

The Relationship Between Nonverbal/Verbal Immediacy, Learning, And Caring By The Teacher in the L2 Spanish Classroom

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Abstract: The purpose of this investigation was to determine the role of immediate behaviors on L2 Spanish students when presented with videos exhibiting verbal and nonverbal immediacy in permutations. Six sets of subjects (N = 320) viewed the videos and responded on a seven-step scale of perceived caring and a one- item instrument on learning. The results derived from the six hypotheses suggest that there is no significant difference between subject's perceived caring by an instructor using high and low immediacies; there is a significant difference in learning by L2 Spanish students after viewing the videos of high and low immediate verbal behaviors of a Spanish teacher: the low verbal condition effected more learning. The investigation finds that high nonverbal immediacy effects more learning and more perceived caring. The study finds that high nonverbal immediacy overrides high verbal immediacy for subjects. Mutual convergence, harmony and learning may be facilitated by a positive set of socio-communicative behaviors with clear nonverbal cues. Actions may speak louder than words.

The learning environment in the L2 Spanish classroom not only includes the subject taught but also the learning environment as perceived by the student. Each instructor creates an environment, hopefully prosocial, in which he or she interacts verbally and nonverbally with student groups. Intentionally or unintentionally, instructors verbal and

nonverbal immediacy influence student behavior; Spanish teachers use gestures, smiles, body positions and movement, eye contact; they verbalize requests, mandates and explanations. Each Spanish teacher has an individual socio-communicative style that influences student level of caring and concern, success and learning. Moskowitz (1978) discussed the role of caring and sharing in the L2 classroom and the greater likelihood of prosocial behaviors generating more positive student-teacher relationships. Little research in applied linguistics followed her line of research; however, the fields of teacher education, communication education and classroom management continue to employ immediacy, caring and learning as correlates (Arends, 1991; Levin and Nolan, 1996; Teven, 2001).

Existing research in L2 Spanish classroom environment has not specified the relationship between verbal/nonverbal immediacy, learning and caring by the instructor. The present investigation examines these relationships using the L2 Spanish classroom in an effort to clarify how students perceive caring and how students evaluate the learning experience by teachers.

A line of research specific to classroom control, learning, satisfaction with teachers and student, and behavior alteration techniques in the classroom has given rise to a range of techniques designed to make university professors manage positive negotiations between student and instructor (Allen and Edwards, 1988; Burroughs, Kearney and Plax, 1989; Cheseboro and McCroskey, 2001; Plax, Kearney and Downs, 1986; Richmond, McCroskey, Kearney and Plax, 1987; Teven, 2001; Wheelless, Stewart, Kearney and

Plax, 1987) . The results of these investigations produced the following prosocial teacher behaviors:

1. Effective teaching equals classroom control (Plax, Kearney and Downs, 1986).
2. Prosocial behavior alteration techniques are more effective than antisocial behavior alteration techniques (Plax, Kearney and Downs, 1986).
3. Immediate and deferred rewards for behavior, rewards from others, and self esteem enhancement lead to student satisfaction (Plax, Kearney and Downs, 1986; Richmond, McCroskey, Kearney and Plax, 1987).
4. Greater academic engagement time is the best predictor of student achievement (Richmond, McCroskey, Kearney and Plax, 1987).
5. Students with external loci of control perceive behavior alteration techniques with higher frequency than those with internal loci of control (Wheeless, Stewart, Kearney and Plax, 1987).
6. Perceived use of teacher power and communication account for 30 per cent of variance in cognitive learning and up to 69 per cent of the variance in affective learning (Allen and Edwards, 1988; Richmond and McCroskey, 1984).
7. Student satisfaction with teacher behaviors may be mediated by teacher nonverbal and verbal immediacy (Burroughs, Kearney and Plax, 1989; Chesebro and McCroskey, 2001; Teven, 2001; Witt and Wheeless, 2001).

Some prevailing research has established that nonverbal and verbal immediacy correlate to cognitive learning, student satisfaction with courses and teacher effectiveness in the classroom. The work of Mehrabian (1969, 1971) , Anderson

(1979) initiated definitive studies in immediacy, learning and teacher effectiveness. Theories and investigations centering around the correlation between learning and immediate behaviors continued with Christophel (1995) and Richmond (1990). There is evidence in more contemporary correlational and experimental research that when teachers employ nonverbal immediate strategies such as gestures, eye gazes, smiles, nods, forward leans and movements, student satisfaction and learning increase (Chesebro, 2003; Chesebro and McCroskey, 2001; Teven, 2001; Witt and Wheelless, 2001).

