NONVERBAL IMMEDIACY AS A PREDICTOR OF STUDENT RETENTION RATES AMONG FULL-TIME/PART-TIME COMMUNITY COLLEGE FACULTY

DISSERTATION

Presented to the Graduate Council of the University of North Texas in Partial Fulfillment of the Requirements For the Degree of

DOCTOR OF EDUCATION

By

Bobbi Rhe Stringer, B. S., M.S.

Denton, Texas

December, 1997

Previous research reveals that student-perceived teacher immediacy behavior is related to teacher effectiveness and that teacher effectiveness is related to student retention rates. The purpose of this study was to examine the relationship between nonverbal immediacy of community college teachers, both full-time and part-time, and their within-semester student retention rates.

A convenience sample of 40 full-time and 35 part-time teachers from a large southwest community college participated in the study. The teachers allowed students in one of their classes to complete the Revised Nonverbal Immediacy Measure, thereby providing a numerical nonverbal immediacy score for that teacher. At the conclusion of the semester, a weighted average of each participating teacher's retention rates was computed.

The results of regression analyses indicated that teachers with higher nonverbal immediacy have higher retention rates and teachers with lower nonverbal immediacy have lower retention rates. Nonverbal immediacy was found to be a predictor of retention rates, but faculty status was not found to
be a predictor. No interaction effect between nonverbal immediacy and full-time/part-time status was detected.
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LIST OF TABLES

1. Means and Standard Deviations of Revised Nonverbal Immediacy Measure ........................................... 79
2. Simple Regression of Retention on All Faculty (Full-time and Part-time Combined) Non-verbal Immediacy ........................................... 80
3. Simple Regression of Retention on Full-Time Faculty Nonverbal Immediacy ........................................... 81
4. Simple Regression of Retention on Part-Time Faculty Nonverbal Immediacy ........................................... 82
5. Variance in Retention Rate Associated with Nonverbal Immediacy and Faculty Status ........................................... 83
6. Regression Analysis of Retention Rate on Nonverbal Immediacy and Faculty Status ........................................... 84
CHAPTER I

INTRODUCTION

Overview

The winds of change are sweeping over American higher education. Demands for quality undergraduate instruction and the responses to those demands are forces changing the direction of higher education as it enters into the 21st century. The evolving responses are directly affecting, and being affected by, the ever-important concern of student retention.

During the 1980s, individuals, study groups, and agencies inside and outside academia began to research and report on the problems of quality in undergraduate higher education. Studies such as the classic National Institute of Education Involvement in Learning (Study Group on the Conditions of Excellence in American Higher Education, 1984), the Higher Education and the American Resurgence by the Carnegie Foundation (1985), and the Transforming the State Role in Undergraduate Education (Educational Commission of the States, 1986) are examples of calls for improved quality of undergraduate education, more objective and innovative methods of assessing quality, and the provision of more varied and effective means of accountability. Best-selling books such as The Closing of the American Mind by Alan Bloom (1987) and Profscam by Charles Sykes (1988) created
interest and alarm among of the general public regarding the quality question. More recently, reports such as *An American Imperative: Higher Expectation for Higher Education* by the Wingspread Group on Higher Education (1993) have continued the critique of the quality and productivity of higher education.

Various avenues of accountability gradually have begun to surface in response to the challenges regarding quality. First, accrediting agencies during the middle 1980s started shifting to an outcomes assessment approach. This included changing their focus from external examination to internal self-study and from quantitatively counting resources to quantitatively and qualitatively assessing "institutional effectiveness" (Bogue & Saunders, 1994). The NCAA Bylaw 30.1 and the Federal Student-Right-to-Know and Campus Security Act are also results of public pressure for the accountability of colleges and universities. They "provide consumers with information to help them choose among post secondary institutions," and consequently, "persistence and graduation rates as outcome measures of educational attainment are now common approaches to estimating efficiency" (Allen & Nora, 1995, p. 509).

Legislators, who during the 1980s and into the 1990s had been grappling with rising costs and competing demands for public dollars, also latched on to the accountability and assessment-based-on-goals idea. Incentive funding, productivity goals, effectiveness reports, and threats (in
some cases, implementation) of performance-based funding are some of the consequences of the legislative budget crunch coupled with a demand for accountability (Ashworth, 1994). Tennessee was the first state to attach funding to institutional performance. The initial Tennessee plan of 1979 offered supplemental funding to institutions for (1) testing graduating students and the students demonstrating proficiency; (2) surveying students, alumni, and the community to receive feedback regarding satisfaction with the institution; (3) peer reviews of the academic programs; and (4) accreditation for accreditable programs (Banta, Rudolph, Van Dyke, & Fisher, 1996).

Since 1979, the Tennessee criteria has been adapted four times and other states have begun to take steps to tie accountability to public funding (Banta et al., 1996).

These financial considerations, like institutional effectiveness, are also linked to the concept of student persistence/retention. For example, in the 1991-1993 Texas legislative session, the Coordinating Board was directed to propose a plan for performance funding. This plan, according to Ashworth (1994), lists Goal 1 as "Undergraduate Degrees" and the Measure description reads, "Number of undergraduate degrees awarded." Goal 2 is labeled "Course Completers," and the Measure description reads, "The number of courses completed with a grade other than some form of 'incomplete,' 'withdrawn,' or 'dropped'" (p. 13). Other states are also involved in various
stages of developing and implementing plans of financing that are connected with performance-based criteria in one form or another (Ashworth, 1994).

In addition to institutional efficiency and funding, the pressure for quality and accountability is also prompting debate in regard to changing the traditional emphasis on teaching to a new emphasis on learning. The 1984 *Involvement in Learning* report recommends, "Faculty should make greater use of active modes of teaching and require that students take greater responsibility for their learning" (p. 39). Barr and Tagg (1995) refer to the emergence of a new paradigm that changes the definition of a college as an institution that provides *instruction* to an institution that produces *learning*. This perspective calls for a change from the traditional, stereotypic professor objectively and authoritatively assuming a teacher-centered focus. Guskin (1994b, p. 25) points out the following:

- Focusing on student learning turns our thinking about the future of our colleges and universities upside-down: from faculty productivity to student productivity, from faculty disciplinary interests to what students need to learn, from faculty teaching styles to student learning styles, from classroom teaching to student learning.

As institutional effectiveness and funding are linked to the concept of retention, so this paradigmatic emphasis on student learning is also related to retention. Caring faculty is a critical factor in promoting student satisfac-
tion, and student satisfaction is one of the key ingredients to maintaining student enrollment (Noel, 1985). Having a student-centered perspective with a focus on active learning is especially important for community college teachers, since the majority of student contact with, and impressions of, the institution occur in the classroom.

Since quality, accountability, and student-centered learning all have direct bearings on the institutional retention issue, these factors also have direct implications for teachers as they face the problem of student retention within their own individual classes. In the past, teachers often have had the perspective that their responsibility was to transmit knowledge; if students learned, fine, and if they did not perform well, it was the student's fault, not the teacher's, and the student's problem, not the teacher's. This perspective must change, however, in view of the fact that institutional accountability eventually means individual teacher accountability. Institutional undergraduate degrees awarded and institutional completers ultimately mean individual classes completed successfully. Institutional student learning means active student learning occurring in each individual teacher's classes.

Teachers therefore must begin to adopt, if they have not already done so, a personal responsibility perspective regarding retention. Many of the withdrawals that occur every semester in a teacher's class are student-owned problems (Kearney & Plax, 1992) and are out of control of the teacher. Other contributors, however, are teacher-owned problems (Kearney
& Plax, 1992) and can be affected by what the teacher does or does not do about them. Accepting this premise is foundational for teachers with low retention rates who are interested in making behavioral changes that will impact their "completer" numbers.

Acceptance of teacher-owned problems can have a bearing on teacher retention rate improvement because this perspective can affect expectancies in the classroom on the part of students and also on the part of the teacher. Teachers communicate verbally and nonverbally as to whether they are open or not open to the possibility of ownership of student problems. Students then develop expectancies that they feel are consistent with what they infer and "gauge their behaviors by these sets of expectancies" (Hurt, Scott, & McCroskey, 1978). When teachers assume that all problems are student-owned and communicate this assumption to students, a negative cycle of expectancies can, and often does, result in student avoidance and non-compliance (Kearney & Plax, 1992), with the ultimate avoidance and non-compliance being dropping the class.

Students tend to relate positively to teachers who exhibit the Mehrabian (1969) construct of behavior called immediacy and are more likely to be compliant with immediate teachers. Immediacy references communication behaviors that "enhance closeness to and nonverbal interaction with another" (Mehrabian, 1969, p. 203).
Since the demands for quality and accountability and the responses to those demands are necessitating that teachers adopt a teacher-owned perspective regarding their personal retention rates, the need exists to explore more specifically what teacher behaviors contribute to higher retention. "Caring faculty" has been identified as one of those behaviors contributing to retention (Beal & Noel, 1980). Nonverbal immediacy has the potential for being the vehicle for communicating that behavior and was therefore examined in this study as a predictor of student retention.

Statement of the Problem

The problem of this study was the relationship between within-semester retention and teacher immediacy as perceived by students of part-time and full-time faculty.

Purposes of the Study

The purposes of this study were (1) to compare student perceived teacher immediacy with the teacher's student retention rates, (2) to determine whether a relationship exists between student-perceived teacher immediacy and student retention rates, and (3) to determine whether a significant difference exists between the student-perceived immediacy of full-time and part-time teachers and the retention rates of those teachers.
Hypotheses

In this study the following hypotheses were tested:

H1: Teachers with high nonverbal immediacy will have higher student retention rates than teachers with low nonverbal immediacy.

H2: Full-time teachers with high nonverbal immediacy will have higher student retention rates than teachers with low nonverbal immediacy.

H3: Part-time teachers with high nonverbal immediacy will have higher student retention rates than teachers with low nonverbal immediacy.

H4: An interaction effect between nonverbal immediacy and full-time/part-time status will occur.

H5: Nonverbal immediacy is a predictor of student retention.

H6: Faculty status is a predictor of student retention rates.

Significance of the Study

A study of this type is important for several reasons. First, due to the recent responses both within and without higher education to the demands for quality and accountability, authorities are concerned with the importance of improving retention and improving teacher classroom behavior for the purpose of increased student learning. Administrators are concerned with the restructuring of the faculty role that will impact and be impacted by both of these topics (e.g., Barr & Tagg, 1995; Guskin, 1994a, 1994b; Plater, 1995).
Second, if the role of faculty is being restructured as these suggest, then the role of faculty preparation should be a topic of change as well. The curriculum of graduate schools should reflect these reforms (e.g., Guskin, 1994b; Kennedy, 1995). Curricula should include training for future faculty that will enhance teaching and class student retention, and therefore studies such as this one should add to the current information in this area.

Third, this study has potential implications not only for administrators and the training of future teachers, but also for faculty development programs for current teachers in both full-time and part-time capacities. The numbers of part-time faculty on community college campuses have continued to increase (Gappa & Leslie, 1993; Rouche, Rouche, & Milliron, 1995), and therefore the need to orient them and provide faculty development for them in the areas of retention and improved classroom behavior are critical to the success of the overall community college mission.

Assumptions

This study was undertaken on the following assumptions:

1. Student perceptions of teacher immediacy were both valid and reliable.

2. The students responded honestly and accurately when completing the survey instruments that supplied the participating faculty members with a nonverbal immediacy numerical index.
3. The participating full-time and part-time faculty were representative of the population being investigated by the study.

Delimitations

When designing this study, the following delimitations were imposed:

1. The sample for this study was limited to full-time and part-time faculty from a single campus of a large southwest community college.
2. Due to the exceptionally high drop-rate of remedial, non-credit classes, the study was confined to instructors of credit classes only.
3. Measurement of perceived teacher immediacy was limited to the scores from the Revised Nonverbal Immediacy Measure.

Limitation

The convenience sample decreased the generalizability of the findings of this study.

Definitions

The significant key terms for this study were defined as follows:

1. Nonverbal Immediacy: the nonverbal behaviors of an individual that indicate physical or psychological closeness (Mehrabian, 1969).
2. Teacher nonverbal immediacy score: a summed score of the Revised Nonverbal Immediacy Measure (RNIM), a survey which assesses students' perceptions of a teacher's physical or psychological closeness by identifying behaviors of approach-avoidance (e.g., eye contact, proximity,
gestures, open-body position, and movement) (McCroskey, Richmond, Sallinen, Fayer, & Barraclough, 1995).

3. Part-time teachers: those who are temporary, nontenure-track faculty employed less than full-time (Gappa & Leslie, 1993).

4. Student retention: a micro level of retention referring to the number or percentage of students starting and successfully completing a course or term (Lenning, Beal, & Sauer, 1980).

Summary

Chapter I has provided an overview of this study. It has presented the rationale for the study, the statement of the problem, the purposes and the hypotheses, the significance of the study, the assumptions, delimitations and limitations, and finally, the definitions of critical terms.

Chapter II contains a review of the literature relative to the dependent variable and the two independent variables of the study. The chapter begins with a discussion of student retention in general and then more specifically on the community college campus. The retention literature discussion is followed by the origin, major findings, and contributions of the immediacy concept in communication literature. Last, the chapter reviews the literature regarding comparison and contrast of part-time/full-time teacher behavior.

