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Student Perceptions of Rules for Classroom Interaction

Hanson Paul LeBlanc III

Louisiana State University and Agricultural and Mechanical College

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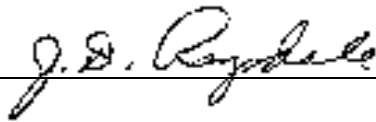
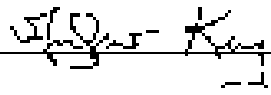
MASTER'S EXAMINATION AND THESIS REPORT

Candidate: Hanson Paul LeBlanc III
Major Field: Speech Communication
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Approved:


Major Professor and Chairman

Dean of the Graduate School

EXAMINING COMMITTEE

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STUDENT PERCEPTIONS OF RULES FOR
CLASSROOM INTERACTION

A Thesis

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in
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ABSTRACT

Burgoon's expectancy violation model posits that nonverbal rule violations will be evaluated according to the perceptions toward the violator and the behavior itself. However, the violator may have perceptions regarding the appropriateness of the rule. This study measured the perceptions of high school students regarding the rules for classroom interaction. It is believed that the rules for classroom interaction are rules which have been learned through the process of socialization and enculturation into the classroom setting throughout students' careers. These rules should be well known by all students by the time they reach tenth grade, the grade being investigated.

A survey questionnaire was developed through a pilot study, and was distributed to 244 students through the English classes of three East Baton Rouge parish high schools. The high schools were chosen by relative drop out rate. Students were grouped by sex, race and age to measure differences in attitude by characteristics of potential dropouts. The study found that males have more negative attitudes toward compliance with laziness rules and the importance of those laziness rules than females. The study also found that Black students have a more positive attitudes regarding the importance of distraction, laziness, and respectfulness rules than non-Black students. Implications regarding the attitudes toward classroom rules are discussed.

CHAPTER 1

PURPOSE OF THE STUDY

Introduction

Education is a life long process that begins in the home and continues through both formal and informal training. How a person learns and his or her success in learning the lessons of life are contingent upon earlier lessons. The patterns that are developed early can significantly affect the learning process later in life. Attitudes affect perceptions, as well as development through the learning process. Attitudes ultimately manifest themselves in behavior (Grusec & Lytton, 1988). The learning process is therefore crucial to the understanding of the behavior of attitudes (Doob, 1947; cited in Staats & Staats, 1958).

In this study, the perceptions of high school students regarding rules for nonverbal interaction in the classroom will be measured along two dimensions: compliance with the rule, and importance of the rule relative to other rules. Attitudes regarding compliance with the rule are measured to determine if students believe the rule should be followed. Attitudes regarding the importance of the rule are measured to determine if students perceive the rule as important regardless of whether it should be followed. It is hoped that by making a distinction between students from a high academic risk group and students from a low academic risk

group, differences in perceptions or attitudes toward the rules can be measured. If differences in attitude between "at risk" and "non risk" students can be measured, then methods for decreasing drop out tendencies can be developed.

For purposes of this study, the term "at risk" is defined as students who have a high potential for academic non-completion, i. e. dropping out. A dropout is a pupil who leaves school, for any reason except death, before graduation or completion of a program of studies and without transferring to another school (Cage, 1984).

The problem of high school dropouts has generated increased interest among researchers, policymakers, and educators in recent years (Rumberger, 1986). Ultimately, it is hoped that measurable differences, if they occur, can be used as a tool to assist educators in dealing with the tendencies that students have in dropping out of school. While attitude has long been recognized as a precursor to behavior, overt behavior does not consistently indicate attitude (Ruby & Law, 1983). Therefore, the study of actual behaviors relative to the perceptions of the subjects is outside the scope of this study.

This study will follow two major lines of thought: communicative rule generation and rule structures for the classroom. This chapter will review communication and sociological research on the generation of rules and rule structure, including nonverbal expectancy violation as

proposed by Burgoon and colleagues. Chapter 2 will review education research on classroom rule structures and characteristics of dropouts. Chapter 3 will attempt a synthesis of communication theory regarding nonverbal expectancy violation considering actual rules for high school classroom interaction. A statement of the research questions and the hypotheses will be relevant here. Chapter 4 will include a discussion on the development on the test instrument including the analysis of the pilot study. Also included in chapter 4 will be an explanation of the methodology to be used in the analysis. Chapter 5 presents the results of the data analysis. Chapter 6 discusses the findings and offers directions for further study.

Rules and Rule Generation

Persons interact with each other in ways that are predicted by earlier behavior. That is, persons interact in learned patterns. These patterns are a function of socialization. And, socialization is the process by which persons learn what is acceptable and unacceptable behavior in a given cultural or social context. Several theories have been posited which seek to illustrate this socialization process. Social learning theory (John B. Watson, Albert Bandura, Richard Walters; theorists cited in Grusec & Lytton, 1988) suggests that individuals imitate actions as a result of conditioning and reinforcement. Social learning theory posits that conditioning and problem solving are the

processes by which individuals learn. Conditioning occurs as a response to stimuli repeated until the stimuli is no longer needed to induce the desired behavior. Problem solving on the other hand, occurs as a result of dissonance and the desire to reduce it. This desire serves as a motivating factor in the cognitive search for a means to reduce dissonance (Mowrer, 1960). On the other hand, cognitive developmental theory (Jean Piaget, James Mark Baldwin, theorists cited in Grusec & Lytton, 1988) suggests that the socialization process involves assimilation of events given existing mental structures and accommodation of new ideas for problem solving. Individuals are typically motivated to maintain equilibrium between assimilation processes and accommodation processes but may opt for one process over the other as a result of cognitive dissonance (Grusec & Lytton, 1988). For example, an individual may opt for the assimilation process to overcome cognitive dissonance when the attitudes surrounding the event are well established and are central to the individual's self-concept. Either theoretical perspective assumes that the socialization process involves interaction between an agent and a target.

In the family environment, children (target) are socialized by their parents, older siblings, or other relatives with which they come in contact (agent). Outside the family, persons are socialized by peers, significant others, or the media. A child's environment includes the

ideology of society (e.g. formal and informal rules about how life should be conducted) (Grusec & Lytton, 1988). Children learn socially appropriate behavior by imitating others when others' behavior is not prohibited and results in positive reinforcement (Kagan, 1985). Children are not born social, but must acquire social characteristics from their environment, including others, and incorporate them into their own personality (Bell, 1963). Children do not learn passively. Rather, children interact with their environment, observing the behavior of others as well as their own behavior (Roedell, Slaby, & Robinson, 1977). Children learn what is acceptable behavior through the observation of others and their interaction with those others.

The theoretical perspective, known as symbolic interactionism, proposes that meaning is communicated through behavior between interactants (Mead, 1934; cited in Littlejohn, 1989). The social learning theoretical perspective would suggest that children learn what is acceptable behavior as a result of reinforcement. Reinforcement occurs through interaction. Behaviors that result in positive reinforcers, such as a smile, are strengthened. Whereas, behaviors that result in negative reinforcers, such as a spanking, are suppressed, and those that are not reinforced are extinguished (McCoy and Zigler, 1965). However, meaning is attached to the behavior, whether reinforced, suppressed or extinguished.

These observations of behavior, by the target, are organized into cognitive schemata, which serve as knowledge bases for achieving goals (Berger & Kellerman, in press). These knowledge bases are mental structures or rules for mentally organizing information, and therefore developing meaning, as hypothesized by Immanuel Kant (1781) in the Critique of Pure Reason (cited in Jones, 1975) and later considered as cognitive schemata by Frederick C. Bartlett (1932; cited in Smith, 1982). Meaning is therefore attached to observations as a function of already existing mental structures. The individual develops methods to achieve goals based on those meanings. Goals such as being accepted into a group, or not being alienated from a group, serve as motivators for acting acceptably. The group is defined by those actions or behaviors that are expected of its members. The expected behaviors are specified by rules. These rules are compared to existing mental structures.

Susan Shimanoff (1980) defines a rule as a prescription which can be followed and suggests behaviors that are obligated, preferred, or prohibited in particular contexts. Rules are determined by the society, the family, or a member of the family given authority to make such rules, i.e. the head of household, and can be implicit or explicit. Implicit rules are guides which are not formally stated but rather define behavior as appropriate or inappropriate based on actions that are either performed or not performed by the

group, i.e. the society or the family. An example of an implicit rule within a family might concern being loyal toward family members: do not talk about family problems to non-family members. In the classroom, an implicit rule might be to respect the right of others: do not borrow another's materials without asking permission. Implicit rules may have been stated explicitly at an earlier time in another social context but are assumed to apply by members of a new social context. For example, a child learns rules of interaction in his or her family of origin. These rules are then applied to other contexts such as friendships, boss/subordinate relationships, or student/teacher relationships. The notions of accommodation and assimilation from cognitive developmental theory play a role in the assumption of rules implicitly from one social context to another. Explicit rules are formally stated regulations or customs that define appropriate or inappropriate behaviors for the group. An example of an explicit rule in the family might be that children are expected to be at home by eleven o'clock in the evening. In the classroom, an explicit rule might take the form of regulations regarding the issuance of hall passes or the carrying of weapons.

The role of rules as communicative interaction cannot be understated. Shimanoff states:

"In order for communication to exist, or continue, two or more interacting individuals must share rules for using symbols. Not only must they have rules for individual symbols, but they must also

agree on such matters as to how to take turns at speaking, how to be polite or how to insult, to greet, and so forth. If every symbol user manipulated symbols at random, the result would be chaos rather than communication."

The formation of the rule (for interaction) may be a result of a behavior that is contrary to the expectations of the group. When behavior occurs, which is contrary to the goals of the group, it is labelled deviant. This deviance may or may not have been intentional, or intentionally deviant. However, when deviant behavior occurs, it creates a crisis situation in which the group may decide to state the rule, therefore making the rule explicit. Implicit rules exist when members of the group know what is expected of them as a consequence of observed behavior of other members of the group (Ford, 1983). Therefore, implicit nonverbal rules are defined as communicative rules for nonverbal interaction that are learned through a socialization process. Attitudes, including knowledge of rules, are learned through conditioning which may be performed through verbal (and nonverbal) communicative behaviors (Staats & Staats, 1958).

Groups are defined by rules which indicate who belongs or does not belong to the group. Rule violation occurs when a member of a group defined by the rule acts contrary to the suggested behavior. This may require specific knowledge of the rule. If the individual group member is unaware of the rule, then the rule violation is an unintentional deviation from expected behavior. However, if a group member is aware

of the rule, then a true violation occurs whether or not the individual agrees with the rule. A violation of a rule may precipitate negative sanctions by the authority setting the rule, or by the group that is defined by the rule. The force of the rule defining the group is not determined by its implicit or explicit nature, but rather by the meaning of the rule for the group and the sanctions incurred by its violation. These negative sanctions can include punishment, ostracism, or alienation from the group. Consistent violation of the rule may result in reformulation of the rule, or a withdrawal of the rule.

Rules, therefore, are learned and used in everyday interactions. For example, Burgoon and Saine (1978) have found that our society has evolved rules about how and when one gazes at another. Also, proximity rules dictate that closeness communicates friendliness, but too much closeness creates discomfort in others. Ford (1983) found: "rules can be inferred from any repetitive family behavior." Rules also affect how persons interact with one another. For instance, the style of expression and the skill of communication are influenced by the emotional expressiveness of the family environment (Halberstadt, 1986). "In a society where being liked is important, the child is often taught ... to fit smoothly with all his age peers" (Bell, 1963).

Other research on rules was conducted by Brown and Levinson (1987). They suggest that interaction is based on

universal rules of politeness in language, and that violation can incur sanctions. These rules of politeness are based on individuals' desires to save or maintain "face." The researchers distinguish rule types by function: rules of positive politeness such as cooperation thus saving face, and rules of negative politeness such as being direct and honest thus threatening face (Brown and Levinson, 1987).

As a consequence of the development and use of rules, persons have expectancies regarding the compliance of persons to rules in any given context. Individuals in a system are expected to follow rules, and noncompliance may be viewed as a violation. Which environment determines the set of rules to be followed may be situational. Rules for appropriate behavior within a specific group, as suggested earlier, may be assimilated from previous knowledge of rules and then applied to the new social context. On the other hand, the context may be sufficiently different to warrant the development of idiosyncratic rules. However, these idiosyncratic rules must be based on a social understanding which is affected by other contexts. For example, parents may consider it inappropriate for teenage children to vandalize school property. Indeed, vandalizing may be an explicitly stated social norm. However, within the teenager's peer group, vandalizing may be considered appropriate behavior. The appropriateness or inappropriateness may be situationally determined, but the

behavior and the rules regarding the behavior has meaning within a larger social context. Within a specific social context, such as a classroom, rules may govern nonverbal behavior in order to maintain a learning environment.

Nonverbal Behavior and Rules

Nonverbal behavior has a communicative function. Such functions include power and dominance, persuasion, feedback and reinforcement, deception, and impression management (Patterson, 1983). These functions of social control serve a purpose of influencing the behaviors of others, and thus defining rules within social contexts. Nonverbal communication, as a form of language, has rules regarding its use in certain social contexts. Ekman and Friesen (1969) specified the origins of nonverbal behavior as including: (a) innate reflexes of the nervous system, (b) the anatomy of the human species (such as the existence of hands), and (c) experience of the use of nonverbal behavior from other members of one's culture, class, or family. Therefore, the social origin supposes a function for nonverbal behavior such as communication in social interaction.

An example of a type of nonverbal communication that entails situational rules for its use is eye contact. Eye contact can communicate intimacy. When strangers make eye contact, that contact typically lasts for a few moments and then is followed with a downward glance. When a stranger maintains eye contact for longer periods of time, it can

become uncomfortable for the individual. Our society has rules against staring because it is viewed as a violation of personal space. When such a violation occurs, sanctions toward the violator are used to control the behavior. Sanctions against staring could include a returned stare or a nonverbal expression of disdain.

According to Burgoon and Hale (1988), expectancies are derived from cognitions regarding social norms that are learned through the socialization process. Behaviors relevant to the norms may fall within a range of acceptability. Burgoon and Hale (1988) researched violations of expected nonverbal behavior and have created a model that incorporates the following concepts: arousal, communicator reward valence, violation valence, and the interpretation and evaluation of behaviors. Arousal occurs in the interactants when a noticeable deviation from the norm is performed. This arousal may have been sought by the deviant individual, as a means to get attention. That is, deviation may have been intentional or unintentional.

Communicator Reward Valence influences the perception of positive or negative affect of the deviant. This may affect further violations for the purpose of getting attention. This may also affect further evaluations of the deviant due to continued violation, i.e. negative evaluation contributes to further violation which contributes to further negative evaluation. In terms of behavior interpretation and

evaluation, regard for the communicator may affect selection of meaning for the implicit relational message. Negative regard for the violator may result in negative interpretation of the deviant behavior. And finally, in terms of violation valence, behaviors are evaluated as positive or negative as a result of the source of the message, the societal norms regarding the meaning of the message, and the degree to which the violation exceeds the range of acceptability, which constitutes the defining boundary of appropriateness within the social context.

This chapter represents some of the current thought in communication research regarding rules for communicative interaction. Rules serve the function of structuring language, such as what can be said and how it can be said. However, rules also define relationships. Rules set boundaries so that members of systems can tell who is in the system and who does not belong to the system. Pearson (1989) holds that rules are important for three reasons. First, the development of rules reinforces relational development. Second, rule development encourages relational satisfaction. Third, rules allow individuals to define any given relationship. This research on rules is based on earlier theorizing regarding the socialization process in general and assumes that socialization is the process by which individuals come to learn about rules for interaction. Littlejohn (1989) states that the rules approach (to

research) incorporates (at least) two assumptions. First, although some human activity is mechanical and determined by uncontrollable factors, the most important behaviors are considered to be actively initiated by the individual. However, these important behaviors may become habituated through time, and therefore become mindless and mechanical. Second, social behavior is structured and organized. It is against this backdrop, structured social behavior, that the investigation is based.

The next chapter will discuss rules within the specific social context of the high school classroom. Chapter 2 will include a discussion on how rules are developed in the classroom through socialization. It will also discuss nonverbal interaction rules as they pertain to the classroom context, and rule types within the framework of the social context.

CHAPTER 2

RULES AND THE CLASSROOM

Classroom Socialization

In school classrooms, rules are essential for the smooth operation of classroom interaction. Expectations of our society regarding the purpose of schools include the development in children the ability to interact with others in prosocial ways, to resolve conflict by peaceful means, and ultimately the ability to contribute productively to society (Grusec & Lytton, 1988). Learning the subtleties of interaction is one of the basic processes of socialization (Martin, 1976). These ideas are woven into the ideological beliefs of the social contract, such that individuals should contribute to society and not be a burden to society.

This ideology is promoted through the socialization process and serves as a basis for the implementation and enforcement of rules. (The ideology may, however, be at odds with the belief systems of individuals in the society.) Nowhere is this purpose more aptly served than in the classroom situation where one individual is given the responsibility of teaching a group of young persons about the rules of society. To be sure, what we call society is identical to agents following rules. It is rational for an agent to follow a rule because by doing so he or she can influence other agents' expectations of his own future

actions, and thus influence their actions to his or her advantage (Rowe, 1989). This is the basis for the need of trust in relationships. The ability to follow a rule provides a basis for establishing reputations. These reputations influence the behavior of others. The existence of social institutions provides an equilibrium for social behavior. Social institutions are constituted by agents following rules of action and believing others to follow rules of action (Rowe, 1989). Given this framework, the school classroom is the context for socialization. Indeed, socialization is a school function which involves more than a simple matter of teaching children to behave themselves, but involves helping children understand themselves and the world around them (Epstein, 1979).

