

ED 316 898

CS 507 088

AUTHOR Pucel, Joanna K.; And Others  
 TITLE Dimensions of Communication Apprehension beyond Boundaries: A Cross-Cultural Comparative Study of U.S. and Japanese Management Personnel.  
 PUB DATE Nov 89  
 NOTE 21p.; Paper presented at the Annual Meeting of the Speech Communication Association (75th, San Francisco, CA, November 18-21, 1989).  
 PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.  
 DESCRIPTORS \*Administrators; \*Business Communication; \*Communication Apprehension; Communication Research; Cross Cultural Studies; Foreign Countries; Occupational Surveys; \*Public Speaking; Questionnaires; \*Stress Variables  
 IDENTIFIERS \*Japan; Stress (Biological)

## ABSTRACT

A study explored the self-reported nonverbal stress behaviors perceived by men and women in management positions in both Japan and the United States who were required to give public speeches as part of their employment or daily lives. The sample included 136 subjects from the United States (60 males, 76 females) and 99 Japanese subjects (86 males, 13 females). The questionnaire was translated and distributed in Japan. To achieve a broad overview, the subjects completed the Nonverbal Communication Survey, designed to examine nonverbal self-reported perceived behaviors toward public speaking situations. Data were compiled separately for both males and females in both cultures. Results revealed that communication apprehension is not limited to United States business populations but is also prevalent in the Japanese business culture as well. Results also showed that similar self-reported nonverbal behaviors are perceived by both cultures, thus suggesting the possibility of "cultural universals." The frequent occurrence of communication apprehension related nonverbal behaviors suggests that a universal attitude exists toward the fear of speaking to groups of people. (A figure and four tables of data are included, and 13 references are attached.) (Author/SR)

\*\*\*\*\*  
 \* Reproductions supplied by EDRS are the best that can be made \*  
 \* from the original document. \*  
 \*\*\*\*\*

# ST. CLOUD

STATE UNIVERSITY

DIMENSIONS OF COMMUNICATION APPREHENSION

BEYOND BOUNDARIES:

A CROSS-CULTURAL COMPARATIVE STUDY  
OF US AND JAPANESE MANAGEMENT PERSONNEL

By

Joanna K. Pucel

Glenn Stocker

Laurinda Porter

St. Cloud State University  
St. Cloud, MN. 56301

BEST COPY AVAILABLE

Paper presented at the annual Speech Communication Association  
Convention, San Francisco, California, November, 1989

"PERMISSION TO REPRODUCE THIS  
MATERIAL HAS BEEN GRANTED BY

JOANNA K. PUCEL

TO THE EDUCATIONAL RESOURCES  
INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION  
Office of Educational Research and Improvement  
EDUCATIONAL RESOURCES INFORMATION  
CENTER (ERIC)

(1) This document has been reproduced as  
received from the person or organization  
originating it.

(2) Minor changes have been made to improve  
reproduction quality.

• Points of view or opinions stated in this docu-  
ment do not necessarily represent official  
OERI position or policy.

Department of Speech Communication

St. Cloud, Minnesota 56301

ED316898

CS507088

Dimensions of Communication Apprehension  
Beyond Boundaries:  
A Cross-Cultural Comparative Study  
of US and Japanese Management Personnel

ABSTRACT

Over the past few years research in the area of communication apprehension has expanded far beyond United States borders to incorporate other cultures. It is therefore the purpose of this paper to explore the self-reported nonverbal stress behaviors perceived by men and women in management positions in both Japan and the US who were required to give public speeches as part of their employment or daily lives.

The sample included 136 subjects from the United States (60 males, 76 females) and 99 Japanese subjects (86 males, 13 females). The questionnaire was translated and distributed in Japan. To achieve a broad overview, the subjects were asked to complete the Nonverbal Communication Survey. This survey was designed to examine nonverbal self-reported perceived behaviors toward public speaking situations. The data was compiled separately for both males and females in both cultures.

The results of this study reveal that communication apprehension is not limited to the US business populations but is also prevalent in the Japanese business culture as well. This study also shows that similar self-reported nonverbal behaviors are perceived by both cultures thus suggesting the possibility of "cultural universals." The frequent occurrence of communication apprehension related nonverbal behaviors suggest that a universal attitude exists toward the fear of speaking to groups of people. Identification and analysis of these behaviors can become a beneficial tool in developing more effective means of understanding communication apprehension and dealing with it at the international business level.

Recently, scholars have turned their attention to the assessment of communication skills experienced by members of cultures outside the continental United States. One of the most widely-studied areas in the field of speech communication, communication apprehension, is an important focus of study for applied communication specialists, consultants working with international companies, and educators. The research project here offers an early assessment of the extent of communication apprehension among Japanese MANAGERS in Japan as compared to their similar counterparts in the United States.