An explanation of the methodology of the study is the focus of Chapter III. First, the discussion contains a description of the population and the
survey instrument. The chapter then details the procedures for the two-fold data collection process and the statistical treatment of the data.

Chapter IV explains the process and findings of the data analysis. Finally, Chapter V puts the study in perspective by discussing and summarizing the implications of the major findings. The chapter concludes with recommendations for future research.
CHAPTER II

REVIEW OF THE LITERATURE

Retention

Although research about retention in higher education has evolved through the years and changed in emphases, definitions, and approaches, it has existed in some form or fashion for over 60 years. An examination of the topic of the retention issue as it relates to community college teacher behavior must include (1) a historical survey of the shifts of higher education retention theory in general, (2) an explanation of the tenets of key retention theories that relate to faculty-student interaction, and (3) an examination of retention studies specifically affecting the community college environment.

Historical Development of Retention Literature

Prior to World War II the studies relative to students who stay and/or leave college were, for the most part, descriptions of basic characteristics of students who were not likely to complete college. The focus of the late 1950s shifted to the "fit" between students and institutions, and the 1960s shifted to a focus on the typologies of student dropouts and college student experiences (Beal & Noel, 1980). These studies were primarily descriptive, atheoretical studies. They were not predictive, but rather were based on
observed facts (Pantages & Creedon, 1978), and they focused on attrition (Beal & Noel, 1980). During these two decades American colleges and universities were experiencing unparalleled growth (Hossler, Bean, & Associates, 1990).

For several significant reasons, the decade of the 1970s reflected a turning point for the concept of retention. First of all, the vocabulary shifted from persistence to retention, because the emphasis changed from students and what was lacking in students that kept them from persisting to an emphasis on the institution and what it could do to encourage retention (Noel, Levitz, & Salurni, 1985). One of the reasons for this shift related to a change in research methodology. Spady's (1970, 1971) theoretical model and Tinto's (1975) model that built on Spady's work, along with Astin's (1975) longitudinal study, marked a change from predominantly descriptive studies to predictive, empirical ones using multivariate statistical procedures made available through improved computers. A second reason for the shift in emphasis from students to institutions had to do with changes occurring outside of the world of academe. Previously large applicant pools began to be affected by a decrease in birthrates and in traditional aged students, and the federal and state funds for higher education were beginning to decrease as the competition for funding from social programs, defense, and the federal deficit increased (Hossler et al., 1990).
The 1980s ushered in a move from theoretical literature to practical application. Robert Cope declared in the Forward of the Beal and Noel (1980) report, What Works in Student Retention, that their study was important for three reasons: (1) it shifted the focus "from the negative to the positive from why students leave college to how they can be encouraged to stay" (p. v); (2) it focused on variables that colleges could do something about; and (3) it suggested actions that could impact institutional quality.

The competitive drive for students and for funding has continued to escalate and to fuel the emphasis on both recruitment and retention into the present decade. Kerr (1994) argued that competition for students, funds and reputation among American colleges and universities was not only endemic, but was the most competitive in the world. He identified the American economic restructuring and its effects on higher education as a critical, dominant theme of the 1990s:

New demands for public resources assert themselves as for health care as the population ages, and for child and youth care as the family disintegrates. As a consequence, the nation faces a confrontation over the use of resources as never before in its history . . . And, thus far, public institutions of higher education have been losing. (p. 185)

As the emphasis shifted in the 1980s from attrition and a focus on student graduation failure to retention and the idea of joint responsibility for
departure between student and institution, definitions and terminology were also affected. One prominently used term in the literature that illustrates this transition is "dropout."

Astin, writing in 1975, defined dropout as "only those students who had originally planned to earn a bachelor's degree but who subsequently failed to do so" (p. 6) and categorized the students in his longitudinal study as dropouts, stopouts, and not dropouts. As the literature during the late 1970s and early 1980s continued to validate Tinto's 1975 model of student departure, researchers began to alter the definition of dropout (e.g., Bean, 1990; Lenning, Beal, & Sauer, 1980; Tinto, 1985, 1987). Tinto's (1985) redefinition, for example, included the student success or failure to achieve not merely a bachelor's degree as Astin stipulated, but rather the broader idea of "educational goals."

Dropout may be seen as occurring when individuals of sufficient skill, competence and commitment fail to achieve reasonable educational goals consistent with those of the institution or fail to receive sufficient institutional support to enable them to achieve those goals. . . . The inability of a student to complete the one course for which he or she is enrolled is as much an educational failure as is the withdrawal of a student prior to completing a desired four year degree program. (pp. 39, 40)
This definition embraces two ideas absent from the earlier definition. First, it includes the idea that students have a variety of reasons for attending an institution of higher education besides attaining a bachelor's degree, and second, that the success of failure in meeting these more inclusive goals should be taken into consideration in regard to student departure. In other words, student departure is not necessarily synonymous with dropout if the student has achieved his or her educational goals.

Additionally, this broader definition of dropout paralleled the idea of institutional responsibility that surfaced during this period. The psychological theories of departure prominent during the 1960s and 1970s viewed student departure as a personal failure on the part of the student and therefore placed responsibility for leaving strictly on the student. These theories subsequently ignored the aspects of the institution which may have contributed to the departure (Tinto, 1987). During the 1980s when the philosophy shifted to the perspective that student departure was a jointly held responsibility between student and institution, not only was the term "dropout" redefined, but the resultant effect was redirected retention efforts.

Retention Theory and Faculty-Student Interaction

The research of Spady (1970) has become a significant and pivotal contribution to the retention literature for two reasons: (1) it pioneered in estimating an attrition model using multivariate statistics, and (2) it was the first fully developed theoretical model of student dropout from higher
education (Bean, 1990). Spady based his model on the social theory of suicide of Durkeim (1961). Durkeim argued that lack of social integration contributed to an individual's propensity for committing suicide, particularly if the lack of integration had to do with morals or values and interpersonal relationships. Spady made the analogy that dropping out of college parallels the dropping out (permanently) of suicide in that both are the result of the lack of integration into a particular social system.

... students withdraw from college because of a lack of shared values or normative support. Shared values means that students accept the importance of academic work, and normative support means that students have family, close friends, or significant others to support their staying in school. (Spady, 1970, p. 150)

Spady's 1970 longitudinal model posited social integration as pivotal in the dropout process. It is affected first of all indirectly by family background and academic potential and directly by normative congruence, friendship support, intellectual development and grade performance. Social integration then directly affects the student's satisfaction, which then affects institutional commitment and ultimately, the dropout decision.

Spady's expanded model for freshman year persistence (1971) was similar, but reflected several changes relating to the social integration variable. This model shows family background having a direct as well as indirect effect on social integration, and it depicts social integration as having
a direct effect not only on satisfaction, but also on institutional commitment. Additionally, for men, the model shows social integration having a direct effect on the dropout decision itself.

Neither of Spady's models for dropout has an isolated index for faculty-student interaction. Instead, both models have a single index (social integration) that includes measures of faculty-student contact and peer relationships, which make a significant contribution to the explained variance.

The longitudinal model developed by Tinto (1975) also had its roots in Durkheim's theory of suicide and built on Spady's work. Tinto similarly asserted that dropout from society (suicide) parallels dropout from the college social system and that both represent voluntary withdrawal from a community. The social conditions which prompt this lack of integration into the college community are "insufficient interactions with others in the college and insufficient congruency with the prevailing value patterns of the college collectively" (1975, p. 91). He further argued that lack of commitment to the particular institution and/or to the goal of college completion and subsequent increased probability of dropout could be the result of either the lack of integration into the academic domain or into the social domain.

A reciprocal relationship between academic and social integration is represented in Tinto's model as the academic system (grade performance and intellectual development) and the social system (peer-group interactions and faculty interactions). Unlike Spady's models, this model broadened
background characteristics to include family, individual attributes, and past school experience and it added expectational and attitudinal attributes referred to as commitments, which continually are modified by the individual.

In the model, background characteristics are shown to have direct impact upon initial goal and institutional commitments, which then affect the academic and social systems, which lead to academic and social integration, which subsequently results in either strengthened or weakened goal and institutional commitments. It is these new goal and institutional commitments that finally bring about a dropout decision. Students' experiences and interactions in the academic and social systems, as measured by their integration into the college community, modify their commitment to the institution and goal completion, which leads to persistence or dropout. Generally, then, the greater the integration, the greater the institutional and goal commitment, and the greater the commitments, the greater the persistence. For a decade this model was the focus of a number of studies (e.g., Bean, 1980; Pascarella, 1980; Pascarella & Terenzini, 1979, 1980; Terenzini & Pascarella, 1978, 1980) which generally supported the predictive validity of the model and the two core concepts of social and academic integration affecting person/institutional fit.

Terenzini and Pascarella undertook a series of six studies based on Tinto's model during the period from September of 1974 to September 1976 involving random samples of freshmen at Syracuse University. Using
discriminant analysis and setwise discriminate functional analysis, they found that "the frequency of informal student-faculty interaction was either the most or second most important single variable" (Terenzini & Pascarella, 1980, p. 277) with the most important type of contact being discussions about intellectual and course-related matters. Another significant finding reported in their studies was that reliable prediction of attrition can not be made based solely on pre-college traits, indicating the importance of what happens to students once they enroll at an institution. This finding was important in that it pointed to the fact that student persistence can be affected positively by institutional policies, programs, and interactions that contribute to student academic and/or social integration.

Tinto acknowledged that faculty interaction with students affects both the academic system and the social system of students, but his 1975 model placed faculty interaction in the social system. Pascarella and Terenzini's series of studies at Syracuse dealing with the Tinto model, however, found that the contribution of faculty interaction to attrition is "more closely aligned with academic variables than with social ones" (1977, p. 17). The interaction vectors as a set explained more variance than academic integration, which was more than social integration, and the academic integration variance would have been even larger than it was if faculty interaction had been included as one of the variables. Their results, then, suggested that academic integration is perhaps more important than social integration and
that informal faculty-student interaction should be treated under academic integration in the attrition model. Tinto reworked his model in 1987, and one of the changes included moving faculty and staff formal and informal interactions into the academic system.

Another model that has significance for the faculty-student interaction concept is the Pascarella model (1980). This model, based on the Spady and Tinto models and also picturing the dropout process as longitudinal, is a general conceptual model, not a specific path analysis diagram, which shows informal faculty contact having direct effect on educational outcomes, which then have direct effects on persistence.

In addition to Spady, Tinto, and Pascarella, another contributor to attrition models is Bean. His first model (1980), unlike the Spady, Tinto suicide theoretical base, was built on a work turnover analogy. Derived from a series of studies relative to this topic, his 1983 model shifted theoretical under-pinnings and built from the information integration theorists Fishbien and Ajzen (1975). They postulated a cyclical interaction of attitudes influencing information received by an individual, influencing attitudes, influencing information. Within this cycle, beliefs correlate with attitudes, which affect intention and subsequent behavior. Bean concluded that "students' beliefs about their experience in school lead to attitudes toward the school (such as whether or not to stay) that affect the students' intent to stay (or leave) followed by actual attrition or retention" (1990, p. 151). He
contended that any retention programs or services should be aimed at positively affecting students' attitudes about the school and self.

Like the Spady and Tinto models, Bean included academic and social integration domains in his model. In his synthesized model (1990) he placed them in the interaction section, which he contended directly influences attitudes, which lead to intent to leave and also institutional fit and institutional loyalty. He placed the informal contact with faculty element in the social integration section of the model, and he placed relationship with faculty in the academic integration section.

Where to place informal faculty-student contact in the dropout decision model may vary from one theorist to another, but the fact that out of class faculty-student interaction is beneficial, and therefore contributes at least indirectly to retention, does not seem to be questionable. Pascarella (1980a, p. 564) reviewed the literature on informal contact and concluded that statistically significant relationships exist between student informal, nonclass contact with faculty and:

- satisfaction with college,
- educational aspirations,
- intellectual and personal development,
- academic achievement, and
- freshman to sophomore persistence.
Astin's (1977) longitudinal study of college effects on students reflected findings similar to Pascarella's list of benefits. This study was a representative national sample of students and institutions and focused primarily on identifying ways to help students finish college. He found that, "Student-faculty interaction has significant positive correlations with every academic attainment outcome: college GPA, degree attainment (Beta = .16), graduating with honors (Beta = .12), and in enrollment in graduate or professional school" (p. 223). He also found that student-faculty interaction significantly relates with non-academic variables such as self-reported areas of intellectual and personal growth, personality and attitudinal outcomes, self-rated abilities except physical health, and satisfaction with the college experience (Astin 1977, 1993). He concluded as a result of his findings that because faculty-student contact has so many benefits, increasing faculty-student contact can have positive implications for student development in any given institution.

Friedlander's (1991) extensive study at Santa Barbara City College demonstrated that the more contacts students have with faculty outside the classroom the more involved they become with what goes on inside the classroom. Friedlander's findings were consistent with Astin's (1985) hypothesis about the importance of student involvement in higher education. The more involved in the classroom students are and the more faculty
interactions (in and out of the classroom), the more intrinsic value students find in learning (Terenzini, Springer, Pascarella, & Nora, 1995).

