

The Relationship of Teacher Clarity and Immediacy with Student State Receiver Apprehension, Affect, and Cognitive Learning

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This study examines the relationships among receiver apprehension, teacher clarity, and teacher immediacy in the instructional context. The relationships between state receiver apprehension and student motivation, affect, and cognitive learning are examined, as are the relationships of teacher clarity and immediacy with receiver apprehension. Analyses reveal that, although state receiver apprehension is significantly related to negative instructional outcomes, clear and immediate teaching may be able to negate this relationship. The importance of being both a clear and immediate teacher are discussed in terms of state receiver apprehension and other instructional outcomes. **Keywords:** teacher clarity, receiver apprehension, teacher immediacy, student learning, student listening, student motivation, and student affect

Receiver apprehension (Wheeless, 1975) should be considered a potentially significant barrier to effective instruction because of its role in limiting effective processing of information (Preiss, Wheeless, & Allen, 1990). Students who experience apprehension while trying to learn material are at a disadvantage in terms of their ability to assimilate incoming information. Their perceptions that they are unable to process all of the information they might encounter, or their concern that they cannot process the information accurately may distract them from their learning tasks. Fortunately, as instructional research has shown, instructors can do many things to facilitate classroom learning. In order to alleviate students' receiver apprehension, for example, instructors can teach in a manner that makes information easier to process, they can increase student comfort during lectures by presenting material clearly, and they can engage in behaviors which increase students' positive affect for their classroom (Christophel, 1990; Richmond, 1990).

The ability of teachers to lessen their students' experiences of receiver apprehension can be studied by examining teacher clarity and immediacy in relation to student receiver apprehension during the learning process. Clear teaching may likely reduce student receiver apprehension by making material easier to assimilate. Immediacy is likely to increase student comfort levels by increasing student positive affect and contributing to positive student-teacher relationships (Frymier, 1994). Students who are comfortable with their teachers, course content, and classroom settings may be less likely to experience receiver apprehension while learning material. The present study examines the relationship between state receiver

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apprehension and student state motivation to learn, affect for the instructor, affect for the course content, and cognitive learning. Teacher immediacy and clarity then are examined in terms of their potential association with lower levels of state receiver apprehension during the learning process. These analyses are preceded by reviews of receiver apprehension, teacher immediacy, and teacher clarity.

Receiver Apprehension

Wheless (1975) introduced the receiver apprehension construct. He recognized that people are likely to experience anxiety when listening to messages as well as when sending messages. Receiver apprehension was conceptualized as "the fear of misinterpreting, inadequately processing, and/or not being able to adjust psychologically to messages sent by others" (Wheless, 1975, p. 263). Receivers may be anxious due to a perceived inability to interpret information effectively or assimilate all of the information to which they are listening. Furthermore, receivers may experience apprehension due to the psychological discomfort caused by the content of the messages they are receiving, or even the behavior of the person(s) sending them. Given existing research, findings that we spend more time receiving messages than sending them, and the fact that there are many ways in which receiving messages can elicit anxiety, receiver apprehension is a significant classroom problem worthy of the attention of instructional communication researchers (Chesebro & McCroskey, 1998b).

Research has identified a number of negative outcomes that are associated with receiver apprehension, including reduced listening effectiveness and information processing effectiveness (Preiss et al., 1990), as well as lower student scores on achievement tests (Scott & Wheless, 1977). Cumulatively, the research on receiver apprehension suggests that apprehensive receivers listen in different ways than non-apprehensive receivers. Findings that receiver apprehension is related to reduced information processing effectiveness are relevant to the instructional context. Students who experience anxiety when listening to their teachers may be less effective at processing information and therefore less likely to learn course material sufficiently. Students experiencing receiver apprehension also may be less likely to have positive affect towards their instructor and/or the course. They may associate their negative experiences with their instructor or the course material and therefore be less likely to have positive affective reactions to their learning experience. Therefore, we posed our first hypothesis:

H₁: State receiver apprehension while learning is negatively related to affect for the instructor, the course content, and cognitive learning.

The relationship between student state receiver apprehension and student state motivation to learn is less clear. Ayres, Wilcox, and Ayres (1995) report that those who are motivated to remember all of the information in a presentation are likely to be apprehensive receivers. Those who are less motivated and therefore "don't care" if they learn the information are less likely to experience receiver apprehension. Chesebro and McCroskey (1998b) also identified this relationship between state receiver apprehension and motivation. However, receiver apprehension also could be related to reduced motivation to learn, in that apprehensive receivers may be

frustrated with a class and lack the motivation to learn the information. Consequently, we posed our research question:

RQ: What is the relationship between student state receiver apprehension and student state motivation to learn?