In this context, the teacher may act as an authority figure. The communication behavior which defines the relationship between the teacher and the student is largely the result of the social system and the culture the individuals grew up in (Hurt, Scott & McCroskey, 1978). Rules are set in the classroom by the teacher, or by the school. In the example of the teacher or the school setting the rules, the rules are formally stated and are explicit.

However, some classroom rules may be implicit, that is students are expected to have learned proper behavior from home through socialization. Examples of implicit rules in the classroom may be: (a) respect the teacher (elder), (b)

pay attention to the teacher (elder), or (c) do not distract others from paying attention to the teacher (elder). According to Charles (1981), at the primary grade level, students have to be continually reminded of the rules in force. By grade four, students recognize the logic of rules, their necessity, and their enforcement. In the Junior High years, students become more independent and will defy authority as a means to gain that independence. By high school, most students have overcome adolescent metamorphoses, and will become less rule breaking. Those who become alienated from the mainstream of personalities, customs, and institutions tend to leave school and reach out in other directions (Charles, 1981). This reaching out in other directions often takes the form of dropping out, which may be considered a violation of the social contract.

Rule Types

Actions that disrupt, destroy, defy, hurt, or infringe on others rights are considered rule breaking behaviors in the classroom situation (Charles, 1981). Examples of non-observance of rules, or violations of expected behavior, are evident from the school records of students in high schools. In an Associated Press article (Baton Rouge Morning Advocate, Friday April 12, 1991), seven high school students from Syracuse, New York were arrested for dismantling school property. Stories of students being killed by other students on school grounds are also frequently seen in newspapers. To

be sure, occurrences of shootings on school grounds in East Baton Rouge Parish, where this study was conducted, have been documented by the East Baton Rouge Parish Sheriff's office. Prohibition against carrying weapons on school grounds is a formally stated, explicit rule. Other examples of rule violations may include fighting, bringing or distributing drugs at school, or setting off fire alarms.

While some students may present discipline problems for school administrators, other students may never get into trouble. This study is interested in student perceptions regarding implicit nonverbal rules in student/teacher or student/student interaction in the classroom because it is believed implicit nonverbal rule violation may demonstrate the potential for academic noncompletion. The type of nonverbal rules of interest in this study include proxemics, oculosics, regulation of conversation, and rules regarding the use of environment, territory and time.

According to Hurt et al., (1978) nonverbal communication in the classroom takes several forms. Space and territory is communicated through the use of seating arrangements: Students will either choose their own seats or be assigned seats, but some confrontations may result from issues of territoriality. Students who choose to sit close to the teacher in a traditional classroom arrangement typically interact more with the teacher, and are typically less apprehensive about talking to other people.

For younger grade students, touch plays an important developmental role. Touch communicates belonging, security, and understanding. Lack of touch communicates rejection and isolation. As students get older, they become enculturated to sexual norms. Body gestures and movement are the most difficult types of communication for the communicator to control. Facial expressions can serve as reinforcers or nonreinforcers. Use of time is regulated in the classroom: Tardiness is a punishable offense. This is due in part to the view of time as a commodity in North American culture. Vocal behavior communicates our attitudes about the content of our verbal message, such as sarcasm or depression. And finally, direct eye contact with another in our culture normally communicates interest and attention. Conversely, lack of eye contact communicates lack of interest and attention (Hurt, et al., 1978). Rules for social interaction become the basis for interaction rules in the classroom.

As argued above, students are expected to learn implicitly and follow these types of rules. As students progress through grades, their grasp of proper behavior should become more acute. Andersen, Andersen, & Mayton (1985) first studied rule development in the classroom. In another study, Andersen, Andersen, Murphy, & Wendt-Wasco (1985) looked at teachers' perceptions of students', grades K through 12, development of nonverbal communication. They studied five types of nonverbal communication including

proxemics, haptics, oculosics, vocalics, and physical appearance. The authors found that teachers perceived that students increased interactional distances between themselves and their peers as well as themselves and adults as grade level increased. Teachers reported that students decreased the amount of touch given as grade level increased. No difference was found in eye gaze between kindergarten through twelfth grade students. Teachers reported a small but significant increase in the appropriate use of loudness and rate as students increased in grade. Students were found to be more inclined to be concerned with their physical appearance as they increased in age. And finally, the researchers obtained mixed results regarding the development of kinesic behavior (facial expression). However, Andersen, Andersen, Murphy, & Wendt-Wasco interpreted the results as being "consistent with literature suggesting that inhibition, masking, and display rules act to suppress the expression of affective behavior in older children" (Shennum & Bugenthal, 1982; cited in Andersen, Andersen, Murphy, & Wendt-Wasco, 1985). This research suggests that appropriate nonverbal interaction is learned through a developmental socialization process in the classroom.

It was suggested that development of nonverbal communication may be related to overall language development rather than the classroom experience per se. However, the Andersen, Andersen, Murphy, & Wendt-Wasco (1985) study is

relevant in that it shows: (a) teachers can code nonverbal behaviors of their students, (b) that students do follow expected nonverbal behaviors, and (c) that development of nonverbal communication with age through grade 12 suggests a socialization pattern.

Conversational interaction rules include following the proper cues for switching speakers. This is known as turn-taking. In a study, researchers have identified behaviors such as a raised index finger, and an inhalation of breath coupled with a straightening of the back as cues by the listener to select the next turn at talk (Wiemann & Knapp, 1975). Harrigan (1985) also found that body movement (eye gaze and hand movement) prefaced turn-taking. Duncan (1972) found that strong regularities exist in behaviors regarding the rules of turn-taking. In the classroom, students are taught to raise their hand in order to speak. This behavior, presumably taught at an early age, has been observed in other social contexts, such as in interpersonal or small group communication, for the purpose of regulating turn-taking (Schegloff, 1978). Students are also expected to wait until they are called upon to speak. There are also constraints on the types of topics which can be discussed in the classroom.

Eye gaze behavior carries with it a set of rules. In order to show that a person is attentive, that person, occasionally at least, should direct eye gaze toward the speaker. According to Burgoon, Buller, Hale, & deTurck (1984) low eye contact, distal position, backward body lean,

and the absence of smiling and touch communicated greater detachment. This is often interpreted by teachers as a sign of non-interest.

In a classroom setting, teacher and student must develop a rapport. Immediacy to the task or interaction is required and expected. Hale and Burgoon (1984) found that a dominant pattern of reciprocity occurred when immediacy was increased, especially on evaluative measures. For example, a teacher may communicate immediacy through nonverbal means such as eye contact. When this immediacy is communicated, it tends to precipitate a perception by both interactants that immediacy is reciprocated. Burgoon, Newton, Walther, & Baesler (1989) found that greatly increased involvement communicated being very immediate, receptive and equal, whereas decreased involvement communicated nonimmediacy.

Maintaining eye contact with the teacher is an indicator of immediacy and attentiveness. To sustain immediacy, the teacher should reciprocate attentiveness. Ginott (1972) adds that two ways to deal effectively with misbehavior include demonstrated attentiveness of the teacher to occurrences in the classroom, and the ability to deal with more than one issue simultaneously. The teacher has to demonstrate control, that is the ability to effectively implement sanctions for behaviors, regardless of the actions of the violator (Ginott, 1972). This attentiveness by the teacher is demonstrated through eye contact. If, perhaps, the teacher does not pay attention to students who violate rules

of classroom interaction, then the student may continue to violate norms which eventually may lead to disciplinary problems and/or expulsion. A second possibility may be the potential for these students to drop out of school.

As part of the socialization process, students learn rules for proper behavior in the classroom. These rules can be restrictive, that is they prohibit certain behaviors, or prescriptive, that is they promote certain behaviors. These rules also can be differentiated by type of behavior sanctioned. Earlier research provides a basis for a list of rules regarding classroom interaction. Seven rule types were employed in the study of students perceptions of classroom rules (from Tikunoff, & Ward, 1978; cited in Mergendoller, Osaki, Swarthout, Ward, & Tikunoff, 1981).

The first types are mobility rules, or norms about what restrictions are placed on the students' physical movement in the classroom. Talking/noise rules are norms which refer to the boundaries the teacher sets on talk in the classroom as well as other sanctionable noises. Ethical rules are norms referring to the students' rights or responsibilities towards others or the group. Procedural rules are norms which define, describe, or delimit the students' behavior in other than strictly instructional situations. These rules are concerned primarily with classroom management rituals as well as scheduling and use of materials. Academic rules are norms which define, describe, or delimit the students' behavior in

instructional situations, and are concerned with the learning process. School-imposed rules are formal rules enforced as part of school or district policy. And finally miscellaneous rules are all other rules which are sanctioned in the classroom which do not belong in the above categories. Each of these rule types could include both restrictive and prescriptive rules.

Examples of each rule type include: (a) Mobility: don't run in class; (b) Talking: don't talk out of turn; (c) Ethical: don't hurt others, or don't talk back to teacher; (d) Procedural: don't come in late after recess; (e) Academic: do your work; (f) School-imposed: don't go in Ball Room, and (g) Miscellaneous: don't pass secret notes (Mergendoller, et al., 1981). Rules relevant to this study include all types except school-imposed. School-imposed rules are made explicit by their nature. These seven rule types are consistent with the categorization of nonverbal behavior described above. For example, mobility rules regard the use of space and territory. Ethical rules may regard the regulation of touch in regard to hurting other individuals. Talking rules regulate use of vocal behaviors. These rules may indeed represent context specific interaction rules which, ultimately, are based on universal rules of politeness (Brown & Levinson, 1987). However these rules are categorized, violation of rules can imply attitudes which are not consistent with the goals of socialization in the

classroom. If, indeed, the attitudes are inconsistent with the apparent goals, these attitudes may precipitate a potential for academic noncompletion.

This potential for dropping out of school must, at least, be determined by attitudes held by the student. Attitudes toward the teacher, school, or social context in general can affect the interaction in the classroom. The interactional approach by a teacher toward students can affect the students' attitudes. Aronson & Linder (1965) found that subjects liked the evaluator (in this case, the teacher) best when the evaluations moved from negative to positive when compared to evaluations that moved from positive to positive, from negative to negative, or from positive to negative (in rank order). This suggests that a student's esteem may be increased if teachers pay more positive attention to those students who have received prior negative evaluations. This gives the initiative for action to intervention measures.

Biases toward or against students by teachers also can affect students' attitudes. For example, to find that accent or dialect is rejected by the teacher and/or the school is usually interpreted by the child as a personal rejection. Frequently this leads to a rejection of self and a lowered self-image and/or a rejection to teacher and school (Hurt, et al., 1978). If the student perceives that the teacher dislikes him or her, and the student develops an attitude of

rejection, this attitude may precipitate a potential for dropping out.

This chapter discussed the specific rules and rule types which are relevant to the classroom context. Also discussed were specific nonverbal behaviors which might be regulated by rules in the classroom. The following chapter will define more explicitly the characteristics of the at risk student in terms of the potential dropout.

CHAPTER 3

RULES AND THE AT-RISK STUDENT

Dropout Characteristics

Current estimates of the dropout problem during grades 9 - 12 range from a high of twenty-five to thirty percent (Smith, 1990) to a low of thirteen to eighteen percent (Sherman, 1987). Sherman (1987) claims that data provided by state education agencies to the U.S. Department of Education estimate the dropout rate at 25 percent or higher. Ruby & Law (1987) claim that the national dropout rate has remained at about 20% for the last decade. However, disparities in the definition of dropouts, in data collection and the methodologies used to calculate the rates have caused national dropout figures to vary (Ruby & Law, 1987; Sherman, 1987). For example, in June 1987, the San Juan (California) Unified School District's Research and Evaluation Department prepared a summary of dropout data available which indicated that San Juan's dropout rate was between 22 and 25 percent over a 3-year period (Widmann & Housden, 1988). As a specific school district, these figures may not be inconsistent with the national averages. To put these percentages into perspective, by 1987 it is estimated that between 290,000 and 325,000 girls and between 325,000 and 375,000 boys drop out of school each year. Consequently, the

problem of school dropouts has become a critical concern for policymakers at all levels (Sherman, 1987).

Definitions of dropout may contribute to the variances in dropout rates reported. For example, a gross definition of the dropout holds that a dropout is an individual who has dropped out of school for such a significant amount of time that it affects their ability to graduate in the standard four year high school period. This definition, therefore, does not count the individuals that return to school or otherwise complete their high school equivalency. Using this definition the dropout rate has been estimated at 27 percent. A net definition of the dropout holds that a dropout is an individual who is not enrolled in school at a particular time, yet this individual may return to school at a later time and finally graduate. Using this definition the dropout rate has been estimated at 12.3 percent (Barro & Kolstad, 1987). Although discrepancies in local district data collection methodologies and definitions of a dropout were found, it was established that the largest single category of dropouts were those individuals whom the school districts could not locate (Kaeser & Hooper, 1983). As defined earlier, a dropout is a pupil who leaves school, for any reason except death, before graduation or completion of a program of studies and without transferring to another school (Cage, 1984).

Students who have been diagnosed by school personnel as having a high potential for dropping out of school have been labeled at risk students. Typically, at risk students are diagnosed according to academic and disciplinary records, as well as underachievement and defiance (Kagan, 1988). If students who violate rules get into disciplinary trouble, then perhaps the question to ask is why do they violate the rules. Before answering that question, however, one has to determine if there exist a connection between the violation of rules and the potential for dropping out. Two persons, an educational consultant E. R. Dent (personal communication, October, 1990) and a high school teacher B. E. Whitlock (personal communication, November, 1990), who work with at risk students were interviewed for the pilot study. It was the belief of both the educational consultant and the high school teacher interviewed that these students may violate rules as a way to get attention.

Some general observations regarding at risk students were made by the educational consultant: (a) At risk students appear to have a difficult time expressing their feelings verbally; (b) at risk students appear to put much effort into expressing their feelings nonverbally; and, (c) teachers may have difficulty decoding the nonverbal messages of at risk students. Some difficulties of at risk students may be that they believe they are in a double-bind or catch-22. The parameters of the catch-22 are: (a) They need

special attention due to disadvantages; (b) they cannot receive special attention unless they violate rules; (c) violation of rules results in negative evaluations by teachers; (d) negative evaluations create the desire to drop-out; and, (e) curbing the tendency to drop-out cannot be achieved unless at risk students receive special attention.

If at risk students are defined as having a potential for dropping out, then this suggests some method must be used to diagnose at risk students. Education research has focused on the characteristics of at risk students and dropouts. Several researchers have defined the main problem areas that accompany the tendency to drop out as family environment, school environment, and personal issues (Bull, 1990; Macdonald, 1989; Adams, 1989; Widmann & Housden, 1988). The family environment might include economic necessity, parenting roles for the student, or child abuse. The school environment might include academic or disciplinary records, classroom size, school type (vocational or college preparatory), or perceived danger on the school grounds. Personal characteristics that may have importance in the potential for dropping out may include low self-esteem, a poorly developed self-concept, negative attitudes towards the school environment or authority figures, or poor social development.

To attempt to unravel the characteristics of the potential dropout, studies that define specific

characteristics of the dropout in the education research were examined. Specific characteristics of dropouts in the family environment category included: (a) low socioeconomic status (Egginton, 1990; McCaul, 1988; Mizell, 1987; Self, 1985; Sherman, 1987; Wittenberg, 1988), (b) single parent or broken homes (Mizell, 1987; Self, 1985), (c) parental support of education or parental educational level (Bull, 1990; Egginton, 1990; Fernandez & Velez, 1989; Gastright, 1987; Kaeser & Hooper, 1983; Mizell, 1987; Self, 1985; Wittenberg, 1988), (d) child abuse (Kaeser & Hooper, 1983), (e) student pregnancy or parenthood (Castallo & Young, 1988; Gastright, 1987; Kaeser & Hooper, 1983; Mizell, 1987; Self, 1985), (f) student work (Gastright, 1987; Self, 1985), and (g) critical life event (Castallo & Young, 1988; Kaeser & Hooper, 1983; Wittenberg, 1988).

Specific characteristics in the personal category included: (a) over age for grade (Adams, 1989; Anton, 1982; Binkley & Hooper, 1989; Curtis, 1983; Fernandez & Velez, 1989; Kaeser & Hooper, 1983; Mizell, 1987; Stedman, 1988; Wittenberg, 1988), (b) low self-esteem (Binkley & Hooper, 1989; Egginton, 1990; Marin, 1990; McCaul, 1988), (c) poorly developed self-concept (Egginton, 1990; Marin, 1990; Self, 1985; Wittenberg, 1988), (d) communication apprehension (McCroskey & Payne, 1984), (e) poor social development (Barro & Kolstad, 1987; Wittenberg, 1988), (f) negative school experiences (McCaul, 1988; Self, 1985; Stedman, 1988;

Wittenberg, 1988), (g) poor student-teacher relationships (Self, 1985), (h) low ambition of student (Binkley & Hooper, 1989; Self, 1985; Wittenberg, 1988), (i) lack of interest by student (Self, 1985; Wittenberg, 1988), (j) chemical dependency (Egginton, 1990; Gastright, 1987; Marin, 1990; Mizell, 1987; Sherman, 1987), and (k) crime and delinquency (Elliot & Voss, 1974; Ehrlich, 1975; Levin, 1972).

