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Communication Apprehension:
What Have We Learned in the Last Four Decades
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#### **Abstract**

Since the late 1960's one of the most researched constructs in the field of human communication has been Communication Apprehension. In this article communication apprehension and its related traits are reviewed and the research related to them is discussed with a personalized eye to explaining how they were developed and what we have learned about them in the past four decades.

Keywords: stage fright, reticence, communication apprehension, shyness, willingness to communicate, compulsive communication, self-perceived communication competence

The question I am most asked relating to my work with Communication Apprehension (CA) is "Where did you get the term 'Communication Apprehension'?" It was chosen in 1968, four decades ago. There already were many studies that had been reported in the Speech discipline that addressed "stage fright," "speech fright," and "public speaking anxiety." At Penn State, Gerald Phillips (1965) was actively writing about what he called "reticence" and developing classes to help reticent students survive in pubic speaking classes.

Two of my graduate students (James Barrick and Charles Ertle) at Michigan State University joined me to discuss what we thought were the problems in explaining to others what our research was all about. We recognized that there were a lot of different terms being used to describe what we were interested in (our working term was "communication-bound anxiety") but none of them seemed appropriate because they were terms being used to describe things that were different from what we were studying. After a lot of discussion, we came up with CA. None of us can remember who brought this term into the conversation. Since I was the first to use the term in a publication (McCroskey, 1970), I have been the one to get most of the praise/blame for it. Before CA

A century ago (1909) the academic discipline of Human Communication was launched by the members of what is now known as the Eastern Communication Association, soon (1914) followed by the members of what is now known as the National Communication Association. In the early decades, the focus of scholarship in human communication was on public speaking, rhetoric (persuasion), argumentation, and debate. Even before the establishment of the professional speech organizations, many high schools and colleges required that students present speeches before the other students and the faculty of the school in order to graduate. These presentations were referred to as "dissertations." If the student was not able to present a high quality of dissertation he/she was not allowed to graduate (much like the written dissertations for doctoral degrees required today). Many people believed that there was a strong linkage between intelligence and speaking ability.

In most cases, in the 18<sup>th</sup> and most of the 19<sup>th</sup> centuries, there was no formal training in public speaking in most schools or colleges. Some students protested the required dissertations, but they usually were not successful. Those who could afford it, hired non-professional speakers to help them. The less wealthy students formed groups of students to help one another. It is thought that students at the College of William and Mary formed the first of these clubs. Students at many colleges began to demand that their school hire speech teachers so they could learn to present better dissertations. By the beginning of the 20<sup>th</sup> century, the number of speech teachers in schools and collages had increased.

Many of the speech teachers argued that learning how to speak better would improve a student's personality. While the linkage between speaking ability and intelligence, general learning, and personality may seem to be "way out there" to communication professionals today, these views were still popular in the 1950's when I took my first college speech class.

When I started high school teaching in 1957, I selected my top debate team members (two seniors and two sophomores) on the basis of their IQ scores. Our high school had never had a debate team. However, our senior team won the Class B (smaller schools) state debate championship the first year. I got a new job where I used the same IQ approach. My new team (Class A, large schools) won second in the first year, and won the championship the next year. During that same year my

former sophomores, now seniors, won the Class B championship (without me). As a result I got my first college teaching/coaching job. Do you think I questioned the speaking/IQ linkage?

In retrospect, I am sure that none of these students were high communication apprehensives. However, we had no concept of CA at that time, much less any way of measuring it or reducing it. However, we now do have evidence that IQ is not related to CA (Bashore, 1971; McCroskey & Andersen, 1976; and Davis & Scott (1978). We now know that communication and personality/temperament are correlated, because of their genetic connections (Beatty, McCroskey, & Heisel, 1998). However, there still is no solid evidence that increasing speaking skills improves learning. Most likely this view still is continued in some quarters because speech courses increase students' speaking skills (those who are not high CAs) and allows them to make better presentations in their other classes. However, we now know that speech classes do not eliminate CA for students who are high CAs.

