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Applying Leader-Member Exchange Theory to the College Classroom: An Investigation of Student Communication Behaviors

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Instructional communication research has demonstrated the importance of the instructor-student relationship in the classroom. This study aimed to apply leader-member exchange theory (LMX) to the instructional setting by examining the quality of the instructor-student relationship and its influences with student classroom communication behaviors. Participants were 132 undergraduate college students. Results indicated that students who perceive in-group relationships report more involvement citizenship behavior than students who perceive out-group relationships. In addition, students who perceive in-group relationships report less expressive dissent than students who perceive out-group relationships. Finally, students who perceive in-group relationships engage in more oral participation and out-of-class communication with their instructors than students who perceive out-group relationships.

The college classroom is an environment that is co-created by instructors and students. In recent decades, instructional communication researchers have thoroughly examined the relational perspective of teaching by examining several instructor behaviors. The instructor-student relationship is one that shares many qualities of other interpersonal relationships (Frymier & Houser, 2000). Furthermore, teaching has been described as a relational process (DeVito, 1986) that undergoes the same process of interpersonal relationships. One difference in the instructor-student relationship is the equality of power that is typically associated with other interpersonal relationships. One theory that has been applied empirically in several research studies that examines the relational approach of individuals who do not have equal power is leader-member exchange theory (LMX; Graen, 1976; Graen & Uhl-Bien, 1995). LMX, traditionally applied to the superior-subordinate relationship within organizations, addresses the quality of the relationship and is based on the assertion that superiors develop different relationships with their subordinates. The primary purpose of this current research study is to apply leader-member exchange theory to the instructional setting by exploring the instructor-student relationship and its influences on student in-class and out-of-class communication behaviors. By using LMX as a theoretical framework, we can better understand how the perceived quality of the instructor-student relationship is related to students' classroom communication behaviors.

Literature Review

Leader-Member Exchange Theory

With a focus on the quality of relationships between superiors and subordinates, leader-member exchange theory (LMX) contends that superiors communicate with subordinates differently based on the quality of the relationship (Dienesch & Liden, 1986; Graen, 1976). Supervisors can communicate with their subordinates in a supervisory style that focuses on authority and formality, or they can communicate in a

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leadership style that focuses on the interpersonal relationship and mutual liking (Kassing, 2000). Therefore, based on this communication style, subordinates perceive to be a member of the in-group or the out-group. In-group members feel supported by their superiors (Kassing, 2000), and they engage in more open and upward communication with their superiors (Krone, 1991). Out-group members do not experience the same support from their supervisors and typically feel avoided and not engaged in the workplace (Lee & Jablin, 1995).

Empirically, LMX theory (Graen & Uhl-Bien, 1995) has been applied in organizational settings regularly. However, in a few studies, LMX has been applied to instructional contexts (Horan et al., 2013; Mosley et al., 2014; Myers, 2006). Myers (2006) used LMX to explain students' motives to communicate with their instructors. He discovered that students who perceived in-group relationships with their instructors used the relational, functional, participatory, and sycophantic motives to communicate at higher rates than students who perceived out-group relationships with their instructors. However, no differences were discovered with the excuse-making motive to communicate. In another application of LMX to the instructional setting, it was discovered that increased instructor-student interactions produced a higher quality instructor-student relationship from the student perspective (Mosley et al., 2014). However, student achievement was not predicted by the perception of LMX relationship. Horan and colleagues (2013) discovered that students' perception of classroom justice and their LMX relationship with their instructors were positively related. Furthermore, when students perceive an in-group relationship with their instructor, they are less likely to engage in antisocial communication behaviors.