Specific characteristics in the school environment category included: (a) academic failure (Anton, 1982; Castallo & Young, 1988; Fernandez & Velez, 1989; Gastright, 1987; Marin, 1990; Mizell, 1987; Self, 1985; Wittenberg, 1988), (b) grade repetition (Anton, 1982; Mizell, 1987; Mueller, 1990; Self, 1985), (c) learning disabilities (Castallo & Young, 1988; Kaeser and Hooper, 1983; Mizell, 1987), (d) poor reading skills (Anton, 1982; Mueller, 1990; Self, 1985; Wittenberg, 1988), (e) poor academic performance (Binkley & Hooper, 1989; Curtis, 1983; Sherman, 1987), (f) low standardized test scores (Anton, 1982; Binkley & Hooper, 1983; Mizell, 1987; Sherman, 1987), (g) little or no extra-curricular activities by student (Mizell, 1987; Self, 1985; Wittenberg, 1988), (h) lack of specialized studies (Mueller, 1990), (i) absenteeism (Egginton, 1990; Fernandez & Velez, 1989; Gastright, 1987; Mizell, 1987), (j) disciplinary problems (Anton, 1982; Barro & Kolstad, 1987; Curtis, 1983; Kaeser & Hooper, 1983; Marin, 1990; Mizell, 1987; Self, 1985; Sherman, 1987; Wittenberg, 1988), (k) dangerous school

grounds (Self, 1985), and (1) poor bookkeeping by school regarding students' location (Kaeser & Hooper, 1983). (See Table D.3, in Appendix D).

Sex Differences

Demographic characteristics, such as sex, race, age (as noted above), and social class, have also been noted in education research as possible correlates of dropout tendencies. Differences between the sexes have been mixed. For example, Shainline (1987) discovered that males and females dropped out at the same rates (male dropouts = 7.99%, females dropouts 7.98%). In studies of dropout tendencies in rural schools, no sex-related differences were found (McCaul, 1988). However, Carpenter (1990), studied dropout tendencies and results indicate that during the 1988-89 school year more girls (52.1%) than boys (47.9%) dropped out of high school. Results of another study show that 61.4 percent of the 1,128 1987-88 dropouts were male (Binkley & Hooper, 1989).

Perhaps the explanation for the differences lies in the reasons boys and girls give for leaving school. In one study, the results indicate that for females, falling behind in school is the strongest factor for dropping out, while for males, falling behind, maintaining a low GPA, suspensions, and negative feelings toward school contribute to dropping out (Baca, 1989). Indeed, any differences noted may be due to different attitudes held by members of the opposite sex which is a result of the socialization process. Boys, much

more so than girls, are more prone to curiosity and risk-taking behaviors (Ginsburg & Miller, 1982; cited in Grusec & Lytton, 1988). As well, the undercontrol of impulse shown through acting-out behaviors, which can lead to behavioral problems, is much more common in boys than in girls (Eme, 1979; cited in Grusec & Lytton, 1988). Girls show more social orientation and are more prone toward intimacy than boys (Maccoby, 1974, 1966; cited in Grusec & Lytton, 1988). Males are more aggressive than females, and this difference is recognizable from early ages (Hyde, 1984; cited in Grusec & Lytton, 1988). Females tend to be more compliant to the requests of adults than males (Maccoby & Jacklin, 1974; cited in Grusec & Lytton, 1988). The suggestion here is that the differences noted between male and female behavior at this early stage can be attributed to socialization patterns in the home that are later reinforced in the schools.

Serbin, O'Leary, Kent, & Tonick (1973) found that girls were rewarded simply for standing close to teachers (displaying affiliative behavior), who then showed affection to them. Whereas teachers encourage self-reliance and independent achievement in boys (Brophy, 1985; cited in Grusec & Lytton, 1988). "Parents, like everybody, are affected by sex stereotypes current in society and therefore their child-rearing practices will encourage and reinforce stereotypical behavior differentially in boys and girls, and thereby produce in their children a reflection of the

stereotypical images that had originally guided them -- a kind of self-fulfilling prophecy" (Grusec & Lytton, 1988).

Race Differences

Differences in attitude may also be apparent according to ethnic or cultural background. To be sure, socialization is a product of one's culture. Rules that define a cultural group are handed down from one generation to the next. If cultural differences are sufficient, and if assimilation tendencies into mainstream culture are low, then it is reasonable to assume that cultural differences may play a role in the attitudes learned through the socialization process. Whether this is the case, that ethnicity based attitudinal differences effect dropout tendencies, has not been shown in the education literature reviewed.

Differences in dropout tendencies by racial group have been well documented. For example, in one state study, examination of the state's dropouts by race shows that the annual dropout rate for Blacks was 1.7 times the rate for Whites and the rate for Hispanics was 2.3 times the rate for Whites (Adams, 1989). Another study indicated that attrition at the high school level is high between grades 10 and 12, and that significant increases in attrition occurs each year. The study also indicated that during the 1988-89 school year, Hispanic (13.5%) and Black (12.1%) youths accounted for the largest percentage of dropouts, followed by Native Americans (10.6%), Whites (9.0%), and Asians (6.3%) (Carpenter, 1990).

In a third study, analysis of the data includes the following dropout rates by ethnic group: White, 6.95 percent; Black, 8.47 percent; Hispanic, 9.61 percent; Native American, 9.68 percent; and Asian and others, 6.18 percent (Shainline, 1987). It has been found, generally, that minorities drop out of school at higher rates than Whites, with Hispanics having a higher dropout rate than Blacks (Sherman, 1987). The assumption that this is always the case is not without challenge. Curtis (1983), found in a study that Whites drop out at a higher rate than Blacks.

However the differences in dropout rates by racial groups are measured, if they exist, differences in attitude between racial groups regarding school and education can be found. Barro & Kolstad (1987), suggest that there is a positive relationship between the percentage of Black students enrolled in a school and the dropout rate of that school. Interpretation of this characteristic suggests that the effect may be due more to "peer effect" on performance rather than specific differences in socioeconomic status (Barro & Kolstad, 1987). This peer effect on performance has been described as a negative evaluation for academic achievement. This suggests that students may hold or promote a certain negative attitude toward school and education.

This attitude may be more of a result of social class than ethnic background. Analyses of one study indicate that differences in dropout rates for different race/ethnic groups

are substantially reduced when socioeconomic status is held constant (Rumberger, 1983; cited in Barro & Kolstad, 1987). In reality, differences in dropout rates as predicted by ethnic background may be more a function of socioeconomic status, as suggested by studies cited above. Most dropouts come from families that are low in socioeconomic status (Sherman, 1987). McCaul (1988) suggested that differences in socioeconomic status were pronounced when considering status as a predictor for academic completion. Other issues relevant to socioeconomic status may include learning ability or parental support. There may be a link, for example, between socioeconomic status and education level. Education level in the parents may affect parental attitudes towards education that are taught to the children through the socialization process. A connection between socioeconomic status and learning ability was posited in a study by Wagner. Wagner (1990) found that learning disabled students were more likely than others to come from economically disadvantaged households.

Age Differences

Age also plays a significant role in measured drop out tendencies. The authors of one study presented findings which suggest that older students are less likely to remain in school than younger students (Fernandez & Velez, 1989). Adams (1989) demonstrated that most dropouts left school at ages 16 and 17, and most were overage for grade placement.

Binkley & Hooper (1989) demonstrated that the dropouts tended to be overage in comparison to their peers at any given level (Binkley & Hooper, 1989). This does not necessarily indicate that the students were overage for school. Most high schools experienced varying percentages of students who reached age 18 but who were not eligible for graduation (Anton, 1982). Anton (1982) suggests that attrition at the high school level is highest between grades 10 and 12, and this attrition rate shows significant increases each year. Shainline (1987) found that dropout rates for ninth through twelfth grades were 6.54 percent, 8.51 percent, 9.46 percent, and 7.72 percent, respectively. If the increase in dropout rates occurs between ninth and tenth grade, then measurements regarding attitudes must occur at least by that age. If attitudes prompt action, then the attitudes regarding early school leaving must exist at that age. Joubert (1968) suggests that studies regarding attrition should occur no later than the 10th grade, or even before.

This research suggests a by grade difference in attitude, that is, the attitudes which may precipitate early school leaving may be more a function of the peer group rather than actual age. Although being overage for the grade has been noted as a possible determining factor of early school leaving, students in the same grade, for instance, may be more likely to have similar attitudes than students in the grade levels directly above or below regardless of age.

Attitudes toward school, home, or personal characteristics may play a significant role in decisions that students make regarding leaving school. If this is the case, then the socialization process itself may be partially to blame. If rules for classroom interaction are learned through the socialization process, then students' attitudes regarding those rules may show the tendency toward academic non-completion. Given this premise, the above definitions, and the findings of earlier research, the following research questions are posed:

RQ1 What type of nonverbal expectancy violations occur in student/teacher relationships?

RQ2 What are the implicit rules regarding nonverbal behavior between high school students and their instructors?

The education research cited suggests that demographic variables can determine students' tendencies to drop out of school. To attempt to answer these questions, a test instrument will be developed and the following hypotheses will be tested:

H1 Students from a higher at risk group (males, Blacks, and students from a school with a high drop out rate) will be more inclined than their respective nonrisk counterparts to have negative perceptions regarding compliance to implicit nonverbal classroom interaction rules.

H2 Students from a higher at risk group (males, Blacks, and students from a school with a higher drop out rate) will be more inclined than their respective nonrisk counterparts to have negative perceptions regarding the importance of implicit nonverbal classroom interaction rules.

A reason for differences may be that a lack of knowledge on the part of the at risk student regarding nonverbal expectancies or rules, may be contributing to the difficulty of encoding messages on their part, and decoding messages on the part of their teachers. If perceptions regarding compliance or importance of these rules differ, they could be used as a basis for diagnosing at risk students.

This chapter has examined the characteristics of the at risk student as well as the dropout. It is hoped that by examining these characteristics an argument can be made for the relationship between characteristics and attitudes, and between attitudes and tendencies for academic non-completion. The following chapter will examine the methodology necessary to measure differences in attitude between students from a higher at risk group when compared to students from a nonrisk group.

CHAPTER 4
METHODOLOGY

Development of the Test Instrument

The research reported in the previous chapters suggests that the attitudes regarding rules for classroom interaction may differ by student characteristics. In order to test this proposition, a test instrument must be utilized to measure attitudinal differences among students. Several steps were involved in this process: (a) generation of a preliminary list of rules, (b) developing a test instrument with the preliminary list of rules, (c) testing of the preliminary list in a pilot study, (d) justification of the pilot study test instrument by comparing the rules to a list of rules generated by students, (e) justification of the pilot study test instrument by comparing the rules to another study regarding classroom rules, and (f) developing the test instrument for the high school study based on the previous steps.

The purpose of the pilot study was to test similar hypotheses as the high school study on a sample of actual high school dropouts and their peers in a post high school setting. This chapter will examine the procedures used to develop the test instrument and justify the instrument's validity. This chapter will also examine the methods of data

collection and the statistical procedures used to analyze the data.

To develop the test instrument, a preliminary list of rules had to be compiled. The first step involved an interview with a high school teacher (B. E. Whitlock, personal communication, November, 1990). B. E. Whitlock has been a high school teacher for eighteen years. She teaches speech courses in Clinton, Mississippi. This interview produced a list of rules from which the pilot study questionnaire was developed. This list can be found in Appendix A. The list includes fifteen generalized rules and a set of behaviors that the teacher believed accompanies each rule. It was the belief of B. E. Whitlock that these behaviors demonstrate a violation of classroom rules for high school students based on her experience in the classroom. The first research question asked about the nature of nonverbal expectancy violations which may occur in student/teacher relationships. The violations which occur in the classroom may be inferred from the initial and subsequent lists of rules generated in the development of the test instrument.

Given the initial list of rules, a pilot study questionnaire was generated (see Appendix B). The test instrument included a statement of a rule followed by two scale items. The first scale item measures the perceptions of students regarding compliance to the stated rule. The

compliance scale ranged from (1) never follow this rule, to (7) always follow this rule. The second scale item measures the perceptions of students in terms of the relative importance of the stated rule. The importance scale ranged from (1) not at all important, to (7) extremely important. The questionnaire included a check for relevant demographic variables including the age, sex, race, and high school graduation status.

The questionnaire was distributed to forty-two Louisiana State University undergraduates, and to one hundred eighty-six students at Spencer College. All students were volunteers. The students were divided according to high school graduation status (188 graduates, 40 nongraduates). All LSU students reported graduating from high school. For high school graduation status, there were three types of students in attendance at Spencer. Most students at Spencer finished high school and received a diploma. A large number of students dropped out of high school and received a GED (Graduate Equivalency Diploma) for unspecified reasons. A smaller number of students at Spencer College had not finished high school or received a GED. For purposes of the pilot study, it is assumed that GED and non-graduate students are in fact at risk students. GED and non-graduate students at Spencer have dropped out of high school. All other Spencer students reported finishing high school and receiving a diploma.

The pilot study sample included 172 females from Spencer. Of these female Spencer students, 56 were Black and 116 were non-Black. The sample included 24 females from LSU, of which all were non-Black. Males from Spencer totalled 11, of which 3 were Black and 8 were non-Black. Males from LSU numbered 18, of which 1 was Black. The age of students from Spencer ranged from 16 to 55 with an average age of 25. The age of students from LSU ranged from 18 to 39 with an average age of 22. (See Appendix D).

The pilot study served as the ground work for testing the hypotheses regarding perceptions of rules and rule violations for at risk students in high school. Following the pilot data collection, a composite list of rules for classroom interaction was generated and compared to the list of rules used on the pilot study questionnaire. The purpose of the comparison was to determine the justification for the rules that were chosen for the final test instrument. This was accomplished by having 267 undergraduate volunteers enrolled in Speech classes at Louisiana State University answer an open ended question in which students were requested to think back to their high school experience and make a list of all the rules they could remember.

A total of 2535 rules was generated averaging 9.46 rules per student. From this total, 2111 rules were found to be relevant to the study. Over 400 rules were found to be irrelevant because these rules either stated an explicit

policy of the school system, a state law, or regulated interactions between students outside of the classroom. Many of these rules listed by the students overlapped. The list was then compiled into categories of restrictive and prescriptive rules (see Appendix A). All the rules generated by the students were examined for common elements such as the use of synonyms, references to similar behaviors, and ability to be generalized by rule type based on the nature of each rule as determined by the educational research on classroom rule violation reviewed in preceding chapters. Fifty-two unique rules were discovered.

This composite list was compared to the seven rule types generated by Tikunoff and Ward (1978). The comparison revealed that the rules generated by the students were similar to the scheme used by Tikunoff and Ward (1978). For example, five restrictive and three prescriptive rules from the list generated by the students could be seen as reflecting mobility rules. These rules accounted for 374 of 2111 rules or 17.74 percent of the total. Six restrictive rules and one prescriptive rule could be generalized as talking/noise rules. These rules accounted for 519 of 2111 rules or 24.59 percent of the total. Nine restrictive and six prescriptive rules could be generalized as ethical rules. These rules accounted for 396 of 2111 rules or 18.76 percent of the total. Six restrictive rules and one prescriptive rule could be generalized as procedural rules. These rules

accounted for 319 of 2111 or 15.11 percent of the total. Two restrictive and four prescriptive rules could be generalized as academic rules. These rules accounted for 360 of 2111 rules or 17.06 percent of the total. School imposed rules were comprised of four restrictive rules and one prescriptive rule. Only 47 of 2111 rules or 2.23 percent of the total were accounted for by these rules. And finally, miscellaneous rules were comprised of two restrictive rules and one prescriptive rule. These rules accounted for 96 of 2111 rules or 4.55 percent of the total (see Appendix D).

When the rules generation list was compared to the rules used for the pilot study some interesting characteristics were found. All of the rules selected for the pilot study were present in the rules generation list (see Figure 4.1).

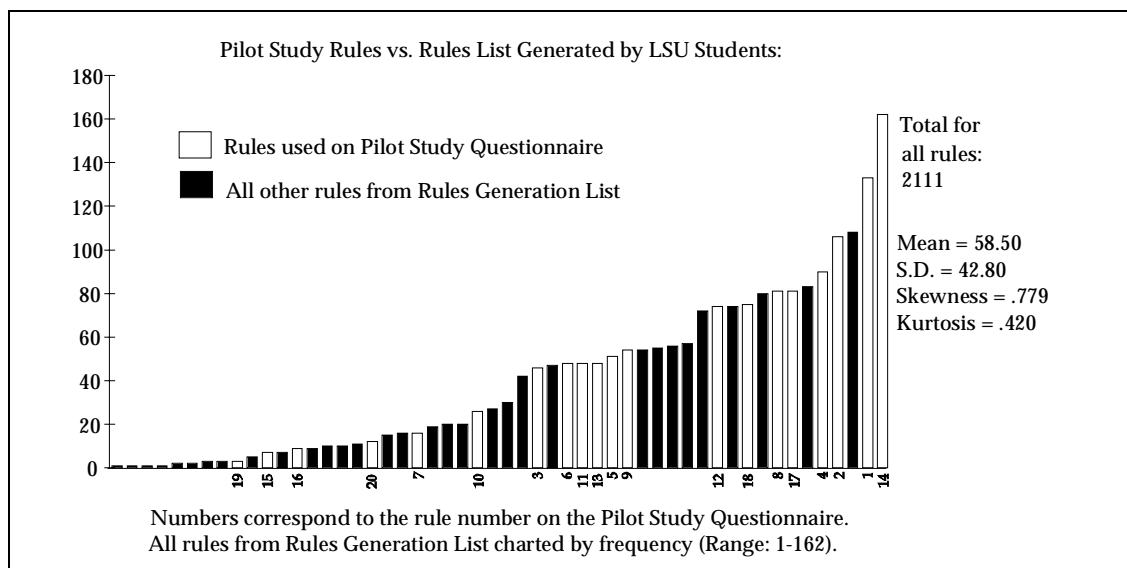


Figure 4.1

It is important to note that the Louisiana State University students who took part in the pilot study were excluded from

generating a list of rules from which the composite was taken. Each of the pilot study rules in the rules generation list varied by the amount at which they were listed (see Figure 4.1). For example, the most frequently listed rule was found on the pilot study. This rule stated that students should raise their hand when they want to speak, and this rule accounted for 162 of 2111 rules or 6.3 percent of the total. The composite list included four of fifty-two rules that were only listed once and nine of fifty-two that were listed less than five times. Examples of these rules included rules against approaching the teacher at his or her desk, using racial terms, lying, or carrying weapons. The pilot study rule that listed least frequently on the composite list was listed three times which accounted for less than one percent of the total. This rule stated that students should not come to class intoxicated or high.

