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A Study Exploring the Impact of Two Instructional Paradigms on State and Trait Communication Apprehension

Amy Rachelle Wolfsen

Communication in the classroom is a key element to success in education. In order for learning to occur, information needs to continually pass between teacher and student. Given this focus on communication and information exchange, two significant issues to consider are a teacher’s instructional paradigm and students' communication apprehension.

An instructional paradigm is defined as the methods a teacher uses to impart information to the student (Johnson, Dupuis, Musial, Hall, & Gollnick, 1996). The teacher sets the tone of the classroom to be authoritative (where the student has little say in what is being taught) or facilitative (where the student sets up his/her own curriculum with guidance from the teacher). While middle-of-the-road strategies exist, it is obvious that the authoritative method tends to involve more one-sided communication while facilitative communication is mutual in nature. These different models, though, can have an impact on the communication process and learning.

Student involvement provides a significant distinction between these two instructional paradigms. As such, student communication apprehension plays a significant role in how participation in the classroom occurs. Communication apprehension (CA) is defined as "an individual's level of fear or anxiety associated with
either real or anticipated communication with another person or persons" (McCroskey, 1977, p. 78). When studying the effects of CA, a considerable amount of the research in this field has been done in the area of education. However, little attention has been given to developing a link between communication apprehension and instructional paradigms. Yet, the type of methodology a teacher uses in his/her classroom could greatly impact CA.

**Review of Literature**

Teachers enter the classroom every day with the intent to instill knowledge in their students (Nussbaum, 1992). While all teachers have a similar goal, their philosophies and instructional paradigms shape how the knowledge is disseminated and gained and could have an impact on how a student with communication apprehension experiences the learning environment.

**Teaching Philosophy**

Philosophy and education have always gone hand in hand; in fact, the departments are combined on many college campuses. As Briggs and Pinola (1985) suggest: "A philosophical foundation can be the basis for selecting and justifying curriculum, instructor action, technology, evaluation, and other contributors to educational experience" (p. 305). While numerous philosophies exist, five traditions are significant regarding how students learn and teachers instruct. These include idealism, realism, existentialism, non-Thomism, and ex-
experimentalism (Morris & Pai, 1976). To narrow the scope of this study, the two philosophies, non-Thomism and experimentalism, will be examined in relation to their respective instructional strategies of essentialism and progressivism. These two were chosen because of their contrasting methods and the significant impact they could have on communication apprehension.

The philosophy of non-Thomism is a combination of idealism and realism shaped by Saint Thomas Aquinas in the mid-thirteenth century (Ellis, Cogan, & Howey, 1991). Coming from Aquinas, the philosophy's background is rooted in religion and a belief that humans need both reason and faith (Ellis et al., 1991). This philosophy is still prevalent today in the Roman Catholic Church (Ellis et al., 1991). In education, non-Thomists believe in the mastery of facts and skills. A teacher who embraces non-Thomism would teach morals and values in a very structured classroom.

The philosophy of experimentalism (pragmatism) holds that the universe is always evolving and changing through experience (Johnson et al., 1996). Experimentalists do not believe in concrete universal truths because everyone is different; each person creates his/her own reality. Like the realist, though, experimentalist teachers believe in learning by doing. In education, an experimentalist believes in methods of interdisciplinary approach. A teacher who embraces experimentalism would guide his/her students to seek out their own truths and ideas about the subject matter.
Instructional Paradigms

Instructional paradigms can have a great impact on the learning environment. Anthony Grasha (1994) defines the qualities of an instructor's methods/style as "the personal qualities of college teachers and their effects on the learning styles of students and upon what transpires in the classroom" (p. 142). These strategies can have a significant impact on the classroom by setting the tone of the class (Grasha, 1994). Understudied, though, is how the instructional paradigm interrelates with issues of communication apprehension.

The instructional paradigm rooted in non-Thomism philosophy is essentialism. Essentialism was shaped by William C. Bagley (Ellis et al., 1991). Johnson et al. (1996) suggest that an essentialist approach to teaching assumes that "there is a common core of information and skills that an educated person must have" (p. 395). Essentialism is a teacher-centered paradigm, and the instructor relies heavily on traditional education. Students attend school to learn, and this places the teacher at the center of the classroom experience presenting information.

The instructional paradigm rooted in experimentalism philosophy is progressivism. Progressivism was founded by Charles Sanders Peirce, but the man most connected to it in history is John Dewey (Johnson et al., 1996). Dewey viewed life as made up of experiences that shape people into who they are. Dewey believed that all ideas should be tested and questioned in the classroom and that the students should be the ones to come up with the questions and the tests (Dewey, 1916). Johnson et al. (1996) posit that progressivists are not authori-
tarian but, rather, are humanists based because they believe that experience creates knowledge (Cawelti, 1993). While the movement is concerned with academics, it places more focus on cultivating the personality of students.

