An Exploratory Study of the Relationship of
Teacher Nonverbal Cues of Warmth to
Student Anxiety Level and Verbal Responsiveness
during an Oral Proficiency Examination of French

DISSERTATION
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By
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*****

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DEDICATION

This dissertation is dedicated to my husband Glenn and to my parents, Havern and Helen Brindle. This milestone is their achievement as well as mine.

Shirley Brindle Huelsman
ACKNOWLEDGEMENTS

I will lift up mine eyes unto the hills, from whence cometh my help.

My help cometh from the Lord, which made heaven and earth.

Psalm 121:1-2

The Almighty often sends His help by way of human hands. So it is with the accomplishment of this research project. I wish to express my sincerest appreciation to the following people:

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CHAPTER I
THE PROBLEM

Introduction to the Problem

For many second language students, speaking in the target language causes more anxiety than any other aspect of language study (Curran, 1976, 1961; Guiora, Brannon & Dull, 1972; Horwitz, Horwitz & Cope, 1986; Lucas, 1984; McCoy, 1979, Rivers, 1964). Trembling, stuttering, trailing responses, palid faces, sweaty brows, and blank stares often follow teacher questions and other activities designed to elicit oral participation from students. Curran (1961) explains that students frequently manifest such visible and, at times, pronounced behavioral reactions because "[t]he threat of being called upon to speak a foreign tongue is not only psychological; the whole psychosomatic system is directly involved" (p. 79).

Crossing the threshold of the language classroom thrusts the student into a unique learning environment where he "...is in a very real sense stripped of familiar cues. Even what is most personally his--his way of thinking and speaking--is set aside" (Jarvis, 1975, p. 107). The student becomes, in essence, a linguistic toddler who, unlike a baby
learning its first language, retains an acute awareness of his limited verbal facility. Research indicates that first and second language learners prefer not to speak a language whose rules and meaning they have imperfectly perceived or internalized (Dulay & Burt, 1974; Ervin-Tripp, 1974; Sorenson, 1967). Unfortunately, the adult in today's second language classroom setting does not usually have the luxury of time for mastery before speaking; he must perform as he learns. Inhibitions can easily develop when the student must publicly produce responses that are not well learned (Bailey, 1983; Davis, 1969). Each attempt to respond orally becomes a risk that invites negative evaluation—not only of the student’s grammar, pronunciation, and language facility but his personal worth as well (Beebe, 1983; Parsons, 1983; Rivers, 1983, 1980, 1964; Stevick, 1980, 1976). Consequently, the language learner finds himself "...perched precariously on a linguistic limb where...[he]...may very well feel more insecure and more ill at ease than in any other academic area" (Chastain, 1980, p. 5).

Most studies of anxiety indicate that stress results in an overall impairment of performance (Holt, 1964; Lazarus, Deese & Osler, 1952; Mouly, 1973). Research in speech anxiety reveals that stressful affective reactions can have a disruptive and inhibiting effect on verbal communication, resulting in speech marked by disfluencies, excessive pauses and silences (Freimuth, 1976; Friedman, 1980; Jordan &
Powers, 1978; Kasl & Mahl, 1965; McCroskey, 1977). In second language learning, the tension associated with oral sentence production can have similar effects on student performance. Gardner, Smythe, Clement & Glicksman (1976) find consistent negative relationships between second language classroom anxiety and scores on oral production tests of speech skills. Anxiety can also alter the student's communication strategies. Kleinmann (1977) reports that debilitating anxiety discourages ESL students from using more difficult and complex language structures in their speech. This avoidance does not derive from lack of knowledge. Ely's (1986) study supports these findings, revealing a negative relationship between the student's level of discomfort and risk-taking in the language classroom. Some students eventually demonstrate a general unwillingness to communicate at all in the target language, even to the point of skipping classes (Horwitz, Horwitz & Cope, 1986; Lucas, 1984; McCoy, 1979; Tarone, 1977). Retreat into silence and other avoidance tactics, however, carry the price of additional stress because oral participation, germane to the language course design, directly influences the course grade. Furthermore, given that the oral interview is a commonly used evaluative technique and may become a standardized measure of oral proficiency (Cmaggio, 1983), the stress experienced by the student becomes a painful reality that must be confronted by
language teachers. Those teachers who are unaware or insensitive to the student's fear of speaking in the second language may incorrectly attribute poor oral performance to a lack of sufficient motivation, preparation, or ability.

Current second language programs continue to place a rising premium on communicative competence, with an emphasis on the development of the student's conversational ability and fluency. Given this curricular focus, the inherently high potential for stress in the language classroom and its deleterious effects on oral performance, the reduction and control of student anxiety in oral tasks is a central issue in second language learning today.

Statement of the Problem

To take the linguistic gamble of speaking in a second language, the student must feel relatively free of fear, threat, and intimidation. Rardin (1977) emphasizes that it is clearly the language teacher who must make the "conscious effort in the initial stages of the learning experience to offset this threat and create the kind of security that makes easier a non-defensive, whole-person engagement in the learning process" (p. 385). This responsibility of the language teacher becomes even more significant in light of Zimbardo's (1981) research. He reports that the people who are most likely to elicit the greatest fear of oral communication are those individuals who are relatively powerful,
who control desired resources, and who are critical evaluators. Ironically, the language teacher on whom the student is linguistically dependent becomes a primary source of threat to the student.

To reduce student anxiety, second language educators agree that a climate of warmth is crucial (Brown, 1980; Chastain, 1980, 1976; Disick & Barbanel, 1974; Krashen, 1982; Rivers, 1983, 1980, 1964; Stevick, 1980, 1976). This warmth establishes the nonthreatening, safe context in which the student can respond openly, expressing his thoughts and feelings without fear of criticism, ridicule, and disapproval. To effect this climate, language teachers have embraced a number of methods, techniques, and activities designed specifically to lower student stress associated with speaking in the target language (Bancroft, 1978; Curran, 1976; Gat tegno, 1972; Terrell, 1982). These approaches have failed, nonetheless, to produce consistent results across language classrooms (Beebe, 1983; Brown, 1977; Scovel, 1978) because a climate of warmth does not derive from methodology but, rather, from the social interaction between teacher and student, or the teacher-student interpersonal relationship (Flanders, 1968; Withall, 1968). Warmth refers to the teacher's concern, caring, and respect for the student because the student is a person with valued potential irrespective of his performance in class (Patterson, 1973; Rogers, 1961; Stanford & Roark, 1974). It
is the teacher's affective response of liking, approval, acceptance, and emotional support to the student (Dunkin & Biddle, 1974; Gage, 1972; McCandless, 1961). Unfortunately, language teachers receive few behavioral guidelines that relate directly to this important dimension of affective teacher-student communication; they are advised merely in terms of adjectives such as warm, friendly, or accepting (Altman & Weiss, 1970; Dodge, 1973; Hancock, 1981).

People can communicate warmth verbally and nonverbally. In Western society, however, there are strong conventional restraints against the expression of feelings, positive or negative, outside intimate relationships (Argyle, 1975; Mehrabian, 1972; Riesman, 1950). Hence, in educational institutions, real feelings and emotions are inappropriate content for explicit communication (French, 1971). Yet, emotions denied expression in the verbal channel cannot be totally concealed and are manifested less overtly by nonverbal, or nonlinguistic, behaviors that include facial expressions, eye contact, tone of voice, body motions, and gestures (Bugental, Henker & Whalen, 1976; Ekman & Friesen, 1974, 1969; Mehrabian, 1972; Zuckerman, DePaulo & Rosenthal, 1981). Although such nonverbal cues can frequently function to clarify, confirm, or contradict the teacher's verbal messages, they generally convey his feelings, likings, and preferences, reflecting the quality of the teacher-student interpersonal relationship (Andersen,

Research indicates that interpersonal warmth, specifically, is conveyed predominately by nonverbal cues (Gafner, 1977; Gazda, 1973; Tepper & Haase, 1978). Mehrabian (1972, 1971, 1970, 1969a, 1969b, 1968a, 1968b) concludes from extensive research that the best measurement of liking, or warmth, incorporates indices based on the nonverbal cues of touching, close distance, forward body lean, eye contact, affirmative head nods, and facial pleasantness. Zajonc's (1980) research further suggests that teachers' and students' first impressions of like and dislike in initial encounters can develop in a fraction of a second, apparently on the basis of such nonverbal cues. These affective reactions, in turn, can set the tone for subsequent interaction. Numerous counseling and interview studies reveal that the affective reactions displayed through an interviewer's nonverbal behavior can contribute to differential performance by clients and job applicants (Druckman, Rozelle & Baxter, 1982; Harper, Wiens & Matarazzo, 1978; Patterson, 1983). The language teacher's nonverbal communication of warmth becomes, therefore, a potentially significant factor in student oral participation and performance.
Teachers are free to choose the words they use; verbal language can be manipulated at will. By contrast, nonverbal behavior does not usually function under conscious control; thus, it is difficult to censor or falsify and is less subject to self-monitoring and accountability (Argyle, 1975; Bugental, Kaswan & Love, 1970; Ekman & Friesen, 1974, 1969; LaFrance & Mayo, 1978). Grant and Hennings (1971) report that 82 percent of teacher behaviors are nonverbal whereas only 18 percent are verbal. Surprisingly, teachers are unaware of the nonverbal messages that they transmit to their students (Davis, 1974; Galloway 1979, 1971, 1968; Hills, 1979; Schusler, 1971; Willett, 1977), but the results are far from inconsequential. Students accurately perceive the teacher's attitudes, feelings, and emotional states by means of nonverbal cues (Feldman, 1976; Seals & Kaufman, 1975). Galloway (1979) warns that

A teacher can convey to a student that he is smart, dumb, pretty, ugly, dirty, or unimportant, without reference to a single word... Teachers can express information without words that they would never have the courage to state verbally, and would retract if they only knew what the student had decoded (p. 203).

Longstreet (1972) concurs, stating that "[i]n many ways, the teacher is caught by his own unconscious forms of nonverbal expression so that what he believes is not what he is necessarily 'saying'" (p. 177). Hence, it is possible for a teacher to use the most persuasive language to convey warmth to a student while his nonverbal behavior indicates
otherwise. When verbal and nonverbal messages conflict, the student accepts the nonverbal communication for the true meaning (Galloway, 1966a, 1966b; Torrence, 1960). The student who possesses less verbal facility relies even more heavily upon nonverbal cues to assess, clarify, and check the fidelity of teacher communications (Bernstein, 1961; Galloway, 1966a, 1966b; Lewis & Page, 1974; Victoria, 1971). Because beginning second language students' oral skills are significantly curtailed in the target language, one would expect these students' sensitivity to teacher nonverbal affect to be heightened or intensified.

Given that a climate of warmth can reduce speech anxiety, that warmth is conveyed better nonverbally, and that less verbal students rely more upon the nonverbal channel of communication for meaning, there is a reasonable need to address the following question: "What is the relationship between teacher nonverbal communication of warmth and student verbal responsiveness in a second language?"

Theoretical Bases

Education does not occur in a vacuum. To the contrary, education is, fundamentally, a dynamic social process involving communication and interaction between teacher and student (Clark, 1979; Hills, 1979; Mann et al., 1970; Montague, 1967; Mouly, 1973; Stolurow & Pahel, 1963).
Educators now recognize that the student's academic experience "...is not a purely cognitive or psychological process, but can depend crucially on the social relationship between teacher and pupil" (Stubbs, 1983, pp. 89-90).

The teacher-student relationship, like all relationships, consists of two basic bipolar dimensions, status (dominance-submission) and affect (warmth-coldness) (Argyle, 1975; Borgatta, Cotrell & Mann, 1958; Brown, 1965; Carson, 1969; Griffin & Patton, 1974; Leary, 1957). Because the status relationship between teacher and student is fairly well defined and constrained by societal standards, the dimension of affect would, presumably, function as the potentially greater source of variance in terms of student performance. The dimension of affect refers to the emotional tone of the relationship and involves expressions of warmth, or liking and acceptance, and hostility, or dislike and rejection. Although the teacher-student relationship is reciprocal in nature to a degree (Feldman & Theiss, 1982; Hunt, 1970; Klein, 1971), the teacher, by virtue of his evaluative position, his monopoly of information and procedures, and his role as facilitator, becomes the primary agent establishing the quality of the relationship, be it warm and encouraging or cold and alienating (Delamaont, 1983; Farley, 1981; Ginott, 1972; Parker & French, 1971; Ringness, 1975; Rogers, 1961; Schwartz, 1977; Schmuck,
Luszki & Epperson, 1963). It is almost axiomatic in educational circles that students learn and perform better when the teacher is warm and encouraging.

The reinforcement-based attraction paradigm of Byrne (1971) and the interpersonal balance theories of Heider (1958) and Newcomb (1953) suggest that teacher warmth can influence the student's verbal communication. According to these theories, students perceive warm teachers as liking them and, in return, reciprocate this warmth. This mutual attraction serves to promote or increase communication between interacting partners. Presumably, students of warm, friendly teachers are less inhibited about making responses because whatever they say usually elicits positively reinforcing teacher behavior.

The literature indicates that nonverbal cues are more indicative of affective states than verbal cues (Argyle, 1979; Bugental, Kaswan & Love, 1970; Knapp, 1980; Mehrabian, 1972; Myers & Myers, 1976). Warmth, specifically, is conveyed better nonverbally (Gafner, 1977; Gazda, 1973; Tepper & Haase, 1978). In his comprehensive theory of communication, Mehrabian (1972) identifies a cluster of nonverbal behaviors whose major function is to signal a more positive attitude between interacting partners. Denoting liking, or warmth, these "immediacy" cues include touching, close distance, forward body lean, eye contact, affirmative head nods, and facial pleasantness. Based on the conceptual
framework of approach and avoidance principles, these behaviors reduce the distance between people, either by increasing the actual physical proximity or by reducing the psychological distance. Mehrabian (1971) explains that "people are drawn toward persons and things they like, evaluate highly, and prefer; and they avoid or move away from things they dislike, evaluate negatively, and do not prefer" (p. 1). The general pattern in nonverbal communication research indicates that people with more positive initial impressions of others spontaneously initiate higher levels of these immediacy behaviors. If the levels of immediacy behaviors exceed, however, those allowed by the implicit social norms of the participants, they can produce an adverse effect, resulting in more negative impressions or evaluations (Argyle, 1975; Argyle & Dean, 1965; Hall, 1966; Harper, Wiens & Matarazzo, 1978; Mehrabian, 1972, 1971; Patterson, 1983; Siegman & Pope, 1972b). Consequently, nonverbal behaviors of immediacy serve as differential cues of interpersonal rapport, or warmth.

Theoretically, nonverbal behaviors of warmth should promote or increase verbal communication between people. Results from several counseling and interview studies support this expectation (Aguilera, 1967; Banks, 1974; Keenan, 1976; Keenan & Wedderburn, 1975; Matarazzo, Saslow, Wiens, Weitman & Allen, 1964; Pope & Siegman, 1968; Reece & Whitman, 1962; Stewart & Patterson, 1973; Wickes, 1956). In
a unique educational study involving Eskimo and white students, Kleinfeld (1973) reports that teacher warmth conveyed nonverbally through close interpersonal distance, smiling, and touch can substantially increase student verbalness and learning. A limited number of other educational studies provide supporting evidence for these conclusions (Caproni, Levine, O'Neal, McDonald & Garwood, 1977; Keith, Tornatsky & Pettigrew, 1974; Kinarthy, 1976; Koneya, 1976; Levine, O'Neal, & McDonald, 1980; Sarbin & Allen, 1968). Collectively, these studies strongly suggest that teacher nonverbal warmth can positively influence student verbal responsiveness in the second language, both in quantity and quality.

Significance of the Study

Given the current emphasis on the learner in second language learning, one may question the value of a study which focuses primarily upon the specific teacher variable of warmth. Altman (1980) cautions that it is inaccurate to conclude that "the language teacher is now somehow 'out of focus'...that language teachers are no longer viewed as essential components of the process of foreign language learning" (p. 1). Strevens (1980) concurs, pointing out that focusing more closely on the language learner requires, paradoxically, a more sophisticated understanding of the principal teacher variables that have the greatest effect on
the student. Berliner (1976) notes that second languages, unlike many other curriculum areas, are not typically learned at home. Hence, student background accounts for much less variance, leaving more variance potentially attributable to teacher effects.