The instructor-student relationship is rather unique because it shares several qualities with other interpersonal relationships while simultaneously sharing qualities with superior-subordinate relationships. Similar to other interpersonal relationships, instructors progress through a relational process with their students and utilize "effective interpersonal communication skills to achieve satisfying outcomes" (Graham et al., 1992, p. 11). However, as Myers (2017b) argued, instructional communication researchers should consider examining the instructor-student relationship through a superior-subordinate lens. In these types of relationships, the superior possesses formal authority to evaluate and direct the activities of subordinates (Jablin, 1979), as well as provide leadership and mentorship (Sias, 2009). Given that instructors engage in these activities with their students, as well as recognizing that the classroom shares many characteristics with organizations (Sollitto et al., 2013), analyzing interactions between instructors and students from an organizational perspective is advantageous for instructional communication scholarship. LMX is an appropriate application of an organizational communication theory to the instructional context as it will offer insight about the dynamics of the instructor-student relationship. Consequently, to investigate the communication of students, this study considers four student behaviors: classroom citizenship behaviors, instructional dissent, oral participation, and out-of-class communication.

Classroom Citizenship Behaviors

Myers and colleagues (2016) applied the concept of organizational citizenship behaviors (OCB) to the instructional setting using Organ's (1988) initial conceptualization that OCB is "individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system, and in the aggregate promotes the functioning of the organization" (p. 4). Examples of citizenship behaviors in the organization are helping, sportsmanship, and civic virtue. Recognizing that college students use citizenship behaviors in the classroom, Myers and colleagues (2016) investigated classroom citizenship behaviors (CCB) and discovered three major categories: involvement, affiliation, and courtesy. *Involvement* contains behaviors related to being actively involved and interacting in the classroom. *Affiliation* is focused on collaborating with classmates inside and outside of the classroom and being supportive and helpful toward classmates. *Courtesy* pertains to the use of etiquette and respect in the classroom. It was discovered that students' use of CCB was positively associated with connected classroom climate, instructor rapport, emotional interest, cognitive interest, affective learning, perceived cognitive learning, state motivation, and communication satisfaction (Myers et al., 2016). Katt et al. (2017) explored relationships between CCB and student traits. They discovered that communication apprehension and the involvement CCB were negatively related, that

extroversion was positively related to all three CCBs, and that openness and conscientiousness were positively related to both involvement and courtesy. Acknowledging that students use different types of CCB in the instructional setting, an advantageous avenue to explore would be how the perception of the LMX relationship influences students' use of CCB. Therefore, the following hypothesis has been forwarded:

> **H1:** Students who perceive in-group relationships with their instructors will report more classroom citizenship behaviors (i.e., involvement, affiliation, courtesy) than students who perceive out-group relationships with their instructors.

Instructional Dissent

Instructional dissent is defined as the student expression of complaints or disagreements related to classroom or instructor issues (Goodboy, 2011). Students communicate instructional dissent in three ways: expressive dissent, rhetorical dissent, and vengeful dissent (Goodboy, 2011). *Expressive dissent* occurs when students want to express their feelings or vent to their classmates, friends, and family in an effort to improve their emotional state. *Rhetorical dissent* is directed at the instructor and occurs when students want their instructor to remedy a problem or issue related to the class. *Vengeful dissent* is an extreme form of dissent when students attempt to ruin an instructor's reputation. In an attempt to seek revenge on an instructor for a perceived wrongdoing, vengeful dissent is directed toward other students, instructors, and administrators. Goodboy (2011) discovered that instructional dissent was positively associated with student challenge behaviors and negatively associated with perceived classroom justice. Students' own traits and characteristics also can influence their use of instructional dissent. Verbally aggressive students typically employ rhetorical and vengeful dissent, whereas students high in argumentativeness report using more rhetorical dissent (Goodboy & Myers, 2012). Furthermore, students who reported higher learning orientation, rather than grade orientation, expressed more rhetorical dissent (Goodboy & Frisby, 2014). Instructor behaviors also play a role in the expression of student dissent. Buckner and Frisby (2015) discovered that instructor confirmation was negatively associated with expressive and vengeful dissent but not rhetorical dissent. A gap currently exists in the literature that investigates how the perception of the instructor-student relationship influences students' expression of dissent. Therefore, the following hypothesis has been posited:

> **H2:** Students who perceive in-group relationships with their instructors will report less expressive dissent, rhetorical dissent, and vengeful dissent than students who perceive out-group relationships with their instructors.

