

AN ANALYSIS OF SOCIAL CLIMATE VARIABLES IN
SCHOOLS WITH VARYING BLACK AND WHITE
STUDENT COMPOSITION WHEN SOCIOECONOMIC
STATUS AND ACHIEVEMENT LEVELS ARE CONTROLLED

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ABSTRACT

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By

Sangchul Kang

It was postulated that controlling the mix of student characteristics may affect climate, since the climate or culture of the school organization depends to a significant degree on the nature of the entering students.

This study therefore focuses on the differences in social academic climate in schools with varying racial composition in different community settings. More specifically, this study examines the perceptions of school academic climate held by black and white students in schools with similar levels of achievement and similar socio-economic composition, but different types of racial composition. The teachers' opinions of the academic norms and expectations are also examined in schools with varying racial composition.

The theoretical foundation for this study was derived from a social psychological theory of human behavior, as stated by Brookover and Erickson (1969): symbolic interaction, reference group, role and expectation theories.

Data were collected from 8 low SES and low achievement elementary

schools, and 3 high SES and high achievement elementary schools. Schools within each community type were selected on the basis of their mean student achievement and mean student SES, as measured by the Michigan State School Assessment Indexes.

The instruments employed in this study were designed to study certain social psychological and structural variables constituting normative academic climate within each of the schools. The instruments used within each school consisted of a student questionnaire, which were administered to 4th, 5th, and 6th grade students and their teachers. A standardized procedure of data collection and subsequent coding of the material was carried out by Brookover's research team. This researcher participated in the coding stage.

A Varimax Rotation Factor Analysis identified clusters of variables which combined to form meaningful factors, and reduced the number of factors to manageable numbers for each set of data. Cattell's Scree Test determined the number of factors by plotting the eigenvalues greater than 1. Five student factors and four teacher factors were generated as school climate variables in each set of data:

Student factors in low SES and low achievement schools;

- Factor 1- Present evaluations-expectations.
- Factor 2- Future evaluations-expectations.
- Factor 3- Sense of futility.
- Factor 4- Reward/feedback.
- Factor 5- School norms.

Teacher factors in low SES and low achievement schools;

- Factor 1- Push for competition.
- Factor 2- Expectations.
- Factor 3- Job satisfaction.
- Factor 4- Press for achievement.

Student factors in high SES and high achievement schools;

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Factor 1- Present evaluations-expectations.
Factor 2- Future evaluations-expectations.
Factor 3- Sense of futility.
Factor 4- Press for competition/push.
Factor 5- Role identity.

Analysis of Variance was used to determine which school climate variables significantly differ in various types of racial composition in the schools. The major findings of this study can be summarized as follows:

1. Predominantly urban black and rural mixed schools (62% black) scored higher/more favorably in all of the student climate factors, except school norms, than urban white and rural white schools.
2. Comparing student climate factors between white and black in rural mixed schools, the black majority (62%) scored higher in present and future expectations-evaluations and more favorably in sense of futility than whites.
3. The black majority (62%) in mixed schools scored higher in reward/feedback than segregated all-black schools.
4. There were no differences in four strata in the four teacher climate factors. There were significant differences in the four groups in all of the student climate factors, except school norms.
5. In two differently composed urban-mixed schools the black (70%) scored higher in two student factors — present evaluations-expectations and press for competition/push — than black minority (15%).
6. In three differently composed urban mixed schools, the white minority (30%) scored higher in two student factors — present evaluations-expectations and press for competition/push — than white majorities (85% and 100%).
7. In an urban mixed school, the black majority (70%) scored favorable in sense of futility but the white minority (30%) scored higher in press for competition/push.
8. The white minority (30%) in a mixed school scored higher in two student factors — present evaluations-expectations and press for competition/push — than did an all white school.
9. In an urban mixed school, the white majority (85%) scored favorable in sense of futility and lower in press for competition/push than blacks.

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10. Low SES and low achievement school teachers scored higher than high SES and high achievement school teachers in all of the factors, except press for competition.

The different sets of groups had different number of factors. In both student and teacher data, the evaluations-expectations variable was the most stable factor in the Factor Analyses.

In the mixed black and white school the majority racial group tended to perceive the school climate more favorably than the minority racial group. Interaction and communication between racial groups in schools was emphasized. Social interaction is not merely a proximity of bodies. When SES and achievement were controlled, there were fewer mixed school effects than expected. As Wilson (1969) indicated, social class mix appears to be more important to the children's behavior than racial composition in these schools.