Theoretically, students of warm teachers should be more highly motivated and, consequently, attain higher levels of achievement. Research evidence demonstrating a significant relationship between teacher warmth and student achievement remains equivocal, nonetheless (Dunkin & Biddle, 1974; Flanders, 1960; Medley & Mitzel, 1959). Most educational research studies designed to investigate the effects of teacher behavior on students, however, have focused on the analysis of verbal communication to the virtual exclusion of the nonverbal dimension of teacher communications (Galloway, 1972; Kaye, 1979; Wolfgang, 1977; Woolfolk & Brooks, 1983). Emphasizing the nonverbal component of communication, Birdwhistell (1970) states that "[t]o focus exclusively upon the words humans interchange is to eliminate much of the communicational process...." (p. 50). Because warmth is conveyed better nonverbally (Gafner, 1977; Gazda, 1973; Tepper & Haase, 1978), it follows that more reliable conclusions may be drawn from this study in which the concept of warmth is operationalized in terms of nonverbal behaviors.
From a pedagogical standpoint, Dodge (1973) contends that in order to communicate warmth successfully to students, teachers must understand the concept in terms of behaviors. Longstreet (1972) maintains that "...if the teacher's true feelings are to be more accurately communicated, his nonverbal forms of expression should receive appropriate attention and consideration" (p. 177). Davitz's (1964) pioneering work demonstrates that affective, or emotional, meaning can be communicated accurately by nonverbal means and that "nonverbal emotional communication is a stable, measurable phenomenon" (p. 178). Thus, nonverbal communication offers a potentially fruitful approach for analyzing and perhaps understanding and concretizing heretofore elusive affective responses such as warmth.

Woolfolk and Brooks (1983) urge educational researchers to begin a systematic study of nonverbal communication and its relation to student performance and teacher effectiveness. Balzer (1969) stresses "that more detailed analyses of nonverbal teacher behaviors are needed" (p. 229). In second language learning, recognition of nonverbal communication as an influential variable in the teaching-learning process is peripheral at best (Barnett, 1983; Moskowitz, 1972). Essentially, nonverbal communication remains a curricular topic, that of teaching students the appropriate gestures of the target culture (Brault,
1963; Green, 1973, 1968; Kany, 1960; Niedzielski, 1975; Nussenbaum, 1983; Walz, 1975; Wylia, 1977). This study is an attempt to illuminate the role of nonverbal communication as it relates to the teaching-learning process in the field of second language learning. It specifically addresses the relationship of teacher nonverbal warmth to student oral performance in the second language.

**Purpose of the Study**

There is a need to investigate teacher nonverbal communication of warmth in second language oral examinations in order to determine its effects on student anxiety and performance. Specifically, the purpose of this study is to investigate the relationship of teacher nonverbal cues of warmth to student verbal responsiveness in a second language speaking examination of French at the beginning university level.

In the context of this study, the following research hypotheses have been formulated:

\[ H_1: \text{Higher frequencies of teacher nonverbal cues of warmth are significantly related to higher measures of student verbal responsiveness in second language speaking examinations of French at the beginning level.} \]
H₂: Higher frequencies of teacher nonverbal cues of warmth are significantly related to lower measures of student anxiety level in second language speaking examinations.

H₃: Lower measures of student anxiety level are significantly related to higher measures of student verbal responsiveness in second language speaking examinations.

H₄: Higher frequencies of teacher nonverbal cues of warmth in second language speaking examinations are significantly related to higher interpersonal judgment ratings by participants subsequent to second language speaking examinations.

Definition of Terms

To provide a clearer understanding of the problem to be investigated, certain terms used in this study are defined as follows:

1. **Affirmative head nod** refers to "a distinct bidirectional movement of the head on the vertical plane, or a continuous sequence of such movements" (Rosenfeld, 1966, p. 67).

2. **Anxiety level** refers to the quantitative measure of an individual's internal physiological state aroused by personally threatening or stressful conditions in the
environment (Dollard & Miller, 1950) and will consist of two commonly used verbal indices, speech rate and silence quotient (Murray, 1971).

3. **Distance** refers to the physical space separating the communicator from the addressee (Mehrabian, 1972).

4. **Eye contact** refers to the observation that occurs "when the communicator looks into the face of the addressee, whether or not it can be ascertained that the addressee is looking back" (Mehrabian, 1972, p. 192).

5. **Facial pleasantness** refers to "smiles" (Mehrabian, 1972, p. 195), or the "[e]xtension of the mouth (with or without lips parted) appearing to express pleasure or approval" (Kazdin & Klock, 1973, p. 645).

6. **Forward body lean** refers to the upper torso position in which "a plane from the communicator's shoulders to his hips is away from the vertical plane" (Mehrabian, 1972, p. 192).

7. **Interpersonal judgment ratings** refers to participants' evaluations of interpersonal attraction and warmth obtained from post-examination questionnaires.

9. **Oral proficiency** refers to the global evaluation of the student's second language oral behavior in the speaking examination in accordance with the Schulz/Bartz Oral Communication Performance Scales (Schulz & Bartz, 1975).

10. **Productivity** refers to the simple word count of the student's oral responses in French (Kasl & Mahl, 1956; Mahl, 1956; Siegman & Pope, 1972).

11. **Questionnaire** refers to a post-examination series of questions designed to assess interpersonal warmth and attraction.

12. **Silence quotient** refers to the temporal measure based on all student pauses beyond five seconds in length in which no words are uttered or added (Aronson & Weintraub, 1972, 1961; Pope & Siegman, 1972; Siegman & Pope, 1972a).

13. **Speaking examination** refers to an oral skills achievement test in beginning French with an interview format.

14. **Speech rate** refers to speech tempo, or the number of words spoken per minute (Siegman & Pope, 1972a).

15. **Touching** refers to "[b]odily contact between the communicator and the addressee" (Mehrabian, 1972, p. 191).

16. **Verbal responsiveness** refers to measures of the student's second language oral behavior in the speaking examination and is represented by the two indices of productivity and oral proficiency.

**Assumptions and Limitations**

The following assumptions are made within the context of this study:

1. It is assumed that people differ in their characteristic affective reactions to other people.

2. It is assumed that an individual's affective reaction to another person is spontaneously manifested in differential nonverbal interaction.

The following limitations must also be taken into account with regard to this study:

1. The definition of "warmth" investigated in this study will apply only to initial impressions with brief exposure to behavioral cues. A more inclusive and complete definition would require observations over time.

2. The educational context of this study will be limited to instructor-student dyads in second language speaking examinations.
3. The subjects of this study will be limited to white, native American students and instructors because nonverbal communication differs across cultures and races (Ekman, 1972; Ekman & Friesen, 1975; Erickson, 1979; LaBarre, 1964; LaFrance & Mayo, 1976).

4. The second language used in this study will be limited to French. No inferences will be made to other second languages.
CHAPTER II
REVIEW OF RELATED LITERATURE

Nonverbal Communication in Teaching

Nonverbal phenomena have been a known source of curiosity since the time of Aristotle. The scientific study of nonverbal communication, however, spans little more than a century, beginning with Darwin's (1872/1965) *The Expression of the Emotions in Man and Animals*. Since the publication of this classic work, researchers from many disciplines, including anthropology, sociology, psychology, biology, and ethology, have studied and documented the importance of nonverbal communication in the total communication process. In the field of education, however, nonverbal communication has received little attention as an influential component of the teaching-learning process prior to the 1960's. Serious investigation of nonverbal communication in the classroom has occurred only in the last twenty years and primarily during the last decade (Galloway, 1984; Harrison & Knapp, 1972; Smith, 1984, 1979).
The neglect of the nonverbal dimension in educational research is understandable in view of the fact that skills taught in the classroom encompass primarily the spoken and written word. Nowhere are these goals more apparent than in the second language classroom. Yet, teaching is more than information dissemination; it involves effective relating as well (Combs, 1959). Silberman (1970) explains that "[w]hat educators must realize...is that how they teach and how they act may be more important than what they teach" (p. 9).

Although the quality of interpersonal relationships is important to teachers and students alike (Cruickshank, 1982; Goodlad, Sirotnik, & Overman, 1979), several studies provide a discouraging commentary on the current state of teacher-student relationships. A large survey of public schools by Madsen et al. (1970) indicates that 77 percent of teacher-student interactions are negative and only 23 percent positive. A survey of college students reveals that most negative experiences involve interpersonal relations, the majority of which involve teachers (Branan, 1972). From the students' perspective, the impersonal nature of teacher-student relationships is a major problem in education (Pittman & Cloud, 1980). Studies by Poole (1983), Antes (1980), Connell et al. (1975), and Tinney, Benn, and O'Neill (1974) indicate that students fervently desire more
concerned, human contact with their teachers. Unfortunately, as the level of schooling rises, positive teacher interaction declines (Benham, Gissen, & Oakes, 1980).

This rather grim picture of teacher-student relationships underscores the unrecognized importance of nonverbal communication to the educational process. Galloway (1971) emphasizes that the language of relationship is not verbal behavior, but, rather, nonverbal behavior:

Silent cues signal changes or continuity in the quality and direction of any personal relationship. These cues, whether given by face, eyes, or gesture, can be the primary means of expressing attitudes of intimacy, aloofness, concern, or indifference (p. 311).

Victoria (1971) states that, in the psychological sense, "nonverbal behaviors permit instantaneous perception of meaning within the context of interpersonal relations and often provide the most lingering retention of the event" (p. 300). Teacher-student contacts are no less characterized by this spontaneity:

Teacher attitudes can be inferred from the way a teacher looks at a student or ignores him. Special positive cues may occur between a teacher and some of his students, implying favorable relationships, while the absence of such cues may be noted between the same teacher and other students (Galloway, 1971, p. 311).

The inherent power structure of educational institutions places the student in the position of being the most seriously victimized by the communication process (Galloway, 1975, 1966). Given that teachers may be engaging in a thousand interpersonal exchanges a day (Delamont, 1983), the
importance of the nonverbal dimension in teacher-student communication becomes unmistakably clear. Galloway (1977, 1976) concludes that the more teachers become sensitive to and knowledgeable about their nonverbal communication, the more humanely they will behave. Unfortunately, teacher education programs rarely include systematic or comprehensive consideration of nonverbal research applicable to the classroom (Kaye, 1979). Failure to alert teachers to the potential effects of their nonverbal response patterns may also have indirect, yet equally grave, consequences. Feldman (1985) warns that from the observation of the teacher's nonverbal behavior, students may learn, consciously or unconsciously, to respond to individual students or groups of students in a nonverbal fashion similar to that of the teacher. Hence, the teacher's nonverbal behavior may serve as a mechanism for social, racial, and ethnical prejudice.

Furthermore, reviews of research on nonverbal communication in the classroom indicate that teacher nonverbal cues are associated with a variety of student academic behaviors, including attentiveness, participation, retention of factual material, and test scores, as well as attitudes towards learning in general (Beebe, 1980; Rankin, 1978; Richey & Richey, 1978; Smith, 1984, 1979; Woolfolk & Brooks, 1983). Although "[w]e have barely begun to learn about the role of nonverbal communication skills in the classroom" (Hall et
al., 1977, p. 165), the present data base pronounces a clear judgment: teachers must acknowledge the consequences of their nonverbal behavior in the academic setting. This responsibility pertains to teachers in all areas of education, including second language learning. Savignon (1976) suspects that the attitudes and feelings of teachers themselves may be blocking second language achievement. She states that "we have to deal convincingly with the feelings of the classroom teacher"; only then will it be possible "to determine what obstacles still lie in the way of creating the kinds of learning environments which would be most helpful to our students" (p. 296). Because nonverbal behavior is the primary vehicle for the expression of feelings and emotions, the nonverbal behavior of second language teachers must be examined.

The main objective of this study is to investigate the effects of teacher nonverbal warmth on student oral performance in a second language at the beginning college level. An impressive amount of research reveals that nonverbal cues can serve as a subtle means to exert influence over a diverse range of behaviors in interpersonal relationships. From this research it is possible to isolate a number of clinical, interview, and educational studies that examine the effects of nonverbal cues on verbal behavior. The studies reviewed are limited to those which investigate one or more of the nonverbal cues associated with warmth, a
concept operationalized in this study to include distance, eye contact, touching, head nods, forward body lean, and facial pleasantness.

Studies of Single Nonverbal Cues

Several studies involve the manipulation of an isolated nonverbal cue to assess its effects upon various measures of verbal behavior. The results of these investigations are presented first.

From her review of the nursing literature, Aguilera (1967) concluded that the judicious use of touch in the therapeutic setting could communicate acceptance, openness, and liking to the patient. She hypothesized that the use of touch gestures would increase the verbal interaction between nurses and psychiatric patients. A study was conducted in which each of six nurses employed simple, appropriate touch gestures with three different patients and no touch gestures with three control patients during routine patient-staff interactions for a period of 15 days. Correlations indicated a trend that the use of touch resulted in increased verbal interaction. The nature of the increased verbal interaction, however, was not specified. The use of chronic, hospitalized mental patients places restrictions on generalization of the findings to an educational population characterized by relatively stable adults.
The effect of counselor touch on clients was investigated by Hubble, Noble, and Robinson (1981). Clients for this study consisted of 32 female students, 17 to 25 years old. As a requirement for an undergraduate education course, these students participated in a 45-minute counseling session in which they discussed their vocational interest in teaching. Clients received one of two conditions during the counseling session. In the touch condition, clients received a total of six touches which were administered consistently according to specific guidelines at predetermined intervals of the session; in the no-touch condition, clients were not touched. Four male counseling psychology doctoral students, ranging in age from 30 to 32 years, served as the counselors.

Each counselor saw four clients in each condition. Treatments were administered in counterbalanced order. Counselors alternated between touch conditions from one session to the next. Following the session, clients responded to measures that assessed anxiety, willingness to self-disclose, and their perceptions of the counselor along the dimensions of expertness, attractiveness, and trustworthiness. The verbal measure used in this study consisted of a global self-disclosure score, or the number of times the client referred to herself by the pronouns I or you.
Analysis of variance indicated a significant effect for the touch factor. Univariate F-tests computed for the dependent variables revealed that the counselor's use of touch significantly affected only one of the criterion measures, the client's perceptions of counselor expertise.

The nonsignificant effect of touch on clients' verbal behavior may be attributed to a procedural limitation. Three independent judges rated one-minute segments of the 32 audiotaped sessions for level of self-disclosure. The authors do not indicate the portion of the interviews from which the segments were taken. Given that touch was administered throughout the interviews, the one-minute samples are not necessarily representative of the total effects of the prescribed condition. The results pertaining to the verbal measures are, therefore, questionable. The type of verbal measure used in this study and the sampling restrictions limit generalization of the findings to an educational context.

Matarazzo et al. (1964) conducted a study designed to examine the relationship of interviewer head-nodding to interviewee speech duration. Each of 20 subjects was given a 45-minute clinical employment interview. During the second of three 15-minute periods of each interview, the interviewer nodded his head all the time the subject was speaking. To control for extraneous variables, interviewers were trained to standardize their verbal comments and to
maintain relatively neutral facial and bodily expression. Speech duration was measured in terms of seconds per verbal utterance. Analyses based on correlations of grand means revealed that head-nodding increased the mean speech duration by 48 percent. Cross-validation and control groups were used to verify the results. The investigators speculate that head-nodding may have functioned as an indicator of approval, which created a more permissive, accepting atmosphere.

Stewart and Patterson (1973) manipulated separately the immediacy cues of eye contact and body lean under far (six feet) and close (three feet) conditions of interpersonal distance and measured their effects on subjects' thematic responses to five cards of a Thematic Apperception Test (TAT) presentation. The investigators predicted that in the closer condition the interviewer immediacy cue would violate comfortable interaction norms, producing a negative effect on subject verbal responses, while in the farther distance the cue would be perceived as more positive, increasing verbal responses. The 80 subjects consisted of 40 males and 40 females whose participation in the experiment was a requirement for an introductory psychology course. A repeated measures analysis of variance indicated that direct eye contact at the farther distance increased the number of thematic responses only in the last trial of the testing session. Body lean was ineffective at both distances. Lack
of support for the prediction of body lean was interpreted as an indication of the greater role that eye contact plays in the communication process.