Oral Participation

Class participation has been defined as "any student comments offered, or questions raised in class" (Fassinger, 1995, p. 86). Although participation is highly valued (Remedios et al., 2008), oral participation is just one behavior that indicates student engagement in the classroom (Frymier & Houser, 2016). Engagement in oral participation is influenced by instructor behaviors and student characteristics. Students' oral participation in the classroom is more likely to occur when their instructors are humorous (Goodboy et al., 2015), use confirming behaviors (Goodboy & Myers, 2008), and use self-disclosure (Goldstein & Benassi, 1994). Nevertheless, some students may never participate orally in class due to their own characteristics or traits. Students high in communication apprehension are less likely to participate in class (Clark & Yeager, 1995). However, students with higher state motivation (Frisby & Myers, 2008; Frymier & Houser, 2016), higher confidence (Karp & Yoels, 1976), and higher willingness to communicate (Chan & McCroskey, 1987) are more likely to orally participate. Frymier and Houser (2016) explained that most instructors expect students to make oral contributions and to ask questions in class. This expectation, along with the expectation that higher quality LMX relationships with instructors should produce more oral

participation, leads to this hypothesis:

> **H3**: Students who perceive in-group relationships with their instructors will report more in-class oral participation than students who perceive out-group relationships with their instructors.

Out-of-Class Communication

Out-of-class communication (OCC) is defined as face-to-face communication between students and their instructors outside of the traditional classroom setting (Fusani, 1994). However, the study of OCC extends to student-initiated email messages and other mediated interactions with instructors (Zhang, 2006). Examples of OCC can include visiting instructors during their office hours, advising, instructor involvement in student organizations, and conversations before and after class (Aylor & Oppliger, 2003). The instructor can certainly encourage OCC with their students, as OCC has been found to be positively associated with instructor immediacy (Jaasma & Koper, 1999), humor use (Aylor & Oppliger, 2003), and use of affinity-seeking strategies (Myers et al., 2005).

Students' own traits and characteristics can influence their engagement in OCC as well. Students who are more likely to engage in OCC with their instructor are more motivated (Goodboy et al., 2009), cognitively flexible (Mansson, 2015; Martin & Myers, 2006), and argumentative (Mansson et al., 2012). In a recent meta-analysis examining the relationships between students' OCC and their learning outcomes, positive summary effects were discovered between OCC and both affective learning and perceived cognitive learning (Goldman et al., 2016). Given that employees with high-quality leader-member exchanges enjoy a host of benefits (Sollitto et al., 2014), it is plausible to hypothesize that when students have high-quality leader-member exchanges with their instructors, they will be more likely to engage in OCC. Therefore, the following hypothesis is forwarded:

> H4: Students who perceive in-group relationships with their instructors will report more out-of-class communication than students who perceive out-group relationships with their instructors.

Method

Participants and Procedures

Participants were 132 undergraduate college students enrolled in introductory level communication courses at a medium-sized midwestern university. Of the 132 participants, 43 were male, 83 were female, and 6 participants neglected to report their sex. The age of the participants ranged from 18 to 46 years, with an average age of 21 years (M = 20.55, SD = 3.3). The majority of participants was White/Caucasian (n = 105; 80%), followed by Black/African American (n = 17; 13%), Middle Eastern (n = 4; 3%), Hispanic or Latino/a (n = 2; 2%), Multiracial (n = 3; 2%), and Asian/Pacific Islander (n = 1; 1%). Fifty-seven participants indicated they were currently in their first year of college, whereas 23 were sophomores, 27 were juniors, and 25 were seniors. On average, the participants were enrolled in 5 courses (M = 4.89, SD = 0.9; range = 1-9 courses) across 15 credit hours (M = 14.53, SD = 2.2; range = 3-21 credit hours). Participants also reported information about their instructor and the course. The majority of the instructors were female (n = 77; 58.3%), whereas 54 of the instructors were male (i.e., 40.9%). One participant (i.e., 0.8%) did not indicate the sex of their instructor. Students also reported on classes in which the enrollment ranged from 5 to 99 students (M = 26.87; SD = 14.1).