Bean (1990), however, pointed out that the benefits of informal faculty-student contact occur only when the meetings are perceived as positive by the student. When informal faculty contact communicates concern with student emotional and cognitive growth, it has an influence on personal and intellectual gains of students (Endo & Harpel, 1982).

In 1987, an American Association of Higher Education taskforce led by Chickering and Gamson researched and developed *Seven Principles for Good Practice in Undergraduate Education*. "Encourages student-faculty contact" is their very first principle. They explain, "Frequent student-faculty contact in and out of class is the most important factor in student motivation and involvement. Faculty concern helps students get through rough times and keep on working" (Chickering & Gamson, 1991 p. 65).

The faculty "concern" these researchers found to be so important was also found to be an important predictor for retention described in the Lenning, Beal, and Sauer (1980) and Beal and Noel (1980) reports as "caring attitude of faculty and staff." These reports both deal with the national survey "What Works in Student Retention," which was a study jointly conducted by the American College Testing Program and the National Center for Higher Education Management Systems in 1979 to examine the implications of retention research for administrators and researchers. This
study found "caring attitude of faculty and staff" to be the most positive campus characteristic contributing to student retention for all four types of institutions in the study, including community colleges (Beal & Noel, 1980). Seventeen variables were discovered to assist in the prediction of student attrition and retention in the instruction category, one of which was "Faculty concern for students and teaching" (Lenning, Beal, & Sauer, 1980). The report described this variable as a faculty member's interest in, and concern for, the student and concern for the student's learning.

As our study establishes (Beal and Noel, 1980), caring attitude of faculty and staff is viewed as the most potent retention force on campus. Requiring courses does not guarantee learning, but competent, caring teachers in the classroom who are motivated to deliver learning can (Noel, 1985, p. 17).

This caring behavior of teachers in the classroom has also been found to affect the perceptions of students regarding the accessibility or inaccessibility of faculty for out-of-class interactions (Wilson, Woods, & Gaff, 1974).

This concern for students and their education both inside and outside the classroom significantly contributes to the complex process of the student's formation of an opinion about the institution (Tinto, 1985; Toy, 1990) and also to the student's social and intellectual integration (Pascarella & Terenzini, 1978, 1979, 1983; Spady, 1970; Tinto, 1975, 1987), both of which lead to persistence.
In addition to finding "caring attitude of faculty and staff" to be the most important of the positive campus characteristics identified by institutions, the "What Works in Student Retention" study found effective teaching to be the second most important institutional retention variable (Noel & Beal, 1980). Effective teaching can contribute to student involvement (Astin, 1985; Friedlander & MacDougall, 1991; Rouche & Rouche, 1985), which can improve the quality of instruction, which in turn can increase academic integration and subsequent increased retention (Thomas, 1990; Salurni, 1985).

Community College Retention Literature

With a leveling off of the traditional age college student pool, lessening of state and federal funding, and the competitiveness of electronic college offerings, community colleges, like four year universities and colleges, continue to be interested in retention. The community college retention literature includes significant early studies independent of the Tinto heritage (e.g., Flannery & others, 1973; Kester, 1971), as well as studies based on the Spady/Tinto work, to investigate commuter students (e.g., Pascarella & Chapman, 1983; Pascarella, Duby, & Iverson, 1983; Pascarella, Ethington, & Smart, 1986), nontraditional students (e.g., Bean, 1986; Bean & Metzner, 1986), and community college students in general (e.g., Halpin, 1990; Tinto, Russo, & Kadel, 1994; Voorhees, 1986; Webb, 1988).
Some of these studies place informal faculty student contact in the social integration domain, some place it in the academic domain, and some do not even address it. Some do and some do not include the caring faculty concept or in-class faculty behavior. This section will attempt to synthesize these inconsistencies first by examining two relevant studies independent of the Tinto model and then by discussing pertinent findings of studies adapted from the Tinto model relating to commuter students, nontraditional students, and/or community college students.

During the early 1970s, while Spady was laying the theoretical groundwork for future empirical retention studies in higher education in general, two intensive community college retention reports were being developed: they were the Northern California community college consortium attrition study (NORCAL) and the Miami-Dade Community College survey report on attrition.

The NORCAL project, beginning in 1969, was a joint effort of the Coordinating Council for Higher Education in California (CCHE) and the Northern California Cooperative Research Group (Nor Cal) to carry out a three phase study involving 28 community colleges and 28,000 first-time, full-time day students (Kester, 1971). In Phase I questionnaires were sent to "stopouts" defined as completers of the fall term, but not enrolled in the spring term. The Phase II "stopouts" surveyed were defined as students who completed the fall and spring, but who did not return in the following fall,
and Phase III surveyed "stopouts" who completed the fall, spring, and fall semesters, but who did not return for a fourth consecutive semester.

In the Miami-Dade Community College retention committee report, Flannery et al. (1973) stated that they did not perceive attrition strictly according to graduation statistics or view it in a totally negative light, but rather they placed the focus on the student and perceived attrition to be "the discrepancy between the student expectation and attainment" (p. 4). The committee's definition was based on the assumption that students' expectations can be measured and that the institutions have the responsibility to measure them. This all-campus responsibility rests first with those who hold administrative positions, next with division directors and department chairs, and last but most important, with the teachers. About the teachers' responsibility they stated:

It is the instructors who ultimately make the educational system effective and relevant, and they must accept the responsibility of using the resources of the college to help the students. . . . it is incumbent upon the individual faculty member to utilize all his talents not only to motivate and encourage students, but also to maintain close contact with them. (p. 6)

The committee's model of factors affecting a student's persistence in college focuses on within-semester attrition from classes and consists of two overlapping circles: one circle is labeled Society, one circle is labeled
College, and the section where the two circles overlap is identified as the Student. Included under the student section are decision to enroll, involvement in extracurricular activities, expectations, goals, motivations and also interaction with peers and faculty.

One of the unique characteristics of this study is that the committee recommended that levels of attrition be established at the class level, the department level, and division levels, as well as a graduation-rate level. They also contended that "personalized education" contributed to retention on each of these levels; anything that did not contribute to this personalized education contributed to attrition.

By the late 1970s the Tinto model was generating research specific to community colleges as well as the four year university upon which the model was originally based. In addition to his original studies at Syracuse with the Tinto model, during the 1980s Pascarella also researched the predictability of Tinto's model with community colleges. Pascarella and Chapman (1983) undertook a longitudinal, multi-institutional study of both two-year and four-year postsecondary institutions. Informal contact with faculty was operationalized under academic integration in regard to academic topics (advising, intellectual matters, and career discussions) and under social integration in regard to social interactions (discussions about campus activities and personal problems, having a meal or refreshments). The path analysis showed social integration to be a stronger predictor of persistence in the
four-year predominantly residential campuses model, but in the community college model it showed no contribution from social integration and significant indirect contribution from academic integration. Although the study had only a 35% response rate and did not include part-time students or students who were attending for purposes other than graduating, these researchers felt that the study substantiated Tinto's model as a potentially useful framework for understanding community college persistence.

Pascarella, Ethington, and Smart (1986) also limited their study to two-year institution students who were planning to pursue a bachelors' degree. This longitudinal study followed students for nine years and found that the variables with the most consistent pattern of significant effects on persistence and degree completion were academic and social integration. Particularly for men, knowing a faculty member or administrator personally had strong positive associations with persistence measures. They concluded that these results paralleled the findings of freshmen persistence behavior of students enrolled in four-year institutions.

While the Pascarella et al. (1986) study involved only first time two-year college students, Voorhees' (1986) log-linear study included 369 new and continuing students, thereby better reflecting the entire community college population. He argued that persistence to degree completion was not a valid measure for all community college students, because of the variety of student goals represented in the student body. The study did not
include a social integration domain, and the academic integration domain was found to be independent of persistence. However, Voorhees' academic domain was characterized by only three variables: grade-point average, number of informal interactions outside of class, and number of hours spent studying each week.

A study by Halpin (1990) modified the Tinto model to survey first-time, full-time freshmen at a two-year non-residential open-door comprehensive community college. Using a questionnaire based on the Pascarella and Terenzini model (1980), Halpin's integration variable set included informal relations with faculty in the social integration domain and faculty concern for teaching and student development in the academic domain. A series of three-group discriminant function analyses found that "Varying levels of integration are significant predictors of persistence, withdrawal and academic dismissal, with the effects of background and environmental factors controlled." Therefore, "the Tinto model, particularly the academic integration aspect does predict persistence or exit outcomes" (Halpin, 1990, p. 30). This finding suggests that the creation of opportunities by community colleges to establish and encourage maximum student-faculty interaction would be likely to result in greater integration and subsequent greater retention.

Tinto himself, in discussing the findings relative to his revised model (1987), advocated interaction between students and faculty at nonresidential
institutions. He argued that meeting with students outside of class is a reminder that they are part of the college community and that the community is concerned about them.

The Bean and Metzner research for nontraditional students is also pertinent to this body of literature. Based on Bean's earlier student persistence models (Bean, 1980, 1983), their two studies (Bean & Metzner, 1985, 1986; Metzner & Bean, 1987) involved both part-time and full-time commuting students; they were, however, conducted with commuting university students, not community college students. The findings of the 1987 study validated the 1985 model, which had placed social integration for commuting students outside the general flow of the dropout/persistence process. Faculty interaction outside of class was considered a measure of social integration; faculty concern was not included in the model as a variable in any domain. Bean and Metzner concluded not only that the reasons nontraditional students drop out do not relate to social factors at school, but rather that dropout is a result of academic performance and commitment to the institution. These researchers recommended that career counseling, academic advising, and "faculty teaching approaches that enhance student perceptions of the value of a college education for future employment," should contribute to greater student commitment, satisfaction, and performance and subsequent decreased dropout (Metzner & Bean, 1987, p. 34).
The findings of Cleveland-Innes' (1994) study among nontraditional students are consistent with Bean and Metzner's findings regarding social integration not contributing to the drop-out decision. However, unlike the Bean and Metzner model, the Cleveland-Innes' model includes faculty concern for student development. She placed this variable in an academic integration domain, which had significant indirect effect on drop-out by having direct effect on commitment, which then had a direct effect on drop-out. This result is consistent with the Pascarella and Chapman (1983) model.

Cohen and Brawer (1996), in summarizing studies that survey reasons students give for leaving community colleges, contend that generally the reasons are not related to the institutions, but instead are related to situations that the college has nothing to do with. Some students simply reach their goal and drop out; some stop out due to the easy accessibility and availability of community colleges; some stop out or drop out due to job situations or other personal reasons. The majority of these students indicate that nothing the college did influenced their decision to leave nor would anything the college have done influenced them to stay. However, according to the Cohen and Brawer summary (1996), very few of the dropouts had consulted either a counselor or instructor before making their decision and the dropouts had never gotten involved with the college socially or academically. They tended to study alone, did not socialize with faculty, and did not
speak with professors outside of class. Consequently, even though the students may not have been aware that the colleges could have done something to influence their decision to stay, according to the research, many of those students were missing out on significant institutional retention contributors.

Summary of Retention Literature

Higher education retention literature has evolved during the second half of this century from descriptive studies to theoretical and empirical studies to reports of practical application. Retention efforts have become a focus of many institutions because of the financial benefits of retaining students, but also because "successful retention programs tend to improve the overall quality of life on campus" (Toy, 1985, p. 396). Noel (1985) represents the view widely held by researchers in the field (e.g., Bean, 1990; Noel, Levitz, & Saluri, 1985; Tinto, 1987) that the improved quality of students' educational experiences should be the purpose and goal of any retention program: "Re-enrollment or retention is not then the goal; retention is the result or by-product of improved programs and services in our classrooms and elsewhere on campus that contribute to student success" (p. 1).

This means that faculty must become convinced that attrition is a serious matter and that their attitude concerning retention can make a difference in the lives of their students. Noel (1985) points out that it is now clear that academic people who have face-to-face interactions with students
are key players in the retention factor. Faculty have significant impact—sometimes positive, sometimes negative—they provide opportunities for growth and development, and they provide experiences to put goals and talents into use.

Immediacy

Mehrabian (1969) defined immediacy as "the nonverbal behaviors of an individual that indicate physical or psychological closeness" (p. 203). He used an immediacy metaphor to describe his approach and avoidance principle: people approach what they like and avoid what they dislike. Based on this definition and principle, Andersen's pivotal instructional communication study involving teacher immediacy in the classroom conceptualized teacher immediacy as nonverbal teacher behaviors "that reduce physical and/or psychological distance between teachers and students" (Andersen, 1979, p. 543).

Andersen's (1979) study synthesized the literature from nonverbal communication and from education to demonstrate that the field of education was already finding correlations between some of the behaviors of the immediacy construct and positive student outcomes. Her research design employed a multiple regression model to investigate teacher nonverbal immediacy as a predictor of student affect toward the instructor and course content, student behavioral commitment, and cognitive learning. She used three sources to determine teacher nonverbal immediacy: (1) the Behavioral
Indicants of Immediacy Scale (BII), a 15, low-inference item, Likert-type scale based on the Mehrabian immediacy construct; (2) the General Immediacy Scale (GI), a 9-item semantic differential scale for assessing the general immediacy of each instructor; and (3) trained observers using the Rater Perceptions of Immediacy Scale (RPI), adjusted to be isomorphic with the BII scale. High correlation between the BII and the RPI (.92 after correction for attenuation) validated the student perceptions of teacher nonverbal immediacy.