It is also known that teachers must verbalize to reinforce immediacy. One-to-one interactions, talking with students on a personal basis, calling a student by name, showing respect and empathy, telling a student that you care, and other prosocial behaviors employed by instructors prove to be effective strategies (Teven, 2001). Teacher use of prosocial Behavior Alteration Techniques (BATs) have been linked to greater teacher and student satisfaction in the classroom, fewer student antisocial behaviors, and cognitive learning. Verbalized immediate and/or deferred rewards and self-esteem builders used frequently appear to enhance learning; whereas verbalized punishment, guilt and subtle abuse result in lower student satisfaction with courses, less learning and antisocial behavior in the classroom (Allen and Edwards, 1988; Plax, Kearney and Downs, 1986; Richmond, McCroskey, Kearney and Plax, 1987; Wheelless, Stewart, Kearney and Plax, 1987).

Another use of nonverbal and verbal immediacy is in classroom management of off-task behavior by students. Proactive coping skills, nonverbal and /or verbal, distinguish the experienced and effective instructor from the novice. The effective classroom manager must deal with surface behaviors (talking, daydreaming, sleeping, passing notes, talking back, etc) using his or her repertoire of nonverbal and/or verbal control techniques. Effective classroom managers use eye contact, movement toward disruptive students, hand movements and special gestures as nonverbal techniques in order to control surface behaviors. When nonverbal techniques fail, verbal management skills may deal with maladaptive behaviors. Brief, private and verbal interventions without recourse to sarcasm, humiliation or demeaning comments may deter further disruptive behavior. Other compliance-gaining attempts (hints, questions, requests, verbal reinforcement, responsibility messages and redirections) form a hierarchy of verbal interventions. At any rate, effective nonverbal and/or verbal interventions in which students learn to recognize maladaptive and inappropriate behaviors and to correct them are the goal of the effective classroom manager (Levin and Nolan 1996).

Another research area directly related to reducing receiver apprehension is caring. Students may experience anxiety due to an inability to process and to interpret information heard in the classroom. Also students may experience discomfort caused by the behavior of the instructor. Many students become less efficient in processing information, less likely to learn course material, and display negative affect toward the teacher when instruction is not clear, and the teacher is perceived as not caring (Chesebro, 2003; Chesebro and McCroskey,

2001; Teven, 2001). Teven (2001) found that immediate teachers are perceived as more caring by students, and that nonverbal immediacy correlates positively with caring. Chesebro and McCroskey (2001) found that the relationship between clarity and immediacy account for significant variance in motivation (45%), instructor affect (62%), course affect (30%) and cognitive learning (30%).

This investigation addresses directly the Spanish instructor who must transmit listening, speaking, writing and reading skills in the L2 classroom. It must be noted that instructors must also convey non-speech features that regulate human life models—meaningful facial expressions, gestures, non-speech sounds, proxemics and head movements. Capper (2000) found that linguistics of a verbal nature abound in textbooks and in research; however, nonverbal immediacy and paralinguistics appear to be neglected. Treatises on phonological, syntactic and semantic decoding dominate textbooks and research in applied linguistics; although, experts in linguistics demonstrate that communicative competence includes appropriate gestures, facial expressions and immediate teaching to reduce learner apprehension (Arends, 1991). Unfortunately, little research exists about L2 Spanish instructors and their socio-communicative style (nonverbal and verbal immediacy) in the classroom. General research in immediacy and learning has proven some positive results from verbal/nonverbal immediacy and student affect, yet the effects of teacher verbal immediacy are inconclusive (Comstock, Rowell and Bowers, 1995; Witt and Wheelless, 2001). Frymier (1993, 1994) found that some students do not respond positively to highly immediate instruction, and concludes that teacher immediacy does not correlate with student

learning. Questions still remain concerning the relationship between verbal/nonverbal immediacy, student affect, caring by teachers, and learning. Therefore, the purpose of this investigation is to continue the line of research on verbal and nonverbal immediacy, and how immediacy affects perceived caring and learning. Furthermore, seeing that existing research rarely focuses on paralinguistic features in the L2 classroom, this question arises: Are paralinguistic features equal to linguistic systems? Capper (2000) says: Do actions speak louder than words?