Because teacher immediacy and clarity both are considered to be qualities or behaviors which characterize effective teachers, they both are likely to be related to reduced levels of student state receiver apprehension.

Nonverbal Immediacy

Instructional communication research has determined that behaviors such as appropriate eye contact, the use of gestures, movement about the classroom, smiling, vocal variety, and the use of humor are highly-effective teaching behaviors. Early research conducted in the field of education on these behaviors labeled them as "teacher enthusiasm" or "teacher expressiveness" (Abrami, Leventhal, & Perry, 1982; Coats & Smidchens, 1966; and Ware & Williams, 1975) while communication researchers have chosen to label them as "immediacy behaviors" (Andersen, 1979). The specific label notwithstanding, these behaviors have been identified as effective teaching behaviors, both in correlational and experimental research in research reported in both the Education and the Communication literatures (for a review of this literature, see Chesebro & McCroskey, 1998b). As the considerable body of research indicates, teacher immediacy is an important teaching behavior. It has been linked to more positive affect towards courses and instructors, greater motivation to learn, greater achievement, and greater perceptions of control. Consequently, we advanced our second hypothesis:

H₂: Teacher immediacy behaviors are positively related to student state motivation to learn, positive affect, and cognitive learning.

Given the number and variety of positive outcomes associated with immediate teaching, it is likely that increased teacher immediacy is linked to reduced levels of student state receiver apprehension when learning. Students with increased positive affect and greater perceptions of control over their environment are likely to experience less anxiety while learning. Furthermore, Wheelless, Preiss, and Gayle (1997) indicated a number of non-immediate behaviors which are related to receiver apprehension: boring lectures, teachers who criticize, lack of vocal variety, and nervousness (p. 157). Given these findings, a negative relationship between teacher immediacy and student state receiver apprehension is probable. Hence, our third hypothesis:

H₃: Teacher immediacy behaviors are negatively related to student state receiver apprehension in the learning process.

The importance of immediacy notwithstanding, teachers must do something verbally to take advantage of the benefits of being immediate. Although immediacy can be effective in spite of what is said by teachers, it is likely to achieve greater effect when teachers also are verbally effective in classrooms. Teacher clarity is a construct concerned with this verbal effectiveness and itself has been linked to positive instructional outcomes.

Teacher Clarity

Teacher clarity is defined as a variable which represents the process by which an instructor is able to effectively stimulate the desired meaning of course content and processes in the minds of students through the use of appropriately-structured verbal and nonverbal messages (Chesebro, 1998). This definition represents the integration of a diverse body of research related to clear teaching. Furthermore, it is conceptually consistent with current thinking among instructional communication scholars that teacher clarity is a relational variable which also is concerned with the clarity of instructional processes (Civikly, 1992; Kendrick & Darling, 1990; Simonds, 1997).

Research related to teacher clarity has examined both the structure of presentations and the verbal characteristics of presentations. Research related to teacher clarity which has focused on the structuring of presentations has included investigations of advance organizers (Alexander, Frankiewicz, & Williams, 1979; Ausubel, 1963), organization, notetaking facilitation (Hartley, 1976), discontinuity, and internal connectors or transitions (reviewed in Cruickshank & Kennedy, 1986). Research on the clarity of verbal messages has investigated fluency (Hiller, Fisher, & Kaess, 1969), vagueness (Land & Smith, 1979), and mazes (Smith, 1977). For a more complete review of structural and verbal clarity in teaching, see Chesebro and McCroskey (1998b).

When research related to teacher clarity is examined, the importance both of appropriate structure and verbal clarity is evident. To be clear, teachers need to make their organization of content explicit so students are able to integrate lecture material into their schemata effectively. Clear teachers also speak fluently, stay on task, and explain information effectively. These behaviors have been associated with increased perceptions of teacher clarity, higher ratings of instruction, and higher achievement. Consequently, our fourth hypothesis is:

H₄: Teacher clarity is positively related to increased student state motivation to learn, positive affect, and cognitive learning.

Clarity also is likely to be related to reduced student state receiver apprehension. Aspects of instruction which indicate a lack of clear teaching have been linked to student reports of receiver apprehension: "material doesn't make sense," "lacks clarity;" "vocabulary too hard or jargonish," and "rate too fast or too slow" (Wheless et al., 1997, p. 157). Because clear teaching facilitates the reception of information, it is likely that students of clear teachers are less likely to experience receiver apprehension in the classroom. Hence, our fifth hypothesis:

H₅: Teacher clarity is inversely related to student state receiver apprehension during the learning process.