Although Andersen's study used a convenience sample (students enrolled in 13 interpersonal communication classes), it introduced instruments which were unpolished and needed development, and it examined only correlational relationships, this study has proven to be seminal and significant for several reasons. First, it supported a trait dimension of immediacy, and it also established the success of student assessment of a teacher's immediacy trait for future investigations. Second, it contributed to the discipline a reliable and valid observational methodology for measuring nonverbal immediacy, the BII, which has been improved and used extensively in instructional communication research. Third, it was the first study to examine immediacy as a characteristic of teacher effectiveness. (Teacher effectiveness was operationalized as producing positive outcomes in the three learning domains: affect toward course and instructor, behavioral commitment, and cognitive learning.) And finally, the study found teacher
nonverbal immediacy to be a meaningful predictor of teacher effectiveness: teacher immediacy predicted 46% of the variance in student affect toward the teacher, 20% of the variance in student affect toward the course, and 18% of the variance in student behavioral commitment. Immediacy in this study was not shown to predict cognitive learning, but later the reason was found to be due to the type of course used in the investigation (McCroskey & Richmond, 1992).

During the interim since Andersen's seminal work with nonverbal immediacy and student learning, numerous studies have expanded on and contributed to our understanding of nonverbal immediacy in the classroom setting. The following section of this literature review first examines pertinent immediacy studies from the instructional communication literature as they relate to affective learning, cognitive learning, and the reason behind the impact of the two types of learning. Finally, this section concludes by discussing constructs similar to immediacy in the education literature.

Nonverbal Immediacy and Affective and Cognitive Learning

Andersen's (1979) findings presented strong support for student perceptions of teacher nonverbal immediacy as a predictor of student affect toward the teacher and toward the course content. Relationship between nonverbal immediacy and affective learning was confirmed during the next few years through studies dealing with a variety of topics: immediacy and
communicator style (Andersen, Norton, & Nussbaum, 1981; Kearney & McCroskey, 1980); immediacy and a variety of learning environments, both task-oriented (e.g., business, science, engineering) classes and people-oriented (e.g., communication, psychology, sociology) classes (Kearney, Plax, & Wendt-Wasco, 1985); and immediacy and perceived use of power bases and Behavior Alteration Techniques (BATs) (Plax, Kearney, McCroskey, & Richmond, 1986).

While Andersen's study set a precedent regarding immediacy as a predictor of affective learning, it did not find a relationship between teacher immediacy and cognitive learning. However, the Andersen study employed students and teachers in a single course of study (interpersonal communication), using the same text, common lesson plans and objectives, and common tests. McCroskey and Richmond (1992) explained that researchers finally realized the following: "With those objectives and the textbook it was quite possible for a student to have mastered the content tested without ever attending the class. Hence, the impact of teacher behaviors (immediacy and all other) was virtually prohibited" (p. 104). Later studies found that immediacy does in fact predict student perceived cognitive learning (e.g., Christophel, 1990; Gorham, 1988; Richmond, Gorham, & McCroskey, 1987) and that student perceptions of their learning and their perceptions of the teacher's immediacy agreed with the teachers' perceptions of student learning and teachers' self-reports of immediacy (Gorham & Zakahi, 1990).
In addition to the studies using immediacy survey methodology, laboratory experiments have contributed findings to strengthen the argument for a significant relationship between immediacy and cognitive learning. One of these studies, Kelley and Gorham (1988), dealt with individual student's recall of information. Students in four different teaching conditions were read four groups of six items and then asked to recall them. In one of the situations the teacher had high physical immediacy with eye contact, the second teacher had high physical immediacy with no eye contact, the third teacher had low physical immediacy with eye contact, and the fourth teacher had low physical immediacy with no eye contact. Physical immediacy and eye contact, plus an interaction of the two types of immediacy, were found through analysis of variance to positively impact short-term recall.

In a more recent experimental study of immediacy and learning, Comstock, Rowell, and Bowers (1995) used not one-on-one teaching, but rather intact groups each taught by a teacher exhibiting a different level of immediacy (low, moderately high, and excessively high) for their Solomon Four design. The "teacher" was a training professional who presented a 10-minute workshop on "Brain Food" using the same script in each case, but manipulating his nonverbal immediacy behaviors. Behaviors demonstrated in the three levels of immediacy were proxemics, haptics, vocalics, kinesics, eye contact, chronemics, and physical appearance. The results of multivariate analysis of variance found that perceptions of immediacy varied across
conditions as expected. Also, short-term cognitive, affective, and behavioral learning were all found to be curvilinearly related to immediacy in an inverted U curve, with moderately high immediacy creating greater learning than either low or excessively high immediacy. Long-term cognitive learning failed to show this relationship, but the researchers cited high mortality in the low and excessively high immediacy groups, indicating more motivation among the moderately high group students. This study was unique to much of the immediacy literature in its:

(a) manipulating immediacy, rather than prompting students to recall their perceptions of immediacy;

(b) measuring actual behavior rather than just behavioral intentions;

(c) measuring actual cognitive gain rather than perceptions of learning. (Comstock, Rowell, & Bowers, 1995, p. 264)

Nonverbal Immediacy and the "Power in the Classroom" Program

During the 1980s, West Virginia University was involved in a highly heuristic research program called "Power in the Classroom." Two of the seven studies that were a part of this program have had direct and significant impact on the immediacy research undertaken since 1986 that pertains to affective and cognitive learning.
Power I, the original study of the program (McCroskey & Richmond, 1983) was an investigation based on French and Raven’s (1959) five categories of power. Student and teachers were given general descriptions of the five power bases (coercive, referent, legitimate, reward, and expert) and asked to indicate the frequency of use. Results showed that teachers and students both thought that reward, referent, and expert power were used more by teachers than legitimate and coercive, but teachers perceived themselves to use expert power more frequently and students perceived their teachers to use coercive power more frequently. Power II (Richmond & McCroskey, 1984) dealt with use of power and its effects on cognitive and affective learning, finding coercive and legitimate power to be negatively related to learning, referent and expert positively related to learning, and reward power not to be associated with either type of learning. Power III (Kearney, Plax, Richmond, & McCroskey, 1985), in shifting the focus to implementation, generated a list of 18 teacher control strategies called Behavior-Alteration Techniques (BATs), which consisted of techniques and messages teachers use in managing student behavior. This list was revised in the Power IV study (Kearney, Plax, Richmond, & McCroskey, 1984) and supplemented with a sample message (Behavior-Alteration Messages, BAMs) for each BAT. Most of the teachers reported using only a fourth of the 22 BATS; they self-reported using the prosocial (reward type) BATs, but they reported other teachers to use antisocial (punishment) BATs often.
Power V (McCroskey, Richmond, Plax, & Kearney, 1985) investigated BAT usage and learning and discovered prosocial BATs to be positively related with learning and antisocial BATs to be negatively related to learning.

The Power VI study (Plax, Kearney, McCroskey, & Richmond, 1986) introduced nonverbal immediacy to the research program. Prior to this point the studies had been using an inductive approach. Based on what was known about BATs and about nonverbal immediacy, the researchers shifted from an inductive perspective and hypothesized that a relationship existed between selective BAT use, nonverbal immediacy, and affective learning (Plax & Kearney, 1992). The findings revealed not only that a relationship existed between BATs and affective learning and that student-perceived teacher nonverbal immediacy was a mediator, but also that nonverbal immediacy was the more important predictor of affect. Kearney, Plax, Smith, and Sorenson (1988) later found teachers’ prosocial or antisocial use of BATs were distorted by their use of immediate or nonimmediate behavior. Students perceived the anti BAT to be prosocial when from a perceived immediate teacher. With active resistance techniques, Burroughs, Kearney, and Plax (1989) subsequently found that students used teacher-owned (blaming the teacher) resistance strategies with nonimmediate teachers and student-owned (justifying resistance by holding themselves responsible) resistance techniques with immediate teachers.
A methodological technique frequently used in immediacy research since 1986 was introduced with the Power VI study. The participants were asked to respond to the survey items in regard to the teacher in the class immediately following the one they were in at the moment. This technique enabled a wide range of disciplines to be represented in the study, and it allowed the inclusion of instructors who might have been reluctant to participate in the study. Numerous subsequent studies followed the precedent set using this technique or a variation of it (e.g., Christophel & Gorham, 1995; Gorham, 1988; Frymier, 1993, 1994; Moore, Masterson, Christophel, & Shea, 1996; Richmond, 1990; Rodriguez, Plax, & Kearney, 1996; Thomas, Richmond, & McCroskey, 1994).

Power VII (Richmond, McCroskey, Kearney, & Plax, 1987) was the last study in the "Power in the Classroom" program. This study examined the relationship between BATs and cognitive learning. To do this the researchers designed a method of student self-report of their own learning. The researchers reasoned that no consistent, objective measure existed across disciplines, teacher evaluation methods, and course content, so they asked students to assess subjectively how much they learned in the class in question (referred to as the raw "learning" score) and how much they thought they would have learned if they had an ideal teacher (referred to as the "learning loss" score). Findings revealed, as expected, "Good teachers use
prosocial BATs and they positively influence both affective and cognitive learning" (Kearney & Plax, 1992).

Richmond, Gorham, and McCroskey (1987) immediately set out to investigate immediacy using this new approach of student self-report to measure cognitive learning in a two-study investigation. In Study 1 of their investigation, they asked half of the students to complete the immediacy questionnaire concerning the "best teacher that you have ever had in college," and the other half of the students to complete the questionnaire as it regarded the "worst teacher that you have ever had in college." Study 2 asked half of the students to answer the questionnaire based on a teacher of a "class you took in your major or intended major last semester," and the other half of the participants to respond to the questionnaire based on a teacher of a "class you took outside your major or intended major last semester."

Both studies revealed a positive relationship between immediacy and cognitive learning. Study 1 discriminate analysis of the data revealed significant differences between the linear combination of nine variables of best and worst teachers and student-perceived nonverbal immediacy accounted for 95% accuracy in classifying teachers in the worst or best categories. Best teachers were described as having high immediacy and worst teachers as having low immediacy. In the second study the students were categorized into low learners, moderate learners, and high learners.
Discriminate analysis indicated that the students could be classified into the three categories with a 68% accuracy based on the reports of teacher immediacy.

In addition to confirming research on nonverbal immediacy and affective learning and shedding new light on nonverbal immediacy and cognitive learning, the Richmond, Gorham, and McCroskey (1987) study made an important methodological contribution to immediacy research. Andersen's (1979) BII had been worded in a comparison manner (This instructor engages in more eye contact with me when teaching than most other instructors). Richmond, Gorham, and McCroskey adapted the BII for their study, thereby correcting the weakness of potential invalidity that they explain was pointed out by Rodgers and McCroskey (1984), who concluded that students with different experiences would have different norms for comparison. Therefore, the new Nonverbal Immediacy Measure (NIM) limited the survey to 14 items (eight presumed to be immediate and six presumed to be nonimmediate) and worded the items in an absolute manner (Looks at class when talking). Since 1987, the NIM has been used in a number of studies investigating nonverbal immediacy and cognitive learning (e.g., Christophel, 1990; Christophel & Gorham, 1995; Gorham, 1988; Frymier, 1993; Richmond, 1990).
Verbal Immediacy Studies

Verbal immediacy and its relationship with affective and cognitive learning has also been studied, but the attempts to polish a reliable and valid verbal immediacy measurement have not been as successful as the NIM and RNIM have proven to be with assessing nonverbal immediacy. Mehrabian (1971) indicated that immediacy had verbal as well as nonverbal components, and that the verbal components also express approach-avoidance and promote like-dislike inference. According to McCroskey and Richmond (1992), Sorensen (1980) was the first to attempt to include verbal behavior in the study of immediacy in the classroom. She used experimental, written statements indicating self-disclosure by teachers. She investigated their impact on student's perceptions of appropriateness and student perceptions of teacher immediacy and found the difference in self-disclosure accounted for 28% of the variance in student perceptions of immediacy.

Gorham (1988) developed what was for a period of time considered a valid and reliable measurement of verbal immediacy. Her study used the Richmond, Gorham, and McCroskey (1987) NIM to measure student-perceived nonverbal teacher immediacy and the Plax et al. (1986) method of student responses ("The teacher in the last class you had before coming to this class"), plus her newly-devised Verbal Immediacy Behaviors survey (VIB). To generate an instrument to measure a linguistic component of the immediacy model, she enlisted 47 students in upper-division communication
courses to participate in a brainstorming session. Based on the Mehradian conclusions that like-dislike results in linguistic changes, Gorham asked the students to think of the best teachers they had had throughout their years of education and to list their behaviors. The result was a 20-item summative survey which she combined with the 14 item NIM survey for her study. Three of the VIB items were found to have low correlations and were eliminated. Of the 17 others the split-half reliability was .94. Teacher immediacy, both verbal and nonverbal, were found in this study to contribute significantly to student learning.