# Why Our Field Recognized a Problem

From the late 1940's to the late 1960's higher education underwent major changes. The speech discipline was influenced by these changes. Prior to this time, higher education was primarily available to students from the upper levels of the society, particularly the male children of the more wealthy white families. These children were seen as the future leaders of the society, hence it was seen that they would need to have high public speaking skills.

At the end of World War II the federal government launched the GI Bill of Rights. This program provided financial support to the veterans of that war to further their education. This was soon expanded to the veterans of the Korean war. Thus, many white males from the lower ranks of society, some white females, and some non-white minority veterans became college students. Movements to provide more freedom to females and members of minorities in the 1960's greatly increased the number of college students from these groups. Enrollments in colleges and universities sky rocked. The student population became much more diverse, and that diversity still increases to the present. Today, white males are a minority in most colleges and universities in the U.S.

Many of these new students (and some of the traditional ones) did not take the need for public speaking skills to be a given. They recognized that their education would benefit them in the future, but they did not see themselves as future leaders with a need to present speeches. The students made their views clear to many of the speech faculties. They believed that public speaking skills may not be needed for all, but instruction about other kinds of communication are badly need. As faculty (who's education was mostly in public speaking, debate, and rhetoric), we were slow to understand.

Gradually, we recognized the need for instruction in communication beyond just public speaking. This produced the expansion of classes in small groups and interpersonal communication. Again, gradually we recognized that some students had anxiety and fears about communication other than just giving public speeches. Even more slowly, we recognized that we needed to be able to identify students with severe fear/anxiety problems and try to find out why these problems exist, and what we could do about it, if anything.

## The Beginnings

I almost began my CA research in 1965 at Penn State. Other doctoral students and I were aware that Gerald Phillips was beginning to develop speech classes directed toward reticent students. We were asked to send the reticent students in our public speaking classes to his reticent classes. Even thought we didn't know what a reticent student was, we sent our problem students to him. I

thought we should have some kind of measure that we could use to identify the reticent students, so I offered to help Phillips develop such a measure (the minor in my doctoral program was in research methods in Educational Psychology). His response was clear: "I don't need any d\_\_\_ measure! I know a reticent student when I see one!"

That ended my reticent research at Penn State. However. A short time after that I became even more concerned about reticent students. One evening I received a phone call at home from a Penn State psychologist. He asked me some questions about one of my students, wanting to know if this student was scheduled to present her speech the follow day. I informed him that she did. I asked him why he wanted he wanted to know. He informed me that they had just rescued this student from an attempt to commit suicide by jumping off the top of one of the highest buildings at the university. She had indicated that she just could not face having to give another speech. Needless to say, this shook me up. I had never noticed this student to be any more reticent than any other students. Obviously, I could not recognize a reticent when I saw one! Years later, we learned that many high CAs are able to conceal their fears/anxieties. One cannot be sure what students are high CAs by looking at them, unless you have the skills equivalent to those of Phillips.

I talked to Phillips about this attempted suicide, and he expressed concern also. He informed me that there had been a number of suicides by students in recent years. He an I were able to get the administration to identify the students who had committed suicide and the enrollments in required public speaking classes. There were 14 suicides recorded, and all but one of those students were currently enrolled in required public speaking classes at the time of their death. Was this just coincidence? Possibly, but the odds are strongly against it.

In the process of looking at the lists of students in the required public speaking class, we accidently identified a student who had enrolled for and dropped the class 12 times. He had a straight "A" record in engineering, but could not graduate because he had not passed the required public speaking class. Phillips located this student, got him into his reticent class, and he graduated. Later, when I was conducting my first study of treatment for CA at Michigan State University, we administered a measure of speech anxiety on the first day of class for all public speaking students. When we returned to the second class meeting, we found almost one third of the students had dropped the required class. Over half of those had high scores on our measure.

I drew two conclusions from this experience: 1) Th Phillips special class approach is helpful, and 2) there may be hundreds or even thousands of students in public speaking classes who drop the course, change their major to one that doesn't require a public speaking class, or even transfer to another school that doesn't have that requirement. This effect may also apply to non-communication classes that require public speeches in those classes, but to my knowledge no research has studied this possibility.