The comparison shows that the rules used in the pilot study questionnaire may be considered as having different levels of importance by virtue of the frequency at which they were listed. As demonstrated above, the range of frequency for the rules used on the pilot study was 159, from 3 to 162. The mean for the frequency of the listing of the rules was 58.50, and the standard deviation was 42.80. This translates to an evenly distributed set of rules in the pilot study questionnaire when compared to the rules generation list.

When comparing the rules on the pilot study questionnaire to the rule schema developed by Tikunoff and Ward (1978), the rules used for the pilot study were also evenly distributed. For example, the number of mobility rules from the composite list used in the pilot study was four. There were three talking/noise rules, four ethical rules, three procedural rules, three academic rules, and three miscellaneous rules. School-imposed rules are explicit by nature, so they were excluded from the pilot study questionnaire. Of the six rule types used, all but procedural rules included both restrictive and prescriptive rules.

These comparisons serve as a basis for the justification of the test instrument. Once the lists of rules generated from the interview with the high school teacher, the undergraduates at Louisiana State University, the educational research including Tikunoff and Ward's (1978) list, universal rules of politeness (Brown & Levinson, 1987), and the rules chosen for the pilot study are compared, the rules used in the test instrument can be justified. The second research question asked what are the implicit rules regarding nonverbal behavior between high school students and their instructors. The development of lists of rules for use in the test instrument describes which rules reflect nonverbal interaction in the classroom. The rules chosen for inclusion in the test instrument included all twenty of the rules used

in the pilot study. Also included was a rule regarding dropping out of school. This rule was included to measure the attitudes of students about dropping out. This rule served as a pivotal dependent variable to compare students by the independent variables of school, race, age, sex, and form of the test instrument.

Instrumentation

Three forms of the test instrument were developed and distributed. All three forms included the same rules in sequential order. The only difference between the forms was the location of the pivotal rule regarding dropping out. This difference was implemented to control for possible fatigue factors. Although the questionnaire was not lengthy, the similarity of format for each of the questions could have produced some fatigue effects.

Negative attitudes were measured on a seven-point Likert scale for compliance with the rule and importance of the rule variables. On the compliance scale, negative attitudes were measured by the tendency to answer never (value = 1), on the compliance scale. Positive attitudes were measured by the tendency to answer always, (7). On the importance scale, negative attitudes were measured by the tendency to answer very unimportant, (1); and positive attitudes were measured by the tendency to answer very important, (7).

Use of Minors in the Study

Permission for the participation of minors, the high school students, had to be obtained at several levels. The first step involved University approval through the Human Subjects Research Committee. After this approval, the East Baton Rouge Parish School Board was approached with a request. The importance of the first step, beyond normal procedure, was to show good faith on the part of the researcher when making the request to the School Board. The request was made to the Assistant Superintendent of Instruction, and the Directors of Secondary Education, and Research and Development. The approval of the School Board was contingent upon the approval of the principals of the selected schools. Therefore a direct request was made to the principals of four area schools: Robert E. Lee High School, Baton Rouge Magnet High School, Capitol High School, and Scotlandville Magnet High School. The principals of all but Baton Rouge High agreed to take part.

The final step in securing permission for the use of minors in the study had to come from the parents. A letter was distributed through the students, who were to participate, to the parents. Parents were requested to sign the letter to approve their student's participation. See Appendix C for the text of correspondence between the researcher and the various individuals responsible for each level of permission in the process.

Samples

The questionnaires were distributed to three schools in the local school district. The East Baton Rouge Parish School District's rate of attrition for the years 1988 through 1991 is 1.25%. Three schools were chosen by rate of attrition: high, average, and low. Group One consists of high school students in the tenth grade who were attending a school with a very high drop-out rate (9.41%) (N = 81). Students attending Capitol High School may be considered at risk for dropping out by school officials due to the drop-out rate. Group Two consists of high school students in the tenth grade who are attending a school with a high-average drop-out rate (4.41%) (N = 96). For this purpose students at Robert E. Lee High School are considered by school officials as moderate in drop-out rate. Group Three consists of high school students in the tenth grade who are attending a school with a very low drop-out rate (0.07%) (N = 67). Students attending Scotlandville Magnet High School are regarded as highly motivated since entrance requirements and maintenance of high grades are mandatory. For this purpose students at Scotlandville Magnet are not considered by school officials as at risk for dropping out.

To administer questionnaires to a representative sampling of same age students, participants were chosen from all sophomore level English classes. All students in the East Baton Rouge school system must take this class. These

sophomore English students from the three schools were requested to fill out the questionnaire. Participants were not volunteers.

Students ranged from 13 to 20 years of age. The average age of 15 accounted for 59.5% of all students, with 70.2% of all students at or below the age of 15 and 29% of all students above the age of 16 (.8% missing). However, age range varied by school (see Appendix D).

The sex of the student was also accounted for on the questionnaire. Of all students, 56.6% were female and 43.3% were male. However, differences in the male/female ratio existed in the schools. Capitol High had 54.3% female students to 45.7% male. R. E. Lee High had an even 50% ratio between males and females. Scotlandville High had the largest difference with 68.7% female students to 31.3% male students.

Race accounted for the greatest overall variance in the sample. Of all students, 58.2% were Black, 33.6% were White, and 8.2% were either Hispanic, Oriental, other or missing. For purposes of the study, the 33.6% and 8.2% groups were combined. This amounted to two categories: 58.2% Black and 41.8% non-Black. By school, race variations were high. The high risk school (Capitol) had 90.1% Black to 9.9% non-Black students. The moderate risk school (Lee) had 44.8% Black to 55.2% non-Black students. The nonrisk school (Scotlandville) had 38.8% Black to 61.2% non-Black students.

Analyses of Data

The questionnaires were coded and analyzed according to the following criteria: exploratory factor analysis using principle components extraction and varimax rotation in order to determine the existence of underlying rule dimensions. Secondly, tests of reliability were run on each factor discovered in the factor analysis. The results of the factor analysis are reported in the following chapter.

The resulting factors were analyzed using correlation analysis to determine if linear associations exist between factors. These correlations are reported in the following chapter. Due to linear association between factors, a three (school) by two (sex) by two (race) multivariate analysis of variance (MANOVA) was performed to analyze the data. Age was not considered as an independent variable in the MANOVA due to significant variance in age by school (see chapter 5).

This chapter has described the development of the test instrument and has documented the procedure used to procure permission to use minors in the study. This chapter also described the method of data collection and the statistical procedures employed in the analysis of data. Chapter 5 will present the results of the data analyses. Results will be determined to support the hypotheses if differences are determined to be statistically significant between the school groups, and by sex and race, according to the above criteria for direction of attitudes regarding rules.

CHAPTER 5

RESULTS

Dimensions of Classroom Rules

To test the hypotheses posited in chapter 3, an exploratory factor analysis was performed to determine underlying rule dimensions. The exploratory factor analysis of compliance variables revealed four factors. These factors include: (a) Laziness, (b) Distraction, (c) Respectfulness, and (d) Politeness. Rules about laziness included rules regarding sleeping, cheating, dropping out, throwing things, leaving class, and using vulgar language. Rules about distraction included public displays of affection, eating or drinking in class, sitting up straight, and passing notes. Rules about respectfulness included raising a hand to speak, maintaining an appropriate or respectful distance, sitting at the teacher's desk, and talking while the teacher is talking. Rules about politeness included maintaining eye contact and cleanliness.

Factor one (Compliance with Laziness Rules) accounted for 34.9 percent of the variance (Eigenvalue = 7.32, alpha = .77). Factor two (Compliance with Distraction Rules) accounted for 8.8 percent of the variance (Eigenvalue = 1.85, alpha = .82). Factor three (Compliance with Respectfulness Rules) accounted for 5.4 percent of the variance (Eigenvalue = 1.13, alpha = .73). Factor four (Compliance with

Politeness Rules) accounted for 5.1 percent of the variance (Eigenvalue = 1.07). However, reliability tests on Factor four yielded a low alpha of = .46. This fourth factor, therefore, was not considered in later tests.

The exploratory factor analysis of the importance scales revealed three factors. These factors include: (a) Distraction, (b) Laziness, and (c) Respectfulness. Rules about the importance of distraction were the same as the rules for compliance with distraction, except that the importance factor included tardiness. Rules about the importance of laziness were the same as the compliance variable findings with a few exceptions. Rules about leaving class and throwing things were not included in the factor loadings for importance of laziness. While rules about doing one's own work, and intoxication were included in the factor loadings for importance of laziness. Rules regarding interrupting or talking while the teacher is talking were cross-loaded with the importance of respectfulness factor. Rules about the importance of respectfulness included raising hand to speak and sitting at the teacher's desk as did the compliance of respectfulness factor. Also included in the importance of respectfulness factor were cleanliness which cross-loaded with the importance of politeness factor, and throwing things which was cross-loaded with the importance of laziness factor. Missing from the importance of respectfulness factor when compared to the similar compliance factor

were talking when the teacher is talking, and maintaining respectful distance.

Factor one (Importance of Distraction Rules) accounted for 32.6 percent of the variance (Eigenvalue = 6.85, alpha = .83). Factor two (Importance of Laziness Rules) accounted for 9.4 percent of the variance (Eigenvalue = 1.98, alpha = .77). Factor three (Importance of Respectfulness Rules) accounted for 5.7 percent of the variance (Eigenvalue = 1.21, alpha = .67). The reliabilities for the summed compliance and importance ratings on this study were high. The dependent variables for the compliance index had an alpha of .91, while the importance index had a reliability of alpha = .89.

Correlations were used to determine linear association between factor indices created by using the highest loading items determined by a .60/.40 primary-secondary loading decision rule. Table 5.1 demonstrates that the factor indices were relatively correlated. The average correlation between Compliance factors was .51. The average correlation between Importance factors was .52. The average correlation between factors determined by similar rule dimensions was .79, with the highest association ($r = .88$) between the Compliance with Distraction Rules and Importance of Distraction Rules factors. Correlation between Compliance with Laziness Rules and Importance of Laziness Rules was .79. Correlation between Compliance with Respectfulness Rules and

Importance of Respectfulness Rules was .72. These linear associations were significant at the .001 level.

Table 5.1

Correlations:	FC1	FC2	FC3	FI1	FI2	FI3
FC1	1.00	.43	.52	.37	.79	.43
FC2		1.00	.59	.88	.48	.41
FC3			1.00	.51	.60	.71
FI1				1.00	.50	.52
FI2					1.00	.55
FI3						1.00
N of cases:	220	1-tailed Signif: - .001				
Where:	FC1 - Compliance with Laziness Rules FC2 - Compliance with Distraction Rules FC3 - Compliance with Respectfulness Rules FI1 - Importance of Distraction Rules FI2 - Importance of Laziness Rules FI3 - Importance of Respectfulness Rules					

Due to the correlation between factors, a three by two by two multivariate analysis of variance was used between the three school groups, and the sex and race of the student. In this analysis, age was used as a covariate due to the significant variance in age between schools (see below). Oneway analysis of variance of the survey form was used to determine if fatigue played a role.

Tests of Hypotheses

The first hypothesis stated that students from a higher at risk group, in this case Capitol High, would have more negative attitudes towards compliance with implicit rules for classroom interaction when compared to their moderate, Lee High, or low risk, Scotlandville Magnet High, counterparts. The second hypothesis stated at risk students would have more

negative attitudes towards the importance of those same rules than their low or nonrisk counterparts.

When student responses to the questionnaire were compared by school, sex, and race, neither hypothesis was completely supported. However, some very interesting results emerged. The multivariate analysis of variance (MANOVA) was performed to analyze the effects of school, sex, and race, with age as a covariate, on the derived factors measuring the compliance and importance variables regarding rules in the classroom. Age was used as a covariate due to significant differences between the schools in terms of age. The high risk school had the highest mean age ($M = 15.83$), followed by the moderate risk school ($M = 15.28$), and the nonrisk school ($M = 14.88$). Between groups analysis of variance on age revealed a significant difference between schools ($F(2, 242) = 19.99, p < .001$).

The MANOVA revealed that no significant differences on compliance or importance factors could be attributed to school, age, or secondary or tertiary interaction effects between school, sex, and race for both compliance and importance factors. Yet, significant differences were found between compliance and importance factors by both sex and race. The MANOVA revealed a significant, multivariate effect for sex on the compliance scale using the Wilks' Lambda criterion ($F(3, 220) = 5.16, p < .002, \text{Wilks' Lambda} = .93$). Table 5.2 displays the sex and race mean values for

compliance and importance factors. The univariate F-tests showed that the sex effect for compliance was due to males ($M = 5.31$) having a more negative attitude toward Compliance with Laziness Rules than females ($M = 5.798$), univariate ($F(1, 222) = 5.14, p < .024$).

Table 5.2

Cell Means for Sex and Race: Compliance and Importance Factors	
Compliance with Laziness Rules: (Sex)	
Male	5.32
Female	5.80
Importance of Laziness Rules: (Sex and Race)	
Male	5.21
Female	5.83
Non-Black	5.23
Black	5.82
Importance of Distraction Rules: (Race)	
Non-Black	3.04
Black	3.66
Importance of Respectfulness Rules: (Race)	
Non-Black	4.68
Black	5.37

Males also had a more negative attitude ($M = 5.21$) toward the Importance of Laziness Rules than females ($M = 5.83$), univariate ($F(1, 216) = 9.64, p < .002$), using the Wilks' Lambda criterion ($F(3, 214) = 7.12, p < .000$, Wilks' Lambda = .91).

The MANOVA revealed a significant, multivariate effect for race on the importance scale using the Wilks' Lambda criterion ($F(3, 214) = 4.07, p < .008$, Wilks' Lambda = .95).

The univariate F-tests showed that the race effect was due to non-Blacks ($M = 3.04$) having a more negative attitude toward the Importance of Distraction Rules than Blacks ($M = 3.66$), univariate ($F(1, 216) = 6.01, p < .015$). Non-Blacks ($M = 5.23$) also had a more negative attitude toward the Importance of Laziness Rules than Blacks ($M = 5.82$), univariate ($F(1, 216) = 8.53, p < .004$). Finally, non-Blacks ($M = 4.68$) had a more negative attitude toward the Importance of Respectfulness Rules than Blacks ($M = 5.37$), univariate ($F(1, 216) = 9.58, p < .002$).

A second MANOVA was performed to analyze the effects of school, sex, and race, with age as a covariate, on the summed compliance and importance indices. This test revealed no significant differences by school, sex or race on the summed compliance index. However, significant differences were found by race on the summed importance index. The univariate F-tests showed that the race effect was due to non-Blacks ($M = 4.36$) having more negative attitudes regarding the importance of rules in general than Blacks ($M = 4.98$), univariate ($F(1, 222) = 12.44, p < .000$). Secondary interaction effects between school and race, however, confounded the findings ($F(2, 222) = 6.36, p < .040$). When comparing by race, non-Blacks at the high ($M = 4.07$) and moderate risk ($M = 4.42$) schools had more negative attitudes regarding the importance of rules than their counterparts at the high ($M = 5.32$) and moderate risk ($M = 5.00$) schools.

Differences between Blacks ($M = 4.63$) and non-Blacks ($M = 4.60$) at the nonrisk school were not significant. Based on regression analysis, no significant differences on the Compliance ($t = .061, p < .952$) and Importance ($t = .631, p < .529$) indices could be attributed to age.

These results suggest that the sex and race of students play a role in determining attitudes regarding rules for classroom interaction. Differences in attitude determined by sex of the student typically support the hypothesis. However, differences in attitude as determined by race typically fall in the opposite direction from that hypothesized.

As described in chapter 4, three forms of the questionnaire were distributed to control for fatigue effects. These differences in form were examined using oneway analysis of variance (the independent variable was questionnaire form A, B, or C) to determine if fatigue effects occurred. No significant differences in the factors were found among groups by form of the questionnaire, which suggests fatigue did not play a role.

This chapter reported the results of the data analysis. The next chapter will present a discussion of the results and make recommendations for further research. The final chapter will also discuss possible policy issues relevant to educating at risk students.

CHAPTER 6

DISCUSSION AND CONCLUSIONS

This study revealed that students' attitudes towards rules in the classroom are generally positive. Yet, the findings did not completely support the hypotheses that students who are at risk for dropping out have more negative attitudes toward implicit nonverbal interaction rules in the classroom when compared to moderate or nonrisk students. The findings suggest a trend in the opposite direction for many of the rule dimensions. Students from the high risk group, as determined by school, tended to have more positive attitudes toward classroom rules than their moderate or nonrisk counterparts. Conversely, the nonrisk students, as determined by school, tended to have more negative attitudes toward classroom rules than their moderate or at risk counterparts. Possible explanations for the tendency of students from the high risk group to have more positive attitudes toward classroom rules could include difficulties with the sampling procedures used to distinguish at risk students from their nonrisk counterparts.