**RELATED RESEARCH AND RATIONALE:  
COMMUNICATION APPREHENSION**

Over the past several years communication scholars have generated an abundance of literature identifying individuals representing populations within the continental United States who are anxious or nervous when confronted with a group of people in a speaking situation. A vast majority of this research has dealt with the popular concept identified as communication apprehension (CA). McCroskey defines it as "an individuals' level of fear or anxiety associated with either real or anticipated communication with another person or persons" (McCroskey, 1977b, 1984). Other associated terms include: "shyness," "reticence," "stage fright," "speech anxiety," or the "unwillingness to communicate." Although the terms might vary according to specific research concerns or populations being studied, generally, the focus rests with the ideas that a large number of people exhibit and experience certain "fears" associated with human communication. This "fear" of speaking might be prompted by communicating orally with one person or several. In turn, the associated behaviors may be either verbal or nonverbal, or a combination of the two.

Even though CA research has been extensive, only a few international studies have been conducted using subjects outside of the continental US up to 1983, according to Payne & Richmond (1984). However, according to McCroskey (1985), CA research has been conducted in other countries but the articles have not appeared in typical speech communication journals (McCroskey, 1985). In his 1985 article on the Japanese he states that CA research has been conducted in such locations as "Hawaii, Japan, Micronesia, Korea, Australia, Sweden, Germany, England, China, Puerto Rico, South Africa, Israel, India, the Phillipines, and Finland" (McCroskey, 1985). Also, the recent intercultural CA researchers have utilized "nonnative" English speakers or persons using English as a second language from colleges and universities for their studies. Nonverbal related CA research in the corporate world of different cultures is very minimal at best. Yet,

according to Klopff (1984), Richmond & Andriate (1984), and Zimbardo (1977), CA and its related discomforts and behavior patterns do, indeed, cross cultural boundaries. However, it is important to point out that certain behaviors/feelings in one culture may be the cultural norm, accepted as natural, and not perceived or believed to hamper or deter communication within their own culture. Japan, for example, is a culture that does not value talkativeness as North Americans value it as a cultural norm. "The Japanese while open, do not feel they are very orally capable, being shy, apprehensive, and reluctant to verbalize" (Ishii, Klopff & Cambra, 1981, p. 11). They also score higher on CA related test instruments than people of other cultures. According to Klopff's study, he found the Japanese students reported the highest levels of CA of any group of people in the Pacific Basin area (Klopff, 1984). McCroskey, Gudykunst & Nishida (1985) also found similar results in a study assessing Japanese students' level of CA in Japanese and English, English being the second language.

Although the Japanese do not have a specific term for CA or speech anxiety, the closest phrase would be "Taijin Kyofu" associated with interpersonal fears or fears relating to speaking to someone. Blushing, fear of expressing feelings, fear of improper appearance, are a few of the examples associated with "Taijin Kyofu." These are familiar behaviors and beliefs associated with the North American concept of anxiety or CA.

In the Pucel & Stocker (1983) study the Japanese listed over 80 nonverbal stress related behaviors associated with public speaking. Although, many of the same nonverbal behaviors were listed by the US populations, the Japanese students experienced them more frequently and with more intensity (Pucel & Stocker, 1983). It became evident from this study that the Japanese believe themselves to demonstrate certain nonverbal behaviors during tense communication encounters, as did the US students. Although many of the behaviors cited in the Pucel/Stocker study may be internalized responses to public speaking on the part of the speaker, the reaction has the potential to become externalized. This externalized behavior may elicit perceived negative communication behavior. To support this claim, Freimuth (1976) concluded in a study concerning the EFFECTS of CA on communication effectiveness, that the sender's CA had a negative effect on the receiver's comprehension and ratings of authoritativeness and speech effectiveness. Therefore, since the Japanese remain quiet, shy, and reserved, this behavior, in turn, has the potential to be perceived negatively by a North American observer. High levels of CA may not handicap a person living in Japan because of their views toward oral communication but it may become devastating for the person who is required as part of their job to conduct business in the United States

as well as speaking the English language. (McCroskey, Gudykunst & Nishida, 1985). Consequently, if both sides remain ignorant or uninformed about each others cultural communication behavior patterns associated with CA, problems in total communication become inevitable. Therefore, it is the purpose of this comparative study to focus on both Japanese and US managers and how both cultures relate to public speaking situations. Since a bulk of the CA research, especially intercultural CA research, has been limited to academic environments, college age students, and international students living within the United States, it seems important to expand the scope of this type of research and look to the business environment in both countries. International dealings, major trade and diplomatic functions are now becoming a norm between both cultures. To take this even further, Japanese women are now filtering into the higher levels of management in Japan as well as into the government system. In 1989 Japanese women were elected to Parliament and one of the political parties elected a Japanese woman as their leader. Due to these cultural changes, it is important for both cultures to learn about each other and their specific communication styles under pressured public speaking circumstances. The question then arises, how do Japanese managers perceive their nonverbal behaviors in public speaking situations and how are these behaviors different or similar from those experienced by their North American counterparts?

In order to deal with this CA comparative research project, two additional pertinent areas of concern need to be included which focus on the Japanese culture. First, the concept of public speaking in the Japanese educational system; and second, public speaking in the business setting.

