pearls of wisdom: Enhancing student class participation with an innovative exercise. *Journal of Instructional Psychology, 21*, 385–387.
- Knapp, J. L., & Martin, M. M. (2002, April 25–28). Out-of-class communication: The development and testing of a measure. Paper presented at the meeting of the Eastern Communication Association, New York City, NY.
- Kohn, A. (1992). *No contest: The case against competition*. Boston, MA: Houghton Mifflin.
- Mansson, D. H., & Myers, S. A. (2009). A reexamination of Swedish and American college students' communicative attributes. *Journal of Intercultural Communication Research, 38*, 9–22.
- Mansson, D. H., Myers, S. A., & Martin, M. M. (2012). Students' communicative attributes and their out-of-class communication with instructors. *Atlantic Journal of Communication, 20*, 237–247.
- Mansson, D. H., Myers, S. A., & Martin, M. M. (2011). Students' aggressive communication traits and their motives for communicating with their instructors. *College Students Journal, 45*, 401–406.
- Martin, M. M., Byrnes, K., & Myers, S. A. (2009, November). International students' stress and communication competence and their motives for communicating with their instructors. Paper presented at the annual meeting of the National Communication Association, Chicago.
- Martin, M. M., Mottet, T. P., & Myers, S. A. (2000). Students' motives for communicating with their instructors and affective and cognitive learning. *Psychological Reports, 87*, 830–834.
- Martin, M. M., & Myers, S. A. (2006). Students' communication traits and their out-of-class communication with their instructors. *Communication Research Reports, 23*, 283–289.
- Martin, M. M., Myers, S. A., & Mottet, T. P. (1999). Students' motives for communicating with their instructors. *Communication Education, 48*, 155–164.
- Martin, M. M., Myers, S. A., & Mottet, T. P. (2006). Students' Machiavellianism and motives for communicating with instructors. *Psychological Reports, 98*, 861–864.
- Martin, M. M., Valencic, K. M., & Heisel, A. D. (2002). The relationship between students' communication apprehension and their motives for communicating with their instructors. *Communication Research Reports, 19*, 1–7.
- McCroskey, J. C. (1997). Self-report measurement. In J. A. Daly, J. C. McCroskey, J. Ayers, T. Hopf & D. M. Ayers (Eds.), *Avoiding communication* (pp. 191–216). Cresskill, NJ: Hampton Press.
- McCroskey, J. C., & Richmond, V. P. (2006). Understanding the audience: Students' communication traits. In T. P. Mottet, V. P. Richmond & J. C. McCroskey (Eds.), *Handbook of instructional communication: Rhetorical & relational perspectives* (pp. 51–66). Boston, MA: Allyn & Bacon.
- Mottet, T. P., Martin, M. M., & Myers, S. A. (2004). Relationships among perceived instructor verbal approach and avoidance relational strategies and students' motives for communicating with their instructors. *Communication Education, 53*, 116–122.
- Myers, S. A., Martin, M. M., & Knapp, J. L. (2005). Perceived instructor in-class communicative behaviors as a predictor of student participation in out of class communication. *Communication Quarterly, 53*, 437–450.

- Myers, S. A., & Rocca, K. A. (2007). The relationship between college student class participation and perceived instructor communication style. *Speech and Theatre Association of Missouri Journal, 37*, 114–127.
- 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*, 241–261.
- Neer, M. R., & Kircher, W. F. (1989). Apprehensives' perceptions of classroom factors influencing their class participation. *Communication research Reports, 6*, 70–77.
- Richmond, V. P. (1990). Communication in the classroom: Power and motivation. *Communication Education, 39*, 181–196.
- Richmond, V. P., & Gorham, J. (1992). *Communicating, learning, and affect in instruction*. Edina, MN: Burgess.
- Ryckman, R. M., Libby, C. R., van den Borne, B., Gold, J. A., & Lindner, M. A. (1997). Values of hypercompetitive and personal development competitive individuals. *Journal of Personality Assessment, 69*, 271–283.
- Smither, R. D., & Houston, J. M. (2002). The nature of competitiveness: The development and validation of the competitiveness index. *Educational and Psychological Measurement, 52*, 407–420.
- Stayman, D. M., & Aaker, D. A. (1993). Continuous measures of self-report of emotional response. *Psychology & Marketing, 10*, 199–216.
- Terenzini, P. T., Pascarella, E. T., & Blimling, G. S. (1996). Students' out-of-class experiences and their influence in learning and cognitive development: A literature review. *Journal of College Student Development, 37*, 149–162.
- Williams, R. L. (1971). Relationship of class participation to personality ability, and achievement variables. *The Journal of Social Psychology, 83*, 193–198.
- Williams, K. D., & Frymier, A. B. (2007). The relationship between student educational orientation and motives for out-of-class communication. *Communication Research Reports, 24*, 249–256.