Essentialist instructors tend to be more authoritative in nature. Classroom emphasis is on lectures, tests, discussions, field trips and labs. Thus, the learner is reflexive while the teacher uses authoritative methods to manage how the learning process will occur. Progressivist instructors, by contrast, are student-centered and experimental (Knapp, 1994). Because progressivist see school as a place where students experiment, question, and experience, the teacher acts primarily as a facilitative rather than authoritative figure.

In the essentialist class, the student is more passive, and the teacher is the active presenter of material; in a progressivist classroom, the learner is involved and the teacher only guides in the learning process. This means that both the instructor and student have a style within this communication environment. Thus, another important aspect to consider in classroom education is student learning style. Different students have different learning styles, and the trend in education is to consider these styles in the overall assessment of education. But, education research must also consider how teaching styles affect students (Grasha, 1994) both academically and personally.

**Communication Apprehension**

The communication field has long been concerned with the correlation between communication skills and
anxiety (e.g. Beatty & Valencic, 2000). For decades, communication educators have studied the different aspects of CA in regards to education (see for example Bowers, 1986). Research in the area has focused on correlations between CA and grades (Menzel & Carrell, 1994), learning styles (Dwyer, 1998), classroom behavior (Lerea, 1956), speech preparation (Ayres, 1996), among a multitude of other variables (Behnke & Sawyer, 1999; Rubin, Rubin, & Jordan, 1997; Krider & Schneider, 2000). As Ayres (1996) suggests, interest in the communication apprehension is consistent with the goals of communication studies because CA directly affects the communication process.

Communication apprehension is prevalent in both society at large and within the classroom specifically. According to Richmond and McCroskey (1995), approximately 20% of the general population has CA, while 40% of college students report a moderate level of CA. Extensive work has been devoted to examining the connection between CA and teacher immediacy (Frymier, 1993; Giffin & Gilham, 1971; Messman, & Jones-Corley, 2001).

Communication apprehension has long been recognized to fall into two major categories, state and trait. Trait CA has traditionally been thought of as a learned behavior and is longitudinal (McCroskey, 1977). Early research in CA showed that it was a socially learned behavior or conditioned response (Mladenka, Sawyer, & Behnke, 1998). For instance, a child who was told not to ask stupid questions, or was made fun of when he/she spoke on one or several occasions, could have internalized those events and developed communication apprehension towards communicating in such circumstances.
However, more and more research is also being done in the area of communobiology (McCroskey & Beatty, 2000). This theory postulates that communication apprehension is linked to biological personality traits such as neuroticism and that CA is due to a genetic predisposition (Kelly & Keaten, 2000). According to McCroskey and Beatty (2000), "It appears now that genetics is far more important to the development of human communication behavior than are learning processes" (pp. 1-2).

State CA is situational and is commonly called "fear," "speech anxiety," "stage fright," and "audience anxiety" (Beatty, Springhorn, & Kruger, 1976). It is defined as anxiety felt in a specific situation at a particular time and could be a reaction to phenomena. While most people experience state CA at a specific point in their lives (i.e. giving a speech, interviewing for a job, etc.), it is typically mild in effect; some people embrace the energy, using it to their advantage when giving a speech. Others, though, may receive the energy as fear or anxiety and freeze up or feel ill. Research has attempted to pinpoint the cause of state CA; such information could be useful in classroom applications for helping students lower CA (Beatty, 1988). State CA only occurs for the duration of the situation and happens most commonly in the classroom, at the workplace, and/or during speaking engagements.

Several elements cause state CA, including novelty, formality, subordinate status, conspicuousness, disruptions, uncertainty, dissimilarity, evaluation, and prior history (Daly & Buss, 1984). The denotative definition of "novelty" is something new or unusual. According to McCroskey (1984), most people do not speak in public every day; therefore, delivering a speech is novel to
them. Many of these elements besides novelty are present in a public speaking course. Areas that could have an effect on state CA include the formality and structure of the class, the teacher-student relationship (subordination), conspicuousness of being alone up in front, unfamiliarity of not knowing everyone in the class, dissimilarity between the students, the effects of whether or not the student (as a speaker) is holding his/her classmates' attention, and knowing the speech is going to be evaluated. Prior history plays an important role but is not encapsulated into the classroom structure. It is no mystery why these elements and state CA are related, and reducing it should be an educator's priority (Beatty, 1988).

