A CROSS-CULTURAL AND MULTI-BEHAVIORAL ANALYSIS OF THE RELATIONSHIP BETWEEN NONVERBAL IMMEDIACY AND TEACHER EVALUATION

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Nonverbal immediacy of teachers has been demonstrated to be substantially associated with increased cognitive and affective learning in students. The assumption underlying the current research is that teacher communication behaviors that enhance student learning will also enhance positive evaluations of teachers by those students. This study sought to determine what specific teacher nonverbal immediacy behaviors are most associated with students' evaluations of their teachers.

Our research was based on data drawn from the cultures of Australia, Finland, and Puerto Rico as well as the dominant United States culture. Each study was conducted in the primary language of the sample studied. The results of this research permit a comparison of the relationship between nonverbal immediacy and teacher evaluation across diverse cultural and linguistic communities as well as multi-cultural comparisons of the importance of individual immediacy behaviors to teacher evaluation.

With the movement toward greater accountability in higher education and additional pressure to increase instructional quality, student evaluations of their teachers, virtually unknown in most institutions as recently as two decades ago, have become an increasingly important aspect of faculty evaluation. While few colleges and universities openly admit that faculty teaching evaluations are based primarily on student ratings, we cannot ignore the fact that such ratings often constitute the bulk of the available objective data. Faculty in all disciplines must be concerned with developing communication skills to enhance both their teaching and positive relationships with their students.

Since the late 1970s an expanding body of research has pointed to the importance of nonverbal immediacy behaviors for effective communication of classroom teachers. The available evidence supports the conclusion that teachers who are nonverbally immediate with their students produce higher levels of affective learning and both objectively measured and student perceived cognitive learning (McCroskey & Richmond, 1992). The premise of the present research is that the same immediate behaviors which enhance student learning are most likely also to enhance students' evaluations of their teachers.

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Most of the research on immediacy has employed global measures of nonverbal immediacy and has been conducted with subjects who have represented a primarily caucasian, middle-class U.S. culture (e.g. Andersen, 1978, 1979; Burroughs, 1990; Christophel, 1990a, 1990b; Frymier, 1992, 1994; Gorham & Zakahi, 1990; Plax, Kearney, McCroskey, & Richmond, 1986; Richmond, 1990; Richmond, Gorham, & McCroskey, 1987; Thomas, 1994; Thomas, Richmond, & McCroskey, 1994; Thompson, 1992). The few studies which have examined other student groups have drawn on students from other subgroups still within the overall U.S. culture (e.g. Powell & Harville, 1990; Sanders & Wiseman, 1990; see Thompson, 1992). This research sought to examine the relationship between students' evaluations of their teachers and both students' general perceptions of immediacy of the teacher and the specific categories of nonverbal behavior used to assess nonverbal immediacy. To permit the possibility of broader generalization of the results obtained, the study was initially conducted in the United States and then replicated in Australia, Finland, and Puerto Rico.

THE IMMEDIACY CONSTRUCT

Mehrabian (1969, 1971) originally advanced the immediacy concept in his study of interpersonal communication. He defined immediacy as behaviors which "enhance closeness to and nonverbal interaction with another." Using this definition, Andersen (1978, 1979; Andersen & Andersen, 1982) drew on literature from the fields of communication and education to demonstrate that research already existed to indicate the positive impact of several nonverbal immediacy behaviors of teachers on classroom outcomes. Her own work advanced our understanding of the relationship between nonverbal immediacy and affective learning.

While both Mehrabian (1969, 1971) and Andersen (1978, 1979) noted that a few verbal behaviors were likely to cause communicators to perceive themselves as psychologically closer to one another, both placed major emphasis on nonverbal behaviors. Subsequent research in instructional communication has focused primarily on nonverbal communication behaviors, although some work

on verbal immediacy in instruction has been reported.