Implications derived from this study indicated that it is desirable to design the teacher education and administrative policy to modify the social climate in schools. Through this, the level of school outcomes may be significantly improved for children in schools with the disadvantaged.

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CHAPTER I

INTRODUCTION

STATEMENT OF THE PROBLEM

The waste of human potential within the schools can no longer be tolerated. Such educational theories as the genetic origin of intelligence or the permanent effect of environmental deprivation can no longer be used as excuses for the failure of schools to educate large numbers of children, especially those from lower SES/culturally different backgrounds.

Some exceptional schools demonstrate that low achievement is not inevitable in schools composed of lower socio-economic status/minority group children. The identification of such a typical schools provides the opportunity to determine what characteristics of the school environment account for the variation in achievement among schools. Much research indicates that children from low SES families and certain minority group families attending schools predominately composed of such children generally achieve at significantly lower levels than children from middle-class families attending predominantly middle-class white schools. A study of the impact of educational climate on academic performance demonstrated that certain characteristics of the academic norms or climate accounted for a significant proportion of the variation in math

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achievement in a sample of high schools with similar family background and social composition controlled (McDill et al. 1967).

Since the climate or culture of the school organization depends to a significant degree on the nature of the entering students, it was postulated that controlling the mix of student characteristics may affect climate. This study therefore focuses on the differences in social academic climate in schools with varying racial composition in different community settings. More specifically, this study examines the perceptions of school academic climate held by black and white students in schools with similar levels of achievement and similar socio-economic composition, but different types of racial composition. The teachers' opinions of the academic norms and expectations are also examined in schools with varying racial composition. If schools with various racial composition differ in academic climate factors, educators should seek to determine how these differences contribute to the achievement difference among students.

JUSTIFICATION FOR THE RESEARCH

Inquiry into the realm of racial/SES differences in school climate is very important. If integrated and segregated schools differ in a climate variable, educators should seek to determine how this contributes to the achievement difference between black and white students. Many of the tangible type-input variables which have previously been assumed to affect the quality of education, do not significantly affect achievement. There is intuitive appeal in the idea that there are differences among schools in the extent to which normative pressures support academic achievement and subsequent status achievement in the larger society.

There is also some relatively unsystematic empirical evidence that such differences do exist, especially on the elementary school level, as Johnson (1970:4) states regarding to this lack of research:

Most studies of organizational climate of schools have confined themselves to the college level, a few have investigated high schools, and practically none have dealt with elementary schools.

In view of Johnson's statement, this study will be significant in that the thrust will be in an area in which limited research has been done in social psychological aspects of the elementary school. The rural mixed school is unique in terms of unintended, natural integration and its latent consequences, since most of the integration problems are concentrated on urban schools.

It is generally agreed that human behavior is learned or acquired in association with other human beings. In this sense, the entire educational process involves the interaction of the individual with other persons, groups, and complex organizations in his social environment (Brookover and Erickson, 1969). Related with the above social context for learning, there are few teaching theories in vogue which take into account a sophisticated understanding of how the social environment influences what and how much is learned by students.

Although most studies identified the factors which contribute significantly to academic achievement and to black and white schools, their sample schools are limited to predominantly segregated cases, and/or socio-economic status was not controlled. For example, in the Berkeley studies (Lunemann, 1973) the fact that the city is unique in the highly visible disparity in socio-economic levels which exists between the upper-income white and lower-income non-white communities, obscures any clear explanation of the relationship between ethnicity and achievement.

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Rodgers studied racial pride and his findings indicated that the students in racially mixed schools manifested the highest racial pride. Nevertheless, there was no evidence whether it is racial mixing or social class which accounts for the differences, since basically the students in the desegregated/integrated schools are middle class and the students in the segregated schools are lower class (1973: 62-63). Brookover and Henderson's study on the comparative analysis of black and white school climate scales (1973: 76-89) also is based on predominantly segregated black and all-white schools only. Therefore, further investigations of the effects of segregation/integration on school climate factors with socio-economic status and achievement controlled are warranted.

This research, though limited, deemed the 20th anniversary school desegregation ruling (1954) a suitable occasion for reviewing and assessing the consequence of that decision and establishing a basis for improved future efforts. For equality of educational opportunity, strategies must be formulated which arrest the disfunctionality of disadvantaged minorities, since no total integration of schools has come close to this goal in educational outcomes.

