Relationships of Self-Perceived Communication Competence and Communication Apprehension with Willingness to Communicate: A Comparison with First and Second Languages in Micronesia

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Research involving communication apprehension (CA) and related constructs such as self-perceived communication competence (SPCC) and willingness to communicate (WTC) has been conducted in a wide variety of cultures. In general, relationships among these variables have been found to be quite similar across cultures, even when substantial mean differences have been observed. An exception to this pattern was an extremely high (r = .80) correlation between SPCC and WTC observed in a study conducted in Micronesia (Burroughs & Marie, 1990). Other relationships observed in the study were generally consistent with those found in other cultures. Since this study involved individuals in a context where they were forced to communicate in a second language much of the time, and the data were collected in that second language, it was suspected this anomaly was what produced the aberrant finding. The present study obtained data from the same population but referenced the participants' first languages and was administered in their first language. Results indicated a relationship between SPCC and WTC consistent with that found in other cultures. It was also observed that, while there was substantially lower perceived communication competence for the second language than for the first language, there was no such differential for communication apprehension.

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Cross-cultural communication research examines communication practices within individual cultures and makes comparisons between those cultures. Researchers are concerned with the need to identify effective communication behaviors which are appropriate within national (multicultural communities, organizations, and education) and international communication (travel, the marketplace, and governmental affairs) encounters.

The general study of the role of cultural in communication begins with the assumption that people from different cultures use different adaptive strategies in their communication behaviors. These strategies, which perpetuate within a culture, result in predictable communication behaviors for each particular group. Through observation and analysis, scholars are able to determine how communication styles and behaviors contribute to degrees of shared meaning or conflict. The information gained may assist intercultural communicators in progressing from ethnocentrism to appreciating and valuing the communication practices of other cultures and, as a result, obtain more satisfying communication outcomes.

Cross-cultural communication research has, so far, provided a general orientation toward intercultural communication, theorized about the analysis of intercultural transactions (Yum, 1991), given insights into cultural differences (Barnlund, 1975; Hofstede, 1980), and made practical suggestions for behavioral strategies which may improve intercultural communication (Jandt, 2001; Gudykunst & Kim, 1997; Klopf, 1998; Neuliep, 2000; Rogers & Steinfatt, 1999). Research increases the cultural awareness required for peaceful co-existence among people who may not share experiences, beliefs, values, or world views. With the increased cultural mix in many countries and ongoing contact with international cultures, it is vitally important for scholars to continue pursuing a broader understanding of the constructs that affect communication behavior. The purpose of this paper is to examine the generalizability of observed relationships among certain communication traits which have been found to have substantial impact on communication behaviors. Specifically, relationships of the traits of communication apprehension (CA) and self-perceived communication competence (SPCC) with willingness to communicate (WTC) for people using their native language are compared with those relationships when people are using a second language.

Communication Orientations and Behaviors

Communication apprehension (an individual's level of fear or anxiety associated with either real or anticipated communication with another person or persons), self-perceived communication competence (an individual's view of their own competence as a communicator), and willingness to communicate (an individual's predisposition to initiate communication with others) are trait communication constructs which have received considerable and increasing attention in recent years (for a more thorough explanation of these constructs and their relationships see McCroskey, 1997). Although the majority of research related to these orientations has focused on U.S. samples, researchers have sought to determine their affect upon behavior in cultures outside the U.S. Examples include Japan, Korea, Australia, Germany, England, People's Republic of China, Puerto Rico, South Africa, Israel, India, the Philippines, Finland, Taiwan, Sweden and Micronesia (for summaries of this work see McCroskey & Richmond, 1990; Klopf, 1997). These studies have revealed substantial and statistically significant dif-

ferences in levels of CA, SPCC, and WTC among these cultures. Such differences generally were anticipated by the researchers and the results confirmed the belief that people in different cultures do indeed have somewhat different orientations toward communication. People in some cultures experience higher (or lower) CA, SPCC, and/or WTC than do people in other cultures.

Other research results have indicated, however, that the relationships among these variables tend to be very similar from one culture to another. The ability of scores on measures of CA and SPCC to predict scores on WTC, for example, generally have been very similar across a wide variety of cultures. The exception to this pattern are results reported from research conducted in Micronesia.