#### Public speaking and its relationship to the Japanese educational system

Like any other Western research construct, CA cannot be measured or observed accurately in a non-Western setting without taking into account the context of the host culture. Given the Western educations and outlooks of the authors, it was important to be sensitive to factors within the Japanese culture that might affect the research and conclusions drawn from it. Several such factors will be noted: 1) the influence of "amae," or "dependency" of Japanese children on their mothers, encouraged by the mothers, that extends to the foreign policy of isolation pursued by Japan for thousands of years; 2) the fear of anyone outside the family, especially strangers, that Japanese mothers teach their children, and the tendency to stay with one's "own kind"; 3) the teacher-centered, non-oral Japanese educational system.

The first general factor which may be seen as influencing a Japanese person to develop CA is the process

of Japanese social development as reported by Japanese psychoanalyst T. Doi. Doi believes Japanese personality development is affected by the dependency of infants and children upon their mothers, that is encouraged by the mothers. The important part about "amae" is that it teaches the child "to expect the help and support of individuals and groups close to him or her" (Miyake, Campos, Kagan, Bradshaw, 1986). This dependency upon the family and especially the mother, is related to the second factor, fear of strangers and people outside the family group. How this manifests itself is reported by Vogel as the tendency to produce children who "are fearful of unfamiliar situations and are often extremely shy and inhibited on entering school" (Miyake, Campos, Kagan & Bradshaw, 1986). Japanese children are taught not to trust strangers and to avoid them.

When they enter school they encounter the third factor, the teacher-centered Japanese educational system. Children are required to be rigidly formal in their behavior, rising and bowing at the beginning and end of each class, standing when they address the teacher, speaking only when spoken to, reciting from memory the correct answers when called upon the teacher. The answers are expected to be short. It is only on a few occasions when a student is asked to speak in front of the class and during this time the student usually reports about what he/she did during a vacation.

Examinations or tests cover only what can be read and answered, and take the form of factual questions of the multiple choice variety. Therefore little attention focuses on verbal or oral communication skills and expressing opinions openly is valued negatively. The Japanese student is not taught how to give oral presentations nor do they have special "speaking" classes where they would be required to address the class.

However, the basic educational structure is patterned after the Western Model, from elementary to the university level. For example, there are six years of elementary school, three years of junior high school, three years of senior high school and four years at the university level. Certain programs take a total of six years, such as with medicine and dentistry. Graduate masters programs take two years beyond the baccalaureate, while a subsequent doctorate takes an additional three years. Schools at all levels are either public or private and a serious of rigorous entrance examinations are required for admission.

Overall, throughout this entire educational system, oral communication or public speaking is not stressed or offered through classes in the subject. However, those students wanting public speaking experience, join clubs called "Rakugo," where they tell long humorous stories in the form of dialogues. Others also become involved in theater groups. According to the Japanese students who informed the authors about these groups, these students

were "good speakers in front of the class."

#### Public speaking used by Japanese management

Even though oral communication in the Japanese educational system is "downplayed," public speaking situations in Japan are as plentiful and varied as those in the United States. However, one of the typical situations calling for public speaking by the people in this part of the survey may be uncommon in North America. Most of the management-level people were responsible for greetings and motivational talks each day at the morning assembly of workers prior to the start of the day's tasks. This was intended to build group morale, bind the group together and keep people informed regarding any new policies, activities, etc. Other occasions were similar to those faced by American business people. Self-introductions are quite common when groups gather. A meeting might begin with each person introducing themselves and their area of expertise or interest. In social settings these self-introductions often become rather lengthy and elaborate. Other, more familiar, public communication situations reported included business briefings, academic presentations at conventions, reports to stockholders at annual meetings, presentations to boards of directors, formal award presentations and receptions, civic club presentations, and other professional occasions calling for speaking. Another common instance of public speaking on the social level is the wedding reception speech, in honor of the bride and groom and in perpetuation of the bond of the speaker to the families of the couple. Also, groups of professional associates gathering for a party will hear an opening speech which is followed by self-introductions of each member of the group, as mentioned above.

The Japanese professional person finds many occasions where public speaking is required as outlined previously. Their rhetorical processes may vary from the United States' models to some extent, but the amount of public speaking by professional people in management positions is equal to ours, if not greater.

#### RESEARCH QUESTIONS

The present study is designed to investigate the following research questions:

RQ1 Are there cultural similarities and differences in self-reported nonverbal behaviors perceived during public speaking situations held by individuals representing Japanese and US management positions?

RQ2 What self-reported nonverbal behaviors associated with communication apprehension are reported by both Japanese and United States managers?

#### METHODS AND PROCEDURES

The present study was designed to investigate two

questions: 1) Are there cultural differences in self-reported nonverbal behaviors perceived during public speaking situations held by individuals representing Japanese and US management positions? 2) What self-reported nonverbal behaviors associated with communication apprehension are reported by both Japanese and US managers? To collect data that would answer these questions, a questionnaire already used in two different studies (Pucel & Stocker, 1983; Pucel, 1985, unpublished MA thesis) was translated into Japanese and administered to a sample of Japanese managers in Japan. "Managers" to the Japanese includes self-employed people, medical personnel, company executives at various levels, and educational supervisors. The sample of 99 managers included 86 men and 13 women. The subjects were university and medical personnel and executives who belonged to the Tokyo Jaycees service club. The questionnaire data was collected while the second author was living and teaching in Japan in 1986.