During the next eight years Gorham's measurement was used in a number of studies and was continually found to have high reliability (Christophel, 1990; Christophel & Gorham, 1995; Frymier, 1993, 1994; Gorham & Zakahi, 1990; Powell & Harville, 1990; Sanders & Wiseman, 1990). However, in 1995, Robinson and Richmond questioned the validity of the Verbal Immediacy Behavior scale. They argued that the method used to generate the measure led to the development of a teacher effectiveness scale, not a teacher verbal immediacy behavior scale, and that since the two constructs are not isomorphic, the VIB scale was being used in the literature to measure something it really did not measure. This contention was based on their discovery that the reverse scored item, plus the three reverse scored items discarded by Gorham as weak items, correlated negatively with the remaining items, which meant that they were associated with higher
immediacy instead of lower immediacy. They concluded that the structure of the instrument builds in a positive bias, resulting in a classic response set, making the responses questionable. Robinson and Richmond examined two additional data sets and found the same pattern in both.

Using data sets that had employed the highly valid NIM and the VIB, the researchers then computed correlations of the scores on the two measures and found only one item had consistently above .50 correlations ("Uses humor in class"), two items had correlations in the .40 range, and three items in the .30 range. All of the others were even lower. Consequently, Robinson and Richmond concluded that the VIB scale lacked both face and construct validity and recommended that it should not "be allowed to become entrenched in the literature of the field" (p. 81).

Explanations for the Impact of Immediacy

From Andersen's (1979) study to the present, one study after another has continued to add to the argument that teacher immediacy increases student learning. During the past decade several groups of researchers have pursued investigating the reason that the phenomenon occurs.

After finding the relationship between immediacy and cognitive learning in their recall experimental study, Kelley and Gorham (1988) suggested an arousal-attention theory to explain their findings. They proposed that teacher immediacy involves more interesting teacher behavior that arouses the interest of students, causing them to pay better attention to
the course content, which leads to better remembering and subsequent learning. Although the study measured neither arousal nor attention, the results of the investigation were consistent with this theory, according to McCroskey and Richmond (1992).

In 1990, Richmond and Christophel independently proposed similar motivation theories to account for the immediacy factor impacting learning outcomes. Christophel used a single data collection in her two-study investigation of state motivation and immediacy and their effects on learning. Study One participants used the Plax et al. (1986) method of having students respond to the immediacy and state and trait motivation instruments based on the teacher in their preceding class, while Study Two used students in an intact class: one group of students provided the immediacy and motivation data and another group provided motivation and learning data. Correlational analyses indicated (1) that students who perceived their teachers as more immediate reported more class motivation; (2) that student perceptions of teacher immediacy correlated positively with student learning; and (3) that state motivation levels were positively predictive of learning, more so than trait levels. Thus, the study confirmed previous research indicating that higher teacher immediacy results in more student learning, and the findings support "the theory that student state motivation levels are modifiable within the classroom environment." Specifically, in this study, a portion of students
state motivation was directly modified by teacher immediacy behaviors" (Christophel, 1990, p. 337).

The other 1990 study, which was carried out by Richmond, was primarily an investigation of the relationship between power bases, Behavior Alteration Techniques (BATs) and student motivation. Richmond, like Christophel, used a single data collection (end of course) and also included immediacy and affinity-seeking techniques in an examination of affective learning and student self-report of cognitive learning. The multiple correlation results found (1) immediacy to have a significant relationship with affective and cognitive learning, and (2) more variance in motivation came from immediacy than from the BAT use. Supplementary analyses strongly suggested "that student motivation is the critical mediating variable between teacher communicative behaviors and student learning" (Richmond, 1990, p. 193).

Following the simultaneous proposal of the motivation theory by Richmond and Christophel, Frymier began further investigation of this answer to the question of the impact of immediacy on learning. In her first study (1993), she hypothesized that highly immediate teachers would result in more highly motivated students throughout the semester and also that "Students with low or moderate beginning motivation will benefit more from a highly immediate teacher than will students with high beginning motivation" (p. 456). Like the previous Christophel and Richmond studies, she used the
Plax et al. (1986) method of having students report on the teacher immediately following the class doing the research, but unlike the other two studies, in this investigation motivation was measured three times (beginning, middle, and end of semester) and immediacy was measured twice (middle and end). The results of the study’s factorial analyses indicated that teacher immediacy is indeed a predictor of motivation to study and also that (1) students beginning with high state motivation maintained high motivation throughout the semester with both high and low immediate teachers, but (2) students with initial low or moderate state motivation had higher levels of motivation at mid-semester and end of the semester with high immediate teachers than with low immediate teachers.

Frymier’s (1994) study followed the test-retest design of her 1993 study to continue the investigation into the cause of student affective and cognitive learning by using path analysis to examine two causal models: the Learning Model and the Motivation Model. The Learning Model proposes that trait motivation influences state motivation and that state motivation, nonverbal immediacy and verbal immediacy then all directly affect learning. The Motivation Model, on the other hand, depicts trait motivation, nonverbal immediacy and verbal immediacy all three equally influencing state motivation, which then in turn influences learning. Chi square analyses indicated that the Motivational Model was the better fit, with Frymier concluding that this finding supported the Kelley and Gorham (1988) arousal-attention theory
with one slight adjustment: "immediacy arouses students, gets their attention, which enhances motivation, which in turn increases learning" (p. 141).

A third Frymier study (Frymier & Shulman, 1995) took one of Keller’s (1987) model components for influencing student motivation, relevance, and investigated its relationship with teacher immediacy. Multiple regression analyses indicated that relevance, along with verbal and nonverbal immediacy, accounted for a significant amount of variance in state motivation. This finding prompted the researchers to conclude that the success of teachers to make content relevant to students may be a result of those teachers using immediate behaviors to get student attention.

To the teacher behaviors of immediacy and relevancy these researchers and two of their colleagues borrowed from the business management theory literature and added student empowerment to their pool of variables (Frymier, Shulman, & Houser, 1996). They argued that teachers directing student behaviors parallels managers directing subordinate behaviors and that student empowerment is related to intrinsic motivation. Since immediacy and relevance had previously been shown to be related to motivation, they hypothesized that student perceived teacher behaviors of immediacy and making content relevant would be positively associated with student reports of empowerment. Their findings confirmed this assumption.

Veering off in a slightly different direction, but relating to the motivation theory, are two studies by Gorham and Christophel. In the first
one (1992) these researchers analyzed student responses to open-ended questions regarding student perceptions of sources of motivation in classes. They found that context factors accounted for 63% of the sources listed by the students, structure/format factors accounted for 18%, and teacher behavior represented 19% of the sources. They also analyzed demotivation factors and found the students perceived context factors to account for 29%, teacher-related factors (both teacher behavior and structure/format) to account for 71%. These findings caused Gorham and Christophel to conclude that "motivation was perceived by students largely as a student-owned state, while lack of motivation was perceived as largely a teacher-owned problem" (p. 294).

Their follow-up study (Christophel & Gorham, 1995) used a test-retest method to replicate the initial study regarding motivation and demotivation. The results of this test-retest study confirmed not only their 1992 single data collection study, but also the Richmond (1990) and Christophel (1990) single data collection studies which concluded that student state motivation is modifiable by teacher behavior. The data in this study led the researchers to suggest that student perceptions of course structure and format (more central to the educational psychologist investigations of motivation than teacher behavior) are also related to teacher immediacy.

In addition to the arousal-attention theory and the motivation theory, Rodriguez, Plax, and Kearney (1996) have recently suggested a third
Rodriquez, Plax, and Kearney used path analysis to test both the motivation theory and their theory on the data that they gathered specifically for this investigation and also on the data collected by Frymier (1994). Results indicated that both models fit the data, so they used three criteria to determine which was the better of the two fits. First, they reasoned that the model with the least amount of error is better, and this was the Affective
Model. Then they reasoned that the Affective Model is better theoretically first because it "precludes the need for introducing a fourth variable (state motivation) into the causal chain" resulting in "a theoretically simple, elegant, and parsimonious explanation of the immediacy/learning relationship" (p. 302). The Affective Model is also better theoretically because supplementary analyses confirm that state motivation and affect-to-learn overlap, but are two separate factors with affective learning including more than just state motivation; therefore, the researchers argue that affect is the larger construct and affective learning is a part of it.

The Immediacy Concept in the Education Literature

Although the immediacy construct is not investigated in the education literature, the concept of teacher behaviors that relate to the Mehrabian approach/avoidance principle and its relationship to teacher effectiveness is definitely evident. Student ratings of teachers has been one of the most extensively researched areas of teacher effectiveness characteristics in higher education literature. Kulik and McKeachie (1975) summarized and synthesized a number of studies involving student ratings of teachers. Under the category called "Rapport" they cite studies having a dimension referred to as empathy (Bendig, 1954; Smalzreid & Remmers, 1943), approachable, warm (Turner, 1970), affective merit (Deshpande, Webb, & Marks, 1970),
teacher accessibility (Frey, 1973), and rapport (Creagor, 1950; Issacson, McKeachie, Milholland, Lin, Hofeller, Baerwaldt, & Zinn, 1964).

Cohen's (1981) extensive meta-analytic synthesis examined 41 studies involving student ratings of teachers and student achievement. He identified 28 studies which included some form of a rapport dimension, 23 of which reflected moderate positive correlation (+.31 average) between the two variables of rapport and achievement.

Further investigation of the Cohen data by Feldman (1989) divided the rapport dimension into two separate categories: teacher's availability and helpfulness, which averaged a correlation of +.36, and teacher's concern and respect for students and friendliness, which averaged a correlation of +.23. Other dimensions in this study also related indirectly to some of the immediacy behaviors (i.e., dimensions that relate to paralanguage, such as teacher's enthusiasm, teacher's elocutionary skills, and overall rating of lecture). Interestingly, one of the recommendations Feldman made in his summary is the following:

... the exact psychological and social psychological mechanisms by which instructional characteristics influence student learning need to be more fully and systematically detailed than they have been. . . . What is needed, then, are not only conceptualizations or theories about what instructional dimensions produce achievement and which
do not but also research on just how those dimensions that affect achievement do so . . . (p. 567)

Based on the recent instructional communication literature previously cited in this chapter (e.g., Christophel & Gorham, 1995; Gorham & Christophel, 1992; Frymier & Shulman, 1995; Frymier, Shulman, & Houser, 1996), it would appear that immediacy is in fact one of those mechanisms that helps meet the need in the research that Feldman recommended in 1989.

In addition to the research on student ratings, another educationally based study important to this literature review is the classic Wilson, Wood, and Gaff (1974) investigation of faculty characteristics. This study is relevant because it seems to link together the student-faculty-contact concept in the retention literature and the teacher immediacy concept in the instructional communication literature. These researchers surveyed 1,556 faculty members at six diverse institutions of higher education, including one public community college. Their purpose was to explore faculty characteristics to see if some of those characteristics facilitated or impeded informal faculty-student interaction. Findings of the study indicated that the differences in faculty characteristics were what Wilson, Wood, and Gaff called social-psychological characteristics. These characteristics included beliefs that education is an interactive process and behaviors that tended to invite discussion and communicate accessibility. The researchers concluded:
Clearly faculty members who frequently interact with their students more often manifest their accessibility for contact in a variety of ways. Even more striking is the converse finding: Faculty who have little interaction with their students outside the classroom manifest their inaccessibility for such contact by a variety of subtle cues which in effect say to the student that the process of learning is essentially one of fulfilling formal classroom assignments and mastering the "facts" and other prescribed content of a given body of knowledge. When each of these teaching styles rather than frequency of interaction is treated as the prior or independent variable, it is apparent that faculty who have little contact with students do little to invite such contact, indeed may do much to discourage it. (p. 85)

The "teaching styles" to which the researchers refer in the above quotation have to do with the three scales that emerged from principal components analysis of variables from the questionnaire: classroom participation practices, discursive practices, and evaluation practices. The "subtle cues" to which Wilson, Woods, and Gaff refer communicate accessibility and inaccessibility and are compatible with the Mehrabian immediacy principle, approach and avoidance.

Based on these findings, Wilson, Gaff, Dienst, Wood, and Bavry (1975) revealed not only a relationship between the "social-psychological" characteristics and faculty-student interaction, but also between those
characteristics and effective teaching. In this study faculty and senior undergraduates were surveyed from eight institutions. Based on both faculty and student perceptions, outstanding teachers were found to have more interaction with students and greater rapport with them than the non-nominated teachers in the study (Wilson et al., 1975).