Specific research that pertains to the focus of this paper begins with a 1980 study (Bruneau, Cambra, & Klopf) which compared the degree of CA of Micronesians with mainland U.S. students. The authors employed a measure which centered on public speaking anxiety and reported no significant differences between the two groups. A similar but later study (Klopf, 1984) noted that Micronesians were significantly less apprehensive than Hawaiian-Americans, and Japanese, but significantly more apprehensive than Koreans and Filipinos, with no difference between Micronesians and Australians or Chinese.

The most recent study involving Micronesian students (Burroughs & Marie, 1990) focused on their WTC. CA and SPCC were also measured and compared to normative data collected in the U.S. (McCroskey, Fayer, & Richmond, 1985). The specific purposes of the study were to determine whether or not CA and SPCC are more or less predictive of WTC in a different culture, and whether Micronesian students are more or less willing to communicate than U.S. students.

The results indicated that U.S. and Micronesian college students reported significantly different communication orientations. Micronesians reported themselves to be more apprehensive, less competent, and less willing to communicate. These results were, of course, anticipated given the previous research on CA conducted with similar groups of students. The relationships among the variables in this study were, for the most part, very similar to those reported in the U.S. (and in other cultures studied previously). There was, however, a very important anomaly in the observed relationship between SPCC and WTC. While the relationship was modest in previous research, the U. S. being typical with a correlation of $r = .59$ (35% shared variance), the correlation observed in Micronesia was $r = .80$ (64% shared variance).

This comparison suggested that significant differences may exist in the relationships between trait communication orientations across cultures. However, no cultural explanation of these findings was offered, even as speculation, by the researchers. Rather, they pointed to the fact that the data were collected in English, the second language of most of the participants, not in their first language. Hence, it was seen as probable that the participants responded in terms of CA, SPCC, and WTC in their second, not their first, language.

A number of studies indicate that communicators experience higher CA when using non-native languages than when speaking in their native language (Allen & Andriate, 1984; Applbaum, Applbaum & Trotter, 1986; McCain, Hecht, & Ribeau, 1986; McCroskey, Fayer, & Richmond, 1985; MacIntyre & Gardner, 1991). In addition, Miura (1985) also reported that bi-dialectal speakers also report higher levels of CA when

using a "standard" English than when speaking in their own local dialect. Furthermore it has been reported that an ESL speaker is more likely to block communication if he/she is uncomfortable speaking English (Dulay & Burt, 1977). As a result, the degree of perceived competence of the second language speakers involved impacts their communication interaction.

Nine different major Micronesian languages with various dialects are spoken in the Federated States of Micronesia. However, (non-native) English is the *lingua franca* used in government, education, and other intercultural contexts. For most Micronesians, English is their second language; for others it is their third or fourth and, thus, a language with which they are less secure and may feel less competent.

It has been argued (McCroskey & Richmond, 1987; Stevick, 1976) that several factors in addition to CA influence a person's willingness to communicate. Of particular interest in these studies are the variables of self-perceived communication competence and culture. It has been determined that norms that affect communication behavior vary across cultures and ethnic groups. Communication competence is language-specific. Hence, when one speaks a language that is not their first language, it is likely they will see her/himself as less competent as a communicator. This may also result in the individual being more apprehensive about their communication. Whether it will result in a higher or lower correlation with WTC, however, is not so clear. There is little research to guide us on this issue. Previous research has observed that the correlations between SPCC and WTC are consistent across cultures, with the exception of the Micronesian study discussed above. There are no studies examining the magnitude of those relationships on a comparative basis for first and second languages.

The present study was designed to examine the relationships of CA and SPCC with WTC for Micronesian students in their first language. The research questions we posed were:

RQ1: Do the relationships of either CA or SPCC with WTC differ for Micronesian students referencing their first language from Micronesian students referencing their second language?

RQ2: Do the relationships of either CA or SPCC with WTC differ for U. S. students referencing their first language from Micronesian students referencing their first language?

METHOD

Since data were available and previously analyzed for a U.S. student sample responding in their first language, and a Micronesian student sample responding in their second language, as noted above, data collection in the present study focused on a Micronesian student sample responding in their first language.