The nonverbal behaviors upon which this research has centered include eye contact, gesture, movement, vocal variety, smiling, relaxed body position, touch, and sitting or standing. People who have taken a traditional public speaking class are likely to recognize the similarity between this list of nonverbal immediacy behaviors and typical lists of "good delivery" behaviors. While the two lists are not identical, the overlap certainly is sufficient to suggest that research on the impact of good versus poor speech delivery is relevant to our understanding of immediacy. It is not an oversimplification to summarize that work as indicating that good delivery has many positive effects on the responses of receivers, including raising receivers' positive perceptions of the speaker. Given the overlap in behaviors, therefore, we should expect that immediate teachers would be evaluated more positively by their students than nonimmediate teachers.

NONVERBAL IMMEDIACY AND CULTURE

As noted above, a few studies in this area have considered possible influences of the culture of the student and/or the teacher on the impact of immediacy in the evaluations of their teacher. Our interest was both in general perceptions of immediacy and in perceptions of individual nonverbal communication behaviors which are presumed to be associated with perceptions of immediacy. We were also interested in the degree to which conclusions about the role of immediacy in instructor evaluation are generalizable across divergent cultures. Therefore, we advanced four research questions:

- RQ1: To what extent is perceived nonverbal immediacy of teachers related to the students' evaluations of those teachers?
- RQ2: What nonverbal immediacy behaviors are most associated with students' evaluations of their teachers?
- RQ3: To what extent is the relationship between nonverbal immediacy and teacher evaluations generalizable across cultures?
- RQ4: To what extent are the relationships between individual nonverbal immediacy behaviors and teacher evaluations generalizable across cultures?

Questions one and two focus, respectively, on global perceptions of teacher nonverbal immediacy and perceptions of individual immediacy behaviors in terms of their association with teacher evaluations. Questions three and four inquire about the generalizability of these relationships across cultures. It was recognized that the global perceptions of immediacy might be similar across differing cultures, but those perceptions might be differentially influenced by the individual behaviors in the varying cultures.

METHODS

Measures

Immediacy was measured by a 10-item revised version of the 14-item Nonverbal Immediacy Measure (NIM) first used by Richmond, Gorham, & McCroskey (1987). The earlier work of Andersen (1978) and others employed the Generalized Immediacy (GI) measure and/or the Behavioral Index of Immediacy (BII). The GI measure is a high-inference affective measure. While its ease of administration makes it a very attractive measurement option, it is highly subject to problems with redundancy of measurement when similar instruments are being used to measure other affective constructs, such as affect toward the course instructor. The BII instrument, in contrast, is a 28-item, low-inference measure which asks students to report their teacher's behavior in comparison to other teachers. The problem with this instrument is its comparative aspect. If students do not have similar bases for comparison, they will be providing data on different scales which cannot be legitimately compared to one another. This is a problem in a single culture because teachers in some disciplines have been found to be consistently more immediate (eg., social sciences) than teachers in some other disciplines (eg., physical sciences). This is presumed to be the reason why validity coefficients between teacher and student reports of the same teacher's immediacy behaviors when using the GI or BII are very low (Rodgers & McCroskey, 1984).

The 14-item version of the NIM instrument was developed to be a lowinference measure with a reference base consistent for all students, regardless of subject matter being studied or the culture of the student. It provides the respondent with items which describe individual immediacy behaviors (eg., "Gestures while talking to the class.") and asks the respondent to indicate which instructional environment. Powell and Harville's (1990) research found only small differences among White, Latino, and Asian-American subgroups (in a California university) with regard to the relationships between nonverbal immediacy behaviors and students' affective learning. In a very similar study at another California university, Sanders & Wiseman (1990) found the impact of immediacy on affective learning to be larger for the Hispanic group than for Asian or Black groups, but the White group did not differ significantly from any of the other three groups in the study.

The kinds of small differences noted in the above studies are consistent with what we probably should expect when drawing from subgroups which represent a regional subculture which is a part of the larger U.S. culture. The individuals in the ethnic subgroups in these studies may well be more culturally similar to one another (all members of the California regional subculture) than they are to others in their ethnic subgroup who live in other regions of the U.S.

or other countries.

While studies such as the above have value, it is important that we examine the potentially different roles nonverbal immediacy may play in truly different cultures—in circumstances where both the teachers and the students are from a culture different from that which is predominant in the mainland U.S. In this way, we may be able to develop theory which will account for systematic differences which may be introduced when teacher and students are *not* from the same culture.