The fact that the interviewer exhibited each cue in conjunction with making written notes at the conclusion of each subject response suggests an alternative interpretation of the results. It is likely that subjects attributed interviewer immediacy cues to a service-task function rather than to an interpersonal affect function. That is, subjects may have associated interviewer eye contact with cognitive functioning and body lean with the physical task of writing notes about subject responses. Consequently, differential nonverbal interaction would not be attributed to interpersonal affective reactions and would exert minimal influence on verbal behavior.

In an educational context, Caproni et al. (1977) report that instructor eye contact availability can influence student rate of participation in a seminar setting. Level of eye contact availability was defined in terms of the instructor's seat position on each of the four sides of the seminar table, ranging from high (seats directly across from the instructor) to low (seats on both sides of the instructor), with seats adjacent to these areas representing the intermediate levels. Participation consisted of the number of times each of 13 students of a graduate level social psychology course initiated discourse with the instructor or
a fellow student over a period of 12 days. The design of the study, however, lacked controls for potentially influential variables including teacher verbal content and other nonverbal behaviors that can affect the communication process. Analyses based on an unweighted means of ANOVA did reveal, nonetheless, that students in high eye contact areas participated more than students in low eye contact areas. Conclusions are tentative, given the use of an indirect measure of eye contact.

Kinarthly (1976) reports that distance from the teacher, defined as student seating position, can affect communication in the classroom. The subjects included 389 community college students in eight introductory psychology courses taught by four instructors. Classrooms contained seven conventional rows of seats to which the students were randomly assigned. Student performance was defined as the number of responses emitted to the instructor. Trained observers tallied responses over a randomly selected two-week period.

Data were submitted to factorial analysis of variance. The number of responses emitted to the instructor was significantly different between the seven rows. the middle-front section of the classroom, as opposed to the rear, proved to be a "relatively high communication sending zone." Seating position was not related, however, to student final grades. The initial analysis included all
students, regardless of whether they completed the course or not. In a second analysis based on data from only those students who completed the course, the relationship between seating position and student performance did not reach significance. The author concludes from the two analyses that the effect of distance from the teacher on student communications diminishes as marginal students drop out and the group becomes more homogeneous.

This conclusion is tentative, however, given the possibility that a curvilinear relationship, which could not be investigated by the design of this study, may exist. The lack of correlation between grades and seating position may be related to the fact that in large, lecture-type classes, the criteria for student evaluation does not include student classroom participation. Course grades are based solely on test scores. In second language classes, however, grades are usually based, in part, on oral participation. In such classes it is possible that distance from the teacher may be related to student grades.

Koneya (1976) also uses seating position to define distance from the teacher in order to explore its relationship to student verbal interaction. His investigation reveals a similar "triangle of centrality" in row-and-column seating arrangements where most student verbalizations originate. Prior to the study, a total of 138 students of seven sections of interpersonal communication classes were
designated as high, low, or moderate verbalizers. For the experiment, the students were randomly assigned seating positions during seven observation periods. The instructor maintained a position at the head of the classroom. Verbal interaction rate consisted of the number of student questions, answers, or comments by seat location. The group means of high, low, and moderate verbalizers were compared via a t test. Results indicated that being seated in the center front section increased the verbal participation of moderate- and high-verbalizing students but did not affect low-verbalizing students. Being closer to the teacher appears to be related to greater participation for many students. A significant implication of these findings is that an increase in distance from the teacher may actually decrease the verbal participation of students with a predisposition toward verbal participation.

In a similar study, Levine, O'Neal, and McDonald (1980) investigated the relationship of instructor proximity, defined as seating position, to student test scores and participation. The 159 subjects of the two-phase study consisted of 95 males and 64 females in an introductory psychology class. The instructor, a male senior faculty member, did not know the experimental hypothesis. The classroom was an amphitheater-type room with 10 rows, each
containing 25 seats. Successive rows were elevated approximately one foot. The instructor stood on a raised platform approximately eight feet from the first row.

During the first week of classes students selected their seats, which they retained over a period of four weeks. The first phase concluded with the administration of the first examination. For the second phase, students were randomly assigned seats for another four-week period. The second examination marked the conclusion of the experiment.

Seating positions were divided into six areas based on two levels of proximity (front and rear) and three levels of centrality (left side, center, and right side). The two levels of proximity were obtained by dividing the class between the fifth and sixth rows; the three levels of centrality were obtained by dividing the class along the two aisles.

Each examination consisted of 50 multiple-choice items. Test scores reflect the number of items answered correctly. Participation, defined as any single occurrence of voluntary initiation of discourse with the instructor, was scored by two observers.

An unweighted means ANOVA indicated that when students selected their seats, those in front scored higher than those in the rear. Centrality was not reliably related to test scores. There was no effect on participation. In the assigned seating condition, the proximity effect on test
scores was not retained. Proximity did, however, affect participation: students in front participated more than those in the rear. Scores on the two examinations were significantly related, but participation across both conditions was not. No relationship between test scores and participation was found. The authors conclude that the relationship between seating position and grades is mediated by self-selection processes, whereas participation is influenced by seating position per se.

Three possibly confounding factors make these results tentative. First, no controls for effects relating to passage of time are evident. Perhaps familiarity with the instructor, classroom procedures and discussions, and subject matter positively influenced the participation of the student during the second four-week period. Secondly, the authors give no information about the two observers. It is not known whether the observers scored participation from a position in the classroom, from a concealed position, or from audiotapes. If seated in the classroom, the presence of the observers may have had an inhibiting effect on participation during the first four-week period. Thirdly, the very large class size and the introductory course level limit generalization of the results to smaller classes and more advanced students.
Rogers, Rearden, and Hellner (1981) report, however, that interpersonal distance does not affect verbal productivity. In their study, two female seniors majoring in psychology conducted 15-minute interviews with 18 male and 18 female undergraduates enrolled in upper division psychology courses. Three levels of interviewer interpersonal distance (2 feet, 5 feet, and 9 feet) were manipulated in the study. Interviewees were asked to discuss academic, social, and personal topics for five minutes each. At the end of each of the three topic segments, the interviewees reported a fear reading. Subjects were instructed to think of fearfulness as mercury in a thermometer that could rise to a maximum value of 10. At the request of the interviewer, the interviewee simply reported a number that corresponded to his or her state of uneasiness at the time. Interviewee communication was measured in terms of verbal productivity, or the average duration of an utterance, and was scored from audiotapes.

Analysis of variance for repeated measures revealed a significant U-shaped function of anxiety over the three levels of interpersonal distance, suggesting that intermediate distance from an interviewer fosters minimal anxiety. The hypothesized inverted U-shaped function for verbal productivity across the three levels of distance was not significant.
The expected negative relationship between anxiety and verbal productivity was found. Scheffé post hoc comparisons of anxiety indicated that students were most anxious while discussing personal topics, less anxious about social topics, and least anxious about academic topics. Students talked significantly more about academic topics than social and personal topics. Anxiety was also significantly related to the sequence of topics discussed in the interview. A Scheffé post hoc comparison of the three sequences of topics incorporated into the study indicated that interviewees who discussed personal matters last were less anxious and talked more as the interview progressed.

The nonsignificant relationship between interpersonal distance and verbal productivity is questionable. It is possible that topic sequence may have affected the productivity measure independently of the interpersonal distance variable. The three sequences of topics are not listed; it is only known that in one sequence personal matters were discussed last. Given that anxiety was greatest in discussions of personal topics, it is not unlikely that, in sequences where personal matters were not discussed last, the anxiety carried over into the following 5-minute segment or segments and, consequently, depressed the verbal productivity. Hence, the effect of topic anxiety upon verbal productivity may have superceded any affect attributed to
interpersonal distance. In addition, the psychological orientation of the interview questions restricts generalization of the results to an educational setting.

In the studies cited above, verbal behavior is measured as a dependent variable of a single nonverbal cue. Given the complexity of the communication process, it is presumptuous to limit investigations to one or two nonverbal components associated with warmth. To do so is to ignore the underlying processes common across different behaviors and may be misleading, resulting in false conclusions and interpretations. Undoubtedly, the significance of any one nonverbal cue depends upon the behavioral context provided by other cues. Researchers of nonverbal communication strongly recommend the use of multiple cues in the study of nonverbal behavior and its role in the communication process (Bakken, 1978; Burgoon, Buller, Hale & DeTurck, 1984; Patterson, 1983; Smith, 1984). The studies in the following section incorporate multiple nonverbal cues in the assessment of the impact of nonverbal communication on verbal behavior.

Studies of Multiple Nonverbal Cues

In a now classic study, Reece and Whitman (1962) investigated the effects of interviewer warmth upon verbal conditioning in a free association task. Interviewer warmth consisted of eye contact, smiles, and forward body lean.
These expressive movements were maintained continuously as 69 college students uttered whatever words came to mind. The interviewer's verbal "mm-hmm" was used to reinforce the category of plural nouns. An analysis of variance disclosed that the interaction of nonverbal warmth with the verbal reinforcement produced the greatest amount of verbalization when all words were considered. Verbal reinforcement alone did not significantly influence the total number of words spoken. On the other hand, the nonverbal cues of eye contact, smiling, and forward body lean did prove to have a significant effect. This study, however, deals with verbal conditioning rather than verbal communication within the interview. The arbitrary nature of the verbal task in the study may not be associated with more natural verbal exchanges characteristic of most interviews. Hence, results may not be readily generalized to other social contexts.

In a similar study, Banks (1974) investigated the effects of the nonverbal cues of eye contact, head nods, and forward lean on selected verbal speech production. Forty female subjects were instructed to make up sentences from a stimulus card which contained six pronouns and a past tense verb. The specific pronouns I and we were reinforced by the nonverbal cues of the interviewer. Although the repeated measures analysis of covariance was not supportive of differential reinforcement potential between the cues, the results suggest that eye contact, head nods, and forward
body lean in tandem increased the frequency of the target pronouns. As in the previous study, generalization to broader social contexts such as the classroom remains tentative, given the use of the verbal conditioning paradigm in this study.

Pope and Siegman (1968) examined the effects of interviewer warmth on interviewee verbal behavior. Thirty-two female junior and senior nursing students, ranging in age from 20 to 22, served as interviewees. All subjects were volunteers and received compensation for their participation in the study. Two female clinical psychology interns in their mid-twenties conducted the interviews. In counterbalanced order each subject had one warm interview and one cold interview. Prior to the warm interview, subjects were informed that they would be interviewed by a "warm and accepting" interviewer; before the cold interview, subjects were told to expect a "cold and distant" interviewer. The warm interviewer was instructed to smile, nod her head, and speak warmly. The cold interviewer was instructed not to smile or nod her head and to keep her voice drab and cold. In both conditions, the interviewers were seated behind a desk and did not gesture with arms or hands. To control the duration variable of the interviewer's remarks, all remarks were restricted to eight or nine words. Following the
interview, each subject completed a postinterview rating scale recording her attitudes toward and perceptions of the interviewer.

Verbal behavior was scored on several indices including productivity and fluency. The productivity score consisted of a simple word count of the subject's verbal responses. Fluency was calculated by summing all forms of speech disturbance such as sentence corrections, repetitions, stutters, and incoherent sounds, and dividing this sum by the total number of words uttered. A temporal fluency measure, the silence quotient index, represented the duration in seconds of all pauses beyond two seconds divided by the total duration of the subject's response. An analysis of variance for repeated measures on the same subjects revealed that warm interviews are associated with greater productivity and verbal fluency than cold interviews. The prediction that the productivity index would be negatively correlated with the silence quotient index was not supported. A significantly positive correlation, however, was found between the silence quotient index and the speech disturbance ratio. The investigators conclude that interviewer warmth appears to be a basic condition for a higher level of interviewee verbalization.

The postinterview ratings by the interviewees confirm the effectiveness of the warm-cold manipulation. Responses to semantic-differential bipolar scales and to an adaptation
of the Libo Picture Impressions Test indicate that the interviewer in the warm condition was perceived as significantly warmer and more likeable than the interviewer in the cold condition. Subjects' interpersonal perceptions of the interviewers cannot be attributed, however, to nonverbal cues exclusively because of the interaction of interviewer verbal and nonverbal behavior. The authors do not explain what instructions were given to elicit the specified verbal behavior of either the warm interviewer who "spoke warmly" or the cold interviewer who "kept her voice drab and cold."

It must be noted that research (Allen & Guy, 1977; Beattie, 1979, 1978; Ellsworth & Ross, 1975; Kendon, 1967; Wiemann & Knapp, 1975) preceding and following the publication of this study establishes that gaze behavior functions as a regulator of conversation. During dyadic conversation, individuals vary in their characteristic level of eye contact, which ranges from 28 to 70 percent of the time (Kendon, 1967). For stressful interviews, Nielson (1962) reports variations in eye contact from 8 to 73 percent. The Pope and Siegman (1967) study does not include or control for this potentially influential variable. Hence, the reported verbal indices cannot be attributed solely to the manipulated variables of the interview sessions. The psychological orientation of the interview questions and the exclusive use of female subjects place restrictions on the generalization of the results to the classroom setting.
An educational context is the focus of the research by Keith, Tornatsky, and Pettigrew (1974). They conducted a descriptive study of the verbal and nonverbal behaviors of 43 student teachers in six elementary schools. Cluster analysis indicates that smiling, verbally probing teachers are associated with "enthusiastic verbal responsiveness" by students. Verbal responsiveness consisted, essentially, of answering questions. Correlations further indicated that smiles exerted stronger effects on student verbal behavior than vocal cues of approval, although the vocal cues were emitted four times as often as smiles. Other teacher nonverbal behaviors such as eye contact and distance from students were associated with an instructional function rather than an affective function.

The data collection procedures of this study, however, limit generalization of the results to other educational contexts. Videotapes of classroom interaction were used for the analyses and included only those students who were within viewing range of the camera focused on the teacher. Research indicates that higher participating students occupy the middle front seating section of the classroom (Adams, 1969; Adams and Biddle, 1970; Koneya, 1976; Sommer, 1969, 1967). The verbal participation may not be, therefore, representative of all students who were in the classroom. The use of elementary school students as subjects is also a limitation. Research indicates that younger children may
decode and react differently to nonverbal cues in comparison to older children and adults (Bugental, Kaswan & Love, 1970; DePaulo & Rosenthal, 1978; Mayo & LaFrance, 1978; Rosenthal, Hall, DiMatteo, Rogers & Archer, 1979). Caution must be exercised in generalizing the results of this study to an adult population.

Working within a university class of nine students, Sarbin and Allen (1968) report that professors can increase the verbal participation of previously low participating students by using verbal and nonverbal reinforcement during and after student speech. During 8 two-hour seminar sessions, the two authors demonstrated one or a combination of behaviors including eye contact, forward body lean, head nodding, and close attention to two male subjects previously designated as low verbalizers when they participated. Verbal participation was defined as the number of spoken comments, irrespective of length. Mean verbalizations for the eight sessions were converted to percentage frequencies. Investigators attributed the substantial increase in low participants' verbalizations to the use of the nonverbal cues.

Four possibly confounding factors, however, prohibit unquestioned acceptance of the conclusions drawn by the investigators. The small sample may not be representative of student populations in general. Secondly, the nonverbal behaviors cited as reinforcers were not validated as to
their occurrence or nonoccurrence during the seminar sessions. The possibility exists that the professors became so involved in the ongoing discussion that consistent use of the cues was not maintained. "Close attention" was not specifically defined in terms of behaviors and may not have been demonstrated in a similar fashion by the participant professors. Thirdly, the interaction of professor verbal behavior with nonverbal cues precludes attributing the results to one or the other dimension exclusively. A fourth confounding variable may derive from the lack of control over the verbal and nonverbal communications of the other students who, in all probability, served as sources of reinforcement.