Participants

Participants were 131 (47 females, 68 males and 16 who did not indicate their sex) undergraduate students enrolled in classes at the Community College of Micronesia, located on Pohnpei in the Federated States of Micronesia (the same population of the students in the Burroughs and Marie, 1990 study). The ages of respondents ranged from 16 to 48, with a mean age of 23.21. Cultural groups represented by primary lan-

guage in this sample included Pohnpeian (59), Kosraen (19), Trukese (20), Yap Proper-main island (6), Yap Outer Island (13), Marshallese (7), and Palauan (7). We also sought to obtain data in the language of Kapingamarange, but participants failed to correctly answer and return our measures. It should be noted, that 43 files were deleted from the original sample of 174 due to an error in language chosen for one group of participants, we assumed incorrectly that participants from Truk could both read and speak Trukese. Due to this false assumption, many instruments distributed in Trukese were incomplete or not returned). The courses sampled fulfilled general education requirements across the college and students represented a diversity of major fields. All instruments were translated (with the assistance of students, staff, and faculty at the Community College of Micronesia) into eight Micronesian languages: Marshallese, Kosraen, Pohnpeian, Trukese, Yapese (main island), Yapese (outer island), Palauan, and Kapingamarange.

Each instrument was initially translated by a native speaker. Each instrument was proofed and edited by a second native speaker and back-translated by a third. Instruments were completed with no personal identification (except sex) to insure anonymity and increase the probability of honest responses.

Measures

All of the measures employed in this study were self-report scales. Participants were given instruments written in their native language and instructed to respond to all statements in the context of communicating with others in their native language. The variables measured in this study were as follows:

Willingness to Communicate. The WTC scale (McCroskey and Richmond, 1987) was used as the operationalization of willingness to communicate. This is a 20-item instrument with 12 items composing the measure and eight filler items. In a previous study (McCroskey & Baer, 1985) the internal (alpha) reliability reported for the total scale was .92. The reliability of the scale in this investigation was .86, the same as in the previous Micronesian study.

Self-Perceived Communication Competence. The SPCC scale developed by McCroskey and McCroskey (1988) was used as the operationalization of self-perceived communication competence. The SPCC scale consists of 12 items. Four communication contexts are included (public speaking, meetings, small groups, and dyads) and three types of receivers (strangers, acquaintances, and friends). The internal (alpha) reliability estimates of the total scale in earlier research (McCroskey, Burroughs, Daun, & Richmond, 1990; McCroskey & McCroskey, 1988) were .92 and .93. In the present study, the internal reliability estimate for the scale was .90 (.89 in the previous Micronesian study).

Communication Apprehension. The Personal Report of Communication Apprehension (PRCA24, McCroskey, 1982) was used as the operationalization of communication apprehension. Four contexts are included in this instrument (public speaking, meetings, groups, and dyads). Previous internal (alpha) reliability estimates reported for the total score in the U. S. have ranged from .91 to .96. In the present study the alpha estimate was .87 (.90 in the previous Micronesian study).

Data Analysis

Mean scores were computed for the participants' CA, SPCC, and WTC scores. Uncorrelated *t*-tests were computed to determine whether the means obtained were

significantly different for this study as compared to the those reported in the previous Micronesian study. The means in the data from the earlier report of research employing U. S. students in their first language and Micronesian students in their second language (Burroughs & Marie, 1991) were used to make comparisons with the means obtain in the present study. Since substantial sex differences for the Micronesian students on the scores for all three measures were observed in both this and the previous study, the means reported for the Micronesian samples are weighted by the number of participants of each sex. Since no meaningful sex differences on any of these measures have been observed in large U. S. samples (or in the current data), the raw means are reported for the U. S. sample.

Pearson correlations were obtained to establish the primary relationships of concern in this study. For our first research question, comparisons were made between Micronesian students is their first language and Micronesian students in their second language. For the second research question comparisons were made between U. S. students and Micronesian students in regard to their first language (English for U. S. and one of seven languages for Micronesians). These comparisons were made with t-tests (with z transformations) for significance of differences between the obtained correlations in the selected samples. The criterion set for statistical significance was alpha < .05.

RESULTS

Table 1 reports the means for each sample on the PRCA24, SPCC, and WTC instruments for the samples representing U. S. first language, Micronesia first language, and Micronesia second language. As noted in Table I, Micronesian students responding with regard to their first language (not English) were significantly less willing to communicate than U. S. students responding with their first language (English). Native speaking Micronesian students also reported perceiving themselves to be significantly less competent at communicating, and more apprehensive than U. S. students. That is, native speaking Micronesian students reported they were less willing to communicate, perceived themselves as less communicatively competent, and more apprehensive than U. S. students.