A sample of the at risk population was not directly accessible in the East Baton Rouge Parish school system. The school system did not have a procedure in place for directly distinguishing between at risk students and nonrisk students. To overcome this difficulty, a sample of the at risk

population was inferred from the drop out rates of the area high schools. The assumption in this inference is that there are more at risk students at a school with a high dropout rate than there are at risk students at a school with a moderate or low dropout rate. In this case, the school with the low dropout rate was a Magnet school. Magnet schools should have a lower proportion of academically at risk students because there are entrance requirements to gain admission. Yet, there are problems inherent in inferring a higher at risk population based on dropout rates.

Earlier research cited in Chapter 3 implied that some reasons for a higher dropout rate may be school imposed, that is, characteristics of the school itself may induce higher dropout rates. Examples of this include relative safety from harm on the school grounds which may not affect students' attitudes regarding rules in the classroom, or programs or activities available at the school which may serve as motivational factors for students to remain in school. In the case of the schools used in the present study, the examples described above may affect the dropout rates of the schools. The attitudes of the student population may not be linked to the dropout rate of the given school.

Although the attitudinal tendencies described above occurred for most of the variables tested, the findings were statistically significant for only a few variables when compared by sex and race of the student. Differences in the

age of the student or the school of attendance did not significantly affect attitudes. For all schools, males had more positive attitudes toward compliance with Distraction rules than females, except for Black males at the nonrisk school when compared to their female peers. For all schools, males had more negative attitudes toward compliance with Laziness and Respectfulness rules, except for Black males at the nonrisk school who had more positive attitudes toward compliance with Respectfulness rules than their female counterparts. Of these differences, only the attitudes toward compliance with Laziness rules were significantly different between males and females.

For all schools, males had more positive attitudes regarding the importance of Distraction rules than females, except for Black males at the high risk school. Also for all schools, males had more negative attitudes regarding the importance of Laziness and Respectfulness rules than females, except for Black males at the nonrisk school who had more positive attitudes regarding the importance of Respectfulness rules than their female counterparts. Of these differences, only the attitudes regarding the importance of Laziness rules were significantly different between males and females.

Earlier research cited suggests that the reasons females most often dropped out of school was pregnancy or family problems, or falling behind in school, whereas males had a more difficult time interacting appropriately with the

teacher. This suggests that males should have more negative attitudes toward classroom rules than females because of the reasons males had for dropping out. Given the findings in the present study, partial support for the hypotheses can be assumed from differences between males and females in their attitudes regarding the importance of Laziness rules.

The race of the student also played a role in determining differences in attitudes. No significant differences were found between Blacks and non-Blacks in attitudes toward compliance with classroom rules. However, some interesting trends did emerge. For all schools, Black males and females consistently had more positive attitudes toward compliance with rules than did their same-sex non-Black counterparts. An exception to this generalization includes: Black males at the nonrisk school had more negative attitudes toward compliance with Laziness rules than their non-black male peers. This exception may be due to the small number of Black males ($N = 8$) at the nonrisk school who took part in the study.

Differences in attitudes between Blacks and non-Blacks regarding the importance of classroom rules were significant. For the high and moderate risk schools, Blacks tended to have more positive attitudes regarding the importance of Distraction rules than their non-Black counterparts. Black students at the nonrisk school had more negative attitudes regarding the importance of Distraction rules than their non-Black

counterparts, although the differences measured were not great. For all schools, Blacks had more positive attitudes regarding the importance of Laziness and Respectfulness rules than their non-Black peers, although the differences between Black and non-Black students at the nonrisk school were not great.

Earlier research cited suggests that Blacks are more at risk for dropping out than Whites. The research suggests that one major reason for this difference may be due to peer pressure in the Black student community to behaviorally conform (Barro & Kolstad, 1987). The research also suggests that Blacks should have more negative attitudes toward classroom rules than non-Blacks. Yet, in this study, Black students consistently had more positive attitudes than non-Blacks regarding classroom rules. A possible explanation for this discrepancy is the notion that students who have been typically defined in negative terms may react to the definition in the opposite direction. That is, if Black students are aware that they are defined as having more negative attitudes, they may compensate for that definition by expressing more positive attitudes. Given the findings in the present study, there is no support for the hypotheses when considering differences between Blacks and non-Blacks.

Tendencies in attitudinal differences found in this study considering the school, although not significant, also demonstrated interesting trends. Attitudes toward compliance

of Distraction and Respectfulness rules were more positive for the high and moderate risk schools, respectively, when compared to the nonrisk school. This trend is in the opposite direction from that hypothesized. Attitudes toward compliance of Laziness rules were more positive for the high and nonrisk schools, respectively, when compared to the moderate risk school, although these differences were very small.

Attitudes regarding the importance of Distraction rules were more positive for the high and moderate risk schools, respectively, when compared to the nonrisk school. This trend is in the opposite direction from the direction hypothesized. Attitudes regarding the importance of Respectfulness rules were more positive for the moderate and nonrisk schools, respectively, when compared to the high risk school. This trend partially supports the hypothesis in that the high risk students' attitudes were more negative. However, the moderate risk students' attitudes were more positive than the nonrisk students' attitudes which is in the opposite direction from that hypothesized. Finally, attitudes regarding the importance of Laziness rules were more positive for the nonrisk and moderate risk students, respectively, than the high risk students. This trend supports the second hypothesis. These trends regarding attitudes toward the rules may be disparate due to the sampling difficulties described above.

When considering the findings with the demographic variables of sex, race, as well as school, the attitudes regarding laziness generally supported the hypotheses, whereas the attitudes regarding distraction and respectfulness generally did not support the hypotheses. Overall, attitudes held by all students were generally most positive toward Laziness rules. Attitudes toward Respectfulness rules were moderately positive, whereas attitudes toward Distraction rules were neutral. (For a complete list of attitude means, see Appendix E).

When the rules' scores were summed for the Compliance and the Importance scales, no significant differences were found for either Compliance with the rule or Importance of the rule by school or sex, or race on the Compliance index. However, the results did demonstrate a significant difference by race for the Importance index with Blacks generally having more positive attitudes regarding the importance of rules than their non-Black counterparts. This finding did not hold true for students at the nonrisk school where differences in attitude were not significant. However, this exception may be due to a small sample size of Black students at the nonrisk school.

The findings not supporting the hypotheses imply that either the test methodology was invalid or the assumptions recommending a direction for the hypothesis are inaccurate. Issues regarding the validity of the test instrument vary

from the method for generating the rules to be tested to the sampling procedure. The first process in the development of the test instrument was the generation of the list of rules for inclusion in the test instrument. The steps involved in this process were outlined in chapter 4. The process of choosing a short list of rules from the overall list involved a few assumptions. The first assumption was that high school students would know the rules that were chosen for the test instrument. This assumption was based on two procedures: (a) the use of college students for generation of rules for classroom interaction based on their experience in high school, and (b) the use of Tikunoff and Ward's (1978) study as a schema for rule types to be included.

The use of college students in the process of generating a list of rules may not be valid because there may be too great an age and maturity difference between college students and tenth grade students. Secondly, the use of college students implies a group of academic achievers. If these college students were academic achievers in high school, then the likelihood that they were at risk for dropping out may be smaller than the general high school population. If that is the case, the rules generated by the college students do not take into consideration the perspective of the high school at risk student. This lack of perspective may have affected the results in that the high school at risk students had limited knowledge of the rules on the questionnaire.

The conclusion of the Tikunoff and Ward (1978) study was that students learned classroom rules at an early age. This conclusion implies that even at risk students should be aware of these implicit interaction rules for the classroom by the time they reach the tenth grade, indeed much earlier. However, Tikunoff and Ward's 1978 study is not without problems. The study involved the socialization of grade school students into the classroom environment. Teachers in the study held expectations about student behavior, and those expectations were imposed upon the students. It is assumed that continuity and congruence between the teacher's expectations of student behavior and the socialization of that student from home should exist, at least for the youngest of students. Much of the educational research cited in Chapter 3 suggests that a characteristic of at risk students is ineffective or improper socialization at home. If this is the case, there would be an incongruence in the rules of home and school for the student.

The categorization of rules in the Tikunoff and Ward (1978) study was constructed through collaboration of the study coders with the principal investigators. The categorization was not produced through statistical means such as factor analysis. Although the study concluded that students learned and understood the rules, it is unclear whether there existed any correlations between the rule types and student understanding of the rules. However, the rule

schema used by Tikunoff and Ward (1978) was utilized in the present study in order to insure variability of rule types. Variability of rule types was considered an issue in the development of the test instrument due to the lack of studies linking classroom rules to the characteristics of at risk students. Yet the selection of rules for the test instrument of the present study may have affected the results. The rules selected for the test instrument were based on rule type schemas and the frequency at which specific rules were listed by the college students in the rule generation process and not on any prior knowledge of specific rules which may be more relevant for at risk high school students.

Another difficulty with the sample of students which may have affected the outcome were the resulting cell sizes for the various subgroups of the sample. The cell sizes for a few subgroups were small, and the cell sizes were unequal between some subgroups. (For comparison of subgroup cell sizes see Appendix E). For example, it was difficult to make conclusions about the differences between Blacks and non-Blacks at the high risk school because the number of non-Black students at that school was very small.

When the sample sizes are equal, the ANOVA is relatively insensitive to violations of the homogeneity of variance assumption. A post-hoc test was conducted on the factors to determine if the homogeneity of variance assumption was violated. A Bartlett-Box F test revealed that significant

effects due to a violation of the homogeneity of variance assumption could have occurred for the Importance of Laziness Rules factor ($F(11, 6524) = 2.89, p < .001$). This result suggests that the ANOVA may not be powerful for this factor.

The test instrument may also be marginally invalid due to the difficulty of students to distinguish between the implied meaning of the two scales. The first scale was intended to measure students' attitudes regarding compliance with the stated rule. The second scale item was intended to measure the students' attitudes regarding the relative importance of the stated rule in comparison to other rules. A student may believe that he or she should comply with a stated rule even though he or she believes the rule is unimportant. On the other hand, a student may believe that a rule is very important but have reasons for not complying with the rule. Students may not have been able to accurately distinguish between these two scales, thus measuring the rule's relative importance based on whether or not they believe they should comply with the rule.

A similar issue which may also marginally invalidate the test instrument may be the possibility that some students believe one should always comply or never comply, or that rules are always important or never important. If this was the case with some students, then the issue of distinguishing between the implied meaning of the two scales becomes relevant.

In at least one sample, the moderate risk school - Lee High, students may have been momentarily motivated to answer the questionnaire with more positive attitudes towards rules. Answers to the Lee High questionnaires could have been affected by the murder of a Lee High student the weekend before the surveys were filled, according to H. Albert, Time Out Room Coordinator at Lee High School (personal communication, October, 1991). It was Albert's belief that students would answer the questionnaire with more positive attitudes regarding classroom rules at the given time when compared to how they would answer under less traumatic circumstances.

If students can be motivated to answer more positively on an attitude assessment questionnaire, then they can be motivated to answer more negatively as well. This issue was implied in the research cited in Chapter 3 which discussed peer pressure. It is reasonable to suspect that students might be motivated to behave either in accordance with or in opposition to certain rules based on the influence of their peer groups. By extension of that argument, it is also reasonable to suspect that students' attitudes might be influenced by their peer group. The difficulty in measuring attitudes is the degree of effect that fear plays in answering the questionnaire. For example, if a student has a certain attitude but fears retribution for stating that attitude, the student may answer differently than he or she

would under less fearful conditions. This survey was designed to counter that effect by not requesting any identification of the student. However, the possibility of the influence of fear or the lack of trust toward the administrators of the test may have affected the outcome. That is, the student may have believed that the survey was not anonymous or confidential and therefore believed he or she would be punished for answering the survey in a certain way, such as negatively.

Certainly, the attitudes of the students can be affected by the culture in which they are socialized. As suggested in Chapter 2, students are socialized in the classroom. Indeed, the Tikunoff and Ward (1978) study described the process of socialization in the classroom, and determined this process as the responsibility of the teacher. However, the attitudes of individual students, or a cultural group of students, may be at odds with the attitudes promoted through the socialization process in the schools. Although low socio-economic status was considered as a characteristic of students at risk for dropping out (see Chapter 3), the possibility of low socio-economic status being defined at least as a sub-cultural group has not been examined, due to difficulties inherent in the research design. (Socio-economic status would have to be reported by the student, or paired with parental responses. It is questionable whether students would know that information.) For example, if

individuals from low socio-economic status live in close proximity, the same neighborhoods, then it may be reasonable to assume that these individuals grow up with similar attitudes and values. These attitudes and values may be at odds with the attitudes of the institutionalized culture otherwise known as the school system.

These differences in attitudes may have more greatly affected the outcome of the study than any differences attributable to the at risk population. If this is the case, then the cultural effects may exacerbate the difficulty of inferring at risk tendencies from attitudes toward classroom rules.

The definition of the at risk student may also affect the interpretation of the results. As discussed in Chapter 3, the definition of the at risk student incorporates characteristics of three major types: family environment of the student, personality of the student, and the school environment. Simple examination of the research regarding at risk characteristics suggested a possible relationship between the sponsoring agency of the study of at risk characteristics and the type of characteristics described in that study. For example, the five types of sponsoring agencies considering characteristics of at risk students were: (a) local, state, and federal departments of education, (b) federal agencies, (c) professional education organizations, (d) university studies, and (e) corporate

sponsors. There may be a tendency for studies sponsored by a particular type of agency to characterize at risk students according to a particular type of influence, such as family environment, personality, or school environment. A test for association may show researcher bias in the definitions of at risk students.

Researcher bias in the education research of at risk students could lead to faulty conclusions regarding the characteristics of potential dropouts. If this is the case, then the direction of the hypotheses in the present study may have been based on faulty assumptions regarding at risk students. This suggests that further study should be done on determining underlying characteristics of at risk students. To accomplish this goal, some agreement among researchers must be made in coding the characteristics of the at risk population.

Prior research reviewed in this study suggests that students who are at risk for academic non-completion can be distinguished by demographic and behavioral variables. This study revealed that simple characterization of students by demographic variables may not be sufficient to uncover causes, or contributory factors, of academic non-completion. To uncover these causes, further study should be conducted on attitude formation in the classroom context. Further study should consider more explicitly the relationship between interaction rules in the classroom and the actual tendency

for dropping out. This suggests a longitudinal study measuring attitudes be conducted on a sample of students from an early grade through high school. The attitudes of actual drop outs can then be compared to students who stayed in school. Also, the development of attitudes in the classroom can also be examined. This examination should consider the attitudinal development of at risk students in particular.

Further study may also examine how peer pressure affects attitudes and attitude formation regarding rules in the classroom. Other issues to be studied which may affect these attitudes include socio-economic status of the student, and characteristics of both the school and home environment. A comparison of rules between the home and school environments may also illuminate commonalities or differences in the development of attitudes. Further study should be conducted on the effect negative evaluations of students by teachers have on the attitude formation of those students.

These suggestions for further study assume that a relationship between attitudes and behavior exists. According to Milton Rokeach (1969), attitudes, values and beliefs affect behavior. Persons most often choose to behave in congruence with their held attitudes. Thus, it is reasonable to conclude that students attitudes may determine their behaviors. For example, students' negative attitudes might affect their tendency to drop out of school. Provided Rokeach's theorizing regarding the primacy of attitudes

toward behavior is accurate, then one way to approach the problem of determining the characteristics of at risk students would be to measure the attitudes, then ascertain the characteristics of the environment which helped develop these attitudes.

If attitudes lead to behavioral choices in individuals, then attitude change may lead to behavioral change. The purpose for the study of at risk populations is to change the tendency of being at risk. For educators, the goal of retarding the growth of at risk tendencies may be reached through observation of students' attitudes and possibly through consideration of the classroom socialization process.

In conclusion, this study reveals that educators should consider the development of students' attitudes regarding the classroom environment. Certainly, educators cannot take on the role of parents in the socialization process. However, educators are in the unique position of affecting attitude development significantly. To this end, parents and educators should cooperate in the socialization process.

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APPENDIX A
LISTS OF RULES

Steps in the generation of rules for the Test Instrument

1. Rules from interview with B. Whitlock (including behaviors associated with not following the rule).

Rule 1: Pay attention to the teacher.

- A. Avoiding eye contact
- B. Writing notes
- C. Talking to peers
- D. Looking out the window
- E. Shuffling through books or papers
- F. Sleeping

Rule 2: Complete homework assignments.

- A. Argumentative distractions
- B. Off-issue discussions
- C. Lack of assignments
- D. Down talking of assignments

Rule 3: Bring pen, paper, and books to class.

- A. Lack of materials
- B. Borrowing materials from other students

Rule 4: Take advantage of the opportunity for an education.

- A. Sleeping
- B. Down talking of school, teachers, subjects
- C. Satirical responses

Rule 5: Be cooperative with fellow classmates.

- A. Sharpening pencils in the middle of a lecture
- B. Refusing to share materials with peers

Rule 6: Work well in the class environment.

- A. Lack of materials
- B. Sleeping
- C. Looking out the window
- D. Talking

Rule 7: Think analytically.

- A. Talking
- B. Restless movement
- C. Down talking
- D. Head on the desk

Rule 8: Believe in oneself.