THE CURRENT STUDY

We obtained data from four very divergent cultures: (a) The baseline data were drawn from U.S. college students from the same population employed in many of the previous studies; (b) Australian college students were chosen because they are English speaking and represent a culture presumed to be quite similar to the general U.S. culture, although very different in many surface aspects; (c) Puerto Rican college students were chosen because they represent a highly expressive and immediate Spanish-speaking culture which distinctly differs from that of the general U.S. culture, even though they are U.S. citizens; and (d) Finnish college students were chosen because they represent a low-expressive, very non-immediate northern European culture and language community which is distinctly different from that of the U.S. and the other two cultures chosen.

It was presumed at the outset that if the relationships between nonverbal immediacy and students' evaluations of their teachers in these diverse cultures were found to be very similar, a presumption for the generalizability of the findings in the U.S. research would be established. Future research would then need to be directed toward identifying the limitations of those generalizations. In contrast, if meaningful differences among the relationships between nonverbal immediacy and teacher evaluation were to be found, no presumption of generalizability would be established. Future research would then need to be directed toward identifying the cultural elements which are responsible for the differences observed and developing culturally based recommendations for teachers' behaviors.

Research questions

We focused on students' perceptions of their teachers' nonverbal immediacy behaviors and how these perceptions were related to students' subsequent

of five response options best describes the teacher: Never = 0, Rarely = 1, Occasionally = 2, Often = 3, and Very Often = 4.

The NIM has been found to be reliable when used by either teachers or students and the validity coefficient between teachers' and students' perceptions of teacher immediacy is good (Gorham & Zakahi, 1990). This instrument has been used in most of the recent research on immediacy in instruction, often in conjunction with an instrument intended to measure verbal immediacy (eg. Burroughs, 1990; Christophel, 1990a, 1990b; Frymier, 1992, 1994; Powell & Harville, 1990; Richmond, 1990; Sanders & Wiseman, 1990, Thomas, 1994; Thomas, Richmond, & McCroskey, 1994; Thompson, 1992). It has excellent

predictive validity and acceptable reliability (.70-.85 in most reports).

All 14 items of the NIM instrument were completed by the subjects in all samples in this study. However, the items relating to touch and sitting or standing while teaching were found to be poor items in all of the samples. Examination of available data sets from earlier research indicated they frequently were poor items in those studies as well. The data from this research indicated that college teachers in all four cultures virtually never touch their students (means ranged from .3 to .6, with the U.S. mean being the highest of the four groups). Subjects in the U.S. sample indicated that college teachers sometimes sit and sometimes stand, but that they are able to be immediate or nonimmediate in either position. Thus, neither sitting nor standing is a reliable predictor of a teacher's immediacy. In reliability analyses we found that elimination of these items would increase the reliability of the instrument, hence they were eliminated. The revised instrument (RNIM) is presented in Figure 1.

Teacher evaluation was measured by two instruments. The first asked the student to respond to four, 7-step bipolar scales related to "My attitude about the teacher of this course." The four bipolar scales used were: good-bad, worthless-valuable, fair-unfair, and positive-negative. The second instrument asked for similar responses to "The likelihood of my taking another course with the teacher of this course, if I have a choice, is:." The bipolar scales used were: likely-unlikely, impossible-possible, probable-improbable, and would-would not.

FIGURE 1 REVISED NONVERBAL IMMEDIACY MEASURE

Directions: Below are a series of descriptions of things some teachers have been observed doing in some classes. Please respond to the statements in terms how well they apply to this teacher. Please use the following scale to respond to each of the statements: Never = 0 Rarely = 1 Occasionally = 2 Often = 3 Very Often = 4 Gestures while talking to the class. Uses monotone/dull voice when talking to the class.* Looks at the class while talking. Smiles at the class while talking. 5. Has a very tense body position while talking to the class.* 6. Moves around the classroom while teaching. 7. Looks at the board or notes while talking to the class.* 8. Has a very relaxed body position while talking to the class. 9. **Smiles at individual students in the class. 10. Uses a variety of vocal expressions when talking to the class.

^{*}Item should be reflected prior to scoring.