Students were provided with a cover letter stating the purpose of the study and the questionnaire. Before beginning the questionnaire, participants were instructed to refer to the instructor and class they had immediately prior to the data collection session (Plax et al., 1986). The study was approved by the university's Institutional Review Board (IRB) and data collection started during the twelfth week of the

semester.

Instrumentation

Participants completed a questionnaire that included a list of demographic questions and a battery of instruments. The battery of instruments included the Leader-Member Exchange 7 Scale (Graen & Uhl-Bien, 1995), the Classroom Citizenship Behaviors Scale (Myers et al., 2016), the Instructional Dissent Scale (Goodboy, 2011), the Oral Participation Scale (Frymier & Houser, 2016), and the Out of Class Interaction Scale (Knapp & Martin, 2002).

The Leader-Member Exchange 7 Scale (LMX 7) uses 7 items to inquire about the quality of the superior-subordinate relationship. For the purposes of this study, the LMX 7 scale was adapted to reflect the instructor-student relationship. Myers (2006) was the first to modify the LMX 7 to the instructor-student relationship. Therefore, the current study used the same wording of Myers' initial scale adaptation. This scale uses a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Previous reliability coefficients for this scale have ranged from .87 to .89 (Kassing, 2000; Myers, 2006). Gerstner and Day (1997) noted that the LMX 7 has the soundest psychometric properties of all available LMX instruments. In the current study, a reliability coefficient of .92 was obtained ($M = 3.57$; $SD = 0.96$).

The Classroom Citizenship Behaviors Scale uses 23 items to measure students' reports of their involvement, affiliation, and courtesy behaviors in the classroom. The scale uses a 5-point Likert scale ranging from 0 (*never*) to 4 (*very often*) to measure the frequency of the behaviors. Previous reliability coefficients for this scale have ranged from .57 to .92 for the three subscales (Katt et al., 2017; Myers et al., 2016), with the lower reliability typically for the courtesy subscale. Confirmatory factor analyses have been conducted in previous studies (Katt et al., 2017; Myers et al., 2016) and have indicated a good model fit. In this study, the alpha reliabilities were all acceptable: .90 for involvement ($M = 2.34$; $SD = 0.85$), .94 for affiliation ($M = 1.61$; $SD = 1.12$), and .78 for courtesy ($M = 3.25$; $SD = 0.80$).

The Instructional Dissent Scale includes three dimensions to measure students' frequency of complaints about class-related issues. The three dimensions include expressive, rhetorical, and vengeful dissent. Responses were solicited using a 5-point Likert scale ranging from 1 (*never*) to 5 (*very often*). Previous reliability coefficients have ranged from .83 to .96 for the three subscales (Goodboy, 2011, 2012; Goodboy & Frisby, 2014; Goodboy & Myers, 2012). Goodboy (2011, 2012) provided psychometric evidence and scale validity in previous studies. In the current study, reliability coefficients were .92 for expressive dissent ($M = 1.37$; $SD = 0.94$), .78 for rhetorical dissent ($M = 1.24$; $SD = 0.84$), and .90 for vengeful dissent ($M = 0.29$; $SD = 0.63$).

The Oral Participation Scale measures students' self-reports of their oral participation during their classes. Using 7 scale items, responses were solicited using a 5-point Likert scale ranging from 0 (*never*) to 4 (*very often*). Frymier and Houser (2016) obtained a Cronbach's alpha of .91 for the instrument. Psychometric evidence and validity for the Oral Participation Scale have been demonstrated in previous research (Frymier & Houser, 2016). In this study, the alpha reliability was .79 ($M = 2.23$; $SD = 0.78$).

The Out of Class Interaction Scale is a 13-item scale that assesses students' levels of interaction with their instructors outside of the classroom. Responses were solicited using a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Previous reliability coefficients for this instrument have ranged from .84 to .87 (Goodboy et al., 2015; Martin & Myers, 2006). Psychometric evidence and validity for the Out of Class Interaction Scale have been demonstrated in previous research (Knapp & Martin, 2002). In this study, the alpha reliability was .91 ($M = 2.68$; $SD = 0.83$).

