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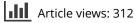
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ABSTRACT

Scholars have long suggested that an individual's communicative adaptability may function as an indicator of their overall communication competence. In pursuit of this idea in a new context – the classroom – this study incorporates communication accommodation theory (CAT) to investigate how students' perceptions of instructor nonaccommodation influence their subsequent evaluations of the instructor. Results demonstrated that, when controlling for students' expected grade, perceptions of nonaccommodation related to content knowledge and student support negatively influenced both instructor credibility and communication competence, while perceptions related to the appropriateness of an instructor's nonverbal responsiveness and verbal delivery did not have significant effects. Implications for theory and classroom practice are briefly discussed.

KEYWORDS

Communication accommodation theory; communication competence; instructor credibility

Adapting communication behavior to facilitate shared meaning with others is a deeply engrained component of human life. Scholars routinely reference this idea through work concerning communicative adjustment. In fact, scholars have made calls for research explicitly examining appropriate adjustment as reflective of competent communication (e.g., Gallois, Gasiorek, Giles, & Soliz, 2016). Thus, the present study incorporates one of the most prominent theories of communication adjustment – communication accommodation theory (CAT; Giles, 1973, 2016) – as an explanatory vehicle for effective communication in a context where adjustment research is sparse: the classroom.

CAT explains how and why communicators adjust behavior in interactions, as well as the consequences of doing so, from a theoretical grounding in identity (Dragojevic, Gasiorek, & Giles, 2016a). Scholars use CAT to explore why listeners interpret communicative messages differently. From a listener's perspective, communication is considered accommodative if it is "appropriately adjusted and unproblematic" (Dragojevic, Gasiorek, & Giles, 2016b, p. 181). Contrarily, when listeners perceive attempts to adjust behavior as inappropriate or unsuccessful, communication is considered *nonaccommodative* (Coupland, Coupland, Giles, & Henwood, 1988). Stated

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differently, nonaccommodation occurs when a listener feels behavior in an interaction does not meet their expectations or standards of appropriateness. It usually involves some form of perceived dissimilarity or disassociation that occurs as a result of another's behavior, and it can lead to misunderstandings, negative perceptions, or lessened comprehension (Giles & Gasiorek, 2013). Additionally, individuals' expectations of appropriateness vary from person to person, which may provide insight into the ways in which students' perceptions of the same behavior may be considered accommodative for some and nonaccommodative for others.

As a result, CAT provides a unique framework for theoretically explaining how instructor-student interactions shape classroom relationships, affect, and understanding (Gasiorek & Dragojevic, 2018). However, few studies have explicitly applied CAT concepts to classroom interaction (Soliz & Giles, 2014), and much of the relevant literature that has attempted to do so has investigated interactions occurring between instructors and students outside of traditional classroom environments (e.g., Jones, Gallois, Callan, & Barker, 1995) or without a specific focus on teaching and learning processes. For example, Gasiorek and Giles (2012) manipulated an interaction between a student and a teaching assistant providing clarity on a topic. The language of the TA was manipulated to reflect the teacher either exceeding (i.e., providing too much information) or undershooting (i.e., not providing enough information) the student's expectations for help. In both cases, nonaccommodative TAs were seen as unhelpful and as having low credibility, though the effect was more pronounced when the TA did not provide enough information. Although these results align with other CAT researchers who have linked individual perceptions of nonaccommodation to evaluations of message senders, researchers are yet to investigate students' experiences with nonaccommodation in actual classroom settings. Thus, to build upon this thinking and situate the classroom as the specific context for inquiry in CAT-related research, the current study assesses students' perceptions of nonaccommodation and subsequent appraisals of instructors in the form of credibility and communication competence.

Instructor credibility reflects the image of an instructor that students hold in their minds. McCroskey and Teven (1999) argued that instructor credibility consists of three dimensions: competence, trustworthiness, and goodwill. That is, the construction of a student's image of an instructor is based in beliefs about the instructor's knowledge of subject matter, the degree to which they believe the instructor possesses integrity, and how concerned they believe the instructor is about their welfare. Researchers have already linked perceptions of accommodative and nonaccommodative behavior to evaluations of speakers (e.g., credibility; Gasiorek & Giles, 2012), and the theory generally supports an inverse relationship between perceived nonaccommodation and reports of credibility. These findings are expected to exist when students recall their classroom experiences as well.