^{**}Recommended replacement for #9 in future use: "Frowns at the class while talking." * See note 1.

These same instruments have been used in several previous studies in this area and have been found to be both reliable and valid.

All instruments were presented to the students in their first language (English in the U.S. and Australia; Spanish in Puerto Rico; Finnish in Finland). The Werner and Campbell (1970) back-translation method was employed for the Finnish and Spanish versions of the instruments.

Procedures

In order to obtain data pertaining to a wide variety of teachers and subject matter in each of the cultures, to avoid problems with having students fill out questionnaires on the teacher of the class in which the data were collected, and to obtain data on teachers who would not otherwise permit their students to complete the questionnaires, we employed the methodology first employed in the Plax et al. (1986) study. This method asks the student to complete the questionnaires on the teacher/class that the student had most recently before the class in which the data are collected.

Data were collected toward the end of the term in each culture so that the students would have substantial exposure to the teacher and content of the class about which they were responding. All students completed the questionnaires anonymously. The Australian sample included 139 students from the Warrnambool Institute of Advanced Education. The Puerto Rican sample included 431 students from the University of Puerto Rico, Rio Piedras. The Finnish sample included 151 students from the University of Jyvaskyla. The U.S. sample included 365 students from West Virginia University. Preliminary analyses indicated there were no significant differences on any measure attributable to biological sex of student or teacher, so subsequent analyses did not include this variable.

Alpha reliabilities for each of the instruments for each of the cultures are reported in Table 1. All reliabilities were satisfactory, although the lower reliability of the RNIM with the Puerto Rican sample (.69) was suggestive of translation problems.¹

Data analyses

Scores on the three measures were subjected to analyses of variance to determine whether there were any general differences in perceptions of immediacy or affect among the students in the four cultures. Correlations between immediacy and the two teacher evaluation measures for each culture and differences between cultures were tested by t-tests for independent samples (employing the usual r to z transformations; Bruning & Kintz, 1968).

TABLE 1
ALPHA RELIABILITY ESTIMATES FOR MEASURES

Measure	Sample					
	Australia	Finland	Puerto Rico	U.S.A.		
Nonverbal Immediacy	.79	.89	.69	.85		
Affect Toward Teacher	.90	.82	.87	.92		
Willingness to Take Another Course with the Teacher	.95	.98	.94	.97		

A supplementary analysis was conduced employing some of the individual items on the RNIM as discrete predictors of student affective learning. Six scores were selected to represent six different nonverbal codes (gesture, voice, eye contact, facial expression/smiling, movement, and body position). The simple correlations were obtained as well as the multiple correlation of these six with each of the teacher evaluation measures. These analyses permitted examination of the comparative importance of the various nonverbal behaviors across the four cultures.

RESULTS

Table 2 reports the means and standard deviations for the immediacy and teacher evaluation measures, including the means for the individual items on the immediacy measure. Analysis of variance indicated that the students in the various cultures differed in the degree to which they perceived their teachers to be immediate (F = 32.49, d.f. 3, 1082, p < .0001). Post hoc t-tests indicated that the Puerto Rican and U.S. students did not differ from each other but reported their teachers as being significantly more immediate than did the students from either Australia or Finland. The Finnish teachers were reported as less immediate than the teachers from any other culture.

Significant differences were also found in the analyses of variance of the attitudes toward the teacher (F = 4.31, d.f. 3,1082, p < .01) and willingness to enroll in another class with the same teacher (F = 4.02, d.f. 3,1082, p < .01). The Finnish students reported more negative attitudes toward the teachers of their classes than the students in the Puerto Rican and U.S. cultures. No other comparisons were significantly different. The Australian students indicated less