Data Analysis

Previous LMX research (Lee, 1999; Myers, 2006) has categorized participants into three groups (i.e., in-group, middle-group, out-group) based on their responses on the LMX 7. For the purposes of this

study, 63 participants were categorized as having an in-group relationship with their instructor, 25 participants were categorized as having a middle-group relationship with their instructor, and 44 participants were categorized as having an out-group relationship with their instructor. Given that the focus of the study was on the differences between in-group and out-group participants, responses from the middle-group category were not analyzed. The hypotheses were analyzed using a series of analysis of variance (ANOVA) and multivariate analysis of variance (MANOVA), with the two LMX 7 groups serving as the independent variables and the outcome variables (i.e., CCB, instructional dissent, oral participation, and OCC) serving as the dependent variables. For the MANOVA tests, Wilks' lambda was used to test whether there are differences between the means of identified groups of subjects on a combination of dependent variables. Wilks' lambda is the most frequently used measure in multivariate tests. Furthermore, eta-squared (i.e., η^2) is most often reported for straightforward ANOVA designs that are balanced and have independent cells.

Results

For classroom citizenship behaviors (H1), the MANOVA was significant, *Wilks's* $\lambda = .83$, $F(6, 254) = 4.24$, $p < .001$, $\eta^2 = .09$. Students who perceive in-group relationships ($M = 2.64$, $SD = .80$) with their instructors report more involvement citizenship behavior than students who perceive out-group relationships ($M = 1.95$, $SD = .82$). There were no significant differences between the in-group and out-group for the affiliation citizenship behavior or courtesy citizenship behavior.

Table 1
Differences in Classroom Citizenship Behaviors by LMX Group Membership

Citizenship Behavior	In-Group* M (SD)	Out-Group^ M (SD)	*F*	η^2
Involvement	2.64 (.80)	1.95 (.82)	9.92†	.13
Affiliation	1.57 (1.15)	1.67 (1.12)	0.09	.00
Courtesy	3.35 (.72)	3.19 (.90)	1.27	.02

Note. *63 participants, ^44 participants, †$p < .001$

For instructional dissent (H2), the MANOVA was significant, *Wilks's* $\lambda = .83$, $F(6, 252) = 3.98$, $p < .001$, $\eta^2 = .09$. Students who perceive in-group relationships ($M = 1.09$, $SD = .80$) with their instructors report less expressive dissent than students who perceive out-group relationships ($M = 1.74$, $SD = 1.04$). There were no significant differences between the in-group and out-group for rhetorical dissent or vengeful dissent.

Table 2
Differences in Instructional Dissent by LMX Group Membership

Dissent Type	In-Group* M (SD)	Out-Group^ M (SD)	*F*	η^2
Expressive	1.09 (.80)	1.74 (1.04)	6.92†	.10
Rhetorical	1.27 (.86)	1.08 (.81)	1.68	.03
Vengeful	0.21 (.54)	0.37 (.67)	1.12	.02

Note. *63 participants, ^44 participants, †$p < .001$

For in-class oral participation (H3), the ANOVA was significant [$F(2, 129) = 5.02$, $p < .001$, $\eta^2 =$

.07]. Students who perceive in-group relationships ($M = 2.44$, $SD = .75$) with their instructors engaged in more oral participation than students who perceive out-group relationships ($M = 1.99$, $SD = .80$).

For out-of-class communication (H4), the ANOVA was significant [$F(2, 128) = 17.31$, $p < .001$, $\eta^2 = .21$]. Students who perceive in-group relationships ($M = 3.05$, $SD = .82$) with their instructors engaged in more out-of-class communication with their instructors than students who perceive out-group relationships ($M = 2.19$, $SD = .63$).