- A. Cheating
- B. Refusing to answer questions
- C. Ducking down in seat
- D. Casting eyes towards the floor
- E. Whining
- F. Being passive in both small and large groups

Rule 9: Do one's own work.

- A. Cheating
- B. Talking
- C. Delaying
- D. Copying homework

Rule 10: Keep one's personal needs private.

- A. Grooming in class; e.g. rubbing lotion on legs
- B. Belching
- C. Scratching
- D. Coughing, sneezing, or noseblowing unnecessarily

Rule 11: Speak with correct grammar.

- A. Speaking in fragments
- B. Using double negatives
- C. Using colloquial language
- D. Using poor subject-verb agreement
- E. Using incorrect verb tenses

Rule 12: Avoid inappropriate subject matter or vocabulary.

- A. Using foul language
- B. Using curse words
- C. Discussing inappropriate subjects

Rule 13: Do not mistreat one's fellow classmates.

- A. Teasing
- B. Stealing materials from others
- C. Ignoring selected individuals
- D. Fighting

Rule 14: Clean up after yourself.

- A. Leaving behind books or materials
- B. Throwing paper on the floor
- C. Leaving desk out of order
- D. Leaving gum, candy or wrappers on the floor

Rule 15: Keep quiet in class.

- A. Talking
- B. Singing
- C. Belching
- D. Rapping
- E. Tapping feet, pens, hands, etc.
- F. Playing air guitar
- G. Eating food or chewing gum noisily
- H. Snoring

Other deviant behaviors listed by B. Whitlock.

- A. Being late for class
- B. Asking to go to the restroom in the middle of class
- C. Asking for makeup work during class, instead of before or after class
- D. Talking about personal needs during class
- E. Putting feet on rim of desk ahead
- F. Writing on the desk
- G. Painting nails
- H. Resting head on hands
- I. Sleeping while sitting upright
- J. Drawing or doodling
- K. Doing other homework
- L. Passing notes
- M. Raising eyebrows
- N. Using sign language

- O. Mouthing conversation without sound
- P. Scowling
- Q. Muttering comments under the breath
- R. Muttering responses to questions
- S. Giving inappropriate responses to elicit laughter from peers

2. Rules chosen for pilot study (from above list).

- Rule 1: Students should maintain eye contact with the teacher to show they are paying attention.
- Rule 2: Students should not sleep in class.
- Rule 3: Students should not cheat.
- Rule 4: Students should not get up and leave in the middle of class.
- Rule 5: Students should not use vulgar language.
- Rule 6: Students should do their own work, or homework.
- Rule 7: Students should clean up after themselves.
- Rule 8: Students should not make noise in class.
- Rule 9: Students should not throw things.
- Rule 10: Students should not publicly display affection, including hand holding.
- Rule 11: Students should not pass notes to other students during class.
- Rule 12: Students should not be late for class.
- Rule 13: Students should sit up straight in their desk.

Rule 14: Students should raise their hand when they want to speak and then wait until they are called on.

Rule 15: Students should maintain a respectful and appropriate distance when speaking to a teacher.

Rule 16: Students should not bring up topics of discussion which are unrelated to the subject matter of the class.

Rule 17: Students should not eat or drink in class.

Rule 18: Students should not talk when the teacher is talking.

Rule 19: Students should not come to class intoxicated or high.

Rule 20: Students should not sit at the teacher's desk.

3. Rules listed by L.S.U. Interpersonal Communication Students (Rules Generation List Study).

Rule 1: Students should not be late for class.

Rule 2: Students should not get up and leave in the middle of class.

Rule 3: Students should not go up to the teacher at his or her desk, unless invited.

Rule 4: Students should not sit at the teacher's desk.

Rule 5: Students should not run in the halls, or anywhere in the building.

Rule 6: Students should not talk.

- Rule 7: Students should not make noise.
- Rule 8: Students should not speak out of turn.
- Rule 9: Students should not blurt out.
- Rule 10: Students should not distract other's attention.
- Rule 11: Students should not pass notes to other students during class.
- Rule 12: Students should not use vulgar, obscene or profane language.
- Rule 13: Students should not use racist or sexist terms.
- Rule 14: Students should not raise their voice or holler at the teacher.
- Rule 15: Students should not lie to the teacher or staff.
- Rule 16: Students should not be mean to other students.
- Rule 17: Students should not dig through the teacher's desk.
- Rule 18: Students should not touch the teacher's grade book.
- Rule 19: Students should not look on their neighbor's paper (Cheat).
- Rule 20: Students should not come to class intoxicated or high.
- Rule 21: Students should not ask questions or speak in class in a language other than English.
- Rule 22: Students should not sleep in class.
- Rule 23: Students should not eat or drink in class.

- Rule 24: Students should not chew gum in class.
- Rule 25: Students should not wear shorts.
- Rule 26: Students should not bring up topics unrelated to the subject matter of the class.
- Rule 27: Students should not talk when teacher is talking.
- Rule 28: Students should not interrupt a teacher.
- Rule 29: Students should not share lockers.
- Rule 30: Students should not fight.
- Rule 31: Students should not smoke.
- Rule 32: Students should not carry weapons.
- Rule 33: Students should not publicly display affection or flirt, including hand holding.
- Rule 34: Students should not throw things.
- Rule 35: Students should stay in their designated place.
- Rule 36: Students should sit up straight in their desk.
- Rule 37: Students should gain permission to leave the classroom for any reason.
- Rule 38: Students should raise their hand when they want to speak and then wait until they are called on.
- Rule 39: Students should keep their hands to themselves.
- Rule 40: Students should ask to borrow materials of another student.
- Rule 41: Students should respect the rights of others, including the teacher.
- Rule 42: Students should respect the teacher.

Rule 43: Students should address the teacher as Mr. or Mrs. with his or her last name.

Rule 44: Students should respectfully confront the teacher if they have a disagreement with the teacher.

Rule 45: Students should maintain a respectful distance when talking to the teacher.

Rule 46: Students should dress neatly and appropriately.

Rule 47: Students should respond loudly enough that everyone in the classroom can hear.

Rule 48: Students should pay attention (use eye contact).

Rule 49: Students should do their homework.

Rule 50: Students should bring books to class.

Rule 51: Students should have a written excuse in order to be granted an excused absence.

Rule 52: Students should clean up after themselves.

4. Rules from Tikunoff & Ward Study.

Mobility Rules: norms about what restrictions are placed on the students' physical movement in the classroom.

Talking/Noise Rules: norms which refer to the boundaries the teacher sets on talk in the classroom as well as other sanctionable noises.

Ethical Rules: norms referring to the students' rights or responsibilities towards others or the group.

Procedural Rules: norms which define, describe, or delimit the students' behavior in other than strictly instructional situations, including time scheduling and management rituals.

Academic Rules: norms which define, describe, or delimit the students' behavior in instructional situations, and are concerned with the learning process.

School Imposed Rules: formal rules enforced as part of school or district policy.

Miscellaneous Rules: other rules or norms not covered in the above categories.

5. Rules chosen for Thesis Study.

Rule 1: Students should maintain eye contact with the teacher to show they are paying attention.

Rule 2: Students should not sleep in class.

Rule 3: Students should not cheat.

Rule 4: Students should not get up and leave in the middle of class.

Rule 5: Students should not use vulgar language.

Rule 6: Students should do their own work, or homework.

Rule 7: Students should clean up after themselves.

Rule 8: Students should not make noise in class.

Rule 9: Students should not throw things.

- Rule 10: Students should not publicly display affection, including hand holding.
- Rule 11: Students should not pass notes to other students during class.
- Rule 12: Students should not be late for class.
- Rule 13: Students should sit up straight in their desk.
- Rule 14: Students should raise their hand when they want to speak and then wait until they are called on.
- Rule 15: Students should maintain a respectful and appropriate distance when speaking to a teacher.
- Rule 16: Students should not bring up topics of discussion which are unrelated to the subject matter of the class.
- Rule 17: Students should not eat or drink in class.
- Rule 18: Students should not talk when the teacher is talking.
- Rule 19: Students should not come to class intoxicated or high.
- Rule 20: Students should not sit at the teacher's desk.
- Rule 21: Students should not drop out of school.

APPENDIX B
QUESTIONNAIRES

1. Pilot Study Questionnaire

Nonverbal Expectancies Questionnaire: November 6, 1990

The purpose of this questionnaire is to identify rules that students are expected to follow. These rules may be formally stated in class or by the school. Or, these rules may be unstated, that is students are expected to have learned them from earlier grades or from home.

Please fill out or check the following demographic information, then list all the rules students must follow in the classroom.

_____ Age

_____ Female

_____ Male

Race: Please circle one

1 - Black

2 - White

3 - Hispanic

4 - Oriental

5 - Other

Did you receive your high school diploma? _____ Yes _____ No

Did you receive a GED? _____ Yes _____ No

Rule: Students should maintain eye contact with the teacher to show they are paying attention.

a. Never follow this rule ___:___:___:___:___:___:___: Always follow this rule.

b. How important is it that this rule be followed?

Not at all important ___:___:___:___:___:___:___: Extremely important.

Rule: Students should not sleep in class.

a. Never follow this rule ___:___:___:___:___:___:___: Always follow this rule.

b. How important is it that this rule be followed?

Not at all important ___:___:___:___:___:___:___: Extremely important.

Rule: Students should not cheat.

a. Never follow this rule ___:___:___:___:___:___:___: Always follow this rule.

b. How important is it that this rule be followed?

Not at all important ___:___:___:___:___:___:___: Extremely important.

Rule: Students should not get up and leave in the middle of class.

a. Never follow this rule ___:___:___:___:___:___:___: Always follow this rule.

b. How important is it that this rule be followed?

Not at all important ___:___:___:___:___:___:___: Extremely important.

Rule: Students should not use vulgar language.

a. Never follow this rule ___:___:___:___:___:___:___: Always follow this rule.

b. How important is it that this rule be followed?

Not at all important ___:___:___:___:___:___:___: Extremely important.

Rule: Students should do their own work, or homework.

a. Never follow this rule ___:___:___:___:___:___:___: Always follow this rule.

b. How important is it that this rule be followed?

Not at all important ___:___:___:___:___:___:___: Extremely important.

Rule: Students should clean up after themselves.

a. Never follow this rule ___:___:___:___:___:___:___: Always follow this rule.

b. How important is it that this rule be followed?

Not at all important ___:___:___:___:___:___:___: Extremely important.

Rule: Students should not make noise in class.

a. Never follow this rule ___:___:___:___:___:___:___: Always follow this rule.

b. How important is it that this rule be followed?

Not at all important ___:___:___:___:___:___:___: Extremely important.

Rule: Students should not throw things.

a. Never follow this rule ___:___:___:___:___:___:___: Always follow this rule.

b. How important is it that this rule be followed?

Not at all important ___:___:___:___:___:___:___: Extremely important.

Rule: Students should not publicly display affection, including hand holding.

a. Never follow this rule ___:___:___:___:___:___:___: Always follow this rule.

b. How important is it that this rule be followed?

Not at all important ___:___:___:___:___:___:___: Extremely important.

Rule: Students should not pass notes to other students during class.

a. Never follow this rule ___:___:___:___:___:___:___: Always follow this rule.

b. How important is it that this rule be followed?

Not at all important ___:___:___:___:___:___:___: Extremely important.

Rule: Students should not be late for class.

a. Never follow this rule ___:___:___:___:___:___:___: Always follow this rule.

b. How important is it that this rule be followed?

Not at all important ___:___:___:___:___:___:___: Extremely important.

Rule: Students should sit up straight in their desk.

a. Never follow this rule ___:___:___:___:___:___:___: Always follow this rule.

b. How important is it that this rule be followed?

Not at all important ___:___:___:___:___:___:___: Extremely important.

Rule: Students should raise their hand when they want to speak and then wait until they are called on.

a. Never follow this rule ___:___:___:___:___:___:___: Always follow this rule.

b. How important is it that this rule be followed?

Not at all important ___:___:___:___:___:___:___: Extremely important.

Rule: Students should maintain a respectful and appropriate distance when speaking to a teacher.

a. Never follow this rule ___:___:___:___:___:___:___: Always follow this rule.

b. How important is it that this rule be followed?

Not at all important ___:___:___:___:___:___:___: Extremely important.

Rule: Students should not bring up topics of discussion which are unrelated to the subject matter of the class.

a. Never follow this rule ___:___:___:___:___:___:___: Always follow this rule.

b. How important is it that this rule be followed?

Not at all important ___:___:___:___:___:___:___: Extremely important.

Rule: Students should not eat or drink in class.

a. Never follow this rule ___:___:___:___:___:___:___: Always follow this rule.

b. How important is it that this rule be followed?

Not at all important ___:___:___:___:___:___:___: Extremely important.

Rule: Students should not talk when the teacher is talking.

a. Never follow this rule ___:___:___:___:___:___:___: Always follow this rule.

b. How important is it that this rule be followed?

Not at all important ___:___:___:___:___:___:___: Extremely important.

Rule: Students should not come to class intoxicated or high.

a. Never follow this rule ___:___:___:___:___:___:___: Always follow this rule.

b. How important is it that this rule be followed?

Not at all important ___:___:___:___:___:___:___: Extremely important.

Rule: Students should not sit at the teacher's desk.

a. Never follow this rule ___:___:___:___:___:___:___: Always follow this rule.

b. How important is it that this rule be followed?

Not at all important ___:___:___:___:___:___:___: Extremely important.

2. Thesis study questionnaire.

Nonverbal expectancies Questionnaire: October 1, 1991

The purpose of this questionnaire is to identify rules that students are expected to follow. These rules may be formally stated in class or by the school. Or, these rules may be unstated, that is students are expected to have learned them from earlier grades or from home.

Please fill out or check the following demographic information, then place an **X** in the best space (between dots) for each rule.

_____ Age

_____ Female

_____ Male

Race: Please circle one

1 - Black

2 - White

3 - Hispanic

4 - Oriental

5 - Other

Rule: Students should maintain eye contact with the teacher to show they are paying attention.

a. Students should: Never follow this rule
:___:___:___:___:___:___:___: Always follow this rule.

b. How important is it that this rule be followed?

Not at all important :___:___:___:___:___:___:___: Extremely important.

Rule: Students should not sleep in class.

a. Students should: Never follow this rule
:___:___:___:___:___:___:___: Always follow this rule.

b. How important is it that this rule be followed?

Not at all important :___:___:___:___:___:___:___: Extremely important.

Rule: Students should not cheat.

a. Students should: Never follow this rule
:___:___:___:___:___:___:___: Always follow this rule.

b. How important is it that this rule be followed?

Not at all important :___:___:___:___:___:___:___: Extremely important.

Rule: Students should not get up and leave in the middle of class.

a. Students should: Never follow this rule
:___:___:___:___:___:___:___: Always follow this rule.

b. How important is it that this rule be followed?

Not at all important :___:___:___:___:___:___:___: Extremely important.

Rule: Students should not use vulgar language.

a. Students should: Never follow this rule
:___:___:___:___:___:___:___: Always follow this rule.

b. How important is it that this rule be followed?

Not at all important :___:___:___:___:___:___:___: Extremely important.

Rule: Students should do their own work, or homework.

a. Students should: Never follow this rule
:___:___:___:___:___:___:___: Always follow this rule.

b. How important is it that this rule be followed?

Not at all important :___:___:___:___:___:___:___: Extremely important.

Rule: Students should clean up after themselves.

a. Students should: Never follow this rule

:___:___:___:___:___:___:___: Always follow this rule.

b. How important is it that this rule be followed?

Not at all important :___:___:___:___:___:___:___: Extremely important.

Rule: Students should not make noise in class.

a. Students should: Never follow this rule

:___:___:___:___:___:___:___: Always follow this rule.

b. How important is it that this rule be followed?

Not at all important :___:___:___:___:___:___:___: Extremely important.

Rule: Students should not throw things.

a. Students should: Never follow this rule

:___:___:___:___:___:___:___: Always follow this rule.

b. How important is it that this rule be followed?

Not at all important :___:___:___:___:___:___:___: Extremely important.

Rule: Students should not publicly display affection, including hand holding.

a. Students should: Never follow this rule
:___:___:___:___:___:___:___: Always follow this rule.

b. How important is it that this rule be followed?

Not at all important :___:___:___:___:___:___:___: Extremely important.

Rule: Students should not pass notes to other students during class.

a. Students should: Never follow this rule
:___:___:___:___:___:___:___: Always follow this rule.

b. How important is it that this rule be followed?

Not at all important :___:___:___:___:___:___:___: Extremely important.

Rule: Students should not be late for class.

a. Students should: Never follow this rule
:___:___:___:___:___:___:___: Always follow this rule.

b. How important is it that this rule be followed?

Not at all important :___:___:___:___:___:___:___: Extremely important.

Rule: Students should sit up straight in their desk.

a. Students should: Never follow this rule

:___:___:___:___:___:___:___: Always follow this rule.

b. How important is it that this rule be followed?

Not at all important :___:___:___:___:___:___:___: Extremely important.

Rule: Students should raise their hand when they want to speak and then wait until they are called on.

a. Students should: Never follow this rule

:___:___:___:___:___:___:___: Always follow this rule.

b. How important is it that this rule be followed?

Not at all important :___:___:___:___:___:___:___: Extremely important.

Rule: Students should maintain a respectful and appropriate distance when speaking to a teacher.

a. Students should: Never follow this rule

:___:___:___:___:___:___:___: Always follow this rule.

b. How important is it that this rule be followed?

Not at all important :___:___:___:___:___:___:___: Extremely important.