Method

Participants

Students enrolled in large service courses (N = 360) at a large Mid-Atlantic University were asked to participate in a study involving instructional communication. Students were offered extra credit, and their participation was voluntary. Students were drawn from courses meeting general university requirements which enroll students from all undergraduate majors in the university. Students were asked to respond to a number of questionnaires based on the teacher they had in their previous class. This method has been used in many previous studies relating to

communication in instruction because it assures that the behaviors of teachers from a wide variety of academic disciplines and orientations will be reported (Plax, Kearney, McCroskey, & Richmond, 1986). Students completed questionnaires designed to measure state receiver apprehension when learning, motivation to learn, cognitive learning, affect for the instructor and course, teacher immediacy, and teacher clarity. The instruments were presented in this sequence so that participants would report their own levels of apprehension, learning, motivation, and affect before considering their instructors' behaviors.

Instruments

State Receiver Apprehension. State receiver apprehension during the learning process was measured using the A-State anxiety measure¹ (Spielberger, Gorsuch, & Lushene, 1968). This five-item Likert type instrument, which is sensitive to anxiety produced by a specific stimulus, was used to assess the extent to which students tend to feel anxiety when learning from a specific teacher. Subjects were instructed to indicate "how you tend to feel when trying to learn information from the instructor in your class most recently before this class." This scale has been used in previous research on state receiver apprehension (Beatty, 1985; Beatty, Behnke, & Henderson, 1980; Chesebro & McCroskey, 1998b) and in this study demonstrated alpha reliability (.92 in the present study).

Student Motivation. State motivation to learn was measured using Christophel's (1990) 12-item instrument. This instrument consistently has been used in instructional communication research on student motivation. The 12 item semantic differential scale includes some of the following adjectives: interested-uninterested; involved-uninvolved; excited-not excited, challenged-unchallenged; unenthused-enthused; uninspired-inspired. The alpha reliability of this measure for the present study was .94.

Student Affect. The Instructional Affect Assessment Instrument (Course Form; McCroskey, 1994) was employed to measure students' evaluation of their teacher and for affect toward the subject matter of the course. Each portion of the instrument employs eight bipolar items. For evaluation of the teacher, four items address affect toward the teacher directly and four items assess whether the student would likely take another course with the teacher. For evaluation of the affect toward the subject matter, four items measure affect directly and four assess whether the student would be likely to take another course with the same subject matter. Both measures had high alpha reliability estimates in this study: affect toward course subject matter = .92, and evaluation of the instructor = .94).

Cognitive Learning. Cognitive learning was measured by asking students to report their "learning loss" (Richmond, McCroskey, Kearney, & Plax, 1987). Students were asked to report how much they perceived they learned from their teacher as well as how much they could learn of the same material had they been taught by the ideal teacher. The resulting score indicates learning loss. The greater the number, the greater the discrepancy between the reported teacher and the ideal teacher for the given subject. Therefore, lower scores reflect greater perceptions of learning. No estimate of reliability could be estimated in the present study, since data were collected at only one time period. Previous estimates of test-retest reliability have been high (>.80). Furthermore Chesebro and McCroskey (2000) identified a significant and meaningful correlation (.50) between students' recall of lecture

material and their reports on the learning loss measure, which indicates a moderately high validity coefficient.

Teacher Nonverbal Immediacy. The revised version of the Perceived Nonverbal Immediacy Scale (Thomas, Richmond, & McCroskey, 1994) was used to measure students' perceptions of their instructors' nonverbal immediacy behaviors. This scale consists of 10 low-inference estimates of teacher behaviors. Students report the extent to which their teachers exhibit these behaviors on a five-step response scale (never-very often). This scale's alpha reliability for the present study was .86.

Teacher Clarity. Teacher clarity was measured using the Teacher Clarity Short Inventory (TCSI) (Chesebro & McCroskey, 1998a). This 10-item scale of Likert-type items includes items used in previous but larger clarity scales (Powell & Harville, 1990; Sidelinger & McCroskey, 1997). It includes low-inference items and items related both to oral and written content and process clarity. The alpha reliability of the TCSI for the present study was .92.