While studies have correlated both students' learning styles (Dwyer, 1998) to communication apprehension, none thus far located have explored the correlation between teaching paradigms and communication apprehension. For example, in an essentialist classroom the teacher is viewed as "a master of a particular subject field," and is in control (Ellis et al., 1991, p. 107). Thus, the essentialist teaching paradigm has a significant effect on CA with reference to a student speaking up in the classroom setting or asking a question. If the teacher is authoritative and assumes the position of expert, he/she may communicate in an intimidating manner. With the classroom set up in a lecture/memorization/test format, a student would likely feel apprehensive about talking or asking questions because of the instructor's authoritative mannerisms. The student may want to speak up but would choose not to because of a fear of looking stupid. This type of classroom would intimidate the student and could inhibit
him/her from speaking. Conversely, in a progressivist classroom students are encouraged to talk and given a sense that their ideas count (Johnson et al., 1996). They create their own course of action and are seeking out the answers with everyone else. In contrast to the essentialist paradigm, the teacher in a progressive classroom acts as a facilitator and guide for students, giving them instruction only when it seems necessary to move students forward in their quest for knowledge (Ellis et al., 1991). With students and teacher working on relatively the same level, students feel it safe to participate (speak) in the classroom. Given this differing emphasis on student ability and value in the classroom between the progressivist and essentialist teaching philosophies the following hypotheses are advanced:

H1: State CA will be lower in the progressivist classroom than in the essentialist classroom.

H2 Trait CA will be lower in the progressivist classroom than in the essentialist classroom.

**RESEARCH DESIGN AND METHODOLOGY**

**Participants**

The participants in this experiment were students at a mid-sized western university. Data were collected during the middle of fall semester 2002. The researcher used 173 Communication Studies classes students for this experiment. Of these, 55.5% were female and 43.4%
were male with the remaining percent not responding to the question. Most of the respondents were between the ages of 18-21 (90.8%), with the remaining being over 21. Ethnicity was accounted for with 79.8% of the participants being Caucasian, 3.7% being Korean, 3.1% being African American, with the rest of the ethnic groups falling below 3%. The teaching assistants from these classes were asked to give their students extra credit if they participated in this study. Students who did not choose to participate were given the opportunity to earn extra credit in other ways. Students were assured that their part of the study was anonymous and voluntary. They were told via a letter that this research project was approved by the OGRD and they could withdraw from the study at any time.

Data Collection

The researcher gained access to the classroom by asking permission of the instructor. After permission was gained to use eight sections of a communication studies class, the researcher randomly assigned the classes to the two teaching assistants. The assistants went into the classes on their scheduled day, delivered the lesson and then left. The lessons were videotaped as part of the manipulation check (described in detail in a later section). Students were assured their participation would be anonymous. The students were told via a letter that the medium sized western university approved the research, that the study was an optional project, and that they were free not to participate or to quit at any time. The researcher then administered the surveys for the students to complete. Once the surveys were com-
completed, the students returned the surveys to the researcher, and the classes were debriefed. Data collection took approximately one class period.

The surveys included demographics: age, sex, ethnicity and year in college. The surveys also included the PRCA-24, (McCroskey, 1982) and the Communication Anxiety State Inventory (Booth-Butterfield, & Gould, 1986).

**Manipulation**

Data manipulation for this study included a pilot study, writing instructional lesson plans, training instructors, manipulation check of lesson plans.

**Pilot Study**

A pilot study was performed by the researcher one month prior to the actual study. The instructors attended the pilot study for further training and to see a model of how the lesson plans should be taught in a real classroom. The study used four communication studies classes with approximately 80 students. Minor cosmetic errors were found in the surveys and were fixed for the actual study. The analysis of the pilot study showed positive trends, but no significant differences emerged. However, it was decided to proceed with the actual study after minor changes to the surveys and lesson plans were completed because it appeared only more participants were needed to obtain significance. The instructors met with the researcher again after the pilot study to discuss any potential issues that might occur.
Lesson Plans

Four lesson plans were written specifically towards each of the strategies. Two lesson plans were constructed for the essentialist approach, and two were constructed for the progressivism approach. The topics of the lessons were the use of development in and the structure of the persuasive speech. The goals of the lessons were the same in each method (i.e., mastery of the material). However, the lessons differed with regard to the way instructors exposed students to the material. For example, the methods of instruction for an essentialist involve, "required readings, lectures, memorization, repetition and examinations," (Johnson et al., 1996). The method of instruction for progressivism is more flexible, involving inquiry and problem solving. The progressivist classroom is set up democratically with students choosing and experimenting. The scientific method and flexibility are key components of a progressivist classroom (Johnson et al., 1996).