Relatedly, communication competence involves an individual's impression of their own or another's communication appropriateness and effectiveness within a context (Spitzberg, 1983; Spitzberg & Cupach, 1984). Given this conceptualization, Spitzberg and Cupach (1984) noted that one of the most fundamental considerations for understanding one's competence comes from their ability to adapt (i.e., adjust) to the environment. Duran and Spitzberg (1995) articulated this idea further: "adaptability is accomplished by perceiving contextual parameters and enacting communication appropriate to the setting" (p. 260). Adaptability can also be understood as a result of one's ability to encode or decode messages effectively (Monge, Bachman, Dillard, & Eisenberg, 1982). Thus, instructors viewed as the most competent communicators by students know when and how to implement various behaviors that meet students' expectations of appropriateness. Therefore, the following hypothesis was proposed:

H: When students perceive their instructor as more nonaccommodative, they will report a) less instructor credibility and b) less communication competence.

Methods

Participants

Students were recruited from the basic communication course (BCC) at a large Southern university. Participants consisted of 549 undergraduate students (359 women, 188 men, and 2 who did not report) with ages ranging from 18 to 55 (M = 19.29, SD = 2.85). Students were mostly homogenous in their academic year, including 421 first years (76.7%), 99 sophomores (18.0%), 14 juniors (2.6%), 14 seniors (2.6%), and 1 unsure (0.10%).

Procedures and instrumentation

This study was conducted as a part of an ongoing assessment of the BCC at the authors' institution and blanketed by existing IRB approval. As part of this assessment, students complete both a pretest and posttest to assess their experiences in their respective course section. Both surveys are integrated as an assignment worth 2% of students' final grade. The current data was collected from the posttest administered during the final two weeks of the semester.

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Perceptions of Instructor Nonaccommodation

Perceptions of instructor nonaccommodation were operationalized using a 9-point scale asking students to rate the appropriateness of specific instructor behaviors via the frequency that they occurred (1: An Inappropriate Amount, 9: *An Appropriate Amount*). Using a modification of the (non)accommodation scale development steps forwarded by Speer, Giles, and Denes (2013), twenty instructor behaviors were selected by consulting typologies of accommodative and nonaccommodative behavior in other contexts (e.g., "My instructor is supportive;" Williams et al., 1997) and synthesizing this work alongside common instructor message behaviors (e.g., "I smile when I talk to people;" Richmond, McCroskey, & Johnson, 2003). Responses were recoded so that higher scores indicated greater perceived nonaccommodation. After removing one item due to poor correlations with other variables ("My instructor used jargon that was tough to understand"), an exploratory factor analysis using Mplus v 8.4 (Muthén & Muthén, 2018) resulted in a 4-factor solution.¹ Nonverbal responsiveness was related to perceived nonaccommodation surrounding the instructor's nonverbal presentation. Verbal delivery was related to the inappropriateness of the instructor's adjustment of their technical language or patterns of speech presentation. Content knowledge referred to nonaccommodation related to students' understanding of specific course content. Student support referred to nonaccommodation related to students' emotional and personal well-being.

Credibility and Competence

Credibility was measured using McCroskey and Teven's (1999) ethos/credibility scale. This 18-item instrument consists of three subdimensions (i.e., competence, trustworthiness, and caring) assessed using semantic differentials on a 7-point scale. The dimensions were averaged to form a single composite, consistent with research supporting the measure as psychometrically unidimensional (see Finn et al., 2009). Communication competence was measured using ten items from Monge et al. (1982) Communicator Competence Questionnaire (CCQ). Five items reflected an instructor's encoding skills (e.g., "My instructor can deal with others effectively") and five items reflected decoding skills (e.g., "My instructor pays attention to what other people say to him/her").