Based upon the lack of a general consensus of research in immediacy, caring and learning, and the paucity of research in Spanish teacher behaviors specific to immediacy, caring and learning, the following hypotheses are offered:

H1: There is no significant difference in perceived caring by L2 Spanish students between high and low verbally immediate Spanish teachers after a video presentation.

H2: There is no significant difference in learning by L2 Spanish students between high and low verbally immediate Spanish teachers after a video presentation.

H3: There is no significant difference in perceived caring by L2 Spanish students between high and low nonverbally immediate Spanish teachers after a video presentation.

H4: There is no significant difference in learning by L2 Spanish students between high and low nonverbally immediate Spanish teachers after a video presentation.

Witt and Wheelless (2001) point out that combinations of verbal and nonverbal immediacy have not been researched systematically. Their research found, at any rate, that lower verbal immediacy and higher nonverbal immediacy result in higher recall; higher verbal immediacy/lower nonverbal immediacy produce less learning loss. Because several permutations of high and low, verbal and nonverbal immediate conditions have not been researched extensively for L2 Spanish classrooms, these hypotheses follow:

H5: There is no significant difference in perceived caring by L2 Spanish students using combined effects of high and low, verbal and nonverbal Spanish teachers after a video presentation.

H6: There is no significant difference in learning by L2 Spanish students using combined effects of high and low, verbal and nonverbal Spanish teachers after a video presentation.

Method

Participants were 320 undergraduate students (192 females and 108 males) enrolled in an elementary Spanish course at a mid-Atlantic university. This beginning course serves students who present little or no knowledge of the Spanish language, and less than two years of high school Spanish. This course represents the first stage in meeting the modern language requirement in selective majors. Subjects were informed concerning the nature of the study and were informed that both information and data collected would be strictly confidential, and any access to data would be limited to the investigator. Participants were

informed that this investigation affected no course grade. Data was collected during regularly scheduled classes and only fifteen minutes would be used to view the video and then subjects responded to a questionnaire.

Perceived caring. Research by McCroskey (1992), Teven (2001) and Teven and McCroskey (1997) advanced the use of a nine-item instrument of perceived caring. Subjects were asked to indicate on a seven-step continuous scale their choice. Students were to imagine that they are the students in the video. Items used to measure perceived caring were:

1. Doesn't care about me/ Does care about me
2. Has my interests at heart/Does not have my interests at heart
3. Self centered/ Not self centered
4. Unconcerned/ Concerned with me
5. Sensitive/ Insensitive
6. Unresponsive/ Responsive
7. Understanding/ Not understanding
8. Does not understand how I feel/ Understands how I feel
9. Understands how I think/ Does not understand how I think

Alpha reliability was .78 (Kuder Richardson 20) for subjects.

Learning. Subjects indicated on a 0-9 scale how much they learned from the video. The learning instrument used by Chesebro and McCroskey (2000) and Witt and Wheelless (2001) was reduced to one question: How much did you learn from the video explanation of possession in Spanish? The investigator eliminated the second question from the original instrument which compares the present

instructor to an ideal instructor: participants were beginning students with little or no exposure to other instructors. No alpha reliability estimates derived from this single item instrument.

Immediacy. Verbal and nonverbal immediacy was operationalized for the video by consulting the 10-item scale used by McCroskey, Fayer, Richmond, Sallinen and Barraclough (1996) in which there are five responses on a 0-4 scale. Never = 0 and Very often = 4. This instrument measures kinetic and paralinguistic teacher behaviors: gestures, gazes, smiles, body positions, movement, variety of vocal expressions and lecture style. Alpha reliability for this instrument was .84 (Kuder Richardson 20) for subjects. Four videos each representing four immediacy conditions—high verbal, low verbal, high nonverbal, low nonverbal—were produced by the investigator. A Spanish teacher (native speaker from Mexico) from a community college served as the actor in the video. Also four videos representing combinations of immediacy conditions were processed effect to cause: high verbal/high nonverbal, high verbal/low nonverbal, low verbal/high nonverbal, low verbal/low nonverbal. Another Spanish teacher (native speaker from the Dominican Republic) from a community college served as the actor in this video. The teaching point for these videos were identical. Possession with de + Noun. Subjects learned to realize that Spanish does not use the apostrophe to indicate possession: the thing/person possessed + de + the possessor. Explanations were in English using Spanish examples of usage.