The US questionnaire, entitled, The Nonverbal Communication Survey ( Figure 1), stemmed from the Pucel and Stocker (1983) intercultural study. It was administered to subjects (60 male and 76 female) in business /professional organizations in the Midwest. Both organizations included individuals in either top, middle, or lower management positions. Top management included such persons as chief executive officers, presidents of companies, owners of companies or division corporate heads. Essentially these persons answer to a board of directors, to one other person, or are at the top of their organizational hierarchy. Middle management included persons with quasi-control who were responsible to the people in top management. They supervise a number of people below them in the chain of command. Sales managers would be an example of someone in the middle management position. Lower management persons answer to supervisors in middle management.

The survey methodology was selected to provide data on the respondents' feelings and attitudes about their nonverbal behaviors while speaking. Thus, while self-report data are sometimes criticized for low reliability, lack of standardization, and limited experimental control in measuring the actual frequency of behaviors, in this case, the focus on the self-perceived behaviors was an appropriate use for the survey method.

As stated earlier, the survey instrument was used in two previous studies, which already included Japanese self-reported nonverbal reactions to public speaking (Pucel & Stocker, 1983). It also demonstrated the behaviors described in the Gilkerson (1942) study were still prevalent years later. Therefore it seemed feasible to draw from the list of nonverbal behavioral reactions to anxiety provoking situations cited by American students in the US-Japanese Pucel & Stocker study published in 1983

and incorporate them into the present research. The actual list of behaviors used in this study followed the same pattern shown in the 1983 international study.

The questionnaire uses an ordinal scale (having rank order properties) with apparent interval measuring qualities on a five-point Likert Scale. The mean and standard deviations on all behaviors were computed separately for both males and females. Also, a comparison of the mean scores (on each behavior) for both genders were calculated using a simple t test. The questionnaire data provided appropriate information to develop frequency counts for the various categories grouped according to gender.

The questionnaire operationalizes the respondent's actual experience with public speaking situations, as well as, the conditions under which the person reacts nonverbally by believing he/she is producing the nonverbal stress behaviors. It also includes questions relating the respondent's speaking status, their comfort levels about public speaking, and their speech training.

### RESULTS

#### Japanese:

The Japanese questionnaires revealed that 92 percent of the respondents (N=99) were between 26 and 49 years old, 81 percent were presently employed, and 90 percent had spoken in public during the last year. Most the respondents (84.9% of men and 92.3% of women) had never had any kind of public speaking training, whether in high school, college, or a seminar/workshop setting. When asked to rate their degree of comfort when speaking in public, 58 percent of the men and 69 percent of the women said they were somewhat uncomfortable or very uncomfortable. When asked to indicate the types of public speaking situations they perceived as stressful, respondents selected "being unprepared" (27.9% of the men and 30.8% of women) and "formal speeches" (17.4% of men and 15.4% of women) most often from a list of nine types of situations.

Respondents were also asked whether they had experienced any of the 34 different nonverbal symptoms (nonverbal behaviors) during or in anticipation of a public speaking experience. They were asked to indicate whether they had experienced each behavior often, moderately, occasionally, seldom, or never. Ordinal numbers of one through five were assigned to the ratings, with one being "never" and five being "often." A mean rating of 2.500 or greater suggests that a significant number of respondents experienced this behavior at least occasionally; this threshold was selected to differentiate the most commonly-experienced behaviors (table 2). Only two of the 34 behaviors rated on the 5-point scale had a mean rating at or above 2.500 for the whole sample: rapid heart beat (2.798) and forgetting (2.626). However, important gender differences were discovered when the 34

behavior ratings were computed separately for men and women (table 4). Men had four behaviors whose ratings exceeded 2.500: rapid heart beat (2.744), forgetting (2.674), sweaty palms and hands (2.535) and rapid speech rate (2.523). Women had three behaviors whose ratings exceeded 2.500: rapid heart beat (3.154), panic (2.615), and general fatigue (2.538).

In order to test the significance of the differences between men's and women's ratings, analysis of variance tests were calculated for each of the 34 behaviors. Six of the ANOVAs were significant at  $p < .05$  level or better. Six of the ANOVAs were significant at the  $p < .05$  level or better. In every case of a statistically significant difference, the men reported higher frequencies of the behavior than women did. The behaviors with statistically significant differences in self-reported frequencies were trembling hands ( $p < .019$ ), butterflies ( $p < .001$ ), rubbing eyes ( $p < .003$ ), red neck ( $p < .001$ ), loss of place ( $p < .01$ ), and leaving the situation ( $p < .01$ ). It must be kept in mind that the sample of Japanese women managers in this study was very small ( $N=13$ ); caution is needed when considering the difference between men and women reported here.

#### UNITED STATES

The US questionnaire revealed that among the females ( $N=76$ ), the vast majority (93.5%) were between the ages of 26 and 49. Only 3 percent of the males were below 33 years of age and 81% were between 34 and 57 years old. The average age for both groups was approximately 39 (44 for the men and 36 for the women). Both males (73.3%) and females (60.6%) had received formal training in public speaking from college classes or seminar workshops.