Controlling for Expected Grade in the Course

Research suggests that success or failure at a task influences individual recollections of behavior as accommodative or nonaccommodative (Gasiorek & Dragojevic, 2018). Thus, students' expected grade in the course, as an indicator of their psychological expectation for success, was included as a control. Students reported their expected grade (1 = Expecting an A, 5 = Expecting an F), and responses were recoded so that higher numbers corresponded to a higher expected grade. The categorical nature of the variable necessitated dummy coding responses into a series of dichotomous variables, with those students expecting an A serving as the reference variable.

Results

Means, standard deviations, reliabilities, an overview of the individual items assessing perceptions of nonaccommodation, and coding for expected grades are presented in Table 1. In accordance with calls made by communication scholars (Goodboy & Martin, 2020), we used McDonald's omega ω to assess reliability instead of Cronbach's alpha (α).

Two hierarchical regression analyses were conducted using nonaccommodation related to nonverbal responsiveness, verbal delivery, content knowledge, and student support as predictors, students' evaluations as outcomes, and expected grade as a control. In each analysis, expected grade was entered into the first step, followed by perceptions of nonaccommodation in a second step. Coefficients and change statistics are reported in Table 2. Examination of the variance inflation values and tolerance statistics suggest that the independent variables were moderately correlated.

	Mean	SD	ω
Nonverbal responsiveness	2.18	1.50	.955 (Cl: .943, .965)
Made eye contact with me			
Smiled at me			
Showed enthusiasm			
Used gestures to emphasize points			
Moved around the classroom when speaking			
Verbal delivery	2.21	1.44	.939 (Cl: .924, .952)
Used slang that I would use			
Concentrated on articulating words for clarity			
Tried to use simple language			
Made an effort to pronounce words correctly.			
Content knowledge	2.02	1.42	.955 (Cl: .942, .965)
Provided feedback to me			
Incorporated examples to make course content relevant			
Explained course content thoroughly			
Simplified course content for me			
Repeated his/her ideas to help me understand			
Student support	2.08	1.54	.964 (Cl: .955, .972)
Provided emotional support			
Made me feel comfortable			
Was concerned about my success in the class			
Was responsive to my needs			
Empathized with me			
Instructor Credibility	6.37	0.73	.950 (Cl: .937, .960)
Communication Competence	6.24	0.77	.961 (Cl: .945, .972)
Expected Grade in the Course (Dummy Coded			
Expecting a D ($0 = Any$ other grade; $1 = D$)	0.00	0.06	-
Expecting a C ($0 = Any$ other grade; $1 = C$)	0.03	0.16	-
Expecting a B ($0 = Any$ other grade; $1 = B$)	0.18	0.39	-

Table 1. Means, standard deviations, and reliability for study variables.

Nonaccommodation items derived from Frey (2019).

	Regression Outcome Variables		
	Credibility	Communication Competence	
Step 1	$R^2 = .02^*$	$R^2 = .01$	
Expected Grade (D)	$\beta =03, t =78$	$\beta =02, t =38$	
Expected Grade (C)	$\beta = .00, t = .17$	$\beta =02, t =36$	
Expected Grade (B)	$\beta =15, t = -3.39^{**}$	$\beta =11, t = -2.56^*$	
Step 2	$\Delta R^2 = .29^{**}$	$\Delta R^2 = .26^{**}$	
NV Responsiveness	$\beta =15, t = -2.11^*$	$\beta =06, t =84$	
Verbal Delivery	$\beta = .08, t = 1.06$	$\beta = .15, t = 1.96$	
Content Knowledge	$\beta =22, t = -2.59^*$	$\beta =27, t = -3.10^*$	
Student Support	$\beta =27, t = -3.39^{**}$	$\dot{\beta} =33, t = -3.89^{**}$	

Table 2. Results of hierarchical regressions.

***p* < .01, **p* < .05.

For credibility, the overall model in the second step was significant; $R^2 = .31$, F(7,523) = 34.628, p < .001. The regression coefficients in this step showed that as perceptions of nonaccommodation related to nonverbal responsiveness, content knowledge, and student support increased, reports of instructor credibility were lessened. At the same time, the effect of verbal delivery was not significant.