Statistical treatment. To analyze the data specific to the first four hypotheses, four t-tests (independent samples) were computed using high, low verbal immediacy, and high, low nonverbal immediacy as independent variables.

Learning and caring served as dependent variables in two t-tests each:

H1 t-test: Caring = High Verbal + Low Verbal

H2 t-test: Learning = High Verbal + Low Verbal

H3 t-test: Caring = High Nonverbal + Low Nonverbal

H4 t-test: Learning = High Nonverbal + Low Nonverbal

To test hypotheses five and six the data was computed using ANOVA, one way classification.

H5 ANOVA: Caring = High Verbal/High Nonverbal + High Verbal/Low Nonverbal + Low Verbal/High Nonverbal + Low verbal/Low Nonverbal

H6 ANOVA: Learning = High Verbal/High Nonverbal + High Verbal/Low Nonverbal + Low Verbal/High Nonverbal + Low verbal/Low Nonverbal

Once the analysis of treatment groups in the ANOVA were complete, Duncan Multiple Range served as the post hoc test. The alpha = .05 significance level served all statistical procedures.

Results

The first hypothesis stated that there is no significant difference in perceived caring by L2 Spanish instructors between high and low verbally immediate teachers after students view the video presentation. Results of the t-test failed to find a significant difference between high and low immediate verbal behaviors (t

= -1.76), $df = 38$, $p = .087$. Means for high and low immediate verbal behaviors were 5.65 and 6.55, respectively.

The second hypothesis stated that there is no significant difference in learning by students between high and low verbally immediate teachers after students view the video presentation. Results of the t-test indicated a significant difference between high and low immediate behaviors ($t = 3.07$, $df = 38$, $p = .004$) with means of 5.1 and 6.5, respectively.

The third hypothesis stated that there is no significant difference in perceived caring by L2 Spanish instructors between high and low nonverbally immediate teachers after students view the video presentation. T-test results found a significant difference between high and low nonverbal immediate behaviors ($t = 7.52$, $df = 38$, $p < .00$). Means for high and low nonverbal immediate behaviors were 7.25 and 4.45, respectively.

The fourth hypothesis stated that there is no significant difference in learning by students between high and low nonverbally immediate teacher after students view the video presentation. The results did not support the null hypothesis: $t = 5.58$, $df = 38$, $p < .00$ with means for high and low nonverbal immediate behaviors of 7.25 and 5.0, respectively.

The fifth hypothesis stated that there is no significant difference in perceived caring by L2 Spanish teachers using combined effects of high and low, verbal and nonverbal immediate behaviors after students view the video presentation. The one-way ANOVA of permutations resulted in: $[F(3, 76) = 31.36; p < .00]$.

Means were: High Verbal/High Nonverbal 7.45

High Verbal/Low Nonverbal	5.90
Low Verbal/High Nonverbal	6.65
Low Verbal/Low Nonverbal	4.50

The Duncan Multiple Range test with a significance level of .05 indicated that the Low Verbal/Low Nonverbal behaviors differed significantly from all other groups. High Verbal/Low Nonverbal behaviors differed from Low Verbal/Low Nonverbal. Low Verbal/High Nonverbal behaviors differed significantly from Low Verbal/Low Nonverbal and High Verbal/Low Nonverbal conditions. High verbal/High Nonverbal differed significantly from all groups.

The sixth hypothesis stated that there is no significant difference in learning by L2 Spanish students using the combined effects of high and low, verbal and nonverbal immediate behaviors by L2 Spanish instructors after student view the video presentation. The one-way ANOVA of the permutations of effects (high, low and verbal, nonverbal) found significant differences: $[F(3,76) = 19.029, p = < .00]$.

Means were:	High Verbal/High Nonverbal	5.9
	High Verbal/Low Nonverbal	5.2
	Low Verbal/High Nonverbal	6.8
	Low Verbal/Low Nonverbal	4.1

The post hoc test, Duncan Multiple Range, with a significance level of .05 indicated that High Verbal/High Nonverbal immediate behaviors differed significantly from all groups. High verbal/Low nonverbal immediate behaviors differed significantly from Low verbal/High Nonverbal immediate behaviors;

however there was no significant difference between High Verbal/Low Nonverbal and High Verbal/High Nonverbal immediate behaviors. Low Verbal/High Nonverbal behaviors differed significantly from all groups.