It was expected that people in management positions would speak frequently as part of their profession. The US study revealed that 80.3% of the females and 93.3% of the males spoke to a group within the past year.

When asked to rate their degree of comfort when speaking in public, 45 (59%) of the women indicated such situations as stressful compared to only 16 (26.9%) of the men. The most frequently cited situation for the males was "being unprepared" (30%) while 22.4% of the females reported giving "formal speeches" as the highest situation.

Table 1 provides the mean self-perceived rating values and standard deviations for the 34 speaking situation behavior categories rated by all respondents. A mean rating of 2.50 or more is suggestive that a significant number of the respondents had experienced this behavior at least occasionally and, therefore, this was the threshold selected to differentiate the most commonly experienced behaviors. Eight of the behaviors rated on the 5-point Likert rating scale had a mean rating at or beyond the 2.50 midpoint; rapid heart beat (3.00); butterflies (2.94); rapid speech rate (2.88); dry mouth

and throat (2.70); sweaty palms and hands (2.57); perspiring (2.55) and wavering voice (2.50).

The US male respondents (table 3) followed the general pattern of the ranking of the speaking situation behavior categories but had lower average ratings, when compared to the US females, on all of the eight behaviors which overall mean rating values of 2.50 or more. Only two of the behaviors rated by the males had mean ratings of over 2.50, while for the female respondents, there were eight speaking situation behaviors with average ratings of over 2.50. In every case of a statistically significant difference, the US females estimated higher frequency of occurrence of the these behaviors as compared to the males. The behaviors with the most highly different mean differences between the male and females ( $p < .001$ ) were rapid heart beat, rapid speech rate, trembling hands and involuntary smiling. Behaviors with mean gender differences significant at  $p < .01$  were butterflies, wavering voice, blushing red face, and breathless. Those significant at the  $p < .05$  were dry mouth and throat, nervous gestures, perspiring and panic.

#### DISCUSSION

Overall, the results of this study support previous research that CA associated self-defined nonverbal behaviors associated with public speaking do indeed cross cultural boundaries and reach into the business environments for both cultures. It also supports past research that females in the US, when compared to men, experience these behaviors at a greater frequency than do males. However, in the Japanese section of this study, the opposite was true. Men reported higher frequencies of the behaviors than women in Japan. At this point it must be stressed that caution is recommended in interpreting these findings because of the small Japanese female sample ( $N=13$ ) as opposed to 86 Japanese male respondents. Yet, the study still points out that there is an occurrence of reported CA associated nonverbal behaviors experienced by people in business from both cultures, representing both genders, and therefore shows that CA may have a pervasive application in the international business environment.

The two questions raised in the present study asked if there are cultural differences or similarities in self-reported nonverbal behaviors perceived during public speaking situations representing Japanese and US management personnel and if so, what are these specific behaviors.

The present findings seem to support previous predictions that public speaking produces nonverbal behaviors commonly associated with CA in both Japanese and US business managers. They also support McCroskey's (1976) conclusions that CA does have a pervasive influence on human behavior even for people in management positions, and in this case, for both cultures. It must also be pointed out that, historically, the Japanese have been

cited by researchers as being characterized as overly shy and possessing high levels of CA. On the other hand, their US counterparts, in business environments, are characterized as having low levels of CA, and being more open and communicative. Yet, as this study indicates, both cultures reported similar nonverbal reactions to public speaking whether they are shy and introverted or outgoing and extroverted. It also becomes evident that both groups were well aware of the existence of nonverbal reactions and actions to speaking situations. These results coincide with the earlier Pucel & Stocker (1983) Japanese-US study, using college students, which produced similar data. Although some behaviors seem to be more culture-specific, such as the use of the term "butterflies," other behaviors were similar, such as "rapid heartbeat," and "rapid speech rate."

When asked to identify the nonverbal behaviors experienced most often, the most highly ranked behavior was "rapid heartbeat," with an average rating of 2.79 for the Japanese and 3.0 for the US. Because a speaker's heart rate is difficult to control, it is interesting to note that this "behavior," an internal/covert behavior, is ranked as the number one behavior. A possible reason for this ranking may be related to the heart rate being controlled by the involuntary nervous system (which is not under direct conscious control). It is also one of the four most frequently used physiological measures of anxiety along with blood pressure, respiration rate and the galvanic skin reflex (Levitt, 1967, Weekes, 1969). In turn, the increased heart rate potentially causes other physically related behavior reactions to occur such as "perspiring" and "blushing." Due to the internalized reaction, one which is difficult to control, it is therefore not unusual to find it ranked as number one for both cultures.

In comparison between the US and Japanese responses, the top eight US behaviors included: "rapid heartbeat," "butterflies," "rapid speech rate," "dry mouth and throat," "sweaty palms and hands," "nervous gestures," "perspiring," and "wavering voice." The top Japanese behaviors included: "rapid heartbeat," "forgetting," "rapid speech rate," "wavering voice," "sweaty palms and hands," "dry mouth and throat," "no eye contact," and "panic." Five of the top behaviors ("rapid heartbeat," "rapid speech rate," "dry mouth and throat," "sweaty palms and hands," "wavering voice") were indicated by both the Japanese and US managers. In contrast, the second US behavior, "butterflies," was listed as number twenty-four for the Japanese and their second behavior was "forgetting," listed as number nine from the US sample. Since the term "butterflies" has been associated with stage fright and the fear of speaking for years and is a commonly used reference word toward speaking in the US, it does not seem uncommon for it to be cited as the second

most troublesome US behavior.