The importance of examiner nonverbal behavior in a testing situation is suggested in at least one study. Wickes (1956) tested the hypothesis that examiner smiles, head nods, and forward body lean would increase the number of verbal responses to a set of achromatic inkblots. Two examiners were assigned six different male psychology students. Examiner verbal and nonverbal behavior was strictly controlled during the first 15 cards of the 30-card set. During the last 15 cards the examiner modified only his nonverbal behavior, alternating head nodding, smiling, and leaning forward after successive responses. A correlated means t test based on 11 subjects' responses indicated a significant difference between the number of
subject responses for the first 15 cards and the last 15 cards. It is important to note that subjects in this study also completed a written questionnaire designed to elicit attitudes toward the examiner. Subjects' positive impressions strongly suggest that the nonverbal cues were perceived as indicators of personal approval and acceptance.

The importance and effects of positive impressions on verbal behavior are specifically addressed in the Keenan and Wedderburn (1975) study. In an experimental situation, four male and four female employment interviewers systematically varied their nonverbal behavior while holding the verbal content of the interview constant. Candidates consisted of 22 male and 2 female engineering or business students. The prediction was that candidates would form favorable impressions of interviewers who frequently used the nonverbal cues of approval including smiles, positive head nods, and eye contact. Nonverbal approval was expected, in turn, to increase candidates' verbal output, which was measured in terms of time spent talking. As predicted, nonverbally approving interviewers were rated more favorably. Although a Wilcoxon sign test indicated that nonverbal approval failed to produce a statistically significant increase in verbal output, the trend was in the predicted direction. It must be pointed out, however, that demonstration rate of the
nonverbal cues of approval was not standardized across interviewers. This inconsistency may account for the nonsignificant verbal measure.

Keenan (1976) devised a second study to test further his hypothesis that an interviewer's nonverbal style can be a critical determinant of the candidate's performance. Twenty-four graduate students of business served as judges. Blinded to the purposes and conditions of the original experiment, they were asked to rate the global performance of the candidates from videotapes. The interviewer's half of the screen was covered to prevent interference of interviewer nonverbal cues with the judgments. Candidates who received the nonverbal approval cues of smiles, positive head nods, and eye contact were evaluated as more relaxed, comfortable, and less ill at ease. Interestingly, the increase in verbal output of the original study did not reach statistical significance, but the judges of this study apparently perceived the difference and rated the candidates as more talkative. There was a tendency to rate the candidates as more articulate, better able to express themselves, and less hesitant in answering questions.

These third party evaluations suggest that the rating of a candidate's interview performance is dependent upon the interviewer's nonverbal style. Unfortunately, evaluations of candidates' performance by the interviewers themselves were not collected. The investigator states that it is
reasonable to assume that interviewers' ratings would not differ markedly from neutral observers. The implications for second language oral testing situations are significant. An interview format is frequently used for the global evaluation of student oral achievement and performance in the second language. The possibility exists that the language teacher's nonverbal behavior may influence the student's oral performance in ways that constitute, in part, the student's academic evaluation.

Kleinfeld's (1973) study of Eskimo and white students offers substantial evidence that teacher nonverbal warmth may be significantly related to student verbalness. Subjects consisted of one white female instructor, 10 male and 10 female Eskimo students, and 10 male and 10 female white students. Nonverbal warmth was operationalized as close distance, smiling, and touch. Student verbalness was determined by the two measures of question-answering (the number of words per student reply to questions about a class) and question-asking (the number of questions initiated by the student about colleges) obtained in a school guidance and counseling session. A repeated measures analysis of variance indicated that teacher nonverbal warmth was significantly related to increases in question-answering for both Eskimo and white students and to increases in question-asking for Eskimo students only.
A potentially confounding variable in this study is subject selection. Eskimo subjects were village residents boarding at the school, whereas the white subjects were urban residents. Demographic background differences may have indirectly accounted for the lower question-asking verbal measure of white students. It is likely that the city-dwelling students may have experienced more exposure to information on colleges than the rural Eskimo students and, hence, asked fewer questions.

Native language background differences are also unspecified. It is not clear whether the Eskimo students were responding in their native language or a second language. In addition, because this study is designed specifically as a cross-cultural experiment, caution must be taken in generalizing the results to other cultures.

Conclusion

The studies cited in this chapter demonstrate that nonverbal behavior can be an influential variable in the verbal communication process. Studies outside the educational context suggest that communicator nonverbal behaviors associated with approval, acceptance, and liking positively affect the quantity and quality of the addressee's speech. Limited research within the classroom setting supports this conclusion, implying that teacher nonverbal communication of warmth may be a significant determinant of student verbal
participation in class. Of these educational studies, however, none specifically pertains to the second language classroom situation. Because oral communication is both the medium and the curricular goal of the second language classroom, there is a critical need to investigate the relationship between teacher nonverbal warmth and student oral performance in the second language.
CHAPTER III
DESIGN AND PROCEDURES

Design

This investigation was a correlational study. Each of five instructors administered one second language speaking examination of French to each of five students. The 25 examinations were scheduled in counterbalanced order (Moos & Clemes, 1967). Numerous student and instructor scheduling conflicts occurred, however, and precluded total adherence to the prescribed order of the 25 examinations. The oral examinations were spaced over the last two weeks of regular classes of The Ohio State University's 1984 Spring Quarter, the time frame corresponding to the usual period of oral testing observed in the language classes.

The study includes one independent variable:

1. Measures of instructor nonverbal cues of warmth

and three dependent variables:

1. Student verbal responsiveness in the second language
2. Student anxiety level during the second language speaking examination.
3. Interpersonal judgment ratings by participants subsequent to second language speaking examinations.

Given the exploratory nature of the study, no attempts were made to manipulate instructor nonverbal behaviors.

This design reflects an "external variable" approach to the research of nonverbal communication in teacher-student interactions. Duncan (1969) describes this approach as an attempt to relate the rate of occurrence of specified nonverbal behaviors to a variety of external variables such as characteristics of the participants or the emotions and attitudes of communicators. Smith (1979) and Woolfolk (1985) maintain that this research approach can make a significant contribution to understanding the role of nonverbal communication in the teaching-learning exchange. The external variable approach most closely approximates the process-product research paradigm that educational researchers recommend for investigating relationships between teacher and student classroom behaviors.

The design also focused on the teacher-student dyad. This unit of study is particularly well suited to the investigation of what and how teachers and students communicate because the teacher is freed from balancing multiple classroom responsibilities (Shavelson & Stern, 1981; Watson, 1972). Furthermore, the results of dyadic studies may be more reliable than results of group studies. Educational
studies based on groups rather than individuals tend to mask rather than reveal process-product relationships (Good, Biddle & Brophy, 1975; Long, 1983).

Finally, the second language oral testing situation was used primarily for two reasons. First, it provides a naturally occurring dyadic teacher-student relationship within the context of the second language classroom. Secondly, because speaking a second language can be stress-ful for many students, it is possible that affective reactions may be amplified in second language testing situations (Shohamy, 1982). McCoy's (1979) survey indicates that students consider oral testing as a major cause of anxiety. The oral testing situation may be, therefore, a sensitive means of measuring the relationship of teacher nonverbal warmth to student anxiety and oral performance.

Population and Sample

The student population consisted of students enrolled in French 101, the beginning course in the elementary sequence of language courses at The Ohio State University during Spring Quarter, 1984. The assumption was that the students in this beginning course possessed reduced verbal skills in French and, therefore, relied heavily on nonverbal cues for clarification of teacher communications (Bernstein, 1961; Davitz, 1966; Schwartz, 1977). Study participants were drawn on a volunteer basis from one section selected at
random from the 12 scheduled 101 sections in order to maximize uniform exposure of students to classroom instructional materials, teaching procedures, and academic requirements prior to the study. The large time element required for data analysis necessitated limiting the sample to a total of six students (Duncan, 1974; Duncan and Niederehe, 1974; Kendon, 1967; Moos and Clemes, 1967; Van der Veen, 1965). Only white native speakers of English qualified in order to minimize possible differences in nonverbal behavior across and within cultures in the data collection (Ekman, 1972; Ekman & Friesen, 1975; Erickson, 1979; LaBarre, 1964; LaFrance & Mayo, 1976). In addition, no handicapped students were considered for subject selection since research suggests that persons with physical disabilities are treated with less immediate behaviors (Kleck, 1968; Kleck et al., 1968).

During the seventh week of the quarter, the researcher visited the randomly selected French 101 section to obtain the initial pool of volunteers. To mask the purpose of the study, the researcher explained that the Department of Romance Languages and Literatures desired to examine its current oral testing format and procedures by videotaping several examination sessions. To blind students to selection criteria, all volunteers completed a Classroom Registration Form, a personal data sheet similar to the one completed by all beginning French language students during
the first week of the quarter. Only six volunteers were obtained, one of whom did not meet selection criteria. The sample was reduced, therefore, to five students and was comprised of four females and one male. The researcher notified the five qualifying students and distributed to them written copies of the videotaping schedule. Participants received no compensation other than the knowledge of their oral examination results made available to them upon request.

Participant instructors were randomly selected from a pool of volunteer Teaching Associates of French employed in the Department of Romance Languages and Literatures at The Ohio State University during Spring Quarter, 1984. Volunteers were blinded to the purpose of the study in the same manner explained earlier. To control the confounding effects of differences in nonverbal behavior across and within cultures (Ekman, 1972; Ekman & Friesen, 1975; Erickson, 1979; LaBarre, 1964; LaFrance & Mayo, 1976) and to minimize differential teacher communication to same and different race students (Feldman, 1977; Feldman & Donohoe, 1978), only white native speakers of English qualified to participate in the study. This information was obtained from the Instructor Information Form, a personal and professional data sheet completed by the Teaching Associates. For reasons stated earlier, the sample was restricted to a total of six instructors. Participant
instructors were unfamiliar with the participant students and their second language achievement prior to the study; hence, the confounding effects of a priori attitudes were controlled as well as the teacher-expectancy effect (Brophy & Good, 1974; Dusek, 1975; Natriello & Dornbusch, 1983; Rosenshine, 1976; Rosenthal & Jacobson, 1968; Smith & Lugenburg, 1976). Six qualifying volunteers were obtained, one of whom could not participate because of scheduling conflicts. The sample was reduced, therefore, to five instructors and was comprised of three males and two females. The researcher notified the five instructors and distributed to them written copies of the videotaping schedule. Participant instructors received no compensation.

General Procedures

Prior to the study, the researcher explained the testing format and videotaping procedures to the participants of the study. Students and instructors were briefed separately to avoid the confounding effects of a priori attitudes. All participants were instructed to refrain from discussing the examinations and procedures with anyone prior to and for the duration of all scheduled examinations. Debriefing did not occur until all examinations had been completed.
Participant students were informed that the oral examination format was similar to the speaking test format used by the university language department. Preparation for the end-of-quarter speaking test in the university course was sufficient for the speaking examinations of the study; hence, no special preparation was required. To minimize any confounding effects attributed to testing format, the researcher administered to each student a sample speaking examination similar in content, form, and order of tasks to the speaking examinations of the study.

The researcher assigned to each instructor one test form selected at random from the five parallel speaking examination test forms. Each instructor received a copy of the test form that s/he was to administer during the study. Instructors retained the test copies for review until the study began. Each instructor received a copy of the Schulz/Bartz Oral Communication Performance Scales definitions. Instructors practiced scoring student performance by the scales from cassette recorded speaking examinations. An Alpha coefficient of inter-rater reliability across scales was established at .9514. The estimate of reliability of any single rater was .8308. Instructors retained the copies of the scales definitions for review until the study began.
All 25 speaking examinations were videotaped in the Teacher Experimental Recording Studio in Room 021 of Ramseyer Hall at The Ohio State University. Data collection required one stationary studio camera for T120 colorfilm video cassettes, two lavelier microphones, one rectangular table with alternating black and white six-inch tape strips attached to the upper fore edge, and two chairs. To avoid predetermining the proxemic behavior of the participants, the two chairs were placed indiscriminately in the area. A pencil and a folder containing the oral examination materials were placed on one of the chairs. The camera position produced a full frontal image from head to waist of both seated participants. For each scheduled oral examination, participants were introduced by name to each other. They were directed to stand in the area of the table and chairs and to put on the lavelier microphones. They were told to remain standing until they received a cue to seat themselves at the table to begin the oral examination. Instructor verbal communication to the student during the examination was held constant by printed instructions at the beginning of each section of the examination, but the instructor was allowed to deviate slightly in order to maintain the flow of the speaking examination. As soon as the examination was completed, the researcher took the student and the instructor to separate rooms nearby. The student completed the Student Questionnaire. The instructor first evaluated the
student's oral performance according to the Schulz/Bartz Oral Communication Performance Scales on the Speaking Evaluation Sheet and, secondly, completed the Instructor Questionnaire; this order served to maximize the objectivity of the instructor's evaluation of the student's oral performance. The researcher collected all forms immediately upon completion. The same procedures were followed for each speaking examination session. The researcher distributed the appropriate tests, evaluation forms, and questionnaires at the studio for each of the scheduled 25 speaking examinations.

Scoring of Nonverbal Cues

There were six nonverbal cues of warmth that were measured in the study. They include interpersonal distance, eye contact, forward body lean, head nods, smiles, and touching.

The physical distance between the instructor and the student was scored by a modified version of a technique used by Mehrabian (1968a) and Mehrabian and Friar (1969). The distance between the middle axis of the instructor's upper torso and the middle axis of the student's upper torso was measured in terms of alternating black and white six-inch tape strips attached to the upper fore edge of the table. The distance was measured to the nearest one-half tape strip, each of which was scored as one unit. In order to
keep participants blind to the true nature of the study, this index was calculated from still photographs taken from the videotape portion in which the participants initially seated themselves and before the speaking examination began. The researcher calculated this index. Another scorer measured the distance in each photograph. Percentage agreement between the two scorers was 100 percent.

The frequency counts of the remaining nonverbal cues of eye contact, forward body lean, head nods, smiles, and touching for the instructor were made from the videotapes without audio feedback in order to partially control for possible distraction contributed by verbal cues. Tallies of the nonverbal cues were made according to a modified version of a technique used by Rosenfeld (1966). The observer wrote the lower case letter of e, l, n, s, or t, corresponding to eye contact, forward body lean, head nod, smile, and touching, respectively, down a strip of adding machine tape each time the designated behavior occurred, regardless of the duration of its expression. This method of recording allowed the observer to maintain continuous visual contact with the subject throughout the interaction. Given the exploratory nature of the study and the relatively short speaking examination period of approximately 10 minutes, the frequencies were based on the teacher-student interaction in its entirety, from the initial seating at the table to the instructor's indication that the speaking examination was
completed. The frequency counts for the categories of eye contact, smiles, and touch were tallied separately, whereas the two categories of head nods and forward body lean were tallied simultaneously. Separate tallies were necessary in order to reduce the complexity of the task and to increase the reliability of the counts.

The researcher and one other female observer tallied the nonverbal cues for 10 randomly selected subjects. Research reveals that females are more sensitive to nonverbal cues than males (Hall, 1978; Rosenthal et al., 1979). Women also surpass men in tasks that demand sustained visual attention such as in the viewing of numerous videotape segments (Davis & Tune, 1969). Percentage agreement between the two scorers was 90 percent for eye contact, 89 percent for forward body lean, 90 percent for head nods, 92 percent for smiles, and 100 percent for touch. The researcher completed all frequency counts of the study. The researcher recounted the frequencies of the nonverbal categories for 10 randomly selected subjects in order to determine the reliability of the frequency counts in the study proper. The variability between the first and second count was no greater than three percent for any one category, which was considered a reasonable range of error. The nonverbal behavior of touch did not occur in any of the 25 teacher-student interactions and was, therefore, dropped from the study.
Scoring of Student Verbal Responsiveness

Student verbal responsiveness in French in each of the 25 speaking examinations was measured according to two indices: (a) productivity and (b) oral proficiency. Productivity is a measure of student verbal quantity; a simple word count of the individual's utterances in French including the number of completed words, the number of incomplete words, the number of sounds caused by stuttering and incoherent sounds, and the number of "ahs" and its less frequent variants "eh," "uh," "uhm," and "er" per response (Kasl & Mahl, 1965; Mahl, 1961, 1959, 1956; Siegman & Pope, 1972). English words within responses were not counted. In this study, the productivity measure was based on the total number of student responses in French per speaking examination. The researcher calculated all productivity measures from verbatim written transcripts of the audio portion of the speaking examinations which had been previously verified by an independent researcher. Because productivity was scored by merely counting the words in each typescript, a reliability check was considered unnecessary.