When I became chair of the communication department at West Virginia University (1972) I learned that the public speaking class was required for all students. I also learned that less than ten percent of the students who took the required public speaking class also registered for another communication class later in their college career. We convinced the administration to end that requirement and offered more interpersonal communication classes that did not include public speaking. The enrollments in the department tripled in four years. Clearly, public speaking classes are very beneficial to most students, those that are not high CAs. Requiring public speaking classes

for high CAs may do as much harm, or even more, than they benefit these students. I concluded that these are the students who need the Phillips approach—at least until a better program could be developed. I started looking for that approach.

Understanding and Treating CA

Early in my years in the Communication Department at Michigan State University I was assigned to teach a large graduate class in research methods. This class included students from communication, education, speech pathology, and a variety of other disciplines. One of those students was James Barrick, a graduate student in Educational Psychology. All of the students were required to submit a quantitative research proposal as part of the course requirement. Barrick submitted a proposal for a study involving the use of systematic desensitization (SD) to reduce the test anxiety of students. His very thorough review of the literature cited a study conducted in Psychology which had used SD to reduce public speaking anxiety with students taking required speech courses at the University of Illinois. I contacted Barrick to see if he thought that method could be used to reduce the more broad-based problem of communication-bound anxiety (now CA). He thought SD should be very effective. Hence he, David Ralph (a senior faculty member, my office mate, and the director of the basic public speaking class), and I decided to do a study to find out.

As they sometimes say, the rest is history. We did the study and found out several things. The first was that communication faculty were able to effectively employ SD (a major concern to us), we could use a revised version of the test anxiety measure that Barrick had planned to use for his test anxiety study to measure communication-bound anxiety, and we found SD statistically significantly reduced the students' communication-bound anxiety (McCroskey, Ralph, & Barrick, 1970).

As an aside, we assigned the students on the basis of the pre-test scores on our measure of communication-bound anxiety. Each group was composed of students who had either low, moderate, or high anxiety scores. We told each or the five-student groups that the "trainer" would be along in about 15 minutes. We simply observed, from a viewing area not visible to the students, their communication behavior. All of the low anxiety groups immediately began to talk. All of the high anxiety groups remained silent for the 15 minute period. In the moderate groups some students talked and some did not. This gave us some evidence of the validity of the measure we employed.

By the time this treatment manuscript was published, as was my first article on measures of communication-bound anxiety (McCroskey, 1970). Also, the term "Communication Apprehension" had been introduced to the literature (McCroskey, 1970). The criticism of by scholars began. *Criticism—Some good, Some not so good.* 

Two very important and valid concerns caught the most attention of critics. The first argued that our original measures (PRCA-College, PRCA-Ten, PRCA-Seven, and the Personal Report of Public Speaking Anxiety-PRPSA) were not really measures of a broad-based communication-bound fear/anxiety (McCroskey, 1970. The critics were totally correct. These measures were based primarily on items from instruments that had been developed by earlier scholars dealing with public speaking anxiety. The PRPSA has proven to be an excellent measure for that purpose, and is still commonly used in public speaking research. But it is not a measure of communication apprehension.

Over the next five years, many efforts were made to improve the validity of the PRCA as a measure of CA. By the middle of the 1970's, the PRCA-25 had been developed and validated by many studies (McCroskey, 1978). It had much less emphasis on CA in the public speaking context of communication. Eventually, the PRCA-24 was generated. It has six items for each of four

communication contexts (one being public speaking) and has been the primary instrument used for measuring CA since that time (McCroskey, 1982a).

The second concern of critics was that our study of the use of SD to treat CA was a controlled experiment and the results might not be generalizable in normal academic circumstances. To answer this concern of the critics, we conducted an extremely large replication of the original study at Illinois State University (McCroskey, 1976). The results replicated those of the original Michigan State study. A subsequent study at West Virginia replicated this study employing cognitive restructuring (Glowgower, Fremouw, & McCroskey, 1978) and obtained similar results. Clearly it is possible to reduce the CA of individuals who have high CA. However, as we learned later, that reduction may not be very large (Beatty, McCroskey, & Heisel, 1998).