For communication competence, the overall model in the second step was significant; $R^2 = .27$, F(7,518) = 28.176, p < .001. Regression coefficients in this step demonstrated that as perceptions of nonaccommodation related to content knowledge and student support increased, students also felt the instructor was a less competent communicator. However, the effects of nonverbal responsiveness and verbal delivery were not significant. Taken together, the hypothesis was partially supported.

Discussion

This study examined connections between students' experiences of instructor nonaccommodation and their subsequent instructor evaluations. Communication accommodation theory (CAT; Giles, 1973, 2016) suggests that perceptions of another's behavior as inappropriately adjusted (i.e., not meeting their needs) should lead to negative evaluations of that individual. Even in a classroom context, research has hinted at the notion that nonaccommodation may lead instructors to be viewed as less helpful, friendly, or intelligent (Gasiorek & Giles, 2012). Results from this study confirm that students' perceptions of instructor nonaccommodation influence judgments. Two conclusions can be drawn from the results.

First, perceptions of nonaccommodation related to content knowledge and student support were significantly, negatively related to both instructor credibility and communication competence. As perceptions of instructor behavior relative to students' knowledge of course content and emotional health in a course departed from expectations of appropriateness, instructors were seen as less credible and as less effective communicators. This finding reinforces claims about the underlying function of accommodative skills as an indicator of communicative competence within a classroom setting (Pitts & Harwood, 2015). This is important because classrooms are often used as models for exemplifying (non)accommodative processes without regard for the constraints they pose on interactions (e.g., Nyquist & Booth, 1977). The research specifically investigated students' actual classroom experiences to confirm that perceptions of nonaccommodation result in more negative evaluations. However, the results also suggest that students' perceptions of some modes of nonaccommodation are uniquely related to their evaluations of instructors, whereas some others are not. We believe this should prompt researchers to further investigate how nonaccommodation functions simultaneously in a classroom context.

Moreover, the finding has practical implications in that nonaccommodation is a personal, individualized experience; what constitutes an optimal level of adjustment should vary from student to student. Whereas some students may desire greater emotional support and connection to motivate them to perform in class (i.e., Frisby, Hosek, & Beck, 2020), others might desire shifts in the way content is presented to help them learn and retain knowledge. In a classroom, perhaps instructors can enhance perceptions of their effectiveness by routinely assessing students' understanding and well-being and adjusting their behavior appropriately. For example, instructors often practice strategic ambiguity as a means of motivating or empowering students (Klyukovski & Medlock-Klyukovski, 2016). There may be certain conditions where such a lack of clarity may hamper rather than benefit students, and credible and effective instructors may be the ones who can recognize students' experiences and adapt appropriately.

Second, nonaccommodation related to nonverbal responsiveness was only significantly related to instructor credibility, and verbal delivery did not significantly predict either outcome. One possible explanation for these results is that students were asked to reflect on their general experiences interacting with instructors without considering *when* these interactions occurred; instructors frequently shift between addressing students as individuals (e.g., a student asks a question privately before class) and the class as a group (e.g., delivering a lecture). The results fail to differentiate between students who based perceptions on routine interpersonal interactions with the instructor and students who based perceptions on general instructor communication with the entire class.

Indeed, students' perceptions are driven in large part by their position relative to instructors within a social hierarchy (Hosek & Soliz, 2016). This means that despite what instructors may think they are communicating to students, varying differences due to stereotypes, expectations, and groupbased scripts may confound student interpretations to the point where an instructor's intended message is not the one received. So, perhaps grouprelated expectations of nonverbal and verbal appropriateness in a classroom context are more salient in individual, interpersonal interactions with instructors opposed to interactions with the class at large. In either case, CAT provides researchers with an opportunity to examine such differences by researching students' nonaccommodative experiences in specific types of classroom interactions (e.g., when providing feedback).