The findings of the Wilson et al. (1974) study relative to community college faculty has also been seen in qualitative research (DuBois, 1993; Guskey & Easton, 1983). In the Guskey and Easton (1983) investigation to determine exceptionally effective community college teacher characteristics, researchers interviewed 28 full-time teachers from six community college campuses. These faculty were identified as effective by using two sources of criteria: (1) student achievement and low student attrition, and (2) perceptions of academic deans based on student ratings and other feedback. Regardless of academic discipline, age, or experience, these effective teachers were also found to possess teaching and instructional characteristics similar to the Wilson et al. "social-psychological" characteristics. The DuBois (1993) research involved participant observation and in-depth interviewing of outstanding community college teachers. "An approachable and friendly style with students" and "accessible to students outside of class" were common characteristics of these teachers (p. 464).
Part-Time Teacher Effectiveness

Feldman’s (1989) meta-analysis in the preceding discussion does not differentiate between, or make reference to, part-time faculty effectiveness. The coding of Cohen’s (1981) meta-analysis differentiated between graduate students and faculty members, but not part-time faculty. The community college research discussed above (Dubois, 1993; Guskey & Easton, 1983) dealt with full-time faculty only, as did the two Wilson et al. studies (1974, 1975). Limiting the definition of the term “faculty” by using it synonymously with “full-time faculty” only, as these studies have done, certainly is a good example of why the Gappa and Leslie term “invisible faculty” is appropriate for part-time instructors.

The fact of the matter is, however, that part-time faculty play an extensive role in the life of community colleges. Part-time faculty represent almost 60% of all faculty teaching in community colleges. Kiem’s (1989) national survey involving 55 colleges in 36 states reported 59%. The Rouche, Rouche, and Milliron (1995) study, a random sampling of almost one-fourth of all American community colleges, found percentages of part-time faculties to range from 3.7% to 89%, averaging 58%, with one-third of community college credit hours being taught by part-time faculty. These researchers, plus other administrators and leaders, see this trend continuing, not reversing (Cohen & Brawer, 1996; Gappa & Leslie, 1993; McGuire, 1993).
Part-time teachers have always been a part of the community college culture (Eells, 1931), and, during the last 25 to 30 years, community colleges have experienced an increase in the hiring of part-time faculty. During the period of greatest increase, the 1970s, part-time faculty increased 80% (Miller, 1987). Commission reports of the 1980s issuing a call for improved quality of undergraduate education, such as Involvement of Learning (Study Group on the Conditions of Excellence in American Higher Education, 1984) and Transforming the State Role in Education (Study Group of the Education Commission of the States, 1986), recommended reversing the trend. The American Association of University Professors deplore the rise of part-time faculty numbers (Mooney, 1992). Administrators and full-time faculty have also expressed concern about the effect of widespread use of part-time in place of full-time faculty (Arbor, 1988; Boyer, 1987; Friedlander, 1980). Other higher education leaders, however, support the use of part-time faculty, even in the present proportions, and recommend, not trying to change a trend that is here to stay, but rather trying to take advantage and make the best of the situation that exists (Gappa & Leslie, 1993; McGuire, 1993; Rouche et al., 1995).

*The Argument Against Effectiveness*

In researching the differences in full-time and part-time community college faculty effectiveness, Friedlander (1980) investigated the following areas: teaching experience, continuation of employment, degree attainment,
participation in selection of course materials, reading requirements for students, use of instructional media, use of out of class activities, use of instructional support, grading practices, availability to students, and involvement in professional activities. In every instance the full-time teachers had higher percentages in a positive direction than did the part-time teachers. For example, 21% of the part-timers did not have a degree beyond the bachelor's degree, whereas only 5% of the full-timers did not. One third of the full-time faculty did not use instructional media, but almost half of the part-time faculty did not use media, giving lack of awareness of availability, lack of lead time, and lack of familiarity with procedures as the reasons. Part-timers indicated slight contact with peers, and few of them attended professional development activities when given the opportunity to do so. Friedlander concluded that if the criteria he investigated does in fact contribute to program effectiveness, then his findings indicated that the extensive use of part-time faculty could conceivably adversely affect the quality of instruction.

Haddad and Dickens (as cited in Biles & Tuckman, 1986) and Kiem (1990) both found that part-time faculty spend less time preparing for class and have less teaching experience than full-time faculty. Additionally, Haddad and Dickens reported that part-timers have less time with students, often are not acquainted with basic teaching-and-discipline-oriented philosophy of their campus, and often give primary allegiance to their full-
time job. Kiem (1990) found less involvement in professional associations and less experience publishing among part-timers.

Part-time faculty generally receive little orientation and even less professional development opportunities (Biles & Tuckman, 1986; Gappa & Leslie, 1993; Rouche et al., 1995). This neglect is also evidenced in the lack of availability of support services for part-timers. Erwin and Andrews (1993) found that 59% of the colleges they surveyed admitted to having a need to improve their support services to part-time faculty. These researchers also found that while 77% of the colleges reporting in their survey were satisfied with their full-time evaluation process, only 58.8% of those reporting were satisfied with their part-time system.

Gappa and Leslie (1993) found that administrators often worry about inadequacies in their hiring practices of part-time teachers, since many are last minute interviews and decisions. Administrators in their study also expressed concern about weaknesses in some part-time teachers’ theoretical depth and research aspects of their disciplines.

While these findings point to differences that may be affecting negatively the quality of education that community colleges can offer, some educators are concerned that extensive use of part-timers and diminishing use of full-time faculty will eventually damage the professional image of the college culture. Vaughn (1992), in encouraging community college faculty scholarship, has noted the following:
On many community college campuses today, one not only fails to find a community of scholars, but also fails to find a community of faculty members of any type. Many two-year faculty members are part-time teachers; they drive in, teach their classes, and drive away. . . . The problems involved in building an institutional culture that values scholarship are compounded when many of the faculty have only a limited professional investment in the community college. (p. 5)

Those concerned about collegial faculty culture worry that part-timers who have few or no benefits, little or no job security, and little sense of professional future threaten scholarly collegiality (Rice, 1996). Part-time faculty rarely "team-teach with colleagues, collaborate on research, write grant proposals" or participate in hiring, curriculum planning, and program evaluation," and, consequently, "traditions of shared decision making and faculty autonomy run the risk of breaking down" (Altbach, 1995, p. B3).

The Argument For Effectiveness

In spite of the research that points to problems in the use of part-time faculty, studies also exist that show part-timers to be every bit as effective as full-timers in student ratings (Gappa & Leslie, 1993; McGuire, 1993), in lesson preparation (Lowther, Stark, Genthon, & Bentley, 1990), and in student achievement (Bolge, 1995). Because of the ambivalent and inconsistent results in studies regarding part-time effectiveness, many administrators
rely on the other benefits of using part-time faculty to strengthen their arguments for doing so.

First of all, they point out that full-time and part-time faculty have the same teaching credentials and do the same instructional activities in the classroom (Friedlander, 1980). Many part-timers are excellent teachers, have more high school teaching experience than do full-time teachers, and are held to a higher standard because the ones who are not effective are not rehired (Gappa & Leslie, 1993). Part-time teachers are a curriculum resource bringing depth and relevance to the classroom with their wide range of first-hand and current experiences in their fields (Altbach, 1995). They are committed and highly motivated to teach, and they are a link to the community and a link to the workplace (McGuire, 1993).

Supporters of extensive use of part-time faculty use also point to two prominent arguments that do not relate directly to teacher effectiveness, but rather to institutional effectiveness and institutional programming. The first is financial benefit. The expense for a part-time instructor to teach in a community college district is one-third to one-half that of a full-time faculty member (Friedlander, 1980; Rouche et al., 1995). For 10 three-hour courses taught by new entry-level full-time faculty, the average salary paid is $38,225; the average salary of a part-timer to teach one of those 10 classes is $1678.45 (Rouche et al., 1995). Not only that, but less than 24% of the community college institutions and/or districts surveyed in the Rouche et al.
(1995) investigation offered benefits to part-time faculty, and of those that did, many did not actually pay any part-timer benefits, because the part-timers at their institutions did not meet the requirements to receive the benefits that were offered.

The second institutional benefit of using part-timers extensively has to do with flexibility of scheduling. Since part-timers are hired on a semester-to-semester basis, they do not have to be rehired. Therefore, adding extra sections to meet market demands or to manage fluctuating enrollments can be taken care of easily and efficiently when a large number of part-timers are being used.

*The Common Ground*

Arguments can be made both for and against the effectiveness of the current extensive use of part-time faculty on community college campuses. Regardless of the position on this part of the question, consensus exists that colleges must take steps to ensure that the existing use of part-timers works as well as it possibly can.

Part-time faculty are sleeping giants; their sheer numbers and their impact on college instruction cannot and should not be ignored. The issues that have divided full-time and part-time faculty, the issues that have separated part-timers from the larger academic community, will not go away. They will be addressed, or they will maim higher education. (Rouche et al., 1995, p. 157)
Very little advancement has been made during the last 25 years in the areas of part-time orientation, development, and integration. Gappa and Leslie (1993) report "a sink or swim philosophy of benign neglect to elaborate programs that link orientation to instructional development and evaluation" (p. 181). A central theme of their study was that faculties are "bifurcated into high and low status castes" (p. 12), and that institutions must begin to do everything possible to overcome this bifurcation.

Unfortunately, academic administrators apparently do not yet rank part-time needs as priorities in their efforts to budget the ever-decreasing available funding (Biles & Tuckman, 1986). Numerous leaders contend that this is definitely a problem that must be addressed and responded to in order for the benefits of extensive use of part-time teachers to outweigh the disadvantages (e.g., Biles & Tuckman, 1986; Gappa & Leslie, 1993; Rouche et al., 1995) Unless the benefits outweigh the disadvantages, they are only potential benefits.

Summary

Retention, teacher effectiveness, and the full-time/part-time dilemma are three critical issues facing community colleges as they stand poised to enter the 21st century. This study has taken these three issues and blended them into an investigation that has something to contribute to the literature of all three areas at this pivotal time of paradigmatic and technological changes in American higher education.
CHAPTER III

RESEARCH METHODOLOGY

Introduction

The purpose of this chapter is to discuss (1) the questions and the hypotheses that evolved from a synthesis of the retention, nonverbal immediacy, and full-time/part-time literature; (2) the research design, population, and instrumentation used to explore the questions and hypotheses; and (3) the data collection and analysis processes.

Research Questions

As the retention researchers point out, the reasons for which college students drop courses are numerous. Many of the reasons have been described and explored in the higher education retention literature. Likewise, many of the benefits of nonverbal immediacy have been described and explored in the instructional communication literature. However, the following questions remain to be asked and answered regarding the relationship between student-perceived teacher immediacy and student persistence/teacher retention rates:

1. Does student-perceived teacher nonverbal immediacy itself make a difference in student retention rates?
2. Does student-perceived teacher nonverbal immediacy itself make a difference in full-time teachers' retention rates?

3. Does student-perceived teacher nonverbal immediacy itself make a difference in part-time teachers' retention rates?

4. Does an interaction effect between student-perceived nonverbal immediacy and faculty status of full-time or part-time make a difference in teachers' retention rates?

5. Are student-perceived nonverbal immediacy and faculty status predictors of teachers' retention rates?

Hypotheses

Because of the research discussed in Chapter 2 indicating a relationship between nonverbal immediacy and faculty-student interaction and faculty-student interaction and retention, three directional hypotheses were formulated to explore the first three questions.

H1: Teachers with higher nonverbal immediacy will have higher student retention rates than teachers with lower nonverbal immediacy.

H2: Full-time teachers with higher nonverbal immediacy will have higher student retention rates than teachers with lower nonverbal immediacy.

H3: Part-time teachers with higher nonverbal immediacy will have higher student retention rates than teachers with lower nonverbal immediacy.

Questions four and five were addressed by testing the following hypotheses:
H4: An interaction effect between nonverbal immediacy and full-time/part-time status will exist.

H5: Nonverbal immediacy is a predictor of student retention rates.

H6: Faculty status is a predictor of student retention rates.

Research Design

The underlying research design for this study involved a survey administered to students for the purpose of obtaining a nonverbal immediacy score for each participating teacher. This process has been used extensively in the communication literature (e.g., Andersen, 1979; Christophel, 1990; McCroskey, Richmond, Sallinen, Fayer, & Barraclough, 1995; Richmond, 1990; Richmond, Gorham, & McCroskey, 1987). The survey findings and the retention data from the Grade Analysis Report were then examined through statistical analyses to develop descriptive and predictive conclusions.

Three variables were used in the design of this study. Nonverbal immediacy (based on the RNIM score) and faculty status (part-time/full-time) were the two independent variables; the single dependent variable was student retention.

Population

From one campus of a large southwest community college, a convenience sample of teachers and one class of each teacher's students were enlisted to participate in this study. On September 10, 1996, a letter
was sent to all full-time teachers of credit classes (67 faculty members) and all part-time teachers of credit classes (87) asking for their voluntary participation (see Appendix A). The letter stated the study’s purposes and made a request to survey one class of each teacher willing to participate. This survey of one class of each teacher’s students was for the purpose of generating a numerical nonverbal immediacy measure to use for each participating teacher. The letter also included mention of the three-week window for undertaking the class surveys (September 30-October 18, 1996), a statement of administration approval, and a return form indicating the teacher’s agreement to participate and preferred class time for the survey of his or her class.

By the designated time of beginning the administration of the class surveys, 42 full-time faculty members and 36 part-time faculty members had responded and agreed to participate. Two of the full-time responding teachers and one part-time responding teacher did not teach credit classes, however, and so were excluded from the study. Therefore, the study included a total of 75 teachers of credit classes, a response rate of 49%. Out of the 75 surveyed, 1,194 students completed surveys; only two students declined to participate.