Early on, some people just didn't believe that there was something like CA in their classrooms. The most common comment was "My students get over CA in my classes." Since then, many different researchers' results have indicated that in studies with control groups such improvement does not occur. It is just regression to the mean. Other people commented that "I don't have high CA students in my classes." Given that we have learned that approximately one person out of five suffers from high CA, that seems unlikely to be true. These people may just not have Phillips' ability to recognize a reticent (or high CA) when they see one, or they just don't want to accept the fact that they have students who need help they can't provide. Of course, these people my be teaching non-required classes. It is quite probable that high CAs do not choose to take their classes. Most of these concerns were expressed by long-time public speaking teachers. We seldom hear similar comments from faculty who are teaching other kinds of communication classes. In recent years we do not often hear these views expressed at all. The validity of the CA construct has been accepted by most people in the discipline.

By the middle of the 1970's, a new concern appeared. Some individuals advanced the argument that CA and reticence are the same thing. This argument could not be answered at that time, since there was no measure of reticence to compare with the PRCA-25 (or the PRCA-24 later). While these constructs were recognized as related, Phillips and I both agreed we were not the studying the same thing. Later research indicated that the instrument developed to measure the construct of "willingness to communicate" (WTC) probably provides the closest measure of reticence available (McCroskey & Richmond, 1987). As expected, these two measures proved to be substantively correlated, but not isomorphic (Additional discussion of WTC later.)

Most of the CA research done in the early years focused on measuring CA and finding ways to reduce it. This became the big concern of the critics. This voice questioned whether CA was really a problem at all, except in public speaking. This valid concern literally launched hundreds of research studies of the next three decades, and continues to the present. This research centers on the effects of CA in a variety of communication contexts. The results of this research will be discussed later.

#### **CA and Communication Traits**

In the early years of the study of CA, a distinction was made between "Trait CA" (TCA) and "State CA" (SCA). TCA was seen as being a general pattern of low, medium, or high orientation of anxiety/fear across communication contexts. SCA was seen as experiencing anxiety/fear in one situation but not in others. For example, an individual could experience anxiety/fear anticipating

communication when applying for a job but not experiencing anxiety/fear in other interpersonal communication situations. It has been estimated that approximately 70 percent of the people in the U.S. report experiencing CA when they have to give a public speech. This does not mean that 70 percent of the population are high TCA communication apprehensives. Rather, it is estimated that only 15-20 percent of the people are high communication apprehensives. Thus, many people who are moderate or low in TCA may experience SCA when confronted by public speaking, but some may learn to control their to control their SCA over time and/or with experience. However, individuals with high TCA experience SCA in many communication situations, but those individuals with low TCA may seldom (or never) experience SCA in any context.

When it was recognized that there is a range of high to low TCA, several scholars began wondering if there were other communication traits that might be related to TCA. Four of these traits have received the most attention: Shyness (SHY), Willingness to Communicate (WTC), Compulsive Communication (CC), and Self-Perceived Communication Competence (SPCC).

Shyness. While much of the research on shyness has been reported in the literature of psychology, it also has been studied by communication researchers. The definitions of shyness provided by researchers in psychology are highly variable, and their measures are equally variant. Some of the research studies in psychology focus on shyness as an internal experience, others focus on externally observable behavior (Leary, 1983). The research reported by communication researchers has employed a common definition of shyness: "The tendency to be timid, reserved, and most specifically, talk less" (McCroskey & Richmond, 1982). This definition encompasses both of the elements discussed by Leary, and the McCroskey Shyness Scale (SHY) follows that pattern.

Factor analysis has determined that the items on the PRCA and the SHY form two clearly distinct dimensions. This indicates that communication apprehension and shyness are distinct constructs. However, this research does indicate that the CA and SHY are related. The original research (McCroskey & Richmond, 1982) found that these two measures are substantially correlated, r = -.57. This indicates that either measure can predict 32 percent of the variance in the other. Subsequent research has produced very similar correlations when the PRCA-24 is employed, r = -.58.