With these concepts in mind, two instructors were chosen by the researcher and trained to teach one lesson plan in essentialism and one lesson plan in progressivism for both sets of material. The instructors taught each set of material twice, instructing a total of four groups. The order of which lesson plan is used with each group was randomly determined. While administering these instructional strategies, the instructors were video taped. These tapes were used for a manipulation check when the experiment was over.


**Instructor Training**

Two female instructors were chosen by the researcher. It was decided to employ only female instructors to control for the effect of instructor gender. The instructors had experience in teaching the communication studies class, since the lesson plans were administered in that subject area.

Both instructors were given an explanation of essentialism and progressivism. The researcher discussed with each of them the important aspects of both instructional strategies. The instructors were given four detailed lesson plans. The plans not only included what to instruct, but how to instruct it, detailing how questions should be answered, assignments given and in what tone of voice. These styles were practiced in front of the researcher. Once the instructors were comfortable with all lessons, they delivered the lesson to students in the communication studies class.

**Manipulation Check**

A manipulation check was run on the lesson styles, progressivism and essentialism. An independent panel of 30 judges reviewed the videotapes of the study and placed the lesson types into their categories correctly, 88% of the time. This shows that the instructors were indeed teaching the style they had been trained in. Although the study itself showed little significance, each style employed by the instructor was different and correctly used.
Instrumentation

McCroskey's (1982) PRCA-24 was used to measure trait communication apprehension. This measure was chosen because it has been found to have high reliability and validity (McCroskey, 1982). The PRCA-24 contains 24 Likert scales that measure public speaking, small group interaction, dyads, and communicating in meetings or classroom settings. The measurement is based on a 1-5 scale, with (1) meaning strongly agree and (5) meaning strongly disagree. Some of the questions include, "I have no fear of giving a speech"; "I'm afraid to speak up in conversations"; and "I dislike participating in group discussions." In order to compute the total scores, the researcher used the scoring table set forth by McCroskey (1982). To compute the sub-scale scores, which can range from 6 to 30, questions 2, 4, and 6 were added, while questions 1, 3, and 5 were subtracted for "group discussion." Questions 8, 9, and 12 were added, while questions 7, 10, and 11 were subtracted for "meetings." Questions 14, 16, and 17 were added, while questions 13, 15, and 18 were subtracted to obtain a score for "interpersonal communication." Finally, questions 19, 21, and 23 were added, while questions 20, 22, and 24 were subtracted to obtain a score for "public speaking." In order to compute a total score on the PRCA-24, all four sub-scores were added and scores above 80 equaled high CA, while scores below 51 equaled low CA. The alpha reliability of the instrument was computed at .96.

Booth-Butterfield and Gould's (1986) Communication Anxiety State Inventory (CAI) was used to measure state CA. This particular inventory was found to have
high reliability, ".91 using Cronbach's Alpha and .92 using Split-half" (Booth-Butterfield, & Gould, 1986, p. 198). The instrument was also found to have high validity. The CAI contains a 4-point Likert scale and contains 20 items to measure a subject's CA in communications situations. Some examples of questions include, "I could not think clearly when I spoke," "I felt tense and nervous," and "I felt ill at ease using gestures when I spoke" (Booth-Butterfield, & Gould, 1986, p. 199). To compute scores, items 2, 3, 5, 8, 9, 12, 17, and 20 on the original inventory were reversed, and then all items were summed. The alpha reliability of the instrument was computed at .88.

**RESULTS**

Scores were coded as followed with TOTSCA for total state CA. The code, TOTTCA, was used for the total trait CA.

**Data Analyses**

These data were subjected to a MANOVA analyses to determine if an overall effect exists. The MANOVA revealed that students in an essentialist classroom (M=38.61, SD=9.58) did not have significantly higher situational communication apprehension scores than those students in a progressivist classroom (M=38.87, SD=9.87).

The MANOVA for state CA revealed these results: instructors $F(1,146) = 2.73$, $p < .10$, style $F(1,146) = 1.12$, $p < .29$, lesson $F(1,146) = .09$, $p < .77$, in the two
way interaction effects between style and lesson $F(1,146) = 2.13, p < .15$, between style and instructors $F(1,146) = .02, p < .89$, between lesson and instructors $F(1,146) = .14, p < .71$ and for the three way interaction effect between style, instructors and lesson $F(1,146) = 2.21, p < .14$. A test of trait CA revealed no significant difference between students in the essentialist classroom (M=59.52, SD=14.74) and those in the progressivist classroom (M=58.55, SD=14.40).