Instrumentation

The Revised Nonverbal Immediacy Measure used to obtain the teachers’ nonverbal immediacy score is a twice-adapted version of the
nonverbal immediacy survey developed by Andersen (1978). The instrument developed for her study, the Behavioral Indicants of Immediacy Scale (BII), is a 15-item, Likert-type scale developed for use with teachers and based on Mehrabian's (1969) conceptualization of nonverbal immediacy. Andersen described the instrument in the following passage:

The instrument operationalizes immediacy as those communication behaviors manifested and perceived when a person maintains closer social distance, uses direct body orchestration, is relaxed, uses overall purposeful body movement, gestures, engages in positive head nods and smiles, uses eye contact and is vocally expressive. (Andersen, 1979, 546)

In this introductory study, factor analysis of the BII scale found all items loaded at .55, time one split-half internal reliability coefficients were .91 and time two were .93, and the test-retest correlation was .80.

The wording of the original BII items and later revisions of them are based on comparison of the teacher being evaluated with other teachers that the student has observed (e.g., The teacher engages in more eye contact with me when teaching than most teachers I have had.). This approach can be problematic if students completing the survey have dissimilar experiences for their comparisons. Richmond, Gorham, and McCroskey (1987) addressed this problem with the development of the 14-item Nonverbal Immediacy Measure (NIM), which is "a low inference measure with a refer-
ence base consistent for all students, regardless of subject matter being studied or the culture of the student" (p. 284). The items on this instrument simply describe immediate behaviors and ask the respondent to use a scale to indicate their perception of how well each statement applies to the teacher in question. (e.g., Looks at the class while talking).

Eight statements of the NIM were worded to presume nonverbal immediacy and six statements were worded to presume nonverbal nonimmediacy, thus requiring reflection before scoring. In the two studies undertaken initially using the NIM, the alpha reliability was .87 in the first study and .80 in the second. Since its development, this instrument has been used extensively in the field of instructional communication (e.g., Christophel, 1990; Frymier, 1992, 1995; Richmond, 1990) with continued findings of acceptable reliability.

The face validity of the instrument is considered excellent (McCroskey et al., 1995; Robinson & Richmond, 1995), because it was conceptually "designed with specific attention to the construct outlined by Mehrabian" (Robinson & Richmond, 1995, p. 80), which dealt with the principle of approach and avoidance based on the perceptions of others. Richmond, Gorham, and McCroskey (1987) cite extensive research from both social psychology literature and instructional communication literature to justify the validity of each of the 14 statements used on the NIM.
The Revised Nonverbal Immediacy Measure is the product of McCroskey et al. (1995) eliminating four of the statements on the NIM. These researchers found that touch and teacher position were poor items not only in their study, but in available data sets from previous research as well. Their data indicated that teachers in a variety of cultures never touch their students and that American college teachers can be either immediate or nonimmediate in both sitting and standing positions; therefore touching students and sitting or standing positions are not reliable predictors of teacher nonverbal immediacy. Upon undertaking reliability analyses, the researchers concluded that the reliability of the instrument was increased without the four statements dealing with touching and position, thus their recommendation for eliminating them, resulting in the Revised Nonverbal Immediacy Measure (RNIM). The RNIM survey used also included demographic items identifying students by gender, academic level, age, ethnicity, and morning or evening class.

Procedures for Data Collection

This study employed a two-step data collection process. The first step involved administering the RNIM survey (see Appendix B) to one class of students for each of the participating teachers for the purpose of determining a nonverbal immediacy score for the nonverbal immediacy independent variable of the study. During the three weeks prior to the middle of the semester, students from one class of each of the 75 participating teachers
completed the Revised Nonverbal Immediacy Measure. The rationale for surveying during the middle of the semester was that this time frame allowed the students an adequate number of classes to observe teacher behaviors prior to the survey. This timing also included as many students as possible who might drop the class before the deadline to do so.

At the time of administering the survey to each class, the students were told that the study was voluntary on the part of their teacher and voluntary on their part as well. The students were also informed that their responses would be anonymous and all faculty data would be coded with numbers rather than names, thus ensuring complete confidentiality in reporting the data analysis.

The second step of data collection called for securing the semester student retention rate of each participating teacher from the Grade Analysis Report published after the conclusion of the semester of the study. Several weeks after the beginning of the next semester (Spring), the student retention rates were gathered from the community college's district registrar.

Data Analysis

To begin the first stage of the data analysis, the student surveys were scanned and filed using the MacTA program. The files were then summed using the reverse scoring techniques in the StatView statistical program to compute the nonverbal immediacy score for each faculty member. The number of students on roll and the retention rates for each participating
teacher's classes were procured from the district Grade Analysis Report for the semester of the study. A weighted average was computed for each teacher's student retention numerical value.

Hypotheses One through Three were tested using simple regression analysis. Hypothesis Four through six were tested by multiple regression analysis, followed by commonality analysis, to examine the interaction effect of the two independent variables and to examine the relationship between the independent variables and the predictor variable. The relevant statistic for determining the rejection of the hypothesis was the F-test statistic. An alpha level of .05 was used to determine whether to accept or reject hypotheses.
CHAPTER IV

RESULTS

Introduction

The purpose of this study was to investigate the relationship between two independent variables, nonverbal immediacy and faculty status, and the dependent variable, retention rate. This chapter presents reliability findings, descriptive statistics, and the empirical testing of the hypotheses.

Instrument Reliability

Alpha reliability for the RNIM instrument was satisfactory (.78). This was comparable to the .85 RNIM reliability reported by McCroskey et al. (1995) and the .83 reported by Thomas, Richmond, and McCroskey (1994).

Descriptive Statistics

The sample consisted of 35 part-time faculty and 40 full-time faculty. Of the part-timers, 19 were male and 16 were female. Of the full-timers, 19 were male and 20 were female. The part-timers had an average retention rate of 74.6%, while the full-timers' average retention rate was 69.7%. Low nonverbal immediacy teachers had an average retention rate of 67.3%, while high nonverbal immediacy teachers had an average retention rate of 76.6%. Mean score on the RNIM for part-timers was 38.90 and for full-timers was
Table 1 reports the means and standard deviations of the RNIM items for both part-time faculty and full-time faculty.

Table 1

Means and Standard Deviations of Revised Nonverbal Immediacy Measure

<table>
<thead>
<tr>
<th>Items*</th>
<th>Full Time</th>
<th></th>
<th>Part-Time</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M  SD</td>
<td>M  SD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Gesture</td>
<td>3.9 1.1</td>
<td>3.9 1.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Voice</td>
<td>4.0 1.1</td>
<td>4.1 1.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Eye contact</td>
<td>4.7 .6</td>
<td>4.7 .7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Smiling at class</td>
<td>4.0 1.0</td>
<td>3.9 1.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Tense body position</td>
<td>4.3 1.0</td>
<td>4.3 1.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Movement</td>
<td>3.5 1.2</td>
<td>3.5 1.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Eye contact</td>
<td>3.4 1.1</td>
<td>3.3 1.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Relaxed body position</td>
<td>4.1 1.0</td>
<td>4.0 1.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Smiling at individuals</td>
<td>3.4 1.2</td>
<td>3.5 1.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Voice</td>
<td>3.7 1.1</td>
<td>3.7 1.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>39.0 6.2</td>
<td>38.9 6.4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Ranges of scores (possible) for the measure are as follows: Total immediacy 10-50; each immediacy item 1-5.

Empirical Testing of the Hypotheses

The statistical procedure used to test used to investigate the six hypotheses was regression analysis. Simple regression was used to study whether a relationship existed between higher nonverbal immediacy and higher retention rates, first for all faculty, then for full-time faculty, and finally for part-time faculty. Multiple regression was used to examine whether an interaction effect existed between the two independent variables and to
examine the predictive potential for the two independent variables. All tests for significance were performed at alpha = .05.

**Higher Nonverbal Immediacy and Higher Retention Rates**

Hypothesis 1 stated that teachers with higher nonverbal immediacy will have higher student retention rates than teachers with lower nonverbal immediacy. This hypothesis was accepted. The results of regression analysis indicated that higher nonverbal immediacy teachers in the total sample of faculty had significantly higher student retention rates than the teachers with lower nonverbal immediacy, $F(73) = 12.39, p < .0007$. The beta weights are presented in Table 2.

Table 2

*Simple Regression of Retention on All Faculty (Full-Time and Part-Time Combined) Nonverbal Immediacy*

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>$B$</th>
<th>Beta</th>
<th>$t$</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Faculty</td>
<td>1.18</td>
<td>.38</td>
<td>3.52*</td>
</tr>
<tr>
<td>$R^2 = .15, F(1, 73) = 12.4^*$</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*$p < .0007$

While Hypothesis 1 dealt with nonverbal immediacy and retention rates of all faculty, Hypothesis 2 dealt with the same relationship, but of full-timers, and Hypothesis 3 dealt with this relationship in regard to part-timers. Hypothesis 2 stated that full-time teachers with higher nonverbal immediacy
will have higher student retention rates than full-time teachers with lower nonverbal immediacy. This hypothesis was accepted. Full-time faculty with higher nonverbal immediacy had significantly higher student retention rates than teachers with lower nonverbal immediacy, \( F (38) = 9.25, p < .00042 \). Table 3 presents the beta weights for this analysis.

Table 3

*Simple Regression of Retention on Full-Time Faculty Nonverbal Immediacy*

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>B</th>
<th>Beta</th>
<th>( t )</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Faculty ( R^2 = .20, F (1, 38) = 9.25^* )</td>
<td>.47</td>
<td>.44</td>
<td>3.04*</td>
</tr>
</tbody>
</table>

*\( p < .0005 \)

Hypothesis 3 stated that part-time teachers with higher nonverbal immediacy will have higher student retention rates than part-time teachers with lower nonverbal immediacy. This hypothesis was also accepted. Part-time faculty with higher nonverbal immediacy had significantly higher student retention rates than did part-time teachers with lower retention rates, \( F (33) = 4.121, p < .05 \). The beta weights for part-time faculty are presented in Table 4.
Table 4

Simple Regression of Retention on Part-Time Faculty Nonverbal Immediacy

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>B</th>
<th>Beta</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Faculty</td>
<td>.48</td>
<td>.33</td>
<td>2.03*</td>
</tr>
<tr>
<td>$R^2 = .11, F (1, 33) = 4.12^*$</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < .05

The Predictive Model

Moderate positive correlation was found between nonverbal immediacy and retention ($r = .38; p = <.0007$) and low negative correlation was found between faculty status and retention ($r = -.17; p = <.149$). A multivariate regression equation using forward selection was followed by commonality analysis (McPhee & Seibold, 1979; Mood, 1979) to determine the unique and common contributions of each independent variable. The results of commonality analysis indicated that both predictors uniquely and in combination contributed to 17.4% of the variance in retention ($F = 7.58, df = 72, p < .001$). Table 5 presents the results of this analysis.

Hypothesis 4 stated that an interaction effect would occur between nonverbal immediacy and faculty status. Commonality, the extent to which predictors operate as a group to explain the dependent variable, was a nonsignificant .1% indicating no interaction between nonverbal immediacy and faculty status. This hypothesis was rejected.
Hypothesis 5 stated that nonverbal immediacy is a predictor of student retention rate. Commonality analysis indicated that nonverbal immediacy accounted for 14.5% of the variance in the dependent variable and the hypothesis was accepted, $F(73) = 112.39, p < .0007$. Hypothesis 6 stated that faculty status is a predictor of student retention. This hypothesis was rejected. Faculty status explained a nonsignificant amount of the variance, 2.8%, suggesting that faculty status is not a significant predictor for retention rate, $F(73) = 2.13, p < .1492$. Beta weights of the multiple regression analysis and the accompanying $t$-values for the model are displayed in Table 6.

Further analyses indicated no significant correlation between the nonverbal immediacy of full-time and part-time teachers, and no significant correlation between the retention rates of full-time and part-time teachers.
Table 6

Regression Analysis of Retention Rate on Nonverbal Immediacy and Faculty Status

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>B</th>
<th>Beta</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nonverbal Immediacy</td>
<td>1.185</td>
<td>.382</td>
<td>3.563*</td>
</tr>
<tr>
<td>Faculty Status</td>
<td>-4.915</td>
<td>-.17</td>
<td>.1175</td>
</tr>
<tr>
<td>$R^2 = .17$, $F (2, 72) = 7.58^*$</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*< .05  **p < .001
CHAPTER V

SUMMARY, CONCLUSIONS, DISCUSSION,
AND RECOMMENDATIONS

Introduction

The purpose of this study was to investigate the relationship between the student-perceived nonverbal immediacy of community college faculty and their student retention rates. This chapter first summarizes the procedures and significant results of the study and considers the implications in regard to existing literature. Also discussed are the hypotheses that were not accepted and their implications. Finally, the chapter concludes with suggestions for professional practice and recommendations for further research.