Rule: Students should not bring up topics of discussion which are unrelated to the subject matter of the class.

a. Students should: Never follow this rule
:___:___:___:___:___:___:___: Always follow this rule.

b. How important is it that this rule be followed?

Not at all important :___:___:___:___:___:___:___: Extremely important.

Rule: Students should not eat or drink in class.

a. Students should: Never follow this rule
:___:___:___:___:___:___:___: Always follow this rule.

b. How important is it that this rule be followed?

Not at all important :___:___:___:___:___:___:___: Extremely important.

Rule: Students should not talk when the teacher is talking.

a. Students should: Never follow this rule
:___:___:___:___:___:___:___: Always follow this rule.

b. How important is it that this rule be followed?

Not at all important :___:___:___:___:___:___:___: Extremely important.

Rule: Students should not come to class intoxicated or high.

a. Students should: Never follow this rule

:___:___:___:___:___:___:___: Always follow this rule.

b. How important is it that this rule be followed?

Not at all important :___:___:___:___:___:___:___: Extremely important.

Rule: Students should not sit at the teacher's desk.

a. Students should: Never follow this rule

:___:___:___:___:___:___:___: Always follow this rule.

b. How important is it that this rule be followed?

Not at all important :___:___:___:___:___:___:___: Extremely important.

Rule: Students should not drop out of school.

a. Students should: Never follow this rule

:___:___:___:___:___:___:___: Always follow this rule.

b. How important is it that this rule be followed?

Not at all important :___:___:___:___:___:___:___: Extremely important.

APPENDIX C

LETTERS AND REQUEST FORMS

1. East Baton Rouge Parish School Board Study Request Letter.

April 26, 1991

Ms. Mary Ellen Jordan
Assistant Superintendent of Instruction
East Baton Rouge Parish School Board
1050 S. Foster Drive
Baton Rouge, Louisiana 70806

Dear Ms. Jordan,

I am a Master's student in the Department of Speech currently working on my thesis. The subject of this study is student perceptions regarding implicit nonverbal rule violations in the classroom, for example students perceive that they should raise their hands if they wish to speak. I am hoping to show that there is a difference between "At-Risk" students and "non-At-Risk" students in their attitudes regarding these rules for interaction. To accomplish this goal, I would like to administer a questionnaire to ninth and tenth grade students in the East Baton Rouge Parish school system. The questionnaire (copy attached) should be

administered to two groups: a group of average, "non-At-Risk" students (the control group), and a group of students who have been defined as being "At-Risk" for dropping out of school.

Each of these groups should have 150 to 200 students, with both having approximately the same number. The students can be distinguished prior to administering the questionnaire, or the students can be asked to put their social security numbers on the questionnaire and their status can be determined through school records by school officials. Please choose the method most convenient for you; however, one must be administered to insure my ability to code the questionnaires. Since I do not need to know who these students are, the information will be anonymous and confidential. If the social security number method is chosen, the numbers will only be used to identify the student respondents as "At-Risk" or "non-At-Risk".

These questionnaires will take no more than twenty minutes to fill out, and the cost of copying the questionnaires will be borne by me. I hope to have the answering of the questionnaires accomplished before the end of the school year. An abstract of the findings will be made available to you upon completion of the study.

Thank You for your help in accomplishing this matter. It is my hope that this study can give us a tool for diagnosing students who are "At-Risk" at an early stage, prior to the students getting into trouble. I believe educators like you and I are very interested in accomplishing this goal.

Sincerely,

H. Paul LeBlanc III

Thesis Director:

Dr. James Honeycutt,
Associate Professor
Speech Communication

cc: Robert Williams, Director of Secondary Education
William Glasper, Director of Research and Development
/hpl
encl.

2. High School Principal Study Request Letter.

September 16, 1991

Mr. William Turner, Principal
Capitol High School

Dear Mr. Turner,

I am a Master's student in the Department of Speech currently working on my thesis. The subject of this study is student perceptions regarding implicit nonverbal rule violations in the classroom, for example students perceive that they should raise their hands if they wish to speak. I am hoping to show that there is a difference between "At-Risk" students and "non-At-Risk" students in their attitudes regarding these rules for interaction. To accomplish this goal, I would like to administer a questionnaire to ninth and/or tenth grade students at your school.

The number of participants needed are 150 to 200 students. Since I do not need to know who these students are, the information will be anonymous and confidential.

These questionnaires will take no more than twenty minutes to fill out, and the cost of copying the questionnaires will be borne by me. I hope to have the answering of the questionnaires accomplished before the end of the school year. An abstract of the findings will be made available to you upon completion of the study.

Thank You for your help in accomplishing this matter. It is my hope that this study can help us develop a tool for diagnosing students who are "At-Risk" at an early stage, prior to the students getting into trouble. I believe educators like you and I are very interested in accomplishing this goal.

Sincerely,

H. Paul LeBlanc III
Thesis Director:
Dr. James Honeycutt,
Associate Professor
Speech Communication

cc: Robert Williams, Director of Secondary Education
William Glasper, Director of Research and Development
Mary Ellen Jordan, Assistant Superintendent of
Instruction

/hpl

encl.

address to:

- 1) Mr. Jack Stokeld, Principal
Robert E. Lee High School

- 2) Mr. Freddie Williams, Principal
Scotlandville Magnet High School

- 3) Mr. William Turner, Principal
Capitol High School

3. Parental Consent Letter.

September 22, 1991

Dear Parent,

With this letter is a formal request for the participation of your son/daughter in a survey being conducted in the English classes of his/her school. Please read the following description and acknowledge with your signature permission for your child to participate in this survey.

The Purpose of this survey is to measure perceptions (beliefs) regarding interaction in the classroom.

This survey will be completely anonymous and confidential. Names of students will not be used on the survey form. The investigator will not have access to the identities of particular students. The results of the survey will be used strictly for statistical purposes. It is hoped that through this study educators will be able to gain a better understanding of the expectations of students.

The study is being conducted by H. Paul LeBlanc III, Masters student in the Department of Speech Communication at Louisiana State University, with cooperation from the East Baton Rouge Parish School Board and the principal and administration of your child's school. The director of the study is Dr. James Honeycutt, PhD. Dr. Honeycutt is Associate Professor of Communication Theory at L.S.U.

Thank you for your cooperation in this matter.

Sincerely,

H. Paul LeBlanc III

Thesis Director:

Dr. James Honeycutt,
Associate Professor of
Speech Communication

_____ I give permission for my son/daughter to participate in
the study.

_____ I Do Not give permission for my son/daughter to
participate in the study
because_____

Parent/Guardian

Date

APPENDIX D

DESCRIPTIVE STATISTICS TABLES

1. Descriptive Statistics for Pilot Study

Louisiana State Univ.: total number of participants = 42

AGE:	Minimum	Maximum	Mean	S. D.
	18	39	21.9	5.29
Count for each age:		AGE		
		18	1	
		19	11	
		20	58	
		21	16	
		22	4	
		23	2	
		30	1	
		35	2	
		38	1	
		39	1	
SEX:	FEMALES	MALES		
	24	18		
RACE:	BLACK	NON-BLACK		
	1	41		
SEX by RACE:	BLACK FEMALES	BLACK MALES		
		0		1
	NON-BLACK FEMALES	NON-BLACK MALES		
		24		17
GRADUATION STATUS:	DIPLOMA	GED	NO DIPLOMA	
		42	0	0

Spencer Business College: total number of participants = 186

AGE:	Minimum	Maximum	Mean	S. D.
	16	55	25.0	7.42
Count for each age:	AGE 16	1	AGE 31	5
	AGE 17	1	AGE 32	1
	AGE 18	22	AGE 33	2
	AGE 19	22	AGE 34	2
	AGE 20	21	AGE 35	4
	AGE 21	16	AGE 36	2
	AGE 22	14	AGE 37	3
	AGE 23	4	AGE 38	4
	AGE 24	9	AGE 39	3
	AGE 25	6	AGE 40	2
	AGE 26	9	AGE 41	1
	AGE 27	6	AGE 42	3
	AGE 28	9	AGE 46	1
	AGE 29	2	AGE 47	2
	AGE 30	3	AGE 55	1

SEX:	FEMALES	MALES
	172	11

RACE:	BLACK	NON-BLACK
	61	125

SEX by RACE:	BLACK FEMALES	BLACK MALES
	56	3
	NON-BLACK FEMALES	NON-BLACK MALES
	116	8

GRADUATION STATUS:	DIPLOMA	GED	NO DIPLOMA
	146	31	7

Overall: total number of participants = 244

AGE:	Minimum	Maximum	Mean	S. D.
	16	55	24.4	7.16
Count for each age:				
	AGE 16	1	AGE 31	5
	AGE 17	1	AGE 32	1
	AGE 18	26	AGE 33	2
	AGE 19	31	AGE 34	2
	AGE 20	32	AGE 35	6
	AGE 21	24	AGE 36	2
	AGE 22	17	AGE 37	3
	AGE 23	6	AGE 38	5
	AGE 24	9	AGE 39	4
	AGE 25	6	AGE 40	2
	AGE 26	9	AGE 41	1
	AGE 27	6	AGE 42	3
	AGE 28	9	AGE 46	1
	AGE 29	2	AGE 47	2
	AGE 30	4	AGE 55	1
SEX:	FEMALES	MALES		
	196	29		
RACE:	BLACK	NON-BLACK		
	62	166		
SEX by RACE:	BLACK FEMALES	BLACK MALES		
	56	4		
	NON-BLACK FEMALES	NON-BLACK MALES		
	140	25		
GRADUATION STATUS:	DIPLOMA	GED	NO DIPLOMA	
	188	31	7	

2. Descriptive Statistics for Rules Generation List

*(See Appendix A.3 for list of rules)

Restrictive rules:

Rule*	Frequency*	Rule type*	Thesis Rule*
1	74	Mobility	Rule 12
2	90	Mobility	Rule 4
3	3	Mobility	
4	12	Mobility	Rule 20
5	10	Mobility	
6	80	Talking/Noise	
7	81	Talking/Noise	Rule 8
8	72	Talking/Noise	
9	19	Talking/Noise	
10	57	Talking/Noise	
11	48	Talking/Noise	Rule 11
12	51	Ethical	Rule 5
13	2	Ethical	
14	10	Ethical	
15	1	Ethical	
16	56	Ethical	
17	5	Ethical	
18	3	Ethical	
19	46	Ethical	Rule 3
20	3	Ethical	Rule 19
21	1	Procedural	
22	106	Procedural	Rule 2
23	81	Procedural	Rule 17
24	74	Procedural	
25	1	Procedural	
26	9	Procedural	Rule 16
27	75	Academic	Rule 18
28	55	Academic	
29	2	School Imposed	
30	20	School Imposed	
31	15	School Imposed	
32	1	School Imposed	
33	26	Miscellaneous	Rule 10
34	54	Miscellaneous	Rule 9

Prescriptive rules:

Rule*	Frequency*	Rule type*	Thesis Rule*
35	83	Mobility	
36	48	Mobility	Rule 13
37	54	Mobility	
38	162	Talking/Noise	Rule 14
39	16	Ethical	
40	11	Ethical	
41	30	Ethical	
42	108	Ethical	
43	27	Ethical	
44	20	Ethical	
45	7	Ethical	Rule 15
46	47	Procedural	
47	7	Academic	
48	133	Academic	Rule 1
49	48	Academic	Rule 6
50	42	Academic	
51	9	School Imposed	
52	16	Miscellaneous	Rule 7

total = 2111

Frequency by rule type:

Rule type	Frequency	Percent of Total
Mobility	374	17.72
Talking/Noise	519	24.59
Ethical	396	18.76
Procedural	319	15.11
Academic	360	17.05
School Imposed	47	2.23
Miscellaneous	96	4.54

Frequency of rules chosen for questionnaire by rule type:

Rule type	Frequency	Percent of Total
Mobility	224	19.14
Talking/Noise	291	24.87
Ethical	107	9.15
Procedural	196	16.75
Academic	256	21.88
School Imposed	0	0.00
Miscellaneous	96	8.21

total = 1170

3. Descriptive Statistics for Educational Research Comparison

Table D.3

Characteristics of At Risk Students by Category													
Researcher (See Key)	1	2	3	4	5	6	7	8	9	10	11	12	13
Sponsoring Agency (See Key)	1	1	2	1	3	1	0	3	3	0	0	5	1
A. Family /Home	0	0	0	0	1	0	2	0	2	0	0	1	3
B. Personal	1	1	1	3	0	0	0	1	3	1	1	1	1
C. Academic /School	0	5	1	2	0	0	2	2	1	0	0	2	2
D. Sex													
Male	0	0	0	1	0	0	0	0	0	0	0	0	0
Female	0	0	0	0	0	1	0	1	0	0	0	0	0
E. Race													
non-White	1	0	0	0	0	1	0	0	0	0	0	0	0
non-Black	0	0	0	0	0	0	0	1	0	0	0	0	0

Researcher

1. Kaeser & Hooper, 1983
2. Levin, 1972
3. Marin, 1990
4. McCaul, 1988
5. McCroskey & Payne, 1984
6. Mizell, 1987
7. Mueller, 1990
8. Self, 1985
9. Shainline, 1987
10. Elliot & Voss, 1974
11. Ehrlich, 1975
12. Fernandez & Velez, 1989
13. Gastright, 1987

Sponsoring Agency:

0. None
1. Local, State, or Federal Dept. of Education
2. Federal Agency
3. Professional Education Org.
4. University study
5. Corporate sponsor

Table D.3 Continued

Characteristics of At Risk Students by Category													
Researcher (See Key)	1 4	1 5	1 6	1 7	1 8	1 9	2 0	2 1	2 2	2 3	2 4	2 5	2 6
Sponsoring Agency (See Key)	5	0	4	3	4	1	3	4	1	1	0	2	0
A. Family /Home	4	0	0	1	0	4	0	5	0	1	0	0	3
B. Personal	1	1	3	2	1	2	0	5	0	0	1	2	6
C. Academic /School	3	0	2	0	0	7	3	6	0	3	0	0	4
D. Sex													
Male	0	0	0	0	0	0	1	0	0	0	0	0	0
Female	0	0	0	0	0	0	0	0	0	0	0	0	0
E. Race													
non-White	0	0	0	0	0	0	0	0	1	1	0	0	0
non-Black	0	0	0	0	0	0	0	0	0	0	0	0	0

Researcher

14. Kaeser & Hooper, 1983
15. Levin, 1972
16. Marin, 1990
17. McCaul, 1988
18. McCroskey & Payne, 1984
19. Mizell, 1987
20. Mueller, 1990
21. Self, 1985
22. Shainline, 1987
23. Sherman, 1987
24. Skager & Frith, 1989
25. Stedman, et al., 1988
26. Wittenberg, 1988

Sponsoring Agency:

0. None
1. Local, State, or
Federal Dept. of
Education
2. Federal Agency
3. Professional
Education Org.
4. University study
5. Corporate sponsor

4. Descriptive Statistics for Thesis Study

Demographic Variables:

Capitol High School: total number of participants = 81

AGE:	Minimum	Maximum	Mean	S. D.
	14	19	15.8	1.06
Count for each age:		AGE 14	5	
		AGE 15	30	
		AGE 16	27	
		AGE 17	13	
		AGE 18	5	
		AGE 19	1	
SEX:	FEMALES	MALES		
	44	37		
RACE:	BLACK	NON-BLACK		
	73	8		
SEX by RACE:	BLACK FEMALES	BLACK MALES		
		41		32
	NON-BLACK FEMALES	NON-BLACK MALES		
		3		5
FORM of Questionnaire:	A	B	C	
	29	23	29	
DROPOUT RATE:	1988-89	1989-90	1990-91	TOTAL
	13.28%	6.02%	8.71%	9.41%

Lee High School: total number of participants = 96

AGE:	Minimum	Maximum	Mean	S. D.
	13	20	15.3	1.03
Count for each age:		AGE 13	1	
		AGE 14	11	
		AGE 15	58	
		AGE 16	16	
		AGE 17	4	
		AGE 18	2	
		AGE 19	1	
		AGE 20	1	
SEX:	FEMALES	MALES		
	48	48		
RACE:	BLACK	NON-BLACK		
	43	53		
SEX by RACE:	BLACK FEMALES	BLACK MALES		
		21		22
	NON-BLACK FEMALES	NON-BLACK MALES		
		27		26
FORM of Questionnaire:	A	B	C	
	31	32	33	
DROPOUT RATE:	1988-89	1989-90	1990-91	TOTAL
	4.97%	2.51%	5.77%	4.41%

Scotlandville High School: total number of part. = 67

AGE:	Minimum	Maximum	Mean	S. D.
	13	16	14.9	.44
Count for each age:		AGE 13	1	
		AGE 14	8	
		AGE 15	56	
		AGE 16	2	
SEX:	FEMALES	MALES		
	46	21		
RACE:	BLACK	NON-BLACK		
	26	41		
SEX by RACE:	BLACK FEMALES	BLACK MALES		
		18		8
	NON-BLACK FEMALES	NON-BLACK MALES		
		28		13
FORM of Questionnaire:	A	B	C	
	24	22	21	
DROPOUT RATE:	1988-89	1989-90	1990-91	TOTAL
	0.00%	0.11%	0.10%	0.07%