This study should also be interpreted within the scope of its limitations. Upon inspection of the means for each form of nonaccommodation, it becomes clear that the instructors teaching the current sample of students generally behaved appropriately. When it comes to students' impressions of their instructors, it may be that small deviations away from expectations of appropriateness relative to their progress in a course have a tangible effect, but delivery-based behaviors (i.e., "My instructor used gestures to emphasize points") necessitate much larger deviations in order to have significant influence. Greater variance in perceived inappropriate behavior of instructors may have led to other forms of nonaccommodation resulting in less positive impressions. Second, although the variance inflation values and tolerance statistics met thresholds of acceptance, an examination of the correlation matrix did reveal that the dimensions of nonaccommodation were highly correlated. Multicollinearity may have played a role in the regression analyses. Finally, research suggests that over time, individuals' perceptions of adjustment depend largely on the reasons for that adjustment rather than the behavior itself (Gasiorek & Dragojevic, 2017). It is possible that students' inferred motives for the instructor's behavior influenced their evaluations.

Ultimately, CAT presents a nuanced framework that instructional communication scholars can use to evaluate classroom processes. This study provides additional evidence linking perceptions of adjustment to communication effectiveness in a new context while also presenting researchers with interesting theoretical questions about how and why student perceptions vary widely. Hopefully, researchers can draw upon the ideas forwarded herein to further delineate adjustment in instructional contexts.

Note

1. Due to space constraints, detailed factor loadings, model fit indices, and analytical procedures are available at https://osf.io/sn3wa/?view_only=ba289ffe9b334689904f94474fe365bc.

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Disclosure statement

No potential conflict of interest was reported by the author(s).

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References

- Coupland, N., Coupland, J., Giles, H., & Henwood, K. (1988). Accommodating the elderly: Invoking and extending a theory. *Language in Society*, 17(1), 1–41. doi:10.1017/ S0047404500012574
- Dragojevic, M., Gasiorek, J., & Giles, H. (2016a). Accommodative strategies as core of the theory. In H. Giles (Ed.), Communication accommodation theory: Negotiating personal and social identities across contexts (pp. 36–59). Cambridge, UK: Cambridge University Press.
- Dragojevic, M., Gasiorek, J., & Giles, H. (2016b). Communication accommodation theory. In C. R. Berger & M. Roloff (Eds.), *The international encyclopedia of interpersonal communication* (Vol. 1, pp. 176–196). Hoboken, NJ: Wiley Blackwell.
- Duran, R. L., & Spitzberg, B. H. (1995). Toward the development and validation of a measure of cognitive communication competence. *Communication Quarterly*, 43(3), 259–275. doi:10.1080/01463379509369976
- Finn, A. N., Schrodt, P., Witt, P. L., Elledge, N., Jernberg, K. A., & Larson, L. M. (2009). A meta-analytical review of teacher credibility and its associations with teacher behaviors and student outcomes. *Communication Education*, 58(4), 516–537. doi:10.1080/ 03634520903131154
- Frey,T. K. (2019). CAT in the classroom: Understanding instructor behavior and student perceptions through communication accommodation theory [Doctoral dissertation, University of Kentucky]. UKY Campus Repository. doi:10.13023/etd.2019.408
- Frisby, B. N., Hosek, A. M., & Beck, A. C. (2020). The role of classroom relationships as sources of academic resilience and hope. *Communication Quarterly*, 68(3), 289–305. doi:10.1080/ 01463373.2020.1779099
- Gallois, C., Gasiorek, J., Giles, H., & Soliz, J. (2016). Communication accommodation theory: Integrations and new framework developments. In H. Giles (Ed.), *Communication*

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accommodation theory: Negotiating personal and social identities across contexts (pp. 192–210). Cambridge, UK: Cambridge University Press.