Oral proficiency refers to the global measure of the student's oral performance in French during the speaking examination and was derived from the Schulz/Bartz Oral Communication Performance Scales. The student receives a score ranging from 4 to 24. Three university professors of
French with similar backgrounds in foreign language education served as independent judges to evaluate student oral performance in each of the 25 speaking examinations (Conrad, 1933, 1932, Rugg, 1922, 1921). Prior to the study, judges practiced scoring sample speaking examinations similar to those of the study. An Alpha coefficient of inter-rater reliability across scales was established at .9154, with an estimate of reliability for any single judge being .8162.

Judges made their evaluations from audio cassette tapes of the speaking examination. The 25 audio segments were randomly ordered; each segment was identified on the tape sequentially by number and by the letter that corresponded to the parallel test form used in the oral examination. Each judge received a copy of each of the five parallel test forms used in the study, 25 Scoring Notes sheets, and 25 Speaking Evaluation Sheets. A sample of a Scoring Notes sheet and a Speaking Evaluation Sheet are included in Appendix A. Each judge was instructed to evaluate no more than five oral examinations within a given time period in order to maximize the validity of the ratings. Each judge evaluated all 25 oral examinations. The researcher collected the completed evaluations.

An Alpha coefficient of inter-rater reliability across scales for the study proper was .9086. The estimate of reliability for any single judge was .8199. The median
score of the three judges for each of the 25 students served as the oral proficiency score used in the analyses of the study.

Scoring of Student Anxiety Level

In the context of this study, anxiety level refers to the quantitative measure of the student's internal physiological state aroused by personally threatening or stressful conditions in the environment (Dollard & Miller, 1950). The student anxiety level measure consisted of two commonly used verbal indices, silence quotient and speech rate (Murray, 1971).

Silence quotient is the temporal measure of all student pauses in which no words are uttered or added. The index is based upon periods of silence beyond five seconds in length. The score is derived from the sum of all silences, calculated to a 100th of a second, minus the first five seconds of each silence period, and divided by the total response time. The final score is calculated to the nearest 1000th of a minute (Aronson & Weintraub, 1972, 1961; Pope & Siegman, 1972; Siegman & Pope, 1972a). In studies of hesitation phenomena, pauses of two seconds or more are perceived as interruptions in the normal flow of speech (Siegman & Pope, 1972a). These studies, however, pertain to native language situations. Because research indicates that silence may reflect cognitive processing (Bruneau, 1973;
Cook & Lalljee, 1970; Goldman-Eisler, 1968; Lounsbury, 1954) and in view of the fact that the student in this study was performing the complex decision-making process of responding in a second language, the five-second lower limit was used in the silence index. The silence index was based upon the total number of student responses per examination.

Speech rate is an index of the individual's verbal tempo. It is calculated by dividing the total number of words in a response by the total response time (Siegman & Pope, 1972a). In this study, a cumulative index was based on the total number of student responses per examination.

Prior to the study, the researcher and another scorer calculated the two indices for three randomly selected speaking examinations. The scorers worked from written verbatim transcripts while simultaneously listening to an audio cassette of the examination. The relevant time readings were made with a Heuer microsplit stopwatch (Siegman & Pope, 1972). Interscorer reliability was 1.000 for silence quotient and .9994 for speech rate. Given these high reliabilities, the researcher calculated both indices for the 25 examinations of the study. The researcher rescored three randomly selected speaking examinations in order to determine the reliability of the time readings for the study proper. Reliability correlations (r) were 1.0000 for silence quotient and .9995 for speech rate.
Instrumentation

Speaking Examination

The Speaking Examination was a French oral proficiency test with an interview format. The test was constructed according to existing guidelines and procedures outlined by the French Language Department at The Ohio State University. Approximately 10 to 15 minutes in length, the examination was based strictly on the first nine chapters of Invitation (Jarvis, Bonin, Corbin & Birckbichler, 1979), the text used in all French 101 courses at the university. French 101 speaking tests and student study sheets on file in the department served as additional sources for individual test items. The five parallel examination forms, labeled S, W, X, Y, and Z, were reviewed and approved by the university supervisor of French instruction. (See Appendix B.)

The test consisted of six sections in the following order: pronunciation, vocabulary, answering questions, asking questions, situation/decision, and picture description. The pronunciation section was included because it is customarily used in departmental tests. For this study, however, the inclusion of this section served to acclimate the teacher and the student to the testing situation and was not used in the calculation of the student productivity measures.
Schulz/Bartz Oral Communication Performance Scales

A global measure of the student's oral proficiency in French was derived from the Schulz/Bartz Oral Communication Performance Scales (Linder, 1977; Schulz & Bartz, 1975). The definitions of these scales appear in Appendix C. Performance is rated on a six-point scale on each of the following four elements of communication: fluency, comprehensibility, amount of communication, and quality of communication. The score ranges from 4 to 24.

The selection of these scales to measure the student's global language performance was based upon several conceptual and practical considerations. Primarily, the scales have six proficiency categories that make appropriate distinctions among beginning second language students who have only limited oral proficiency. Although the FSI examination (Foreign Service Institute) is the best established test of oral proficiency, it is not designed to distinguish the varying ranges of ability among beginning language students, even with a modification of the rating scales. Secondly, a number of statistical procedures used to determine scoring validity reveal high correlations between the scales and high inter-rater reliability without the necessity of special training for raters (Bartz, 1974; Schulz, 1974). Finally, these scales can be used with texts
and materials of any second language course; hence, these scales could be used specifically in conjunction with the testing materials of this study.

**Student and Instructor Questionnaires**

The student questionnaire was composed of a series of questions and rating scales designed primarily to assess the student's personal judgments about the instructor in terms of interpersonal attraction and warmth. Interpersonal attraction was measured because the attraction construct closely parallels the immediacy, or warmth, construct (Brown, 1965). Student attraction for the instructor was assessed by a modified version of the Byrne (1969) attraction index previously used in nonverbal research (Woolfolk, Woolfolk, & Garlinsky, 1977). The index consisted of two 7-point scales. The first scale ranged from "I like this instructor very much" to "I dislike this instructor very much." The second scale ranged from "I would very much dislike having this instructor as my classroom teacher for French" to "I would very much enjoy having this instructor as my classroom teacher for French." The two items were scored from 1 to 7 and then summed to constitute the measure of attraction, ranging from 2 (most negative) to 14 (most positive).
The student's perception of instructor warmth was measured by five semantic-differential bipolar scales used in the assessment of interpersonal warmth in interview situations (Nunnally, 1976; Pope & Siegman, 1972, 1968; Reece, 1964; Siegman, 1976). The bipolar scales included accepting-rejecting, friendly-unfriendly, interested-uninterested, pleasant-unpleasant, and responsive-unresponsive. For a random subset of three of the five bipolar scales, the positive pole was placed on the left and the negative pole placed on the right. For the remaining two bipolar scales, the order was reversed. The directionality of the attributes was varied to insure rater independence of judgment (Osgood, Suci, & Tannenbaum, 1957). Each scale had seven options, with 7 representing the positive end of the continuum and 1 representing the negative end. The sum of the ratings across the five scales represented the rater's score of interpersonal warmth, ranging from 5 to 35.

Filler questions pertaining to task-related activities and conditions of the testing atmosphere were incorporated in order to minimize suspicions about the true nature of the study. The instructor questionnaire was similar in format to the student questionnaire and assessed the same personal judgments in terms of the instructor's reactions to the student. Three Ph.D. candidates in Foreign Language Education at The Ohio State University reviewed the
questionnaires. For clarity of content and format, ambiguous questions and phraseology were revised. (See Appendices D and E.)

Classroom Registration Form

This personal data sheet was completed by all volunteer students prior to the study. Its primary function was to determine student race, nationality, and native language. This information was used as subject selection criteria. (See Appendix F.)

Instructor Information Form

This personal data and professional experience sheet was completed by all volunteer Teaching Associates of French prior to the study. Its primary function was to determine instructor race, nationality, and native language. This information was used as subject selection criteria. (See Appendix G.)

Pilot Studies.

During the initial planning stages of the study, it was decided that a pilot study was necessary to determine whether or not the categories of the nonverbal behaviors of warmth could be scored consistently and reliably from a videotape. During Spring Quarter, 1983, at The Ohio State University two Teaching Associates of French administered an
oral examination to each of three French 101 students. Analyses of the six videotaped segments revealed that a split-screen approach made the eye contact count virtually impossible; it could not be determined if the subject was looking at the other person or just in the direction of the other person. A full frontal image from head to foot of both seated participants had a depth of field that, likewise, precluded accurate measurement of the eye contact variable. A full frontal image from head to waist of both seated participants, however, had a depth of field permitting reliable scoring of all categories of the nonverbal behaviors of warmth. This position, therefore, was prescribed for the data collection of the study proper.

A second pilot study was conducted during Fall Quarter, 1983, at The Ohio State University in order to verify the videotaping procedures for the oral examinations and to ascertain subjects' perceptions of the format, instructions, and purpose of the questionnaires. The researcher recruited two Teaching Associates of French to administer an oral examination to each of two students enrolled in French 101. The procedures used were identical to those outlined under the heading General Procedures.

Following one of the examinations, the instructor requested a copy of the Schulz/Bartz scales definitions when he rated the student's oral performance. It was decided,
therefore, that a reference copy of the scales definitions would be provided for the instructors during the study proper.

Following the completion of the four speaking examination sessions, the researcher interviewed each subject separately about the questionnaire. Subjects reported no difficulties or questions concerning the format, instructions, or wording of specific items. The questionnaire did not raise suspicions about the true nature of the study. Voluntary comments made by the participants and responses to probes by the researcher indicated that the participants were not aware of the true parameters or purpose of the study. Modifications of the Student Questionnaire or the Instructor Questionnaire were, therefore, unnecessary.

Analysis of Data

In the context of this study, the following null hypotheses were tested:

1 $H_0$: There is no significant relationship between frequencies of teacher nonverbal cues of warmth and measures of student verbal responsiveness in second language speaking examinations of French at the beginning university level.
2 $H_0$: There is no significant relationship between frequencies of teacher nonverbal cues of warmth and measures of student anxiety level in second language speaking examinations.

3 $H_0$: There is no significant relationship between measures of student anxiety level and measures of student verbal responsiveness in second language speaking examinations.

4 $H_0$: There is no significant relationship between frequencies of teacher nonverbal cues of warmth in second language speaking examinations and interpersonal judgment ratings by participants subsequent to second language speaking examinations.

Given the exploratory nature of the study, the data analysis was correlational, permitting inferences of interdependency, but not producer-product relationships. For each hypothesis, scattergrams were used to determine the type of correlational analysis to be used. For those scattergrams illustrating a linear, homoscedastic trend, a Pearson Product Moment was appropriate. For those scattergrams illustrating a curvilinear trend, an eta ratio was appropriate. Given the small sample of the study, however, possible curvilinear relationships or trends could not be
ascertained from the scattergrams. The Pearson Product Moment formula was, therefore, used exclusively in the data analysis.
CHAPTER IV
RESULTS

Introduction

The design of this exploratory study was correlational. Several variables were under investigation. First, the focus was to examine the relationships of six teacher nonverbal cues of warmth to student verbal responsiveness in French during a second language oral examination. Second, the relationships of the six nonverbal cues of warmth to student anxiety level during the oral examination were studied. Third, the relationship between student anxiety and student verbal responsiveness was examined. Additional insights were sought from self-report ratings of interpersonal warmth and attraction obtained from post-examination questionnaires. The relationships of these ratings to teacher nonverbal cues of warmth were studied.

Correlational analyses using the Pearson Product Moment formula were performed on the assigned variables. Accompanied by the range of measures, means, and standard deviations, each analysis was based on the data from the 25 examinations combined.
Results from Testing the Hypotheses

1 $H_0$: There is no significant relationship between frequencies of teacher nonverbal cues of warmth and measures of student verbal responsiveness in second language speaking examinations of French at the beginning university level.

Initially, there were six teacher nonverbal cues of warmth designated for this study. These cues included interpersonal distance, eye contact, facial pleasantness or smiles, affirmative head nods, forward body leans, and touching. Because there was no occurrence of touching between teachers and students during the 25 examination sessions, this cue was deleted from the study. The range, means, and standard deviations of each of the remaining five teacher nonverbal cues appear in Table 1.
Verbal responsiveness, defined as the student's second language oral behavior in the speaking examination, was measured in terms of Productivity and Oral Proficiency. Productivity represented the number of words spoken by the student in French. Oral proficiency (OP) was defined as the global evaluation of the student's oral performance in accordance with the Schulz/Bartz Oral Communication Performance Scales (See Appendix C). The median OP rating of three independent judges for each of the 25 examinations was used in this study. The participant teacher's OP rating in each of the 25 examinations was also obtained. The range, means, and standard deviations for the three measures of student verbal responsiveness are presented in Table 2.
Table 2

Range, Means, and Standard Deviations of Student Verbal Responsiveness (VR) Measures

<table>
<thead>
<tr>
<th>VR MEASURE</th>
<th>MEAN</th>
<th>STD DEV</th>
<th>MIN</th>
<th>MAX</th>
</tr>
</thead>
<tbody>
<tr>
<td>Productivity</td>
<td>130.76</td>
<td>55.12</td>
<td>61</td>
<td>287</td>
</tr>
<tr>
<td>OP rating by judges</td>
<td>12.40</td>
<td>3.27</td>
<td>7</td>
<td>18</td>
</tr>
<tr>
<td>Op rating by teachers</td>
<td>12.44</td>
<td>3.38</td>
<td>7</td>
<td>18</td>
</tr>
</tbody>
</table>
Table 3 summarizes the correlations for each of the five teacher nonverbal cues of warmth with each measure of student verbal responsiveness.

Table 3

<table>
<thead>
<tr>
<th>TEACHER NV CUE</th>
<th>PRODUCTIVITY r</th>
<th>by Judges r</th>
<th>by Teachers r</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distance</td>
<td>-.335</td>
<td>-.419*</td>
<td>-.340</td>
</tr>
<tr>
<td>Eye Contact</td>
<td>-.079</td>
<td>-.313</td>
<td>-.228</td>
</tr>
<tr>
<td>Smiles</td>
<td>.191</td>
<td>.127</td>
<td>.085</td>
</tr>
<tr>
<td>Nods</td>
<td>.312</td>
<td>.016</td>
<td>-.062</td>
</tr>
<tr>
<td>Leans</td>
<td>.071</td>
<td>-.001</td>
<td>.123</td>
</tr>
</tbody>
</table>

*p .03.
The physical distance between the teacher and the student was measured in terms of 6-inch tape strips, each of which was scored as one unit. As indicated in Table 1, teacher distance varied from two feet to four feet, while the average teacher distance was approximately three feet. From Table 3, it appears that greater teacher distance was mildly, but nonsignificantly, associated with lower student productivity. The moderate negative relationship between teacher distance and OP ratings by independent judges was significant, however. Similarly, greater teacher distance was associated with lower OP ratings by the teachers, but this relationship was milder and nonsignificant.

Eye contact consisted of the number of times the teacher looked at the student, regardless of whether or not the student locked back. As shown in Table 3, the frequencies of teacher eye contact were negatively, but nonsignificantly, associated with the three measures of student verbal responsiveness. The relationship of higher frequencies of teacher eye contact to lower student productivity was negligible. There was a mild trend for OP ratings by judges to be associated with teacher eye contact. A weaker trend was noted between OP ratings by teachers and teacher eye contact.