The MANOVA for trait CA reported these results: instructors $F(1,153) = 4.68, p < .03$, style $F(1,153) = .005, p < .94$, lesson $F(1,153) = .006, p < .94$, for the two way interaction effect between style and lesson $F(1,153) = .076, p < .78$, style and instructors $F(1,153) = .08, p < .78$, and lesson and instructors $F(1,153) = .16, p < .69$. Significance was only found for trait communication apprehension in the interaction effect of style type, lesson type and instructor number $F(1, 153) =10.41; p < .002$. The post hoc revealed that the interaction effect was largely attributable to instructors.

<table>
<thead>
<tr>
<th>Post Hoc Test of Interaction Effect from MANOVA Analysis</th>
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<tbody>
<tr>
<td>Instructor 2</td>
</tr>
<tr>
<td>Appeals Lesson Plan</td>
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<tr>
<td>Instructor 3</td>
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<tr>
<td>Appeals Lesson Plan</td>
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<table>
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<tr>
<th>Progressive Style</th>
<th>Essential Style</th>
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<tbody>
<tr>
<td>Appeals Lesson Plan</td>
<td>Delivery Lesson Plan</td>
</tr>
<tr>
<td>Instructor 2</td>
<td>61.1 (1)</td>
</tr>
<tr>
<td>Instructor 3</td>
<td>57.2 (2)</td>
</tr>
</tbody>
</table>
As shown in the table 1, boxes (3) M= 53.3 and (4) M= 65.8 were found to be significantly different from one another when compared in the post hoc test. This revealed a difference in the instructors using the same style and lesson plan. This same effect was found between boxes (5) M= 53.6 and (6) M= 65.6. Significance was also found between boxes (4) M= 65.8 and (5) M= 53.6 and boxes (3) M= 53.3 and (6) M= 65.6. Again these data suggest the effect revolves around the instructors interacting with the styles and lesson plans. It appears, perhaps, that instructor personality transcends style of the lesson.

**DISCUSSION AND LIMITATIONS**

This study investigated whether different paradigms of instructional styles (progressivism and essentialism) had an impact on state and trait communication apprehension. Teaching paradigm was not related to either type of CA in this study. This potentially suggests that the interaction between instructional paradigm specifically and level of both trait and state CA were affected by confounding variables. Students scoring high on apprehension scales may still have high communication apprehension regardless of instructional style, and those students with low CA scores may continue to score low.

According to this study, the effect an instructional paradigm has upon CA levels is mitigated in the short term by other confounding variables not controlled for in this study. These data point to but do not specify these intervening variables. For instance, a three way interac-
tion effect emerged that revolved around the instructor. The specific teaching methods employed in the short-term paradigmatic style appear to have affected these data. This is consistent with current literature regarding the efficacy of specific methods within teaching style (Jonassen, 1981).

However, caution should be used when projecting these results over a long time frame. A teacher may not be able to set up the classroom atmosphere in a day or create any type of bond with the students in that time frame. In order to reveal whether or not an instructional paradigm or a teacher’s personality has an impact on communication apprehension over the long term, it would be wise to do this study over the course of a semester, possibly employing more paradigms such as a cross between progressivist and essentialist. And, although these results do not support the research hypothesis, the research design will prove useful in further studying the intersections of communication apprehension and instructional style over a longer period of instruction.

Several limitations of this study include limited number of instructors, limited time frame, and limited number of lessons. Only two instructors were used, and in order to adequately test the impact of style on CA, more instructors may be necessary. If more instructors were used, with more classes, the results could help to reveal whether or not teaching styles matter with regard to reducing CA. Using multiple instructors in each style may show that style matters more than the instructor, contrary to the results obtained here wherein instructors seemed to be of greater consequence than the teaching style they employed. It might also be im-
important that the instructor's personality matches the style s/he is teaching. This way the teacher does not have to act in a manner that is contrary to his/her natural style. It may be that no matter how much practice and training is involved, an instructor's personality will emerge and supercede a style they don't normally employ.

CONCLUSION

These limitations suggest caution is in order vis-à-vis to generalizations based on these data. However, the findings of this study provide insight into students' reactions to teaching styles and instructors' personalities. In the field of education, several different teaching styles have been developed under the idea that different students will react to and learn better with different styles. However, it appears that instructor paradigm has less direct impact on students' communication apprehension than initially considered. But, useful insight is gained from this research. First, that future research needs to occur over a longer period of time to mitigate instructor methods in the short-term teaching situation. Second, that the research design utilized proved useful to consider a more nuanced and specific intersection of communication apprehension as it occurs within specific instructional styles. That is, instructors' teaching style is unlikely, over the short term at least, to adversely affect high CA students. But, this effect remains untested in a longer-term study.
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