Results

The first hypothesis predicted that state receiver apprehension would be negatively related to student affect for the instructor, course content, as well as cognitive learning. The results indicated receiver apprehension was negatively related to affect for the instructor and affect for the course material. State receiver apprehension was positively related to cognitive learning loss—hence, negatively related to learning. Students who are experiencing anxiety during the learning process are less likely to have positive affect for their teachers or the course material. They also are less likely to perceive that they learn the course material. In each case, the hypothesis was supported. The simple correlations for the instructional variables are reported in Table 1.

The research question explored the relationship between student state receiver apprehension and student state motivation to learn. The analysis revealed a strong negative relationship between student motivation and receiver apprehension. This indicates that students who are experiencing anxiety when listening to their teachers are less likely to be motivated to learn.

The second hypothesis predicted that teacher immediacy behaviors would be positively related to student state motivation to learn, positive affect, and cognitive learning. The results support this hypothesis, revealing positive relationships with student motivation, affect for the instructor, affect for the course, and a negative relationship with learning loss. These results are consistent with existing research on teacher immediacy behaviors.

TABLE 1
SIMPLE CORRELATIONS*

Measure	1	2	3	4	5	6	7
1. Clarity	—	.66	-.53	.63	.74	.53	-.52
2. Immediacy	—	—	-.46	.60	.69	.45	-.47
3. State Receiver Apprehension	—	—	—	-.46	-.51	-.50	.35
4. Motivation	—	—	—	—	.72	.67	-.58
5. Affect for Instructor	—	—	—	—	—	.64	-.59
6. Affect for Course	—	—	—	—	—	—	.34
7. Perceived Learning	—	—	—	—	—	—	—

*All correlations are statistically significant ($p < .0001$).

Hypothesis three predicted that teacher immediacy behaviors would be negatively related to student state receiver apprehension in the learning process. The results confirmed the hypothesized negative relationship. Students with immediate teachers are less likely to experience anxiety when trying to listen to classroom messages.

Hypothesis four predicted that teacher clarity would be positively related to increased student state motivation to learn, positive affect, and perceived cognitive learning. The analyses reveal positive relationships between clarity and student motivation, affect for the instructor, and affect for the course. Clarity also is negatively related to perceived learning loss. Students of clear teachers are more likely to be motivated, have positive affect for their instructor and the course, and are likely to perceive that they have learned more cognitively. These results confirm hypothesis four and are consistent with existing research on teacher clarity. Although a comparison of the correlations related to teacher immediacy behaviors and teacher clarity appear to indicate that teacher clarity has a higher correlation with instructional outcomes than does immediacy, the correlations are essentially identical when the correlations are corrected for attenuation. Our best estimate, therefore, is that immediacy and clarity are of equal importance and probably usually highly interrelated in the instructional environment (they were correlated at $r = .66$ in the present study).

Hypothesis five predicted that teacher clarity would be inversely related to student state receiver apprehension during the learning process. The expected negative relationship was observed. Students with clear teachers were less likely to report experiencing anxiety when listening to classroom messages. Again, when corrected for attenuation, teacher clarity and immediacy correlations with state receiver apprehension were essentially identical.

Post Hoc analyses² were conducted to examine the extent to which the strong negative relationship between state receiver apprehension and motivation, affect, and perceived learning can be neutralized by clear and immediate teaching. First, the variance in student motivation, affect, and perceived cognitive learning accounted for by state receiver apprehension was examined. Receiver apprehension alone accounts for meaningful variance in student state motivation to learn (21%), affect for the instructor (26%), affect for the course (25%), and perceived cognitive learning (12%). Multiple regressions (the General Linear Model procedure in SAS) were performed in which student motivation, affect, and perceived cognitive learning were entered as dependent variables. Teacher clarity and immediacy were entered as independent variables for both regression analyses. In one regression, state receiver apprehension was entered as another independent variable. This approach enabled the isolation of the variances accounted for by state receiver apprehension when combined with clear and immediate teaching. When clarity and immediacy were the sole independent variables, the regression models accounted for significant variance in state motivation to learn (45%), affect for the instructor (62%), affect for the course (30%), and perceived cognitive learning (30%). When state receiver apprehension was added as an independent variable, each model accounted for significant, but not substantially more, variance in state motivation to learn (45%), affect for the instructor (63%), affect for the course (30%), and perceived cognitive learning (34%). These results indicate that state receiver apprehension does not account for meaningfully significant variance in student motivation, affect,

and cognitive learning which is independent of that predicted by clarity and immediacy (it adds only 1% variance in affect for the instructor and 4% variance in cognitive learning. This suggests (but of course does not prove) that potential negative effects of receiver apprehension can be largely overcome by clear and immediate teaching.