Summary of Research

The Procedure

Based on the nonverbal immediacy, full-time/part-time faculty, and retention literature, the following five research questions were developed:

1. Does student-perceived teacher nonverbal immediacy itself make a difference in student retention rates?

2. Does student-perceived teacher nonverbal immediacy itself make a difference in full-time teachers’ retention rates?
3. Does student-perceived teacher nonverbal immediacy itself make a difference in part-time teachers' retention rates?

4. Does an interaction effect between student-perceived nonverbal immediacy and faculty status of full-time or part-time make a difference in teachers' retention rates?

5. Are student-perceived nonverbal immediacy and faculty status predictors of teachers' retention rates?

Six hypotheses were formulated to test these research questions. A convenience sample of teachers from a large southwest community college was invited to participate in the study by allowing one of their classes to complete the Revised Nonverbal Immediacy Measure in order to obtain a nonverbal immediacy total for that particular teacher. At the conclusion of the semester, student retention rates were secured from the registrar for the participating 40 full-time teachers and 35 part-time teachers. Simple and multiple regression analyses were performed to test the hypotheses.

Results of Significant Findings

Support was found for the first three hypotheses, which suggests that higher teacher nonverbal immediacy does have a positive impact on student retention rate than lower nonverbal immediacy.

H1: Teachers with high nonverbal immediacy will have higher student retention rates than teachers with low nonverbal immediacy.
H2: Full-time teachers with high nonverbal immediacy will have higher student retention rates than teachers with low nonverbal immediacy.

H3: Part-time teachers with high nonverbal immediacy will have higher student retention rates than teachers with low nonverbal immediacy.

The nonverbal immediacy of both full-time and part-time teachers combined related significantly with retention ($r = .38$), as well as each of the status levels individually. Full-time teachers had a higher correlation of nonverbal immediacy to retention rate ($r = .44$) than did part-time teachers ($r = .33$).

Another significant finding dealt with nonverbal immediacy as a predictor of retention.

H5: Nonverbal immediacy is a predictor of student retention.

In the multivariate regression model, nonverbal immediacy accounted for moderate, but significant, variance in retention (17.4%), indicating as predicted in the fifth hypothesis that teacher nonverbal immediacy is a meaningful predictor of student retention rate. The variance accounted for by full-time faculty was greater (14.5%) than the variance accounted for by part-time faculty (2.8%).

The finding that nonverbal immediacy is a predictor of retention rates is not surprising. The immediacy and education literature is replete with studies indicating that nonverbal immediacy and similar constructs are related to positive outcomes such as affective learning (Andersen, 1979;
Christophel, 1990; Cosmetic, Rowel, & Bowers, 1995; Kearney & McCroskey, 1980; Kearney, Plax, & Wendt-Wasco, 1985), cognitive learning (Kelley & Gorham, 1988; Richmond, Gorham, & McCroskey, 1987), motivation (Christophel & Gorham, 1995; Frymier, 1993, 1994; Frymier, Cambridge, Schulman, & Hoosier, 1996), and teacher effectiveness (Dubois, 1993; Guskey & Easton, 1983; Wilson, Gaff, Diets, Wood, & Bower, 1975). The implication that nonverbal immediacy is predictive of retention also supports the findings in the education literature that have shown teacher approachability and teacher effectiveness behaviors to relate positively with retention (Beal & Noel, 1980; Halpin, 1990; Lenning, Beal, & Sauer, 1980; Thomas, 1990).

Two findings, however, were somewhat surprising. First, only a moderate correlation was observed between nonverbal immediacy (all faculty) and retention in the multiple regression model. One explanation for this might be that the study involved only a nonverbal measure and did not include verbal immediacy behaviors. Mehrabian (1971) has pointed out that immediacy and nonimmediacy are also communicated through verbal messages as well as nonverbal messages. The Plax, Kearney, McCroskey, and Richmond (1986) and Richmond, McCroskey, Kearney, and Plax (1985) studies discussed in Chapter 2 point to the fact that prosocial, as opposed to antisocial, verbal messages increase student-perceived teacher immediacy, which results in increased affective and cognitive learning. The inclusion of
verbal measures would hypothetically increase the correlation between immediacy and retention in this study.

Another explanation for the moderate correlation may have to do with class size. The variance accounted for by nonverbal immediacy behaviors has shown to increase as class size increases. Gorham's (1988) study indicated a 33% correlation of the Nonverbal Immediacy Behaviors Instrument (Richmond, Gorham, & McCroskey, 1987) with cognitive learning in small classes (1-25 students), 41% correlation in medium classes (26-50), and 50% correlation in large classes (51+). Relationships between nonverbal immediacy and attitudes toward class content also increased with class size: 53% for small, 59% for medium, and 61% for large. All of the classes surveyed in the current study would be classified in the small to low medium range with full-time teachers averaging 18 students and part-time teachers averaging 15 students; therefore, the immediacy correlations with retention and predictive potential were probably affected by the small class size average.

A third element possibly affecting the correlation is the use of a weighted average to compute the dependent variable, retention rate. This method, selected to compensate for the wide range of class sizes (3 students to 38 students), allowed for a conservative approach to the problem of differentiated class sizes, but it also resulted in a less sensitive design.
A second interesting finding is the fact that while full-time teacher nonverbal immediacy and retention was significant at \( p < .0042 \), the part-time teacher nonverbal immediacy and retention was minimally significant at \( p < .05 \). Two differences between the full-time and part-time samples may have contributed to this finding: (1) a difference in the size of the samples (full-time = 40 participants; part-time = 35 participants) and (2) a difference in the number of courses figured in computing the weighted average retention rate (full-time = 3-5 classes; part-time = 1-2 classes). Additionally, a convenience sample, rather than a random sample, was used, lessening the sensitivity of the design. Even in view of these weaknesses, however, the difference in full-time and part-time nonverbal immediacy was not found to be significant.

Results of Nonsignificant Findings

Two of the hypotheses were not supported in this investigation. Hypothesis 4 proposed that an interaction would occur between the two independent variables.

H4: An interaction effect between nonverbal immediacy and full-time/part-time status will occur.

No interaction was reported between faculty status and nonverbal immediacy, indicating not only no difference between full-time/part-time immediacy, but also no difference between full-time teachers’ retention and part-time teachers’ retention rates.

The second hypothesis that was rejected was Hypothesis 6.
H6: Faculty status is a predictor of student retention rates.

As reported in Chapter 2, the literature regarding the use of part-time teachers is divided. These two findings, however, strengthen the perspective in education literature that extols the virtues of part-time teachers and supports the view that they are as effective in the classroom as full-time teachers (Bole, 1995; Lowther et al., 1990; Wilted, 1980). The proponents of this perspective use these findings to argue for making the best of a trend that apparently is not going away.

Recommendations for Professional Practice

Administrators are currently concerned with improving the quality of undergraduate education as well as devising effective retention programs. Previous research shows that teacher nonverbal immediacy behaviors can be learned (Richmond, McCroskey, Plax, & Kearney, 1986), and this study indicates that nonverbal immediate behaviors are related to increased retention. Therefore, one recommendation for professional application of these findings is the inclusion of immediacy training in faculty development programs. In order for the training to be effective, however, relevance for the benefits must be established in order to impress upon faculty members, both full-time and part-time, the need to embrace a teacher-owned perspective. Explaining findings such as in this current study may help persuade teachers of the importance of adopting this perspective. Without laying this foundation, training in immediacy as well as other teacher effectiveness
behaviors, may result in head knowledge, rather than internalization. Caution should always be taken in teaching about immediacy to include the Comstock et al. (1995) finding that immediacy is curvilinear and excessive immediacy can result in negative outcomes, rather than positive ones.

A second recommendation is to include immediacy training in the curriculum for teaching assistants and Ph.D. programs. Teaching assistants and doctoral candidates often have little or no training in how to teach effectively. With the call for quality from the public and from administration and the shifting paradigm from teaching to learning, effectiveness in the classroom for beginning and experienced teachers is becoming more of a priority.

Finally, this study has relevance for administrators and legislators involved in policy making decisions regarding the use of part-time faculty. These professionals should be interested in the findings, even from a convenience sample, that indicate no significant difference between retention rates of full-time and part-time teachers and no significant difference between a teacher effectiveness characteristic (nonverbal immediacy) of full-time and part-time teachers.

Recommendations for Future Research

In addition to the suggestion made earlier to refine and use verbal immediacy measures in future research involving the variables of this study, two other recommendations appear relevant as well. Because of emphasis
on teaching at community colleges, it may be that community college teachers would have higher immediacy than at universities where teachers are research-oriented and teaching assistants are inexperienced teachers. Additionally, university classes are usually larger than community college classes, thereby increasing the impact of the immediacy or non-immediacy of the teacher. What relationship would immediacy have with retention in that environment? This question remains to be asked and answered by future researchers.

Two questions also remaining to be addressed have to do with other aspects of teacher effectiveness. What other teacher effectiveness characteristics might predict retention? Might any of these characteristics vary significantly between full-time and part-time teaching?

Although these questions remain for future research to investigate, this current study has added to the literature in a distinct manner. It has made an effort to integrate theoretical perspectives and empirical findings of the educational and communication fields of literature, carry out a study based on this literature, and contribute findings relative to both fields of study. A final recommendation is that the strategy of integrating the literature of these two fields be furthered in order to synthesize the rich and valuable theoretical principles and empirical findings of both areas of study. Each has much to learn and benefit from the other.
APPENDIX A

LETTER TO FACULTY
MEMORANDUM

TO: NW Campus Faculty
FROM: Bobbi Stringer, Assistant Professor of Speech
RE: Request for Assistance
DATE: September 10, 1996

I am writing to you for your help in the study I am undertaking for the dissertation requirement of the Ed.D. degree I am pursuing at the University of North Texas. The proposed study involves "nonverbal immediacy," a communication variable that affects the perception of physical and psychological closeness. I will be investigating (1) whether or not a relationship exists between student-perceived teacher nonverbal immediacy and student retention rates and (2) whether or not a difference exists between student-perceived full-time teacher nonverbal immediacy and student-perceived part-time teacher nonverbal immediacy. The statistical design I will use is a 2x2 factorial ANOVA partitioning teacher nonverbal immediacy (High vs. Low) and faculty status (Full-time vs. Part-time) to investigate their effect on student retention rates. I have secured permission from Dr. Saenz, Dr. Allie, and Dr. Hines, Director of Research for TCJC, to invite the full-time and part-time faculty of NW Campus to participate in this study, and the project has been "reviewed and approved by the UNT Committee for the Protection of Human Subjects (817) 565-3940."

I am asking you and one of your classes to be a part of my planned study which will take place during the three weeks prior to mid-term (September 30 - October 18). Since the survey instrument I am using is a very brief one, administering it will take me only five minutes of your class time. The student responses will be anonymous and all faculty data will be coded with numbers rather than names, thus ensuring complete confidentiality in reporting the data analysis.

The success of my dissertation study initially is contingent upon securing enough volunteer faculty participation for an adequate sample size to undertake the study. I realize that every class session in the semester is important and therefore what I am asking is in fact a large favor. However, I sincerely feel that the results of this study will potentially contribute important pieces of information both to student retention literature and full-time/part-time faculty literature. Since your participation is purely volunteer, there will be no adverse repercussions if you choose not to participate or if you choose to withdraw your participation at any time during the study.

Please indicate your willingness to participate by filling out the form attached and sending it back to me by September 23 in inter-office mail. I will schedule you at whatever time you request, but if you teach an 8:00 a.m. class (M-F) or an evening class and can participate during those times, it would be helpful. If you have any questions, my office extension is 7227. Upon receiving your form, I will call and confirm a specific date most convenient for your class.

THANK YOU FOR YOUR ASSISTANCE.
NAME: ______________________  PHONE: _______

BEST TIME TO PARTICIPATE IN THE SURVEY:

DAY: ____________________________________________

TIME: ___________________________________________

CLASSROOM LOCATION:

_____________________________________________
APPENDIX B

REVISED NONVERBAL IMMEDIACY MEASURE
Revised Nonverbal Immediacy Measure

Instructions: Below is a series of descriptions of things some teachers have been observed doing in some classes. Please respond to the items in terms of the class you are taking now. For each item, please indicate on a scale of 1-5 how often your teacher in this class engages in these behaviors. Use this scale: never = 1; rarely = 2; occasionally = 3; often = 4; and very often = 5.

1. _____ Gestures while talking to the class.

2. _____ Uses monotone/dull voice when talking to the class.

3. _____ Looks at the class while talking.

4. _____ Smiles at the class while talking.

5. _____ Has a very tense body position while talking to the class.

6. _____ Moves around the classroom while teaching.

7. _____ Looks at board or notes while talking to the class.

8. _____ Has a very relaxed body position while talking to the class.

9. _____ Smiles at individual students in the class.

10. _____ Uses a variety of vocal expressions when talking to the class.

Instructions: Please continue filling out numbers 11-14 about yourself and number 15 about this class.

11. Gender: (1) male  (2) female

12. Level: (1) freshman  (2) sophomore  (3) other

Age:  (1) 17-20  (2) 21-30  (3) 31-40  (4) 41+

Ethnicity:  (1) African American  (2) Hispanic  (3) Anglo  (4) Other

15. Class Time: (1) morning  (2) evening
REFERENCES