Table 3
Differences in Communication Behaviors by LMX Group Membership

Communication Behavior	In-Group* M (SD)	Out-Group^ M (SD)	*F*	η^2
Oral Participation	2.44 (.75)	1.99 (.80)	5.02†	.07
OCC	3.05 (.82)	2.19 (.63)	17.31†	.21

Note. *63 participants, ^44 participants, $^{\dagger}p < .001$

Discussion

The purpose of this study was to examine the extent to which students' relationship quality with their instructors affects their in-class and out-of-class communication behaviors. Specifically, this study applied LMX theory to the instructor-student relationship to examine differences between in-group and out-group perceptions. There were three sets of findings in this study. First, it was discovered in the sample collected, that students who perceive in-group relationships with their instructors use the involvement classroom citizenship behavior more frequently than students who perceive out-group relationships. There were no differences between the groups for the affiliation or courtesy citizenship behaviors. The finding that high-quality instructor-student relationships relate to more involvement citizenship behaviors in the classroom is plausible because students feel comfortable communicating with instructors to whom they feel close. Examples of the involvement citizenship behavior include asking questions in class, providing examples, and engaging in conversations with the instructor (Myers et al., 2016). When there is a high-quality instructor-student relationship, students are likely concerned about maintaining that strong relationship and hope to be viewed favorably by the instructor. It makes sense that no relationship was discovered between LMX and the affiliation citizenship behavior. With affiliation, the focus is on classmates (i.e., forming study groups, helping with homework). While these are positive and helpful behaviors, students can be affiliated with their classmates regardless of the quality of the instructor relationship. In a similar vein, the courtesy citizenship behavior pertains to showing respect toward classmates, which is a behavior that is positive and useful, but not necessarily related to the relationship with the instructor. Students can choose to be courteous towards others regardless of their instructor-student relationship.

The second finding of this study was that students in the sample who perceive in-group relationships with their instructors use expressive dissent less than students who perceive out-group relationships. No differences between the groups were found with rhetorical dissent or vengeful dissent. It makes sense that students who have lower-quality relationships with their instructors' will dissent in expressive manners. With expressive dissent, the focus is on complaining to others (i.e., classmates, family, friends) about the instructor and the course in an attempt to feel better. Students who perceive an out-group relationship with their instructor might feel that their instructor does not care about them or their learning. Goodboy (2011) found that when teachers misbehave (i.e., grading unfairly, offensiveness, indolence), students are more likely to dissent. Coincidentally, if an instructor misbehaves in class and if a student perceives a low-quality relationship with instructor, then expressive dissent is more likely to occur. Though it was hypothesized that rhetorical dissent and vengeful dissent also would be related to LMX, it is plausible that those relationships were nonsignificant. Recall that rhetorical dissent is only designed to fix a perceived

wrongdoing (Goodboy, 2011). In essence, students can perceive a wrongdoing in class but still perceive a high-quality relationship with their instructor. This lack of relationship between LMX and rhetorical dissent corroborates previous research on the lack of findings between instructor confirmation and rhetorical dissent (Buckner & Frisby, 2015). It is also worthy to note that the amount of vengeful dissent reported among students was incredibly low. In fact, the majority of students (*n* = 86) reported using no vengeful dissent at all.

The third finding of this study was that students in the sample who perceive in-group relationships with their instructors orally participate more in class and communicate with their instructor outside of class more frequently than students who perceive out-group relationships. When instructors use effective teaching behaviors including, but not limited to, humor (Goodboy et al., 2015), confirmation (Goodboy & Myers, 2008), and self-disclosure (Goldstein & Benassi, 1994), students in the sample collected are more likely to participate inside and outside of class. Perhaps the use of these behaviors by instructors allow students to perceive a higher quality relationship with their instructors. The significant relationships found in H3 and H4 provide evidence that perceived relationship quality and student communication behaviors are related.

Practical Implications

Based on the results of this study, several practical implications are noteworthy for instructors. First, instructors should work to develop positive relationships with their students. Instructors should start by learning their students' names, information about each of them, and their learning styles and needs. Further, instructors can use this information to make the course content relevant to the student by using useful and applicable examples (Frymier & Shulman, 1995). These actions will allow the student to feel that their education is personalized to them (Waldeck, 2007). Davis (2009) noted that the first day of class is incredibly important for the instructor-student relationship, and instructors should start forming these relationships early in the semester.