- Gasiorek, J., & Dragojevic, M. (2017). The effects of accumulated underaccommodation on perceptions of underaccommodative communication and speakers. *Human Communication Research*, 43(2), 276–294. doi:10.1111/hcre.12105
- Gasiorek, J., & Dragojevic, M. (2018). Effects of instrumental success and failure on perceptions of underaccommodative messages and sources. *Communication Reports*, 31(1), 14–27. doi:10.1080/08934215.2017.1335760
- Gasiorek, J., & Giles, H. (2012). Effects of inferred motive on evaluations of nonaccommodative communication. *Human Communication Research*, 38(3), 309–331. doi:10.1111/j.1468-2958.2012.01426.x
- Giles, H. (1973). Accent mobility: A model and some data. *Anthropological Linguistics*, 15, 87–105.
- Giles, H., & Gasiorek, J. (2013). Parameters of non-accommodation: Refining and elaborating communication accommodation theory. In J. Forgas, J. László, & V. Orsolya Vincze (Eds.), *Social cognition and communication* (pp. 155–172). New York, NY: Psychology Press.
- Giles, H. (Ed.). (2016). Communication accommodation theory: Negotiating personal and social identities across contexts. Cambridge, UK: Cambridge University Press.
- Goodboy, A. K., & Martin, M. M. (2020). Omega over alpha for reliability estimation of unidimensional communication measures. Annals of the International Communication Association, 44(4), 422–439. doi:10.1080/23808985.2020.1846135
- Hosek, A. M., & Soliz, J. (2016). Expanding the landscape of diversity in instructional communication research through the intergroup perspective. *Communication Education*, 65(2), 223–226. doi:10.1080/03634523.2015.1098714
- Jones, E. S., Gallois, C., Callan, V. J., & Barker, M. (1995). Language and power in an academic context: The effects of status, ethnicity, and sex. *Journal of Language and Social Psychology*, 14(4), 434–461. doi:10.1177/0261927X950144006
- Klyukovski, A. A., & Medlock-Klyukovski, A. L. (2016). Instructor strategic ambiguity: Delineation of the construct and development of a measure. *Communication Education*, 65(3), 253–271. doi:10.1080/03634523.2016.1142097
- McCroskey, J. C., & Teven, J. J. (1999). Goodwill: A reexamination of the construct and its measurement. *Communications Monographs*, 66(1), 90–103. doi:10.1080/ 03637759909376464
- Monge, P., Bachman, S., Dillard, J., & Eisenberg, E. (1982). Communicator competence in the workplace: Model testing and scale development. In M. Burgoon (Ed.), *Communication* yearbook 5 (pp. 505–527). New Brunswick, NJ: Transaction Books.
- Muthén, L. K., & Muthén, B. O. (2018). *Mplus user's guide* (8th ed.). Muthén & Muthén. Retrieved from https://www.statmodel.com/download/usersguide/MplusUserGuideVer_8
- Nyquist, J. L., & Booth, J. L. (1977). Instructional communication: A basic course for teachers. Communication Education, 26(1), 13–26. doi:10.1080/03634527709378195
- Pitts, M. J., & Harwood, J. (2015). Communication accommodation competence: The nature and nurture of accommodative resources across the lifespan. *Language & Communication*, 41, 89–99. doi:10.1016/j.langcom.2014.10.002
- Richmond, V. P., McCroskey, J. C., & Johnson, A. D. (2003). Development of the nonverbal immediacy scale (NIS): Measures of self-and other-perceived nonverbal immediacy. *Communication Quarterly*, 51(4), 504–517. doi:10.1080/01463370309370170
- Soliz, J., & Giles, H. (2014). Relational and identity processes in communication: A contextual and metaanalytical review of communication accommodation theory. In E. Cohen (Ed.), *Communication yearbook* (Vol. 38, pp. 106–143). Thousand Oaks, CA: Sage.

- Speer, R. B., Giles, H., & Denes, A. (2013). Investigating stepparent-stepchild interactions: The role of communication accommodation. *Journal of Family Communication*, 13(3), 218–241. doi:10.1080/15267431.2013.768248
- Spitzberg, B. H. (1983). Communication competence as knowledge, skill, and impression. *Communication Education*, 32(3), 323-329. doi:10.1080/03634528309378550
- Spitzberg, B. H., & Cupach, W. R. (1984). *Interpersonal communication competence*. Beverly Hills, CA: Sage.
- Williams, A., Ota, H., Giles, H., Pierson, H. D., Gallois, C., Ng, S. H., ... Cai, D. (1997). Young people's beliefs about intergenerational communication: An initial cross-cultural comparison. *Communication Research*, 24(4), 370–393. doi:10.1177/009365097024004003