Overall: total number of participants = 244

AGE:	Minimum	Maximum	Mean	S. D.
	13	20	15.3	.99
Count for each age:		AGE 13	2	
		AGE 14	24	
		AGE 15	144	
		AGE 16	45	
		AGE 17	17	
		AGE 18	7	
		AGE 19	2	
		AGE 20	1	
SEX:	FEMALES	MALES		
	138	106		
RACE:	BLACK	NON-BLACK		
	142	102		
SEX by RACE:	BLACK FEMALES	BLACK MALES		
		80		62
	NON-BLACK FEMALES	NON-BLACK MALES		
		58		44
FORM of Questionnaire:	A	B	C	
		84	77	83
DROPOUT RATE:	1988-89	1989-90	1990-91	TOTAL
(E.B.R. SCHOOLS)	1.30%	1.14%	1.32%	1.25%

APPENDIX E

INFERENTIAL STATISTICS TABLES

1. Factor Analysis Table

FACTORS:

COMPLIANCE FACTORS

FACTORC1: (Laziness)
Sleeping
Cheating
Dropping Out
Throwing Things
Leaving Class
Vulgar Language

FACTORC2: (Distraction)
Public Displays (PDA)
Eating in Class
Sitting up Straight
Passing Notes

FACTORC3: (Respectfulness)
Raise Hand to Speak
Respectful Distance
Sit at Teacher's Desk
Talk when Teacher is

FACTORC4: (Politeness)
Maintain Eye Contact
Cleanliness

IMPORTANCE FACTORS:

FACTORI2: (Laziness)
Cheating
Sleeping
(C3) Talk when Teacher is
Intoxication
Doing Own Work
Dropping Out
Vulgar Language

FACTORI1: (Distraction)
Public Displays (PDA)
Eating in Class
Sitting up Straight
Passing Notes
Tardiness

FACTORI3: (Respectfulness)
Sit at Teacher's Desk
Raise Hand to Speak
(C4) Cleanliness
(C1) Throwing Things

2. MANOVA Table

FOR COMPLIANCE FACTORS:

EFFECT .. WITHIN CELLS Regression

Multivariate Tests of Significance (S = 1, M = 1/2, N = 109)

Test	Value	Appr. F	Hyp. DF	Err. DF	Sig. F
Wilks	.97848	1.61317	3.00	220.00	.187

EFFECT .. SCHOOL BY RACE BY SEX

Multivariate Tests of Significance (S = 2, M = 0, N = 109)

Test	Value	Appr. F	Hyp. DF	Err. DF	Sig. F
Wilks	.98824	.43522	6.00	440.00	.855

EFFECT .. RACE BY SEX

Multivariate Tests of Significance (S = 1, M = 1/2, N = 109)

Test	Value	Appr. F	Hyp. DF	Err. DF	Sig. F
Wilks	.98513	1.10713	3.00	220.00	.347

EFFECT .. SCHOOL BY SEX

Multivariate Tests of Significance (S = 2, M = 0, N = 109)

Test	Value	Appr. F	Hyp. DF	Err. DF	Sig. F
Wilks	.98232	.65695	6.00	440.00	.685

EFFECT .. SCHOOL BY RACE

Multivariate Tests of Significance (S = 2, M = 0, N = 109)

Test	Value	Appr. F	Hyp. DF	Err. DF	Sig. F
Wilks	.98193	.67169	6.00	440.00	.673

EFFECT .. SCHOOL

Multivariate Tests of Significance (S = 2, M = 0, N = 109)

Test	Value	Appr. F	Hyp. DF	Err. DF	Sig. F
Wilks	.98502	.55555	6.00	440.00	.766

FOR COMPLIANCE FACTORS:

EFFECT .. RACE

Multivariate Tests of Significance (S = 1, M = 1/2, N = 109)

Test	Value	Appr. F	Hyp. DF	Err. DF	Sig. F
Wilks	.97408	1.95168	3.00	220.00	.122

EFFECT .. SEX

Multivariate Tests of Significance (S = 1, M = 1/2, N = 109)

Test	Value	Appr. F	Hyp. DF	Err. DF	Sig. F
Wilks	.93419	5.16571	3.00	220.00	.002**

Univariate F-tests with (1, 222) D. F.

Variable	F	Sig. F
FACTORC1	5.14036	.024**
FACTORC2	2.34524	.127
FACTORC3	1.54475	.215

** Significant findings

FOR IMPORTANCE FACTORS:

EFFECT .. WITHIN CELLS Regression

Multivariate Tests of Significance (S = 1, M = 1/2, N = 106)

Test	Value	Appr. F	Hyp. DF	Err. DF	Sig. F
Wilks	.99308	.49679	3.00	214.00	.685

EFFECT .. SCHOOL BY RACE BY SEX

Multivariate Tests of Significance (S = 2, M = 0, N = 106)

Test	Value	Appr. F	Hyp. DF	Err. DF	Sig. F
Wilks	.99063	.33665	6.00	428.00	.917

FOR IMPORTANCE FACTORS:

EFFECT .. RACE BY SEX

Multivariate Tests of Significance (S = 1, M = 1/2, N = 106)

Test	Value	Appr. F	Hyp. DF	Err. DF	Sig. F
Wilks	.99240	.54663	3.00	214.00	.651

EFFECT .. SCHOOL BY SEX

Multivariate Tests of Significance (S = 2, M = 0, N = 106)

Test	Value	Appr. F	Hyp. DF	Err. DF	Sig. F
Wilks	.98351	.59568	6.00	428.00	.734

EFFECT .. SCHOOL BY RACE

Multivariate Tests of Significance (S = 2, M = 0, N = 106)

Test	Value	Appr. F	Hyp. DF	Err. DF	Sig. F
Wilks	.97065	1.07043	6.00	428.00	.379

EFFECT .. SCHOOL

Multivariate Tests of Significance (S = 2, M = 0, N = 106)

Test	Value	Appr. F	Hyp. DF	Err. DF	Sig. F
Wilks	.97896	.76261	6.00	428.00	.600

EFFECT .. RACE

Multivariate Tests of Significance (S = 1, M = 1/2, N = 106)

Test	Value	Appr. F	Hyp. DF	Err. DF	Sig. F
Wilks	.94598	4.07315	3.00	214.00	.008**

Univariate F-tests with (1, 216) D. F.

Variable	F	Sig. F
FACTORI1	6.00991	.015**
FACTORI2	8.52930	.004**
FACTORI3	9.58010	.002**

FOR IMPORTANCE FACTORS:

EFFECT .. SEX

Multivariate Tests of Significance (S = 1, M = 1/2, N = 106)

Test	Value	Appr. F	Hyp. DF	Err. DF	Sig. F
Wilks	.90923	7.12125	3.00	214.00	.000**

Univariate F-tests with (1, 216) D. F.

Variable	F	Sig. F
FACTORI1	1.76873	.185
FACTORI2	9.63696	.002**
FACTORI3	2.22196	.138

** Significant findings

3. Cell Means Table

FACTOR: COMPLIANCE WITH LAZINESS RULES			
	Mean	S. D.	N
SCHOOL: CAPITOL	5.706	1.214	77
SEX: FEMALE (ALL)	5.980	1.022	42
SEX: MALE (ALL)	5.376	1.353	35
RACE: BLACK	5.742	1.172	69
SEX: FEMALE	5.983	1.045	39
SEX: MALE	5.428	1.269	30
RACE: NON-BLACK	5.396	1.593	8
SEX: FEMALE	5.944	0.822	3
SEX: MALE	5.067	1.935	5
SCHOOL: R. E. LEE	5.505	1.197	92
SEX: FEMALE (ALL)	5.706	1.107	47
SEX: MALE (ALL)	5.296	1.263	45
RACE: BLACK	5.694	1.120	42
SEX: FEMALE	6.016	1.012	21
SEX: MALE	5.373	1.153	21
RACE: NON-BLACK	5.347	1.247	50
SEX: FEMALE	5.455	1.135	26
SEX: MALE	5.229	1.372	24
SCHOOL: SCOTLANDVILLE	5.641	1.198	66
SEX: FEMALE (ALL)	5.748	1.235	45
SEX: MALE (ALL)	5.413	1.110	21
RACE: BLACK	5.420	1.350	25
SEX: FEMALE	5.480	1.500	17
SEX: MALE	5.292	1.038	8
RACE: NON-BLACK	5.776	1.091	41
SEX: FEMALE	5.911	1.039	28
SEX: MALE	5.487	1.187	13
For entire sample	5.609	1.201	235
RACE: BLACK (ALL)	5.668	1.188	136
RACE: NON-BLACK (ALL)	5.529	1.220	99
SEX: FEMALE (ALL)	5.806	1.124	134
SEX: MALE (ALL)	5.348	1.254	101

FACTOR: COMPLIANCE WITH DISTRACTION RULES

	Mean	S. D.	N
SCHOOL: CAPITOL	4.016	1.656	77
SEX: FEMALE (ALL)	3.952	1.608	42
SEX: MALE (ALL)	4.093	1.731	35
RACE: BLACK	4.076	1.669	69
SEX: FEMALE	4.032	1.634	39
SEX: MALE	4.133	1.740	30
RACE: NON-BLACK	3.500	1.535	8
SEX: FEMALE	2.917	0.764	3
SEX: MALE	3.850	1.851	5
SCHOOL: R. E. LEE	3.133	1.480	92
SEX: FEMALE (ALL)	2.824	1.384	47
SEX: MALE (ALL)	3.456	1.524	45
RACE: BLACK	3.363	1.618	42
SEX: FEMALE	3.107	1.501	21
SEX: MALE	3.619	1.726	21
RACE: NON-BLACK	2.940	1.340	50
SEX: FEMALE	2.596	1.265	26
SEX: MALE	3.313	1.344	24
SCHOOL: SCOTLANDVILLE	2.932	1.475	66
SEX: FEMALE (ALL)	2.861	1.456	45
SEX: MALE (ALL)	3.083	1.540	21
RACE: BLACK	3.150	1.510	25
SEX: FEMALE	3.191	1.504	17
SEX: MALE	3.063	1.624	8
RACE: NON-BLACK	2.799	1.456	41
SEX: FEMALE	2.661	1.416	28
SEX: MALE	3.096	1.553	13
For entire sample	3.366	1.600	235
RACE: BLACK (ALL)	3.686	1.664	136
RACE: NON-BLACK (ALL)	2.927	1.402	99
SEX: FEMALE (ALL)	3.190	1.558	134
SEX: MALE (ALL)	3.599	1.633	101

FACTOR: COMPLIANCE WITH RESPECTFULNESS RULES

	Mean	S. D.	N
SCHOOL: CAPITOL	5.299	1.363	77
SEX: FEMALE (ALL)	5.530	1.124	42
SEX: MALE (ALL)	5.021	1.576	35
RACE: BLACK	5.399	1.276	69
SEX: FEMALE	5.583	1.140	39
SEX: MALE	5.158	1.418	30
RACE: NON-BLACK	4.438	1.841	8
SEX: FEMALE	4.833	0.629	3
SEX: MALE	4.200	2.355	5
SCHOOL: R. E. LEE	4.867	1.375	92
SEX: FEMALE (ALL)	5.043	1.281	47
SEX: MALE (ALL)	4.683	1.457	45
RACE: BLACK	5.113	1.384	42
SEX: FEMALE	5.274	1.440	21
SEX: MALE	4.952	1.341	21
RACE: NON-BLACK	4.660	1.346	50
SEX: FEMALE	4.856	1.132	26
SEX: MALE	4.448	1.541	24
SCHOOL: SCOTLANDVILLE	4.686	1.435	66
SEX: FEMALE (ALL)	4.706	1.514	45
SEX: MALE (ALL)	4.643	1.281	21
RACE: BLACK	4.660	1.538	25
SEX: FEMALE	4.544	1.748	17
SEX: MALE	4.906	1.008	8
RACE: NON-BLACK	4.701	1.388	41
SEX: FEMALE	4.804	1.378	28
SEX: MALE	4.481	1.438	13
For entire sample	4.957	1.404	235
RACE: BLACK (ALL)	5.175	1.378	136
RACE: NON-BLACK (ALL)	4.659	1.392	99
SEX: FEMALE (ALL)	5.082	1.352	134
SEX: MALE (ALL)	4.792	1.461	101

FACTOR: IMPORTANCE OF LAZINESS RULES			
	Mean	S. D.	N
SCHOOL: CAPITOL	5.801	1.151	77
SEX: FEMALE (ALL)	6.197	0.679	42
SEX: MALE (ALL)	5.327	1.406	35
RACE: BLACK	5.914	1.060	70
SEX: FEMALE	6.249	0.647	39
SEX: MALE	5.493	1.313	31
RACE: NON-BLACK	4.673	1.491	7
SEX: FEMALE	5.524	0.873	3
SEX: MALE	4.036	1.635	4
SCHOOL: R. E. LEE	5.570	1.164	92
SEX: FEMALE (ALL)	5.711	0.978	47
SEX: MALE (ALL)	5.422	1.326	45
RACE: BLACK	5.868	0.969	41
SEX: FEMALE	6.107	0.675	20
SEX: MALE	5.639	1.154	21
RACE: NON-BLACK	5.331	1.259	51
SEX: FEMALE	5.418	1.073	27
SEX: MALE	5.232	1.458	24
SCHOOL: SCOTLANDVILLE	5.714	1.102	60
SEX: FEMALE (ALL)	5.840	0.996	42
SEX: MALE (ALL)	5.421	1.301	18
RACE: BLACK	5.799	0.986	22
SEX: FEMALE	5.911	0.900	16
SEX: MALE	5.500	1.228	6
RACE: NON-BLACK	5.665	1.174	38
SEX: FEMALE	5.797	1.066	26
SEX: MALE	5.381	1.388	12
For entire sample	5.686	1.143	229
RACE: BLACK (ALL)	5.881	1.014	133
RACE: NON-BLACK (ALL)	5.415	1.257	96
SEX: FEMALE (ALL)	5.908	0.916	131
SEX: MALE (ALL)	5.388	1.338	98

FACTOR: IMPORTANCE OF DISTRACTION RULES			
	Mean	S. D.	N
SCHOOL: CAPITOL	4.104	1.501	77
SEX: FEMALE (ALL)	4.195	1.551	42
SEX: MALE (ALL)	3.994	1.455	35
RACE: BLACK	4.226	1.499	70
SEX: FEMALE	4.318	1.506	39
SEX: MALE	4.110	1.507	31
RACE: NON-BLACK	2.886	0.893	7
SEX: FEMALE	2.600	1.442	3
SEX: MALE	3.100	0.258	4
SCHOOL: R. E. LEE	3.320	1.485	92
SEX: FEMALE (ALL)	3.055	1.324	47
SEX: MALE (ALL)	3.596	1.605	45
RACE: BLACK	3.673	1.584	41
SEX: FEMALE	3.520	1.419	20
SEX: MALE	3.819	1.749	21
RACE: NON-BLACK	3.035	1.350	51
SEX: FEMALE	2.711	1.159	27
SEX: MALE	3.400	1.478	24
SCHOOL: SCOTLANDVILLE	3.083	1.413	60
SEX: FEMALE (ALL)	2.929	1.248	42
SEX: MALE (ALL)	3.444	1.724	18
RACE: BLACK	3.018	1.398	22
SEX: FEMALE	2.913	1.275	16
SEX: MALE	3.300	1.788	6
RACE: NON-BLACK	3.121	1.439	38
SEX: FEMALE	2.938	1.257	26
SEX: MALE	3.517	1.767	12
For entire sample	3.521	1.527	229
RACE: BLACK (ALL)	3.856	1.564	133
RACE: NON-BLACK (ALL)	3.058	1.349	96
SEX: FEMALE (ALL)	3.380	1.480	131
SEX: MALE (ALL)	3.710	1.575	98

FACTOR: IMPORTANCE OF RESPECTFULNESS RULES

	Mean	S. D.	N
SCHOOL: CAPITOL	5.416	1.311	77
SEX: FEMALE (ALL)	5.768	1.042	42
SEX: MALE (ALL)	4.993	1.482	35
RACE: BLACK	5.539	1.277	70
SEX: FEMALE	5.846	0.998	39
SEX: MALE	5.153	1.487	31
RACE: NON-BLACK	4.179	1.038	7
SEX: FEMALE	4.750	1.299	3
SEX: MALE	3.750	0.677	4
SCHOOL: R. E. LEE	5.158	1.302	92
SEX: FEMALE (ALL)	5.229	1.171	47
SEX: MALE (ALL)	5.083	1.436	45
RACE: BLACK	5.604	1.114	41
SEX: FEMALE	5.663	1.055	20
SEX: MALE	5.548	1.190	21
RACE: NON-BLACK	4.799	1.342	51
SEX: FEMALE	4.907	1.167	27
SEX: MALE	4.677	1.531	24
SCHOOL: SCOTLANDVILLE	4.962	1.335	60
SEX: FEMALE (ALL)	4.952	1.277	42
SEX: MALE (ALL)	4.986	1.501	18
RACE: BLACK	4.989	1.379	22
SEX: FEMALE	4.984	1.542	16
SEX: MALE	5.000	0.922	6
RACE: NON-BLACK	4.947	1.328	38
SEX: FEMALE	4.933	1.117	26
SEX: MALE	4.979	1.760	12
For entire sample	5.193	1.320	229
RACE: BLACK (ALL)	5.468	1.256	133
RACE: NON-BLACK (ALL)	4.813	1.319	96
SEX: FEMALE (ALL)	5.313	1.206	131
SEX: MALE (ALL)	5.033	1.450	98

VITA

H. Paul LeBlanc III was born in Donaldsonville, Louisiana. He received his Bachelor of Arts degree in Philosophy from St. Mary's University of San Antonio, Texas in 1988. While at St. Mary's University, he was a Roman Catholic seminarian with the Congregation of the Most Holy Redeemer.