Second, instructors should make themselves readily available to students. Not only should instructors hold regular office hours, but they could also consider other mechanisms for availability such as video chats, social apps (e.g., Slack), and staying after class to answer any questions. Instructors should investigate the preferred methods of student communication. For example, some students might prefer traditional office hour visits whereas other students might prefer communicating on a social app. Whatever the case, instructors should articulate clear guidelines and expectations for communication.

Third, instructors should work to facilitate connectedness in the classroom (Dwyer et al., 2004). When students feel connected to the instructor and their classmates, they report greater learning outcomes and increased communication (Sidelinger & Booth-Butterfield, 2010). When facilitating a connected classroom climate, instructors can promote openness and inclusivity among their students. It is likely that students will communicate more frequently with the instructor and their peers in open and inclusive classrooms.

Limitations and Future Directions

A limitation of the current study is that the data only included a one-time glimpse of the instructor-student relationship and the communication behaviors. It has been demonstrated in research that the instructor-student relationship fluctuates over the course of the semester (Myers, 2006, 2017a). Therefore, an advantageous future direction of research would be to examine how the quality of the instructor-student relationship (LMX) evolves over the course of the semester, and how that influences the student communication. A second limitation of the current study is the lack of institutional, age, and ethnic diversity in the sample, therefore results should be interpreted with caution. The sample was collected through convenience sampling, but additional efforts could have been made in increasing the diversity of the sample. A third limitation of this study is that specific instructor behaviors were not measured. Perhaps a more comprehensive view of this line of research would be to assess a causal model of how instructor behaviors

influence the instructor-student relationship (LMX), and then assess how that relationship influences student communication. If instructional researchers continue to apply LMX to the instructor-student relationship, then a future direction of research could be to develop a quantitative measure specific to this relationship. As of now, the current adaptation of the superior-subordinate relationship scale measure LMX relationships is the only quantitative measure that exists. This scale adaptation should be subjected to a series of factor analyses to verify the factor structure.

Another area of future exploration regarding LMX theory in the college classroom would be to determine relationships with personalized education (Waldeck, 2007). Personalized education includes instructor accessibility, instructor interpersonal competence, and course-related practices. It would be reasonable to assume that students who perceive to be in their instructors' in-group would report higher levels of personalized education. However, it could be advantageous for future research to determine if students who perceive to be in their instructors' out-group perceive a lack of personalized education. Answering these questions would assist instructional communication scholars with determining if perceived relationship quality is related to personalized education. Furthermore, if instructional scholars continue to apply LMX theory to the classroom setting, another avenue of future research could be to investigate the experiences of graduate students. Graduate students and graduate teaching assistants could have different levels of relationships with their instructors than undergraduate students. It could be beneficial to determine the extent to which graduate students perceive in-group or out-group relationships with their instructors and to determine relationships with communication behaviors.

Conclusion

Collectively, the results from this study suggest that students perceive to be in their instructors' in-group, middle-group, or out-group, and that perception influences the manner in which they communicate with their instructors. Specifically, students who perceive to be in their instructors' in-group report more involvement citizenship behavior, less expressive dissent, increased in-class oral participation, and increased levels of OCC. Through their research, instructional communication researchers (i.e., Fassinger, 1995; Frymier & Houser, 2000, 2016; Goodboy et al., 2015; Myers, 2017a) have continuously demonstrated that quality student-instructor relationships produce benefits for student participation, learning, and communication. This study provides evidence that when students perceive a high-quality relationship with their instructors, they are more likely to communicate and less likely to dissent. Instructors should consider that one motivating factor for their students' communication is the perception of their relationship with their instructor. Therefore, instructors should communicate with their students in a positive manner while using a host of effective instructor behaviors (i.e., affinity-seeking, self-disclosure, immediacy, humor, confirmation, content relevance, instructional clarity).

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