Teacher facial pleasantness was defined as the number of smiles that occurred during the oral examination. Table 3 indicates that the frequencies of teacher smiles
associated positively, but nonsignificantly, with all measures of student verbal responsiveness. The number of words spoken by the student in French was slightly related to the number of teacher smiles. The relationship of OP ratings by judges to the frequencies of teacher smiles was somewhat slighter, while the association between OP ratings by teachers to the frequencies of teacher smiles was negligible.

Affirmative head nods were defined as vertical bidirectional movements of the teacher's head. As reported in Table 3, higher frequencies of teacher head nods were mildly and positively associated with higher frequencies of French words spoken by the student. The relationship of teacher head nods to OP ratings by judges was positive, whereas the relationship to OP ratings by teachers was negative. Collectively, all relationships were nonsignificant.

Forward body lean referred to the teacher's upper torso position when away from the vertical position. According to Table 3, the number of forward leans emitted by the teacher was positively, although negligibly, related to student productivity. The negative relationship between frequencies of teacher leans and OP ratings by judges was also negligible. The positive, but very slight, association between frequencies of teacher leans and OP ratings by teachers was the strongest of the three correlations. All correlations, however, were nonsignificant.
From the data analysis for the first hypothesis, teacher interpersonal distance emerged as the only nonverbal cue of warmth to be significantly related to student verbal responsiveness. As teacher interpersonal distance increased, there was a moderate decline in student oral proficiency ratings by independent judges. Given this significant correlation, however, the null hypothesis was rejected in part.

2 $H_0$: There is no significant relationship between frequencies of teacher nonverbal cues of warmth and measures of student anxiety level in second language speaking examinations.

The range, means, and standard deviations for the five teacher nonverbal cues have been reported in Table 1. Anxiety level was defined as the quantitative measure of the student's internal physiological state aroused by threatening, stressful conditions in the environment (Dollard & Miller, 1950). Two verbal indices, silence quotient and speech rate, were used to measure student anxiety level. Silence quotient (SQ), a temporal measure based on all pauses greater than five seconds, was essentially an index of hesitation. Speech rate (SR) reflected the number of French words spoken by the student per minute. The range, means, and standard deviations of the anxiety level indices appear in Table 4.
Table 4

Range, Means, and Standard Deviations of Student Anxiety Level (AL) Indices

<table>
<thead>
<tr>
<th>AL INDEX</th>
<th>MEAN</th>
<th>STD DEV</th>
<th>MIN</th>
<th>MAX</th>
</tr>
</thead>
<tbody>
<tr>
<td>SQ</td>
<td>.112</td>
<td>.143</td>
<td>.001</td>
<td>.636</td>
</tr>
<tr>
<td>SR</td>
<td>58.410</td>
<td>9.840</td>
<td>45.880</td>
<td>79.970</td>
</tr>
</tbody>
</table>
The correlations for each of the five teacher nonverbal cues of warmth with each index of anxiety level appear in Table 5.

Table 5

<table>
<thead>
<tr>
<th>TEACHER NV CUE</th>
<th>SQ r</th>
<th>SR r</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distance</td>
<td>.007</td>
<td>-.130</td>
</tr>
<tr>
<td>Eye Contact</td>
<td>.270</td>
<td>-.091</td>
</tr>
<tr>
<td>Smiles</td>
<td>-.124</td>
<td>.273</td>
</tr>
<tr>
<td>Nods</td>
<td>.072</td>
<td>-.012</td>
</tr>
<tr>
<td>Leans</td>
<td>.316</td>
<td>.253</td>
</tr>
</tbody>
</table>
None of the teacher nonverbal cues of warmth was significantly related to either of the anxiety level indices. Positive and negative correlational trends emerged, however. As teacher interpersonal distance increased, there was a negligible increase in the student's hesitant speech, or SQ index. A very slight decline in the student's speech rate accompanied greater teacher distances. Higher frequencies of teacher eye contact were very mildly related to more hesitant student speech (SQ) and negligibly related to lower speech rate. There was a very slight negative trend for frequencies of teacher smiles to be associated with the SQ index. A stronger positive association with the SR index emerged. The SQ and SR indices were negligibly related to frequencies of instructor head nods. The strongest association was found between frequencies of teacher leans and SQ indices. The two variables related mildly and positively. There was a similar positive but weaker trend for frequencies of teacher body leans to be related to SR indices.

Positive and negative trends associating measures of teacher nonverbal cues of warmth to measures of student anxiety level were found. No correlation, however, was statistically significant. The null hypothesis was, therefore, retained.
3 H₀: There is no significant relationship between measures of student anxiety level and measures of student verbal responsiveness in second language speaking examinations.

The range, means, and standard deviations for the measures of student anxiety level, silence quotient (SQ) and speech rate (SR), were reported in Table 4. These descriptive statistics for student verbal responsiveness, or productivity and oral proficiency (OP) ratings, were presented in Table 2. Table 6 summarizes the correlations for the measures of student anxiety level with the measures of student verbal responsiveness.

Table 6

<table>
<thead>
<tr>
<th>AL INDEX</th>
<th>PRODUCTIVITY</th>
<th>OP RATING by Judges r</th>
<th>OP RATING by Teachers r</th>
</tr>
</thead>
<tbody>
<tr>
<td>SQ</td>
<td>-.490</td>
<td>-.633*</td>
<td>-.587**</td>
</tr>
<tr>
<td>SR</td>
<td>-.116</td>
<td>-.284</td>
<td>-.205</td>
</tr>
</tbody>
</table>

*ₚ < .001. **ₚ < .002.
As indicated in Table 6, all correlations were negative. The relationship between the SQ index and productivity was moderate and nonsignificant. The associations, however, between the SQ index and the OP ratings by judges as well as by the participant teachers were much stronger and significant. The SR index was very slightly, but nonsignificantly, related to student productivity. The correlations between the SR index and the OP ratings were nonsignificant as well. These correlations, however, were somewhat stronger. Given that the SQ index was significantly related to the OP rating by judges and also to the OP rating by teachers, the null hypothesis is rejected in part.

4 $H_0$: There is no significant relationship between frequencies of teacher nonverbal cues of warmth in second language speaking examinations and interpersonal judgment ratings by participants subsequent to second language speaking examinations.

The range, means, and standard deviations for each of the five teacher nonverbal cues of warmth have been presented in Table 1. Interpersonal judgment (IJ) ratings consisted of two indices, attraction and warmth. These self-report evaluations were obtained in post-examination questionnaires completed by both participants following each oral examination. The attraction index was, essentially, the measure of the individual's liking for the other
person. The warmth index was the individual's perception of the other person's warmth or friendliness. The range, means, and standard deviations for the IJ ratings by teachers and by students are presented in Table 7.

Table 7

Range, Means, and Standard Deviations of Interpersonal Judgment (IJ) Ratings

<table>
<thead>
<tr>
<th>IJ RATING</th>
<th>MEAN</th>
<th>STD DEV</th>
<th>MIN</th>
<th>MAX</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATTRACTION</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teachers</td>
<td>11.56</td>
<td>2.77</td>
<td>5</td>
<td>14</td>
</tr>
<tr>
<td>Students</td>
<td>10.36</td>
<td>2.76</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td>WARMTH</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teachers</td>
<td>29.52</td>
<td>3.18</td>
<td>23</td>
<td>35</td>
</tr>
<tr>
<td>Students</td>
<td>28.16</td>
<td>5.62</td>
<td>16</td>
<td>35</td>
</tr>
</tbody>
</table>
The correlations for each of the five teacher nonverbal cues with the IJ ratings by teachers and students are reported in Table 8.

**Table 8**

<table>
<thead>
<tr>
<th>NV CUE</th>
<th>Teachers r</th>
<th>Students r</th>
<th>Teachers r</th>
<th>Students r</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distance</td>
<td>.081</td>
<td>.328</td>
<td>-.238</td>
<td>-.058</td>
</tr>
<tr>
<td>Eye Contact</td>
<td>-.634**</td>
<td>-.362</td>
<td>-.309</td>
<td>-.308</td>
</tr>
<tr>
<td>Smiles</td>
<td>.448*</td>
<td>.672**</td>
<td>.111</td>
<td>.685**</td>
</tr>
<tr>
<td>Nods</td>
<td>-.133</td>
<td>.238</td>
<td>-.171</td>
<td>.204</td>
</tr>
<tr>
<td>Leans</td>
<td>.059</td>
<td>.089</td>
<td>.094</td>
<td>.056</td>
</tr>
</tbody>
</table>

*p < .02. **p < .001.
As indicated in Table 8, teacher interpersonal distance was nonsignificantly related to all IJ ratings. Attraction ratings were positively related to teacher distance; student ratings were mildly associated with the cue, whereas teacher ratings were negligibly related. By contrast, warmth ratings were negatively associated with teacher distance; teacher ratings were very mildly related to distance, and student ratings were negligibly related to the nonverbal cue.

Frequencies of teacher eye contact were negatively associated with all IJ ratings. A strong significant relationship with teacher attraction ratings emerged. The relationship to student attraction ratings was mild, but nonsignificant. Frequencies of teacher eye contact were nonsignificantly related to warmth ratings. Teacher and student warmth ratings, however, were comparable in their mild associations to the nonverbal cue.

Teacher smiles correlated positively with all IJ ratings. Frequencies of smiles significantly related to both attraction ratings; the relationship to teacher ratings was moderate, whereas the relationship to student ratings was strong. There was a very slight nonsignificant trend for frequencies of teacher smiles to be related to teacher warmth ratings. By contrast, frequencies of teacher smiles were strongly and significantly related to student warmth ratings.
There were no significant relationships between frequencies of teacher head nods and IJ ratings. As reported in Table 8, teacher head nods were negatively associated with teacher IJ ratings while positively associated with student IJ ratings. Teacher warmth and attraction ratings were very slightly related to frequencies of teacher head nods. Student warmth and attraction ratings were somewhat more strongly associated with the nonverbal cue.

No significant relationships were found between frequencies of teacher leans and IJ ratings. Although all relationships were positive, the strength of those relationships was negligible.

From the correlational analyses for the fourth hypothesis, four significant relationships were found. Three of these correlations were positive. Higher frequencies of teacher smiles were moderately related to higher teacher attraction ratings. Higher frequencies of this cue also associated strongly with higher student attraction ratings and with higher student warmth ratings. On the basis of these significant correlations, the null hypothesis is rejected in part.
Summary of Data Analyses

Of the six teacher nonverbal cues of warmth initially designated for this study, five were used in the data analyses. Because there were no instances of touch in the 25 interactions, this cue was deleted from the study. The correlations for the first hypothesis revealed interpersonal distance to be the only teacher nonverbal cue significantly related to student verbal responsiveness. This relationship, however, permitted partial rejection of the null hypothesis. Data analyses for the second hypothesis indicated no significant relationships between the teacher nonverbal cues of warmth and student anxiety level. Although the null hypothesis was retained, positive and negative trends were noted. In regards to the third hypothesis, two significant relationships were found associating student anxiety level with student verbal responsiveness. Consequently, the null hypothesis was rejected in part. The focus of the fourth hypothesis pertained to the associations between the teacher nonverbal cues of warmth and the participants' interpersonal judgment ratings. Four significant correlations, three of which were positive and related to teacher smiles, emerged. The null hypothesis was rejected, therefore, in part.
CHAPTER V
SUMMARY AND CONCLUSIONS

Introduction

Recalling Stubbs' (1983) statement that the student's academic experience "can depend crucially on the social relationship between teacher and pupil" (pp. 89-90), this exploratory, correlational study has focused on the teacher's nonverbal communication of warmth to the student and its relationship to student oral performance and anxiety in second language speaking examinations of French at the beginning university level. In addition, participants' interpersonal evaluations of warmth and attraction were measured in order to determine their relationship with teacher nonverbal cues of warmth.

Subjects included five volunteer Teaching Associates of French at The Ohio State University and five volunteer students enrolled in the university's spring quarter. Each teacher administered one oral examination to each student in a repeated measures design, totalling 25 examinations. Data were collected on videotape.

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The teacher nonverbal cues of warmth were selected on the basis of Mehrabian's (1972) comprehensive theory of communication and included close interpersonal distance, eye contact, smiles, affirmative head nods, forward body leans and touching. Measurements of these behaviors were made from videotapes. Student verbal responsiveness was defined as productivity and oral proficiency. Productivity, or word count, was determined from written transcripts. Scores of oral proficiency, a global evaluation of student verbal behavior, were obtained from the participant instructors following the examinations and from three independent judges working from audiotapes. The median rating of the judges was used in the analyses. The verbal indices of student anxiety, speech rate and silence quotient, were made with a stopwatch in conjunction with written transcripts and audiotapes. Affective reactions and perceptions of the participants were assessed by means of rating scales on post-examination questionnaires.

Rationale

To reduce the anxiety associated with speaking a second language, a climate of warmth is crucial (Brown, 1980; Chastain, 1980, 1976; Disick & Barbanel, 1974; Krashen, 1982; Rivers, 1983, 1980, 1964; Stevick, 1980, 1976). This warmth does not derive from methodology but, rather, from the teacher-student interpersonal relationship for which the
teacher is primarily responsible (Flanders, 1968; Rogers, 1961; Withall, 1968). Research indicates that warmth is communicated predominately by nonverbal cues (Gafner, 1977; Gazda, 1973; Tepper & Haase, 1978), a dimension of teacher-student communication largely ignored in educational research (Galloway, 1972). The general literature indicates that affective reactions displayed through an interviewer's nonverbal behavior can contribute to differential performance by interviewees (Druckman, Rozell, & Baxter, 1982; Harper, Wiens, & Matarazzo, 1978; Patterson, 1983). Given that the oral interview is a commonly used evaluative approach in the field of second language education, this study has sought to investigate the relationship of teacher nonverbal cues of warmth to student oral performance, anxiety, and affective reactions. Furthermore, because the oral interview may become a standardized means of evaluating student oral proficiency (Omaggio, 1983), the questions proposed by this research are important to investigate.

Summary of Findings and Conclusions

H₁: Higher frequencies of teacher nonverbal cues of warmth are significantly related to higher measures of student verbal responsiveness in second language speaking examinations of French at the beginning university level.
The first research hypothesis dealt with the verbal responsiveness variable which included the three measures of productivity, global oral proficiency ratings by independent judges, and global oral proficiency ratings by the participant teachers. The general literature (Druckman, Rozell, & Baxter, 1982; Harper, Wiens, & Matarazzo, 1978; Patterson, 1983) had indicated that the quantity and quality of an interviewee's verbal behavior could be influenced by the interviewer's nonverbal communication of affective information. Application of these findings to the oral interview-type of examination commonly used in second language education has been, heretofore, relatively unknown. Although the relationship between closer interpersonal distances and higher oral proficiency ratings by independent judges was the only significant one to emerge, there were positive trends, ranging from slight to moderate, relating several of the six initially selected nonverbal cues to one or more of the verbal responsiveness measures. Hence, the analyses lend support to the expectation that levels of teacher nonverbal warmth are associated with both the quantity and quality of the student's second language oral performance.

The data suggest that closer interpersonal distances and greater numbers of smiles, affirmative head nods, and forward body leans by instructors in dyadic speaking examinations are associated with more student talk and/or
higher scores on oral proficiency ratings. Given that these findings are consonant with the general literature, one may assume that these behaviors functioned as expected indicators of interpersonal warmth, or approval, creating a more encouraging, accepting atmosphere. Because the data are correlational, however, the temporal relationship between the teacher nonverbal cues and student verbal behavior cannot be determined. It is possible that teachers may contingently convey their nonverbal approval through such cues as smiles or nods consequent to appropriate verbal responses of students, thereby strengthening the student's verbal behavior. On the other hand, if teachers emit such cues systematically, or noncontingently, then variations in student productivity and global speaking scores may be expected. The sequencing of teacher nonverbal cues of warmth and student oral behavior in speaking examinations merits further investigation.

In addition, the strengths of the different correlations do not necessarily indicate the amount of variance contributed by each individual cue to the overall warmth exhibited by the teacher. Warmth is a multidimensional, multichannel construct embracing a number of different behaviors, including verbal cues, that are interdependent (Andersen, 1985; Knapp, 1980; Patterson, 1983). The design and exploratory nature of the present investigation did not
permit analyses based on weighted combinations of the nonverbal cues. A study of larger sample size would be necessary to accomplish these purposes.