Coleman (1967: 122-26) adds credence to this line of research when he discusses equality of educational opportunity and equal schools. What really is important, according to Coleman's theory, is the output of the school, irrespective of the social origins of the input. In other words, the output should be capable of competing on equal basis with other. Thus, whether a school contains high and/or low socio-economic status students, black and/or whites, the output should be same.

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STATEMENT OF HYPOTHESES

The major hypothesis formulated in this study is generally stated as follows: There are significant differences in social psychological school climate variables, between black and white students and between integrated and segregated schools when the socio-economic status and the achievement level are controlled. The measurable hypotheses for analysis are listed as follows:

1. Students' climate factor scores will differ significantly among students in urban white, urban black, rural white, and rural mixed schools with low SES and low achievement.
2. White students in urban white, rural white, and rural mixed schools with low SES and low achievement will perceive school climate differently.
3. White students (38%) and black students (62%) in rural mixed schools with low SES and low achievement will perceive school climate differently.
4. White students (38%) in rural mixed schools will perceive a more favorable climate than students in all white rural schools with similar low SES and low achievement.
5. White students (38%) in rural mixed schools will perceive climate factors more favorably than white students in urban all white schools with similar low SES and low achievement.
6. Black students (62%) in rural mixed schools will perceive climate factors more favorably than black students in predominantly urban black schools with similar low SES and low achievement.
7. Teachers' school climate factor scores will vary significantly

among urban white, urban black, rural white, and rural mixed schools with low SES and low achievement.

8. Teachers's perception of school climate factors differ significantly among predominantly white, predominantly black, and mixed schools with low SES and low achievement.
9. Black students in predominantly white (85%) and predominantly black (70%) mixed urban schools with high SES and high achievement will perceive school climate factors differently.
10. White students in all white, predominantly white (85%) and predominantly black (70%) urban schools with high SES and high achievement will perceive school climate factors differently.
11. Black students (70%) will perceive the school climate more favorably than white students (30%) in an urban mixed school with high SES and high achievement.
12. White students in an all white urban school perceive climate factors less favorably than white students in a predominantly black (70%) urban school with high SES and high achievement.
13. White students (85%) perceive the school climate more favorably than black students (15%) in an urban mixed school with high SES and high achievement.
14. Teachers' climate factor scores will differ significantly between high-SES-high-achievement and low-SES-low-achievement schools.
15. There will be significant differences in students' climate factor scores among classrooms in a rural mixed school with low SES and low achievement.
16. There will be significant differences in students climate factor scores among classrooms in a low SES and low achievement urban

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black school in which classes are homogeneously grouped by ability.

With the following statement in mind, hypotheses 15 and 16 above were formulated. McPartland suggested in his school integration study (1967) that the classroom is more important than school integration. He found that black students' achievement was increased with an increase in the number of white classmates. With this importance of classroom as an immediate environment for the students, the classroom as the unit of analysis was proposed under the assumption that there are significant differences in the climate factor scores among the sample school classes.

There are a number of reasons to analyze classrooms as the fundamental unit, especially in elementary schools:

- 1) The classroom is the basic unit of school activities for the children.
- 2) The classroom as the unit of analysis is the most neglected in educational researches (Mittra 1974: 41).
- 3) The school class as a social system is more relevant to classroom teachers and to student peers for socialization (Parsons 1959).

THE CONCEPT OF SOCIAL CLIMATE OF SCHOOLS

The social aspects of school environment can be analyzed in many ways (Johnson 1970: 231-33; Boocock 1973; Mcpall 1973: 4-6). In this study, two concepts referred to different aspects of the social environment-structural variables and climate factors. The structural/organizational variables, used as independent variables, were racial and SES composition and school achievement levels. School climate or the school culture referred to the attitudes, beliefs, values, norms that characterize the social system of the school (Brookover 1974).

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The climate or culture was defined in this study as the aggregate attitudes, beliefs, norms and role expectations of the members who make up the school social system. These social-psychological variables are subject to change through the reference group-teachers, parents and peers.

DEFINITION OF ORGANIZATIONAL CLIMATE

It is easy to identify the differences between the cultural setting of Seoul National University and Michigan State University, or among various colleges in a single country. Apparently, such differences in culture have serious effects on student attitudes toward school, student achievement, and later success. Each school has its own culture, which in turn may be made up of a whole spectrum of subcultures affecting student behavior and performance. This culture of an organization is a combination of the organizational factors and of the personal characteristics of the members of the organization. It is such a significant force that it affects almost every activities in the organization.