Willingness to Communicate. The first two attempts (to my knowledge) at development of an instrument which might measure something related to individual's verbal orientation (reticence, verbosity) were not successful. The first of those focused on "unwillingness" to communicate (Burgoon, 1976). This work sought to develop an instrument which would provide a measure of CA and a measure of of communication unwillingness. The results produced two dimensions. One was a weak CA measure, and the other was a number of items that were not found to measure anything interpretable.

The second measure (Mortensen, Arnston, & Lusting, 1977) sought to measure "predispositions toward verbal behavior." The results generated a 25-item measure with good reliability. However, only five of the items in this measure appeared to relate directly to WTC.

My colleagues and I made numerous attempts at developing a measure of reticence that was not also a valid measure of communication apprehension (never published). We were using the normal Likert scaling methods. We consistently failed to develop such a measure. After over a decade of failures, we changed methods and were successful. When we got our successful pilot study, we contacted Professor Phillips. He indicated that he had changed his view of reticence and didn't want us to refer to our new measure as "reticence." Hence, we changed the name of the

measure to "Willingness to Communicate" (McCroskey & Richmond, 1987).

In early and recent research we have found that the correlation between CA and WTC typically is about r = -.51. This indicates that either measure can predict 27 percent of the variance in the other. This indicates that communication apprehension and willingness to communicate are distinct constructs. However, this research does indicate that CA and WTC are related.

Since both SHY and WTC are correlated with CA, we recently have sought to determine the relationship between SHY and WTC. Based on the results of several studies, we determined that SHY and WTC are typically correlated by r = -.48. This indicates that SHY and WTC are related, but are distinct traits.

Compulsive Communication. Many people who are interested in CA have asked whether the people who are low in CA are "talkaholics," the people who they think "talk too much." If so, this might indicate that low CAs have a reverse problem compared to the high CAs. We recognized the possibility that these people might be on to something. Hence, we decided to find out if their speculation was correct. We chose to call these people Compulsive Communicators (CC), because we thought they might or might not have a problem.

From the results of the initial study (McCroskey & Richmond, 1993) we learned that the scores on the CC measure (referred to as the talkaholic scale) are not normally distributed. People are either compulsive communicators or they are not—much like people are either alcoholics or not, or either chocaholics or not. Some studies outside the U.S. have found similar results. In a subsequent study (McCroskey & Richmond, 1995), it was found that CC is substantially correlated with SHY, r = -.62, accounting for .38 percent shared variance. CC was also found to be correlated with introversion, assertiveness, CA, WTC, neuroticism, and SPCC, but all of these correlations were below r = .30 and none could account for as much as nine percent shared variance. Responsiveness and affect orientation correlations with CC were found not to be statistically significant.

Clearly, CC is a distinct trait which is meaningfully (negatively) associated with only shyness. CC is not meaningfully associated with low CA. High, moderate, and low CAs do not differ in their likelihood to engage in CC. In addition, students who had high talkaholic scores were offered a training program to overcome "their problem." Not a single student accepted the offer. We interpreted their response as an indication that people who are high in CC do not believe they have a problem. Interviews with a sample of high CC indicated that being a "talkaholic" was not a problem and they thought being one was an asset.

When we presented a paper on "talkaholism" at a NCA convention, over 100 members of this association attended (a larger group than for most sessions, all seats were taken, and people stood in the room, and a few out side the door). Prior to our presentation, we asked every person attending to complete the talkaholic scale. While only about five percent of the students in the previous study scored as high in CC, approximately 75% of the communication professionals scored as high on the talkaholism scale.

In a pilot study (never published because of the small sample), we asked 132 college students to identify another person they knew who "talks too much." All of the students identified such a person. We we able to reach 73 of those people. Only four of these people scored as high CC.

While so few studies require caution in interpretation, it appears appropriate to speculate that

being a high CC is not associated with any communication problem, and it may be associated positively with communication competence. It appears that CC and "talks too much" are distinct and unrelated constructs. It also appears that the reference to "talks too much" does not relate to a quantitative (amount of communication) problem, but does relate to a qualitative problem—people who are seen as talking too much are viewed as incompetent communicators—talk when they should not, say things that are offensive, etc. Future research is needed to determine the accuracy of these speculations.