Discussion

The results provide a number of important implications concerning the process of communication in instruction. Clearly, receiver apprehension can be a significant negative factor in the learning process. Students who are apprehensive when receiving classroom messages are likely to have difficulty listening to and processing information effectively. The analyses supported this conclusion, as they revealed significant negative relationships between state receiver apprehension and student state motivation to learn, affect for the instructor and the course, and perceived cognitive learning.

One particularly interesting outcome in this naturalistic study was the observed negative relationship between state receiver apprehension and state motivation to learn. On one hand, this relationship makes sense. Students are likely to have negative reactions towards classes in which receiver apprehension is a common experience. It is reasonable that they would be less motivated to learn. However, previous research has demonstrated that motivation to understand a message can increase receiver apprehension (Ayres et al., 1995; Chesebro & McCroskey, 1998b). In these cases, students who were motivated to understand a message were more likely to experience receiver apprehension. Ayres et al. reasoned that people would not be likely to experience receiver apprehension if they do not care about the message. Both of the identified relationships between state receiver apprehension and state motivation are reasonable. Future research in this area would be very useful in terms of explaining these different findings. The methodologies in the various studies were different, so at this point we do not know whether the observed differences are methodological (naturalistic vs. experimental), substantive, or both.

Though receiver apprehension is a significant problem in instruction, the results of this study suggest that teachers who teach clearly and exhibit immediate teaching behaviors have students who report much lower receiver apprehension. Both clarity and immediacy are negatively related to student state receiver apprehension, indicating that students with clear and immediate teachers are less likely to experience anxiety when processing their teachers' messages. Or, since causation with this correlation has not been established, those students who have lower receiver apprehension are more relaxed and as a result view their teachers more positively in terms of such things as clarity and immediacy. We believe the former explanation is more likely. If we are correct, when teachers are clear and immediate, the negative role of state receiver apprehension in important instructional outcomes can be greatly diminished. Experimental studies are needed (and are in progress) to sort out the causal relations in this area.

Though one might reasonably wonder whether clarity or immediacy is more important in the instructional process, this does not appear to be a question worth additional exploration. They are meaningfully related, and as indicated by their collinear relationships with other variables, probably work together under most circumstances. Immediate teaching without clarity would gain students' attention,

and students would have fun, but this enjoyment would probably be void of a clear understanding of course content. Enjoyable instruction is useless if students finish the class without a solid grasp of the course content. Most of us can recall learning from clear but non-immediate teachers—and how difficult it was. If we are highly motivated, of course, we can still learn under those circumstances. However, clear teaching without immediacy behaviors is likely to go unnoticed by many students because they will not be stimulated to pay attention to the clear but non-immediate instructor. Moreover, students' negative feelings towards the non-immediate instructor and course are likely to diminish the effectiveness of clear teaching. Most importantly, the two variables are substantially associated with each other. Both are needed, and both make a major contribution to effective teaching.

This study provides evidence which builds on previous research in support of clear and immediate teaching. The combination of clarity and immediacy accounted for significant variance in state motivation (45%), affect for the instructor (62%), affect for the course (30%), and cognitive learning (30%). Relevant to other instructional research, these findings are quite meaningful, and they suggest that clear and immediate teaching together should be considered qualities essential to effective teaching.

Based on this study, there are a number of promising directions for future research. Experimental studies of the variables involved in this study would potentially provide even stronger evidence for our conclusions regarding clarity and immediacy. For example, an experiment could test the assumption that teaching involving either variable without the other would be significantly less effective.

Future research also could explore the combination of clarity and immediacy and their relationship with other instructional processes and outcomes. Additional research is needed in the area of clarity to better explicate the construct. As stated, clarity has been studied from a number of perspectives. Research should examine which specific behaviors are most important to clear teaching. For example, research could examine the extent to which structural clarity (previews, reviews, transitions) adds to the impact of verbal clarity (fluency). At a time when presentational aids such as Power Point are gaining in popularity, research could examine the extent to which such instructional technologies enhance the clarity of teaching, or do they simply reduce immediacy and bore students. Specific features of visual presentations which increase clarity also could be examined. The impact of lecture notes on clear teaching also could be examined. Much remains to be known about which features are essential to clear teaching, so this is a promising area for future research.

Notes

¹At the time this study was conducted, the Schumacher and Wheelless (1997) State Receiver Apprehension Test (SRAT) had not been published.

²Examination of post hoc tests for predictors such as sex, age, race, major, and educational level indicated that none of these accounted for significant variance.

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