TABLE 1
Sample Means of SPCC, PRCA24, and WTC Scores

Measure	Sample Group U. S.	Micronesia 1st Language	Micronesia 2nd Language
SPCC	73.7_{a}	60.1_{a}	48.8_{a}
PRCA	65.6_{bc}	76.7_{b}	76.7_{c}
WTC	63.1_{d}	56.0_{d}	47.1_{d}

Means with same subscript (a,b,c,d) are significantly different, $p < .05$.

The results reported in Table 1 indicate the same general pattern for Micronesian students responding in English. That is, Micronesian students reported they were significantly less willing to communicate, less communicatively competent, and more apprehensive than U. S. students.

As noted in Table 1 there were two significant mean differences between Micronesian students reporting in terms of their first language and Micronesian students reporting in terms of English. The Micronesian students reporting in terms of English indicated they were significantly less willing to communicate and less communicatively competent than those reporting in terms of their native language. However, the students reporting with reference to English and those reporting with reference to their native language indicated exactly equal levels of CA.

TABLE 2
Correlations of SPCC and PRCA with WTC

Predictor	U. S.	Sample Group Micronesia 1st Language	Micronesia 2nd Language
SPCC*	.59a	.59b	.80ab
PRCA	-.52	-.44	-.52

*Correlations with same subscript (a,b) are significantly different, $p < .05$.

Table 2 reports the observed correlations between SPCC and WTC for each of the three student samples. As indicated in the table, the SPCC/WTC correlations were identical for the U. S. students and the Micronesian students speaking in their first language. The Micronesians speaking in their second language (English) were significantly less willing to communicate than the other two samples.

The correlations between CA and WTC are also reported for the three samples in Table 2. These results indicated that CA was equally predictive of WTC for the Micronesian and U. S. students in their first languages. The relationship for Micronesian students referencing their second language was not statistically significantly different from other samples.

DISCUSSION

The results of this research indicate an affirmative answer for our first research question with regard to the relationships between SPCC and WTC. These results indicate that these communication orientations, and the relationships between them, are influenced by whether or not the communicator is called upon to communicate in his/her own native language or must communicate in a second language. In this and a previous study, Micronesians were asked to complete the instruments to assess their overall communication orientation in regard to their level of self-perceived communication competence and willingness to communicate. The primary differences between this study and the earlier study were that Micronesian students were asked to respond to scales written in their own native language and were instructed to reference speaking in their own native language while responding. The previous study asked Micronesian students to respond to English written measures about communication orientations while communicating in English. Comparisons of the results of the two studies indicate that non-native (English) speaking Micronesians report lower levels of self-perceived communication competence and willingness to communicate than U.S.

students. However, it was also found that native speaking Micronesian students perceived themselves to be significantly more communicatively competent and willing to communicate than non-native speaking Micronesians. This is consistent with research discussed earlier which suggests that people generally feel they are less competent in second languages than they are in their native language, and that these perceptions are substantially correlated with their willingness to communicate in those languages. This is confirmed by the significant difference in the two relationships observed between first (r = .59) and second language (r = .80) speakers.

A negative answer to our first research question is indicated by the fact that the relationships between CA and WTC were not significantly different for the first and second language speaking Micronesians. Not only were the CA/WTC relationships not significantly different, the level of CA for the Micronesian students was virtually identical for both first and second language. While this consistency in level has not been found in previous research, a substantial correlation between first and second language apprehension has been observed in Puerto Rico (McCroskey, Fayer, & Richmond, 1985).

The results of this research indicate a negative answer to our second research question for both CA and SPCC. The relationships between these variables were not significantly different between U. S. students and Micronesian students speaking in their first language. While the Micronesian native-speakers reported being significantly more apprehensive and saw themselves as less communicatively competent than the U. S. students, these differences apparently had no differential impact on the relationship between their reports of CA and WTC.

Taken as a whole, these results suggest there is a cultural impact on the level of each of the variables involved in this study. Micronesian students were found to see themselves as more apprehensive, less communicatively competent, and less willing to communicate than U. S. students whether they were speaking in their first or their second language. This difference appears to have been magnified by language used for their reports on self-perceived competence and willingness to communicate, but not on communication apprehension. These results support the conclusion that self-perceived communication competence and communication apprehension make independent (as well as colinear) contributions to the prediction of willingness to communicate which was advanced by MacIntyre, Babin, & Clement (1999).

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