Self-Perceived Communication Competence. During the late 1970's and the 1980's a major concern of communication scholars was "communication competence" and its measurement (Wiemann, 1977; Wiemann & Backlund, 1980; McCroskey, 1982b). A variety of theories and a few measures were advanced. One of these was the Self-Perceived Communication Competence scale (McCroskey & McCroskey, 1988).

It was believed that one's CA, SHY, and/or WTC might be good predictors of their SPCC (Richmond, J. McCroskey, & L. McCroskey, 1989). The results of their research supported their speculation. The correlations of CA with SPCC obtained ranged from r = -.57 to r = -.66. The obtained correlations of SHY with SPCC ranged between r = -.48 to r = -.57. The correlations obtained were from r = .63 to r = .74. These results clearly indicate that CA, SHY, and WTC influence SPCC, but CC does not.

We now know that there are strong relationships among these five communication traits. We also know that these communication traits are distinctive of each other. What we don't know is what other communication traits may be related to these, and what communication traits are important but not related to them. A task to complete in the next 40 years?

Causes and Effects of CA in Human Communication

A lot of attention has been given to the effects of CA in human communication. Comparatively, little attention was given to the cause(s) of CA until recently. I will deal with causes first.

Causes of CA. When research began on CA in the 1960's few, if any, researchers questioned the cause of CA. At that time the learning paradigm dominated scholarship in all of the social sciences and some of the hard sciences. Infants were thought to be blank slates and they learned everything from the environment (other people and experience) as time went on. So, of course, we presumed that CA was learned. And, the motto was "Whatever is learned can be unlearned and/or relearned." This view dominated scholarship and nothing else was considered. When we sought a way to reduce CA, we considered no other view than learning. Even brain scholars were caught up in this view—and they could only study the brains of dead people, since physically probing a live brain would kill the person. It wasn't until the 1990's that the technology began to develop methods of studying live brains without killing the person. Almost everything we now know about live brains has been learned since that time. We chose our methods for reducing CA from various approaches to learning and selected the Systematic Desensitization approach to "unlearn and relearn" with our high CAs. Statistically, this was an effective method. Other methods were tried, and they seemed to work also. However, the effect sizes turned out to be relatively small, hence were not very effective. When we realized this, we sought some other approach to understanding the cause of CA.

We read some work in brain science and psychology and recognized some of this work might apply to our problem. At this point we recognized there were two kinds of causation for human factors—learning and genetics. So if one doesn't work, maybe the other one will. Genetics had

a bad name at that time because of the society's aversion to the horrible research conducted by the Nazi physicians before and during World War II. People had not gotten over the view that genetic research was evil, and understand that it was the Nazi approach and use of that research which was evil.

As we anticipated, our first two published studies (Beatty & McCroskey, 1997; Beatty, McCroskey, & Heisel, 1998) received extremely negative verbal responses and numerous physical threats from many members of our field who were ignorant of what genetic studies are today. As far as those people saw it, we were the lowest creatures on earth and worse than the Nazi murderers. As an aside, I was a candidate for President of NCA at the time. Yes, I lost. That I expected, but the threats I did not. Particularly because many of these attacks were published in an NCA electronic publication.

At any rate, this work launched the communibiology paradigm. It now appears that genetics is a major factor in the causation of CA and maybe other communication orientations and behaviors. We hope that sometime soon we can develop genetically based methods for helping the people with high CA.

Effects of CA. As noted previously, some critics questioned whether CA is really a problem, except for public speaking. This appeared to be a valid concern. We thought there might be many negative effects of CA beyond just public speaking fear and anxiety. Hence, two of my former graduate students (John A. Daly & Virginia P. Richmond) and I joined together to launch research studies directed toward developing and understanding of the effects of CA in normal communication contexts (beyond public speaking).

We anticipated that this would take us a few years. We underestimated. We had conducted and published over 20 studies in a few years (1972-1978) on this topic. Simply put, our results indicated that virtually regardless of context, humans with high CA are handicapped by their CA, whereas humans with low CA are benefitted by their lack of CA. Virtually all of our later research in this area has supported this conclusion. The same is true for most of the research reported by others.