It is also a direct result of a person's reaction to a situation controlled by the sympathetic nervous system. This reaction is initially triggered by a person's emotional reaction to a situation. First, the heart beats faster and the other behaviors follow. Most of the behaviors in this sample are typically associated with the involuntary reactions to anxiety controlled by the sympathetic nervous system. "Forgetting," cited by the Japanese also falls into this category.

However, "forgetting" (second top Japanese behavior reaction) information when communicating in a culture that emphasizes silence as the norm would be quite devastating because what they say and when they say it is valued in their communication process. If "forgetting" occurs, then it is logical that "panic" would set in, thus creating problems in the public speaking interaction.

In light of the small Japanese female sample (N=13) as opposed to the 76 US female sample, only general conclusions will be addressed.

First, when comparing the Japanese male responses to the US male responses, similar nonverbal behaviors were cited. For example, when looking at the top five behaviors in each group, the only two conflicting behaviors were "forgetting" (reported by the Japanese) and "butterflies" (reported by the US males). The mean scores for each behavior in each gender category were extremely close. However, the Japanese women differed from the US females. The top three behaviors for the Japanese females included "rapid heart beat," "panic," and "general fatigue." On the other hand, the top US female behaviors included "rapid heart beat," "butterflies," and "rapid speech rate." "Panic" was indicated as a low US female response. Yet, for the Japanese sample as a whole, "panic" in a public speaking situation seems to be a major reaction. One must take into consideration that "panic" to the Japanese culture and "panic" to an American could be interpreted quite differently. In the US when someone says they are "panic stricken" they generally mean that they are almost paralyzed or extremely frightened. This may not be the case in Japan.

The results of this study lend indirect but strongly suggestive evidence in support of the findings that female (US) managers report more apprehension (related nonverbal behaviors) toward public speaking than their male counterparts. Yet, the men in Japanese management positions reported higher frequencies of the behaviors than women in Japan. As stated earlier in this study, because of the small female sample these findings may vary considerably if the sample was larger. Also, just by the Japanese culture itself, which has few women in top management positions, the women in this study may not represent the norm. They may indeed, represent a new trend or "breed" of females in Japan who are more

communicative, less shy, and are beginning to stray away from the "typical" Japanese female stereotype commonly characterizing women in Japan.

Overall, the outcome of this study reveals that communication apprehensive associated self-reported nonverbal behaviors are not limited to one culture or one demographic group, such as college age students. It seems that they are also prevalent in both US and Japanese business cultures as well. The results also indicate that similar self-reported nonverbal behaviors are perceived by both cultures thus suggesting the possibility of creating "cultural universals." The frequency of these behaviors suggest that a similar attitude exists toward public speaking in Japan and the US. This study has essentially shown that people in management positions, whether they are in Japan or the United States, seem to report the same reactions toward public speaking. Overtly, US observers might report the Japanese to be quiet and shy, and conversely, the Japanese might see North Americans as talkative, but, in both groups' minds, they assess reactions to public speaking as being the same. Therefore, once in a management position where speaking to groups is the norm, the behavioral perceptions are the same in both cultures. Further investigation and analysis of these behaviors, especially a gender analysis, can become a beneficial tool in developing more effective means of understanding CA and its relationship to the international business levels. People judge others by what they see and individuals judge themselves by what they do (how they act) or how they perceive themselves as behaving. In the end, people see what they want to see in themselves and ultimately report those perceptions. Therefore researchers are finding that a once believed gap in understanding between cultures is decreasing and our world is becoming a "global village."

Figure 1

9. The following scale is designed to record nonverbal behaviors you believe you experience in any type of public speaking situation.

Please mark with a check (✓) how often you think you do or feel any of the following nonverbal behaviors. For example, have you often experienced, moderately experienced, occasionally experienced, seldom experienced, or never experienced panic when in a speaking situation with three or more people. Do not indicate how often you see these behaviors in other people.

BEHAVIORS	OFTEN EXPERIENCED	MODERATELY EXPERIENCED	OCCASIONALLY EXPERIENCED	SELDOM EXPERIENCED	NEVER EXPERIENCED
10. Trembling hands					
11. Wavering voice					
12. Nervous gestures					
13. Moving back/forth					
14. No eye contact					
15. Rapid heart beat					
16. Blushing/red face					
17. Forgetting					
18. Sweaty palms/hands					
19. Stuttering					
20. Butterflies in stomach					
21. Rapid speech rate					
22. Involuntary smiling, laughter, blinking					
23. Dry mouth/throat					
24. Breathless					
25. Dizziness					
26. Perspiring					
27. Stiff body					
28. Twitching mouth					
29. Panic					
30. Frequent nodding					
31. Rubbing eyes					
32. Vomiting					
33. General fatigue					
34. Voice stops					
35. Trembling eyes					
36. Red neck					
37. Slouching					
38. Runny nose					
39. Loose place					
40. Urge to run					
41. Soft voice					
42. Difficulty swallowing					
43. 'save situation					