An unexpected finding was the trend for higher frequencies of teacher eye contact to relate to depressed oral proficiency ratings. One may recall, however, that the instructors were unacquainted with the students. Lower scoring students were, presumably, less proficient in speaking. Hence, the instructors probably had to look at these students more in order to understand the content of their responses or, perhaps, to ascertain when to provide linguistic aid to the students during responses. In this case, eye contact would have fulfilled a service-task function rather than an interpersonal-task function. Further research is necessary to verify such an interpretation and would require, perhaps, stratification of a larger student sample in low, average, and high achieving students.

Another finding contrary to the general literature was the total absence of touching behavior. Western middle class taboos about touching, however, may deter university teachers from using this powerful means of expressing warmth, or friendliness and acceptance. Given the rise in the American social consciousness concerning sexual harassment, male teachers must be extremely cautious about using touch with female students. In addition, fears of possible homosexual implications may be partly responsible for the
lack of touching behavior between teachers and students of the same sex. Longitudinal studies are necessary in order to investigate more adequately and accurately the nonverbal cue of touch within the context of the teacher-student relationship.

A final point worth noting concerns the oral proficiency (OP) ratings by the independent judges and those by the participant teachers. Interpersonal distance was significantly and more strongly correlated to the judges' ratings. Two other cues, eye contact and smiles, were more strongly related, although nonsignificantly, to the judges' ratings as well. One would expect, however, that the nonverbal cues would be more strongly related to the teachers' ratings because the teachers had interacted personally with the students. A post-study comparison of the judges' OP ratings and those by the participant teachers revealed a correlation of .70 (p < .001). One must recall that the independent judges made their evaluations from audiotapes. It is possible that the judges may have been unconsciously influenced by positive or negative statements, comments, and remarks of the teacher in reference to student responses or performance during the course of the oral examination. Verbal comments by students and other factors including paralinguistic cues such as voice tone may have influenced the judges' ratings, accounting for the somewhat
stronger correlations. Further research would have to control for these variables by eliminating, perhaps, the verbal contributions of the teacher from the audiotapes.

H2: Higher frequencies of teacher nonverbal cues of warmth are significantly related to lower measures of student anxiety level in second language speaking examinations.

This research hypothesis dealt with the two verbal indices used to measure the anxiety level experienced by the student during the oral examination. The silence quotient (SQ) index was a measure of hesitation, or pauses exceeding five seconds in length. The speech rate (SR) index was a measure of speech tempo, or the number of words spoken per minute. An increase in anxiety level can be associated with an increase in either index. The only negative correlation to emerge was between smiles and SQ indices. This relationship, however, was counterbalanced by a positive relationship between smiles and SR indices. Contrary to expectations supported by the literature, closer distances, more eye contact, and more forward leans were associated with higher anxiety level as well. Although all correlations were insignificant, there are several reasons that may explain these surprising trends.
The SQ and SR indices, based on the student's responses for the oral examination in its entirety, do not reflect moment-to-moment changes or fluctuations in anxiety throughout the examination. In view of evidence that more physiological variability occurs during the first few minutes of speech (Behnke & Carlile, 1971), it is possible that more hesitation and faster speech rate, which are subject to less voluntary control by the individual, occurred in the earlier portion of the oral examination and declined or leveled off as the examination progressed. Hence, the correlations may not adequately represent the relationships between the pertinent variables. Further study to verify the relationship of student anxiety level to measures of teacher nonverbal cues of warmth would require, perhaps, comparisons of correlations taken from the beginning, middle, and latter portions of the oral examinations.

An alternate interpretation of the data rests upon the possibility that previous experience may have conditioned the instructors to expect students to be anxious or nervous about oral examinations. Given that under normal conditions speaking tests are not videotaped and are administered in the more intimate setting of the instructor's office, this anticipation of student anxiety may have been further intensified. Hence, instructors may have made a conscious effort to alleviate or prevent student anxiety by behaving in a decidedly warm and friendly manner. Presumably, their
efforts would be accompanied by higher frequencies of the nonverbal cues of warmth, possibly explaining why closer distances, more eye contact, more smiles, and more forward leans would tend to associate with higher anxiety. Such a perspective is supported in part by the fact that higher frequencies of smiles were related to lower anxiety level as indicated by SQ indices as well as to higher anxiety level as indicated by SR indices. That is, teachers tended to give more smiles to less anxious students as well as to more anxious students. Caution is again suggested because correlational data simply imply concomitance and do not reveal the temporal relationship between the variables in question. The negligible relationships associating head nods to both measures of student anxiety level implies the possibility that positive head nods may serve functions other than the communication of interpersonal affect.

A related, but slightly different, interpretation emerges when student anxiety becomes the pivotal variable. In oral examinations where students know that their second language responses are being systematically evaluated, those students may be less susceptible to the presumed calming effects that the teacher's nonverbal cues of warmth may exert in less pressurized situations. Student anxiety, intensified by subjects' lack of acquaintance, the unfamiliar studio setting, and the filming of the examinations, may have been strong enough to resist the facilitative
effects of the nonverbal cues, with the sole exception of smiles. That smiles are reportedly the best single predictor of warmth (Bayes, 1972) may explain why higher frequencies of this cue tended to associate with some reduction of student anxiety, specifically less hesitant speech. This relationship poses the distinct possibility that teacher nonverbal cues of warmth may interact with various behavioral manifestations of student anxiety in different ways.

A final and equally plausible interpretation of the unexpected trends is that the SQ and SR indices are not actually tapping student anxiety levels. Given that these verbal indices are most commonly used in native language situations, it is possible that these measures as applied in the present study merely reflect the more or less hesitant, disfluent speech patterns common to most beginning second language students. Perhaps a behavioral index of anxiety unrelated to verbal behavior, such as the galvanic skin response technique (Harper, Wiens, & Matarazzo, 1978), would be more reliably employed in future research, yielding more conclusive results about the relationship of teacher nonverbal cues of warmth to student anxiety during second language oral examinations.
H₃: Lower measures of student anxiety level are significantly related to higher measures of student verbal responsiveness in second language speaking examinations.

The inclusion of this research hypothesis was intended to check previous research findings that anxiety is negatively correlated with second language oral performance (Gardner, et al, 1976). Ranging from very slight to relatively strong, all relationships between the anxiety level measures and the verbal responsiveness measures were negative. Two significant correlations were found associating the silence quotient indices with global oral proficiency (OP) ratings by independent judges and with OP ratings by participant instructors. The analyses permitted, therefore, partial rejection of the null hypothesis.

The general conclusion is that lower student anxiety is associated with more student talk and higher oral proficiency scores. Given the limitations of correlational analyses, however, one cannot conclude that lower anxiety causes better oral performance or vice versa. Furthermore, the possibility that the contingency between lower anxiety and better oral performance derives from a predisposition for less anxious persons to communicate better and more easily cannot be eliminated. The implication is that student oral performance in the second language may be
directly related to a personality-type characteristic commonly known as communication apprehension (McCroskey, 1977), or fear of oral communication. Given that as high as 20 percent of the college student population suffer from debilitating communication apprehension (McCroskey, 1977), and that second language study is a general requirement of the university curriculum, a large number of second language students may be at a competitive disadvantage. The conversational problems that these students experience in their native language may be compounded when the students are compelled to speak in a second language, resulting in lower scores and grades. Investigation of the possibility would require a stratified sample of students who have been previously designated as low and high communication apprehensives.

It was also noted that anxiety measures were more strongly related to the OP ratings by independent judges than to the OP ratings by the participant instructors. This finding lends support to an earlier supposition that the judges' evaluations in their entirety, were probably influenced by verbal exchanges and paralinguistic cues. It is suggested once more that future studies control for such extraneous variables by using only the student portion of the recorded oral examinations for evaluation purposes.
As previously discussed, the silence quotient and speech rate indices may not be totally reliable indicators of student anxiety. These verbal indices measure speech hesitation and tempo, which are also components of the verbal responsiveness measures. Increases in these indices could, logically, result in decreases in the dependent variables. Given the exploratory nature of the study, however, it was considered expedient to use such measures which are made without the knowledge of the subjects. Hence, subjects' suspicions of the true parameters of the study were minimized. Future research, however, would profit from a design in which a more precise analysis of anxiety is secured from such physiological measures as heart rate or palmar sweat prints (Harper, Wiens, & Matarazzo, 1978).

$H_4$: Higher frequencies of teacher nonverbal cues of warmth in second language speaking examinations are significantly related to higher interpersonal judgment ratings by participants subsequent to second language speaking examinations.

The instructor and student questionnaires were designed to obtain participants' personal assessments of each other in terms of attraction and warmth ratings. The attraction index reflected the individual's liking for the other person
and willingness to interact with that person again. The warmth index was a measure of the individual's perception of the other person's friendliness. Given that interpersonal warmth is conveyed primarily by nonverbal cues (Gafner, 1977; Gazda, 1973, Tepper & Haase, 1978), one might expect higher interpersonal judgment (IJ) ratings by teachers and by students to associate with closer teacher distances and with more eye contact, smiles, nods and forward leans. Several unexpected associations were found, however, and require explanation.

Smiles emerged as the only nonverbal cue to relate positively to the IJ ratings by both the teachers and the students. Three of the four significant correlations from the analyses of the questionnaire data pertained to this cue. These results are consonant with Bayes' (1972) findings that smiles are the single best indicator of warmth.

By contrast, there were negative trends associating eye contact with all IJ ratings, including a significant relationship to attraction ratings by teachers. In respect to teacher IJ ratings, the results lend support to an earlier deduction that eye contact may not have been operating primarily within an interpersonal affect dimension but, rather, within a service-task dimension. Understanding the responses of less proficient students may have required more attentive behavior in the form of watching lip
movements and facial expressions. Given that the attraction index also taps one's willingness for continued interaction with the other individual, the lower IJ ratings may indicate that teachers regard less proficient students as less desirable candidates for their classrooms. Furthermore, these teachers may have misinterpreted the behavior of more anxious or less confident students and, consequently, attributed such behavior to indifference or lack of friendliness. This possibility may explain the lower warmth ratings by teachers in relation to higher frequencies of eye contact.

Students may have, in turn, perceived higher frequencies of teacher eye contact as a negative commentary on their performance. As a result, these students may have formulated less positive impressions of such teachers and envisioned less promising future interaction with these teachers in terms of classroom consequences and grades. Such impressions and expectancies may reasonably account for the negative IJ ratings by students. It is also possible that higher frequencies of teacher eye contact violated expected norms for dyadic encounters between strangers, producing discomforting feelings which, in turn, negatively influenced students' perceptions and impressions of those teachers. Given that more eye contact associated with lower
teacher IJ ratings and also with lower verbal responsiveness measures, the former interpretation of lower student IJ ratings appears more plausible.

In regards to the nonverbal cue of interpersonal distance, teachers and students tended to perceive each other as warmer at closer distances. These anticipated findings were offset by data suggesting that teachers and students liked each other more at greater distances. It must be noted, however, that the distance measurements of the present study ranged from two feet to four feet. According to Hall's (1966) interpersonal distance schema, interactions between American people generally fall into one of three categories: the personal distance (2 to 4 feet), social distance—close phase (4 to 7 feet), and social distance—far phase (7 to 12 feet). All distances measured in the 25 interactions of the present study fall well within the personal distance range, the most intimate of the categories. Given that unacquainted dyads may prefer greater distances (Morton, 1977), it is possible that the participants' ratings of attraction, or likeability, in the present study merely reflect that the teachers and students were more comfortable at the more extreme distances encompassed by the personal distance category. This conclusion is plausible and reconciles the apparently contradictory ratings of warmth and attraction.
In reference to affirmative head nods, this cue tended to associate negatively with teacher IJ ratings and positively with student IJ ratings. With respect to the teacher ratings, head nods may have operated primarily in a service-task capacity as hypothesized earlier in the case of eye contact. Head nods may have been used to prompt student answers, to signal correctness of responses, or to encourage hesitant speech. For teachers, higher frequencies of this behavior may have denoted, at a conscious or unconscious level, less than superior performance, resulting in the negative attraction ratings. Students requiring more teacher head nods may not have been as talkative or fluent as other students. Research evidence suggests that less talkative people are perceived as less sociable or friendly (Davis & Perkowitz, 1979), which may account for the negative teacher ratings of student warmth in relationship to this cue.

Whereas affirmative head nods may hold negative connotations for teachers, this nonverbal cue may serve as a source of positive reinforcement for students. Higher frequencies of teacher head nods tended to relate to higher ratings of teacher attraction and warmth. From the students' perspective, such perceptions may contribute to motivation, leading to better performance. This conclusion is supported in part by the fact that teacher affirmative head nods tended to associate with greater student
productivity. Given the differential teacher and student IJ ratings with respect to this cue, teachers' and students' perceptions of nonverbal cues of warmth merit further investigation.

In regards to the nonverbal cue of forward body leans, all IJ ratings were positive but negligible. These marginal relationships indicate perhaps that leans are a less salient cue of interpersonal affect.

To summarize, the data analyses for the fourth hypothesis indicate that teacher smiles associate positively with affective ratings by teachers and students. This finding indirectly supports repeated suggestions in the general literature that nonverbal cues communicate interpersonal warmth. Unfortunately, the relationships associating the other nonverbal cues included in this study to the affective reactions of teachers and students are not as conclusive. Clearly, the role of nonverbal cues in the communication of warmth by second language teachers deserves further investigation.

Limitations of the Findings

The basic limitation of the study is inherent in the design. Neither instructors nor students were selected randomly; participants were volunteers. The study is, in essence, an intensive, composite analysis of the interactions between five instructors and five students. The small
sample prohibited analyses incorporating sex as a stratification factor. Given that the participants were not personally acquainted, the results may pertain only to initial oral examinations between unacquainted teachers and students. The results may also reflect the confounding effects attributed to the interaction of verbal and non-verbal behavior. Order effects cannot be ruled out entirely because counterbalancing was only partially maintained. With respect to the correlational analyses of the data, the results merely imply concomitance of the variables and do not indicate causal relationships.

Another limiting factor concerns the use of verbal indices as measures of student anxiety. Given that such indices are generally used in native language situations and that the students in this study responded in a second language, the validity of the anxiety indices is questionable. A number of other behavioral indices of anxiety, unrelated to verbal behavior, are available and may be effectively used in future studies.

A procedural limitation involves the oral proficiency ratings. The independent judges heard both instructor and student on the tape segments when making evaluations. The possibility exists, therefore, that these ratings were influenced by the verbal behavior of the instructor.
**Final Observations**

The present study was an initial attempt to determine if teacher nonverbal cues of warmth are associated with student oral performance and anxiety in second language speaking examinations. Analyses did reveal that several of the specified nonverbal cues tended to associate positively with student verbal responsiveness measures. Conclusions pertaining to the role of teacher nonverbal cues of warmth with respect to student anxiety and teacher-student affective reactions, however, are not clear. More precise analysis of student anxiety, coupled with a better understanding of teachers' and students' perceptions of nonverbal behaviors of warmth, may yield more definitive judgments concerning these variables. Previous research findings suggesting that student anxiety correlates negatively with second language oral performance were supported, however. These results lend credence to the importance of making the reduction and control of student anxiety a priority in second language learning today.

It is unreasonable to expect second language teachers to control all the environmental factors that contribute to student anxiety. It is equally impossible for those teachers to perceive and erase all the psychological inhibitions that each student carries across the threshold of the second language classroom. Teachers can and must, however, take full responsibility of their own behavior,
both verbal and nonverbal, utilizing it to the best advantage of the student. The present study provides some evidence that second language teachers may be overlooking a naturally occurring and potentially positive source of reinforcement that could be effectively used to facilitate the language learning process for students. The nonverbal communication of teacher warmth offers a relatively unexplored dimension of research that may complement, modify, or even supercede the present understanding of the variables essential to success of second language students.

**Recommendations for Further Research**

Several issues have arisen that warrant further investigation.