When we chose to launch this research effort, what we did not anticipate was the level of research on this topic could reach. Several of our colleagues, students, and former students began to do research in this area. Other communication researchers from all over the U.S. began to conduct research in this area. U.S. communication scholars began doing research in this area in other cultures. Scholars in other disciplines became interested in this area of research. And more recently, scholars in other cultures are doing research in this area. Books have been published that include discussions of the problems caused by CA, and some of these have been translated into the languages of other cultures. In a recent visit to "Google," "Communication Apprehension" resulted in over 39,000 responses. While most of the CA research in the early years was produced my colleagues and I, now our work represents only a small percentage of that which has been reported.

While I do not have the room to describe all of the effects of CA that have been identified, in the following pages I will provide some of these:

- 1. Daly and McCroskey (1975) found that high CAs prefer occupations that have low oral communication demands while low CAs prefer occupations that require high oral communication demands. Problem: High CAs tend to have lower incomes.
- 2. Falcione, McCroskey, and Daly (1977) found that high CAs who are teachers (elementary or

high school) or are Federal civil service employees have less job satisfaction than those who are low CAs. Problem: High CAs may cause more turnover in their occupations and/or to leave their own jobs.

- 3. McCroskey and Andersen (1976) found that high CAs who are college students prefer attending large lecture classes over small classes which encourage interaction. Problem: Students who avoid interaction in class often receive lower grades because they don't "participate." Also, because they don't like the classes, students learn less in classes which demand interaction.
- 4. Scott, Yates, and Wheeless (1975) found that high CAs who are college students and are, when in small personalized classes, significantly less likely to seek the assistance of available tutors than were students with lower CA.

Problem: High CAs do less well compared to other students in these classes.

- 5. McCroskey and McVetta (1978) found that college students who are high CAs prefer classes where they may sit on the sides or back of the room, while low CAs prefer seats in the center and front of the class. Problem: When teachers require high CA students to sit in the center or front of the class, they learn less.
- 6. McCroskey and Sheahan (1978) found that high CA college students as compared to those who with lower CA are less likely to accept a blind date, have a date, interact with peer strangers, and to engage in exclusive (steady) dating. Problem: Students with weak social connections are more likely to drop out of college.
- 7. McCroskey and Kretzschmar (1977) found that college graduates with high CA (even though they are less likely to date) are more likely to marry immediately upon graduation than are graduates with lower CA. Problem: Early marriage has been found to be a good predictor of divorce.
- 8. Quiggins (1972) found that high CAs are perceived as both less credible and less interpersonally attractive than are low CS, by low, moderate, and even other high CAs. These results have been replicated numerously in subsequent studies. Problem: Negative attractiveness and low credibility lead to dislike and rejection in social and work environments.
- 9. Hurt and Joseph (1976) found that high CAs are less likely to be turned to as opinion leaders or to be selected as friends than other other people. Problems: People who are not opinion leaders have less influence in their work environment, and people who are not selected as friends can be lonely and accepted less in their social lives.
- 10. Richmond (1977) found that high CAs have less likely hood of being successful in the job applicant screening process. Problem: High CAs have less chance of being hired compared to others.

The ten examples shown above are just a small sample of the dozens of CA effects studies which appeared in a brief six-year period. Such research has continued on these and other kinds of contexts relating the impact high CA in everyday life. It almost seems like communication researchers are committed on finding a communication context where being a high CA is *not* a negative trait. There have been very few, if any, studies with these results in the past four decades.

It seems reasonable to come to the conclusion that high CA is a very negative trait for a person to have in the U.S. culture, and in at least several other cultures. We know it has many negative effects for about 1 in 5 of our acquaintances, our friends, our families, as well as our selves. We think we now know why it exists (genetics and learning). We know how to reduce it a little for some high CA people. We have learned about drugs which temporarily reduce a person's CA (and their potential negative side effects). I conclude with the hope that it doesn't take 40 more years for a method to be developed that can help high CAs overcome their CA, and hence avoid their

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problems. I believe you , as a reader of this article, share that hope with me. There never will be enough research on communication apprehension until the effects of high CA can be prevented for everyone in our society and in other cultures.

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