Table 1

## UNITED STATES

Combined Mean Rating Values for US Respondents Reacting to  
the Speaking Situation Behavior Categories

BEHAVIOR CATEGORIES	Mean Rating Values	Standard Deviation
Rapid Heart Beat	3.00	1.21
Butterflies	2.94	1.47
Rapid Speech Rate	2.88	1.14
Dry Mouth & Throat	2.70	1.12
Sweaty Palms & Hands	2.57	1.23
Nervous Gestures	2.57	1.23
Perspiring	2.55	1.14
Wavering Voice	2.50	.90
Forgetting	2.43	.88
Moving Back & Forth	2.28	1.08
Blushing Red Face	2.22	1.07
Trembling Hands	2.17	1.04
Losing Place	2.04	.83
No Eye Contact	1.96	.92
Breathless	1.87	.93
Involuntary Smiling	1.86	.92
Panic	1.67	.95
General Fatigue	1.65	.96
Soft Voice	1.61	.98
Stiff Body	1.54	.79
Stuttering	1.53	.83
Frequent Nodding	1.48	.68
Difficulty Swallowing	1.42	.79
Urge to Run	1.35	.73
Twitching Mouth	1.32	.65
Sloughing	1.28	.59
Runny Nose	1.28	.63
Rubbing Eyes	1.25	.57
Red Neck	1.24	.68
Trembling Eyes	1.23	.66
Dizziness	1.21	.48
Voice Stops	1.13	.37
Leave Situation	1.04	.21
Vomiting	1.02	.12

Rating Scale: 1=never experienced  
2=seldom experienced  
3=occasionally experienced  
4=moderately experienced  
5=often experienced

TABLE 2

## JAPANESE

Combined Mean Rating Values for Japanese Respondents'  
Reacting to the Speaking Situation Behavior Categories

BEHAVIOR CATEGORIES	Mean Rating Values	Standard Deviation
Rapid Heart Beat	2.79	.99
Forgetting	2.62	1.04
Rapid Speech Rate	2.46	1.10
Wavering Voice	2.45	.89
Sweaty Palms & Hands	2.45	1.16
Dry Mouth	2.43	1.06
No Eye Contact	2.42	1.12
Panic	2.39	1.09
Blushing Red Face	2.33	1.02
Perspiring	2.24	1.14
Nervous Gestures	2.15	.89
General Fatigue	1.98	1.03
Stuttering	1.87	1.04
Trembling Hands	1.81	.91
Moving Back & Forth	1.80	1.04
Stiff Body	1.76	.85
Twitching Mouth	1.69	.93
Slouching	1.56	.94
Soft Voice	1.56	.82
Urge to Run	1.52	.94
Trembling Eyes	1.49	.70
Frequent Nodding	1.47	.73
Voice Stops	1.41	.70
Butterflies	1.35	.70
Red Neck	1.33	.67
Rubbing Eyes	1.32	.60
Difficulty Swallowing	1.30	.64
Breathless	1.28	.59
Dizziness	1.27	.62
Lose Place	1.20	.46
Runny Nose	1.16	.46
Vomiting	1.05	.29
Leave Situation	1.10	.52

Rating Scale: 1=never experienced  
2=seldom experienced  
3=occasionally experienced  
4=moderately experienced  
5=often experienced

TABLE 3

## UNITED STATES

Mean Rating Values of Male and Female Respondents  
Evaluating the Speaking Situation Behavior Categories

BEHAVIOR CATEGORIES	Mean Rating Values			
	MALE		FEMALE	
	M	SD	M	SD
Rapid Heart Beat	2.52	1.11	3.38	1.14 ***
Butterflies	2.63	1.10	3.18	1.13 **
Rapid Speech Rate	2.50	.98	3.17	1.17 ***
Dry Mouth & Throat	2.45	.96	2.90	1.20 *
Sweaty Palms & Hands	2.48	1.10	2.65	1.28
Nervous Gestures	2.35	.90	2.74	1.08 *
Perspiring	2.30	1.00	2.75	1.21 *
Wavering Voice	2.28	.85	2.67	.92 **
Forgetting	2.37	.74	2.49	.97
Moving Back & Forth	2.18	.98	2.36	1.15
Blushing Red Face	1.95	.93	2.43	1.12 **
Trembling Hands	1.87	.91	2.41	1.07 ***
Losing Place	1.92	.77	2.15	.88
No Eye Contact	1.98	.83	1.93	.98
Breathless	1.60	.81	2.08	.96 **
Involuntary Smiling	1.57	.65	2.09	1.04 ***
Panic	1.48	.77	1.82	1.06 *
General Fatigue	1.65	.95	1.64	.98
Soft Voice	1.45	.91	1.74	1.01
Stiff Body	1.45	.65	1.62	.88
Stuttering	1.40	.74	1.63	.89
Frequent Nodding	1.40	.62	1.54	.72
Difficulty Swallowing	1.40	.74	1.43	.82
Urge to Run	1.22	.52	1.45	.86
Twitching Mouth	1.27	.52	1.36	.74
Sloughing	1.33	.60	1.24	.59
Runny Nose	1.17	.42	1.36	.74
Rubbing Eyes	1.30	.60	1.21	.55
Red Neck	1.17	.42	1.29	.83
Trembling Eyes	1.25	.63	1.21	.68
Dizziness	1.13	.39	1.28	.53
Voice Stops	1.13	.43	1.11	.33
Leave Situation	1.03	.18	1.05	.23
Vomiting	1.02	.13	1.01	.12