Summary and Conclusions

The purpose of this investigation was to determine the role of immediate behaviors on L2 Spanish students when presented with a video exhibiting verbal and nonverbal immediacy in combinations. In this report six sets of subjects viewed the video and responded on the seven-step scale of perceived caring and the one item instrument on learning. Fundamental to this study is the question of the strength of one immediacy condition over the other: Do actions speak louder than words? Are paralinguistic features equal to or override verbal production in the L2 Spanish classroom? Current research establishes that immediate behaviors contribute to some positive teacher-student relations (Chesebro and McCroskey, 2001; Love, 2005; Teven, 2001; Wanzer and McCroskey, 1998). On the other hand, students may resist and use clearly defined misbehaviors as a result of some antisocial and nonimmediate behaviors by teachers (Vurroughs, Kearney and Plax, 1989). Also, Frymier (1993, 1994) found that some students do not respond to highly immediate instructors and that teacher immediacy does not correlate with student learning. Therefore, questions still remain concerning the relationship between verbal and nonverbal immediacy, student affect for teachers, perceived caring and learning. Furthermore, research in applied linguistics and

Spanish rarely focuses on paralinguistic features, teacher negotiations and messages, and student compliance-resistance (Capper, 2000).

The results derived from the six hypotheses represent some consistent data on the receiver construct of L2 Spanish students. Hypothesis 1 suggests that there is no significant difference between subjects' perceived caring by instructors after viewing a video presentation demonstrating high and low verbal immediacies. Hypothesis 2 concludes that there is a significant difference in learning by L2 Spanish students after viewing the video of high and low immediate verbal behaviors of a Spanish instructor. Hypotheses 1-2 indicate that verbal immediacy may have some effect on learning, but only in the low verbal immediate condition. Furthermore, verbal immediacy at any level has little effect on perceived caring. On the other hand, hypotheses 3-4 advance the concept that high nonverbal immediacy has an effect on both perceived caring and learning. Hypothesis 5 finds that high verbal/high nonverbal and low verbal/high nonverbal combinations affect perceived caring by students of a L2 Spanish teacher. High nonverbal immediate behaviors appear to be a common factor. The results of hypothesis 6 indicate that low verbal/high nonverbal and high verbal/high nonverbal immediate behaviors are requisite to learning. This investigation concludes that high nonverbal immediacy overrides high verbal immediacy for subjects. In addition, these results appear to corroborate the finds of Witt and Lawrence (2001) in which higher nonverbal immediacy by the teacher results in greater recall and greater affect or caring.

The role of nonverbal immediacy and the conclusions derived from this investigation appear to validate the role of paralinguistics in the classroom. Human nonverbal communication include facial expressions, gestures, eye contact, postures and movement. The human face expresses and masks emotions, conveys meaning without words. Actions such as tapping on a desk, tapping the feet, yawning, hair tossing, head nodding, eyebrow movement, eye aversion and shifting gazes, heavy breathing, and swaying have meaning in human interaction. Approach-avoidance ratios are also nonverbal actions. Intimacy or distance strategies validate Hall's proxemic theory (Hall, 1959). If nonverbal communication is an involuntary process, it is also a culturally based and necessary avenue toward comprehension between two humans. Mutual convergence and harmony between teacher and student may be facilitated by a positive set of socio-communicative behaviors with clear nonverbal cues. Actions may speak louder than words.

Limitations: While ideally participants should be exposed to treatment videos for longer periods of time in order to measure reactions to verbal and nonverbal immediate behaviors, the investigator had to minimize disruption to courses. There is the possibility that subjects may have misread some of the verbal immediate behaviors as manufactured or phony. Witt and Lawrence (2001) found that their video may not operationalize robustly verbal immediacy; therefore, the efficacy of the video script caused an adverse student reaction. Last of all, the

investigator would like to have had a production team, studio cameras and a standard camera chain; however, budget constraints required a simple camcorder.

Recommendations for further research.

1. Research centering upon suprasegmentals and intonation patterns, and compliance-resistance in L2 Spanish students.
2. Research on nonverbal behaviors of Hispanic teachers versus Near-Native Teacher on student learning and perceived caring.
3. Research on the relationship between L2 teacher evaluations and the use of Behavior Alteration Techniques (BATs).
4. Research on L2 student willingness to communicate.
5. Research on L2 student reactions to personal, social and public distances or proxemic variations.

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