TABLE 2
MEANS AND STANDARD DEVIATIONS OF MEASURES

Measure*	Sample							
	Australia		Finland		Puerto Rico		U.S.A.	
	М	SD	M	SD	М	SD	M	SD
Revised Nonverbal Immediacy								
Measure	25.6 _{ab}	6.1	23.9ab	7.9	28.8	5.6	28.2 _b	7.8
1. Gesture	3.0	.8	2.3 .	1.2	2.9	1.1	3.0	1.1
2. Voice	2.3	1.1	2.4	1.3	2.7	1.4	2.8	1.4
3. Eye Contact	3.5	.7	3.2	.9	3.7	.7	3.6	.8
4. Smiling	2.6	1.1	2.5	1.1	3.3	1.0	3.0	1.2
5. Body Position	2.8	1.0	3.3	1.0	3.2	1.1	3.0	1.2
6. Movement	2.0	1.2	1.5	1.4	2.5	1.4	2.5	1.4
7. Eye Contact	2.1	1.0	2.2	1.1	2.5	1.3	2.5	1.2
8. Body Position	2.8	.9	2.6	1.1	3.3	.9	3.1	1.1
9. Smiling	2.0	1.0	1.6	1.0	1.9	1.1	2.1	1.2
10. Voice	2.4	1.0	2.2	1.2	2.8	1.1	2.7	1.3
Affect Toward Teacher	19.7 _{ab}	6.1	20.8	4.9	22.8	5.4	22.1 _b	6.3
Taketch	17.4 abc	7.5	20.1.	7.8	20.2 _b	8.0	20.2	8.4

Taketch = Willingness to enroll in another class with same teacher.

 $_{abc}$ Means with same subscript on same measure are significantly different, p < .05.

^{*}Ranges of scores (possible) for the measures are as follows: Total immediacy 0-40; each immediacy item 0-4; Affect and Willingness each 4-28. Obtained ranges were consistent with possible ranges.

willingness to enroll in another class with the same teacher than did the students from any other culture. No other comparisons were significantly different.

Table 3 reports the simple correlations of the teacher evaluation measures with the total RNIM scores and the scores on the individual items as well as the multiple correlations of the six selected RNIM items with each teacher evaluation measure. In all cultures teacher nonverbal immediacy was found to be positively correlated with attitude toward the teacher, ranging from .44 to .69. The correlation for the Puerto Rican sample was significantly lower than for any of the other three samples. This was most likely a function of the lower reliability of the immediacy measure in that culture. When the correlation was corrected for attenuation due to unreliability, it increased to .57, and was no longer significantly different from the correlations of the other cultures. The multiple correlations based on the six selected items followed the same pattern, ranging from .49 to .70. These correlations are best described as moderately high and of about the magnitude observed in previous research. Examination of the correlations of the individual immediacy items with attitude toward the teacher did not indicate any striking variations from culture to culture, although the correlations obtained from the Puerto Rican data were lower for most items than for the other cultures.

The correlations of the RNIM scores with the scores on willingness to take another course with the same teacher ranged from .52 for Puerto Rico to .66 for Finland. The relationship for Finland was significantly higher than for any other culture while the other three cultures did not differ from each other. The multiple correlations of the six selected items with willingness to enroll in another class with the teacher ranged from .57 to .69. Examination of the simple correlations of the items with enrollment indicated the correlations for the

TABLE 3

CORRELATIONS AND MULTIPLE CORRELATIONS OF NONVERBAL IMMEDIACY MEASURES WITH TEACHER
EVALUATION MEASURES

Predictor(s)		Sample				
	Criterion*	Australia	Finland	Puerto Rico	U.S.A	
Total Immediacy Score	Teacher	.60,	.69 _b	.44 _{abc}	.59,	
Six-Item Scores (multiple-r)	Teacher	.62	.70	.49	.62	
1. Gesture	Teacher	.11	.39	.18	.29	
2. Voice	Teacher	.44	.65	.43	.49	
3. Eye Contact	Teacher	.36	.55	.25	.36	
4. Smiling	Teacher	.52	.55	.33	.52	
6. Movement	Teacher	.02	.24	.22	.28	
8. Body Position	Teacher	.51	.57	.28	.47	
Total Immediacy Score	Taketch	.54,	.66 _{abc}	.52 _b	.55,	
Six-Item Scores (multiple-r)	Taketch	.57	.69	.60	.57	
l. Gesture	Taketch	.12	.34	.20	.29	
2. Voice	Taketch	.48	.67	.55	.44	
3. Eye Contact	Taketch	.29	.55	.27	.32	
4. Smiling	Taketch	.41	.47	.42	.50	
6. Movement	Taketch	.05	.21	.23	.28	
3. Body Position	Taketch	.47	.47	.33	.42	

^{*}Teacher = Affect toward teacher, Taketch = Willingness to enroll in another course with same teacher. $_{abc}$ Correlations with same subscript involving the total immediacy score are significantly different, p < .05.