Rating Scale: 1=never experienced  
5=often experienced

\* p < .05  
\*\* p < .01  
\*\*\* p < .001

TABLE 4

## JAPANESE

Mean Rating Values of Male and Female Respondents  
Evaluating the Speaking Situation Behavior Categories

BEHAVIOR CATEGORIES	Mean Rating Values			
	MALE		FEMALE	
	M	SD	M	SD
Rapid Heart Beat	2.74	.98	3.15	.98
Panic	2.36	1.07	2.61	1.26
General Fatigue	1.89	.97	2.53	1.26
Wavering Voice	2.45	.87	2.46	1.05
No Eye Contact	2.44	1.12	2.30	.63
Forgetting	2.67	1.03	2.30	1.10
Dry Mouth & Throat	2.46	1.05	2.23	1.09
Blushing Red Face	2.36	1.01	2.15	1.06
Rapid Speech Rate	2.52	1.08	2.07	1.18
Stiff Body	1.74	.85	1.92	.86
Sweaty Palms & Hands	2.53	1.17	1.92	.85
Nervous Gestures	2.20	.89	1.76	.93
Urge to Run	1.48	.93	1.76	1.01
Perspiring	2.32	1.17	1.69	.75
Twitching Mouth	1.69	.93	1.69	.94
Involuntary Smiling	1.72	.91	1.61	1.12
Stuttering	1.91	1.02	1.61	1.19
Voice Stops	1.38	.67	1.61	.87
Soft Voice	1.55	.79	1.61	1.04
Slouching	1.57	.91	1.53	1.19
Trembling Hands	1.88	.95	1.38	.50
Trembling Eyes	1.51	.79	1.38	.65
Moving Back & Forth	1.88	1.07	1.30	.63
Breathless	1.29	.55	1.23	.83
Dizziness	1.27	.62	1.23	.83
Frequent Nodding	1.51	.74	1.23	.59
Runny Nose	1.16	.48	1.15	.37
Difficulty Swallowing	1.32	.65	1.15	.55
Butterflies	1.39	.74	1.07	.27
Rubbing Eyes	1.36	.63	1.07	.27
Red Neck	1.37	.70	1.07	.27
Lose Place	1.22	.56	1.07	.27
Leave Situation	1.10	.55	1.07	.27
Vomiting	1.05	.32	1.00	.00

Rating Scale: 1=never experienced  
5=often experienced

## REFERENCES

- Freimuth, V.S. (1976). The effects of communication apprehension on communication effectiveness. Human Communication Research, 3, 289-298.
- Gilkerson, H. (1942). Social fears as reported by students in college speech classes. Speech Monographs, 9, 141-160.
- Ishii, S., Klopf, D.W., & Cambra, R. (1981). A comparison of communication styles of Japanese and American college students. Current English Studies, 20, 66-71.
- Klopf, D.W. (1984). Cross-cultural apprehension research: A summary of pacific basin studies. In J.A. Daly & J.C. McCroskey (Eds.), Avoiding communication: Shyness, reticence, and communication apprehension. Beverly Hills, CA: Sage.
- Levitt, E.E. (1967). The Psychology of Anxiety. New York: Bobbs-Merrill.
- McCroskey, J.C. (1977b). Oral communication apprehension: A summary of recent theory and research. Human Communication Research, 4, 78-96.
- McCroskey, J.C., Gudykunst, W.B. & Nishida, T. (1985). Communication apprehension among Japanese students in native and second language. Communication Research Reports, 2, 11-16.
- Miyake, K., Campos, J.J., Kagan, J. & Bradshaw, D.L. (1986). Issues in socioemotional development. In H. Stevenson, H. Azuma, K. Hakuta (Eds.), Child development and education in Japan. NY: W.H. Freeman.
- Payne, S.K. & Richmond, V.P. (1984). Communication avoidance: A bibliography of research and writing on communication apprehension, reticence, and shyness. In J. Daly & J. McCroskey (Eds.), Avoiding communication: Shyness, reticence, and communication apprehension. Beverly Hills, CA: Sage.
- Pucel, J.K., & Stocker, G. (1983). A nonverbal approach to communication: A cross-cultural study of stress behaviors. Communication, 12, 53-65.
- Richmond, V.P. & Andriate, G.S. (1984). Communication apprehension: Cross-cultural perspectives. Paper presented at the Eastern Communication Association Convention, Philadelphia, PA.
- Weekes, C. (1969). Hope and Help for Your Nerves. New York: Bantam Books.
- Zimbardo, P.G. (1977). Shyness: What it is and what to do about it. Reading, MA: Addison-Wesley.