1. The hypotheses of this study should be tested with a sample of second language teachers and students from their classes. Analyses based on acquainted dyads may yield results that typify more naturalistic second language learning situations.

2. The temporal patterns between teacher nonverbal cues of warmth and student oral behavior in the second language need to be explored.
3. The designs of future investigations should incorporate student samples stratified by sex and second language achievement in order to determine if the nonverbal communication of teacher warmth varies significantly according to these factors.

4. Additional research is needed to verify the specific and salient teacher nonverbal cues that contribute to students' perceptions of teacher warmth within the context of second language learning.

5. Teacher nonverbal cues of warmth need to be studied separately and in combination in order to determine a more precise definition of warmth.

6. Longitudinal studies can generate a more complete and functionally based conception of the nonverbal communication of warmth within the context of second language learning.

7. Further study is necessary to define more clearly the role of anxiety and its effects on student oral performance in a second language. Videotape playback in conjunction with intensive interviews immediately following oral examination experiences may prove useful in determining the intrinsic/extrinsic and affective/cognitive variables pertinent to student second language oral performance.
BIBLIOGRAPHY


Jarvis, G. A. (1975). We think we are Evening in Paris, but we're really Chanel. Foreign Language Annals. 8, 104-116.


APPENDICES
Appendix A

SAMPLE SCORING NOTES SHEET

A. Pronunciation—Take a few seconds to prepare the following sentences. Then read each sentence aloud naturally and in your best French. You will be evaluated on correct pronunciation of sounds and intonation as well as your overall fluency and pronunciation of the sentences.

overall sentence

1. Nous allons chez le dentiste.
   
   /œ/ /a/

2. Il est sincère, n'est-ce pas?
   
   /sɛʁ/ /rising intonation/

   
   /ɛ/ /e/

4. C'est une femme mariée.
   
   /am /a/

B. Vocabulary—

1.

2.

C. Answering Questions—

1.

2.

3.
D. Asking Questions--
   1.
   2.
   3.

E. Situation/Decision--

F. Picture Description--
SAMPLE SPEAKING EVALUATION SHEET

Please rate the student's global or overall performance on the Schulz/Bartz Oral Communication Performance Scales below. Circle the number that corresponds best to your evaluation of the student's performance. If necessary, you may refer to the attached copy of the scales' definitions and the notes you made during the administration of the exam.

I. FLUENCY

1 2 3 4 5 6

II. COMPREHENSIBILITY

1 2 3 4 5 6

III. AMOUNT OF COMMUNICATION

1 2 3 4 5 6

IV. QUALITY OF COMMUNICATION

1 2 3 4 5 6
Appendix B

SAMPLE SPEAKING TEST

Instructor's Copy

A. Pronunciation-- Take a few seconds to prepare the following sentences. Then read each sentence aloud naturally and in your best French. You will be evaluated on correct pronunciation of sounds and intonation as well as your overall fluency and pronunciation of the sentences.

1. Nous allons chez le dentiste.
   /nɔ̃ ɔlɔ̃ ʃɛz lə dɛntist/  

2. Il est sincère, n'est-ce pas?
   /il e zɛ̃ siʁsə nɛst-se pas/  
   /rising intonation/

   /ʒaime voʒaʁ ən ɛtə/  

4. C'est une femme mariée.
   /sɛ ən fɛm məriə/  

B. Vocabulary-- Look at this vocabulary card. Tell in French what it is you see. Then tell a use or purpose for what you see.

<table>
<thead>
<tr>
<th>Vocabulary</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. (Ce sont des avions.)</td>
<td>(answer varies)</td>
</tr>
<tr>
<td>2. (Ce sont des poissons.)</td>
<td>(answer varies)</td>
</tr>
</tbody>
</table>
C. Answering Questions-- You will now be asked several questions in French. Listen carefully to each question and then answer the question in your best French. If necessary, you may ask for the question to be repeated.

1. A quelle heure avez-vous quitté la maison ce matin?
2. Quant avez-vous peur?
3. Qu'est-ce que vous avez envie de faire quand il pleut?

D. Asking Questions-- Ask the instructor the questions below in French. You will be asked to explain in English the instructor's response.

1. What sports do you prefer?
2. Have you gone to Europe?
3. Do you like ice cream?

E. Situation/Decision-- A situation will be described to you in French. You will be asked to tell in French what you would do under the circumstances described. You will hear the description twice. Listen carefully.

Vous emmenez vos amis au restaurant. Vous mangez un dîner excellent. C'est le moment de payer l'addition, mais vous avez oublié votre argent. Qu'est-ce que vous faites?

F. Picture Description-- Look at this picture. Describe in French what you see in the picture. You may use your imagination to create a context or a story around this picture. (See attachment.)
A. Pronunciation-- Take a few seconds to prepare the following sentences. Then read each sentence aloud naturally and in your best French. You will be evaluated on correct pronunciation of sounds and intonation as well as your overall fluency and pronunciation of the sentences.

1. Nous allons chez le dentiste.
2. Il est sincère, n'est-ce pas?
4. C'est une femme mariée.

D. Asking Questions-- Ask the instructor the questions below in French. You will be asked to explain in English the instructor's response.

1. What sports do you prefer?
2. Have you gone to Europe?
3. Do you like ice cream?
Appendix C

SCHULZ/BARTZ ORAL COMMUNICATION PERFORMANCE SCALES

I. Fluency
   General definition: Fluency does not refer to absolute speed of delivery, since native speakers of any language often show wide variations in this area. Fluency refers to overall smoothness, continuity, and naturalness of the student's speech, as opposed to pauses for rephrasing sentences, groping for words, and so forth.

Definition of each level on the scale:
1. Very many unnatural pauses, very halting and fragmentary delivery.
2. Quite a few unnatural pauses, frequently halting and fragmentary delivery.
3. Some unnatural pauses, occasionally halting and fragmentary delivery.
4. Hardly any unnatural pauses, fairly smooth and effortless delivery.
5. No unnatural pauses, almost effortless and smooth, but still perceptively nonnative.
6. As effortless and smooth as speech of native speaker.

II. Comprehensibility
   General definition: Comprehensibility refers to the ability of the student to make himself understood—to convey meaning.

Definition of each level of the scale:
1. No comprehension—couldn't understand a thing the student said.
2. Comprehended small bits and pieces, isolated words.
3. Comprehended some phrases or word clusters.
5. Comprehended most of what the student said.
6. Comprehended all of what the student said.
III. Amount of communication

General definition: Amount of communication refers to the quantity of information relevant to the communicative situation the student is able to convey.

Definition of each level of the scale:
1. Virtually no relevant information was conveyed by the student.
2. Very little relevant information was conveyed by the student.
3. Some relevant information was conveyed by the student.
4. A fair amount of relevant information was conveyed by the student.
5. Most relevant information was conveyed by the student.
6. All relevant information was conveyed by the student.

IV. Quality of communication

General definition: Quality of communication refers to the linguistic (grammatical) correctness of the student's statements.

Definition of each level on the scale:
1. No statements were structurally correct.
2. Very few statements were structurally correct.
3. Some statements were structurally correct, but many structural problems remain.
4. Many correct statements, but some problems remain with structures.
5. Most statements were structurally correct; only minor problems with structure.
6. All statements were structurally correct.
Appendix D

STUDENT QUESTIONNAIRE

Please take a few minutes to complete this questionnaire. Your responses will remain strictly confidential. Please do not omit any item.

1. You just performed several tasks in French. Mark (X) the task you liked the best.
   ___ Pronunciation ___ Asking Questions
   ___ Vocabulary ___ Situation/Decision
   ___ Answering Questions ___ Picture Description

2. Why did you like this task best?

3. Mark (X) the task you liked the least.
   ___ Pronunciation ___ Asking Questions
   ___ Vocabulary ___ Situation/Decision
   ___ Answering Questions ___ Picture Description

4. Why did you like this task least?

5. Did you concentrate more on content or grammar when giving your responses? (Mark one.)
   ___ Content ___ Grammar

6. Do you think the instructor paid more attention to the content or the grammar of your responses? (Mark one.)
   ___ Content ___ Grammar

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7. Mark (X) the statement that most accurately describes your feelings.

___ I like this instructor very much.
___ I like this instructor.
___ I like this instructor to a slight degree.
___ I neither particularly like nor particularly dislike this instructor.
___ I dislike this instructor to a slight degree.
___ I dislike this instructor.
___ I dislike this instructor very much.

8. Mark (X) the statement that most accurately describes your feelings.

___ I would very much dislike having this instructor as my classroom teacher for French.
___ I would dislike having this instructor as my classroom teacher for French.
___ I would dislike to a slight degree having this instructor as my classroom teacher for French.
___ I would neither particularly dislike nor particularly enjoy having this instructor as my classroom teacher for French.
___ I would enjoy to a slight degree having this instructor as my classroom teacher for French.
___ I would enjoy having this instructor as my classroom teacher for French.
___ I would very much enjoy having this instructor as my classroom teacher for French.

9. Does your performance on this oral examination reflect how well you can really speak French?

___ Yes  ___ No  ___ Somewhat  ___ Not sure

10. Was there anything that annoyed or distracted you during this examination? Please explain.
On the following page you will indicate your responses by marking scales. Here is how to mark the scales:

If you feel that your response is very closely related to one end of the scale, you should place your mark as follows:

Happy: \(\times\):___:___:___:___:___:___:___: Sad

or

Happy: ___:___:___:___:___:___:___:___: \(\times\): Sad

If your response is quite closely related to one end or the other (but no extremely), you should mark as follows:

Strong: ___: ___: ___: ___: ___: ___: ___: Weak

or

Strong: ___: ___: ___: ___: ___: ___: ___: \(\times\): Weak

If your response seems only slightly related to one end or the other (but is not really neutral), you should mark as follows:

Safe: ___: ___: ___: ___: ___: ___: ___: Dangerous

Safe: ___: ___: ___: ___: ___: ___: ___: \(\times\): Dangerous

If your response is neutral on the scale, equally associated to both ends, then you should mark the middle space:

Clean: ___: ___: ___: ___: ___: ___: ___: Dirty

IMPORTANT: (1) Place your marks in the middle of spaces, not on the boundaries:

\[
\text{THIS} \quad \text{NOT THIS} \\
\quad \times:___:___:___:___:
\]

(2) Mark only one space on a single scale.

(3) Do not omit any scale.

GO TO THE NEXT PAGE
11. Describe the instructor on each of the following scales.
   Pleasant :____:____:____:____:____:____:____: Unpleasant
   Responsive :____:____:____:____:____:____:____: Unresponsive
   Rejecting :____:____:____:____:____:____:____: Accepting
   Friendly :____:____:____:____:____:____:____: Unfriendly
   Uninterested :____:____:____:____:____:____:____: Interested

12. How did you feel while you were taking this oral examination?
   Calm :____:____:____:____:____:____:____: Nervous

In the space below, feel free to make any additional comments about this oral examination experience.
Appendix E
INSTRUCTOR QUESTIONNAIRE

Please take a few minutes to complete this questionnaire. Your responses will remain strictly confidential. Please do not omit any item.

1. The student just performed several tasks in French. Mark (X) the task you think the student liked the best.
   ____ Pronunciation    ____ Asking Questions
   ____ Vocabulary       ____ Situation/Decision
   ____ Answering Questions     ____ Picture Description

2. Why do you think the student liked this task best?

3. Mark (X) the task you think the student liked the least.
   ____ Pronunciation    ____ Asking Questions
   ____ Vocabulary       ____ Situation/Decision
   ____ Answering Questions     ____ Picture Description

4. Why do you think the student liked this task least?

5. Do you think the student concentrated more on content or grammar when giving responses? (Mark one.)
   ____ Content    ____ Grammar

6. Did you find yourself paying more attention to the content or the grammar of the student's responses? (Mark one.)
   ____ Content    ____ Grammar
7. Mark (X) the statement that most accurately describes your feelings.

___ I like this student very much.
___ I like this student.
___ I like this student to a slight degree.
___ I neither particularly like nor particularly dislike this student.
___ I dislike this student to a slight degree.
___ I dislike this student.
___ I dislike this student very much.

8. Mark (X) the statement that most accurately describes your feelings.

___ I would very much dislike having this student in a French class that I was teaching.
___ I would dislike having this student in a French class that I was teaching.
___ I would dislike to a slight degree having this student in a French class that I was teaching.
___ I would neither particularly dislike nor particularly enjoy having this student in a French class that I was teaching.
___ I would enjoy to a slight degree having this student in a French class that I was teaching.
___ I would enjoy having this student in a French class that I was teaching.
___ I would very much enjoy having this student in a French class that I was teaching.

9. Do you think this student enjoyed taking this oral examination? (Mark one.)

___ Yes    ___ No    ___ Somewhat    ___ Not sure

10. Was there anything that annoyed or distracted you during this examination? Please explain.
On the following page you will indicate your responses by marking scales. Here is how to mark the scales:

If you feel that your response is very closely related to one end of the scale, you should place your mark as follows:

Happy : X:___:___:___:___:___:___:___: Sad

or

Happy :___:___:___:___:___:___:___: ___: X: Sad

If your response is quite closely related to one end or the other (but no extremely), you should mark as follows:

Strong :___:___:___:___:___:___:___:___: Weak

or

Strong :___:___:___:___:___:___:___: ___: X: Weak

If your response seems only slightly related to one end or the other (but is not really neutral), you should mark as follows:

Safe :___:___:___: __:___:___:___: ___: Dangerous

or

Safe :___:___:___: ___:___:___:___: X: Dangerous

If your response is neutral on the scale, equally associated to both ends, then you should mark the middle space:

Clean :___:___:___:___:___:___:___:___: Dirty

IMPORTANT: (1) Place your marks in the middle of spaces, not on the boundaries:

THIS NOT THIS

___: X:___:___:___:

(2) Mark only one space on a single scale.

(3) Do not omit any scale.

GO TO THE NEXT PAGE
11. Describe the student on each of the following scales.

Pleasant :___:___:___:___:___:___:___:___: Unpleasant
Responsive :___:___:___:___:___:___:___:___: Unresponsive
Rejecting :___:___:___:___:___:___:___:___: Accepting
Friendly :___:___:___:___:___:___:___:___: Unfriendly
Uninterested :___:___:___:___:___:___:___:___: Interested

12. How do you think the student felt during this oral examination?

Calm :___:___:___:___:___:___:___:___: Nervous

In the space below, feel free to make any additional comments about this oral examination experience.
Appendix F

CLASSROOM REGISTRATION FORM

Please print clearly

Student: ________________________________ French: ________________________________
(Last Name) (First) (Middle) (course)

Place of birth: __________________________________________________________
(City) (State)

Age: _____ Sex: _____ Nationality: _________ Race: _____

College: ____________________________________________________________ Rank: 1 2 3 4
(Circle one)

Major: __________________________________________________________________

Languages Studied in High School Languages Studied in College Name of College

French _____ yes. French _____ qt. sem. _________
Spanish _____ yes. Spanish _____ qt. sem. _________
Other _____ yes. Other _____ qt. sem. _________

French courses taken at O.S.U.

1. _______________ Instructor: ___________ Grade: __

2. _______________ Instructor: ___________ Grade: __

Travel abroad

<table>
<thead>
<tr>
<th>Country</th>
<th>Time</th>
<th>Country</th>
<th>Time</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>

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Reasons for taking this course
(Mark as many as applicable to your particular case)

( ) To fulfill the language requirement at O.S.U.
( ) I'd like to be able to communicate in French.
( ) I was told that French is an easy language to learn.
( ) I already know some French and want to learn more.
( ) I have friends and/or relatives in French speaking countries and would like to visit and/or communicate with them.
( ) I am planning to pursue a career for which knowledge of French is an asset.
( ) Other: ___________________________________________________________
Appendix G

INSTRUCTOR INFORMATION FORM

Please print clearly

Name:
(Last) __________________________ (First) __________________________ (Middle)

Age: ___ Sex: ___ Race: ___ Nationality: __________

Place of birth:
(City) __________________________ (State)

Years of French language study: ______________________

Years of teaching experience: ______________________