Finnish sample were generally higher than those for the other cultures. Gesture and movement had unusually low correlations with both teacher evaluation measures in the Australian sample. It would appear that these two nonverbal behaviors are of less importance when evaluating an instructor in that culture.

DISCUSSION

The results of this study point to the importance of teachers' nonverbal immediacy behaviors across four divergent cultures. The correlations between total immediacy scores and two different measures of teacher evaluation were quite high, indicating shared variance between perceived immediacy and teacher evaluation ranging from about 27 to 48 percent. While teachers' immediacy behaviors may a bit more important in some cultures than others; the direction of the relationship is constant, at least for the cultures sampled in this study.

As noted previously, teachers at the high school and college levels appear to touch their students so infrequently that this should not be considered a variable which commonly is employed by teachers at these levels to enhance their immediacy. It should be noted, however, that touch is seen as much less acceptable by some people and some cultures than others, so teachers should carefully monitor their touching behavior when students of another culture are present. Teacher touch at the lower elementary level, of course, is quite a different matter. In most cases teacher touch at this level is seen as positive and even very necessary for the children's development.

Whether teachers sit or stand also seems to be of little consequence. Most likely either is acceptable, depending on the size of class and other factors not included in this study. For example, there are more and less immediate sitting and standing behaviors. Such variability was not examined in this research.

At the other end of the continuum, it would appear that having vocal variety, a relaxed body position, eye contact with the students, and smiling at the students are all aspects of nonverbal immediacy which contribute to teachers receiving higher student evaluations. Engaging in movement and gesturing appear also to be viewed positively by students, but are of lesser importance to their evaluations of the teachers.

In addition to the important impact of teacher immediacy on learning, which has been established previously, it is clear that nonverbal immediacy also plays an important role in students' evaluations of their teachers. The fact that nonverbal immediacy has similar impact in both areas actually points toward the validity of student evaluations. These results also help explain the findings cited in Beatty and Zahn's (1990) study which indicate communication teachers characteristically receive higher student evaluations than do teachers in other disciplines. If we may presume that communication teachers practice at least some of what they preach about immediacy (or, more traditionally, about good delivery), they should actually be better teachers than their colleagues and be so-evaluated by their students.

In the contemporary "total quality management" environment, the concept of customer satisfaction is being brought into academia. It would appear that if we want to make "satisfied customers" of our students, we would be well-advised to be immediate in our teaching. Though some may think that we are recommending that teachers pamper students or be overly responsive to their prefer-

ences, it would be wise to keep in mind that the research also indicates these

same behaviors increase student learning.

While we certainly would not want to go so far as to translate the old business adage about the customer always being right to the view that the student is always right, it would seem reasonable to suggest that when the student evaluates immediate teachers more positively than non-immediate teachers, the student is at least usually right. And when a large number of students evaluate an immediate teacher as an effective teacher, their judgement is one that should receive considerable credence when evaluating that teacher.

NOTES

'Subsequent to completion of these data analyses and preparation of the initial report of this research, Puerto Rican students from the same population included in this study were engaged in focus groups to determine whether translation problems existed. These discussions indicated that there were no problems with the literal translation of the instrument. However, one item (#9 "Smiles at individual students in the class") was interpreted by many of these students in a way very different from the students in the other cultures, and in a way which was not consistent with the intent of the item on the measure. Instead of seeing this behavior as a positive indication of teacher immediacy, many of these students saw it as an indication of the teacher showing prejudicial favoritism toward some students over others. Omission of this item was subsequently found to raise the reliability of the RNIM so as to be consistent with its reliability in the other cultures. Consequently, we recommend substituting a new item in place of item 9 in future use of this instrument. The new item is "Frowns at the class while talking." This item should be reflected prior to scoring the instrument.

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