The results of studies of school climates have revealed differences in climates between schools, particularly in variables such as emphasis on academic excellence, the intellectual, political, and social orientation and aspirations of students.

Murry (1938) introduced a taxonomy for classifying both environmental pressures and the characteristic ways in which an individual strives to structure the environment for himself. Murry called the external pressures "press" and their internal pressures "need". These two terms serve a dual function in classifying self-directing personality trends (needs) and externally controlling situational pressures (press).

Both needs and press are inferred from characteristic activities and events, the needs from things that the individual typically does and the press from things that are typically done to him in some particular setting. Pace and Stern (1958) applied Murry's personality theory to the climate of educational organizations. Thus, they conceptualized the climate of an educational organization as consisting of the personality characteristics and values (needs) of its members and the organizational pressures on the students, administration, and faculty (press).

In a statement of the climate of school organizations Astin and Holland (1961) and Michael (1961) theorized that the major portion of environmental pressures depends on the nature of the people within the environment; organizational climate, therefore, was defined as the personal orientations and characteristics of the majority of the students within the organization.

Boyle (1965) conceptualized climate as consisting of both structural characteristics of the school and the characteristics of the students. Boyle reported that the students' aspirations for attending college were jointly determined by the educational standards and practices of high schools, the scholastic abilities of the students, and the peer-group influences on values and attitudes.

Backman and Secord (1968) defined the climate as three factors: (1) the personality characteristics, abilities, motives, values, career and educational plans and past experiences of the students; (2) the norms, values, role requirements and other characteristics— such as the exercise of authority, size, availability of facilities, and nature of setting— of the school itself; (3) the values and norms of the informal organization

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within the school, that is, the traditions and collective feelings passed from one generation of students to another.

These three factors, however, are not independent of each other, but interact to some extent. For example, the quality of the entering students is dependent on the characteristics of the organization, if self-selection for students is possible. That is, intellectually-oriented students enroll in colleges that have reputations for being intellectually oriented schools. The interactive process is complicated by the fact that incoming students react differently to the formal and informal aspects of organization. The personal characteristics of the incoming students interact with the formal and informal aspects of the organization to influence the students' behavior. That is, unique characteristics make a student receptive to certain types of influences and resistant to others. This receptivity determines the extent to which he is influenced by the organizational characteristics of the school and the traditions and norms of the ongoing student body. Thus, the climate of a school does not affect all the students in a given school uniformly. The three variables determining climate are not necessarily homogeneous. There are subcultures present in all three variables within the organization, the student body, and the incoming students, which differentially influence the individual student. The structure of the school, furthermore, is usually heterogeneous, so that students differ with respect to their chances of encountering formal influences.

The climate in this review appears to be the environmental pressures in an organization which exert an influence in shaping and maintaining the behavior of its members. By manipulation of the variables in environmental pressures, human behavior can be modified.

Operationally, school climate can be defined as student factors (5) and teacher factors (4) generated by a Varimax Rotation Factor Analysis in this study.

CHAPTER II

THEORETICAL FOUNDATIONS

The present study is theoretically based on the current theories of symbolic interaction, reference groups, and role expectations.

Brookover and Erickson (1969) stated a social psychological conception of learning which is relevant to this study:

1. The social norms and expectations of others define the appropriate behavior for persons in various social situations.
2. Each person learns the definitions of appropriate behavior through interaction with others who are important and significant to him.
3. The individual learns to behave in ways that he perceives are appropriate or proper for him.
4. The individual also acquires conceptions of his ability to learn various types of behavior through interaction with others whose evaluations are important to him.

This social psychological frame of reference involves the reference group and role expectations as well as symbolic interaction theory.

SYMBOLIC INTERACTION

Many sociologists and social psychologists use the term "symbolic interaction" to emphasize that the basis of social behavior is communication. Socialization appears to be a process in which an actor is trained to

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engage on any or all types of symbolic interaction or communication. Social interaction is not merely a proximity of bodies. It involves for each participant an awareness of others. Each participant interprets and reinterprets the cues provided by those with whom he is interacting. More than that, it involves on the part of each interacting individual an awareness and interpretation of self. This leads to a process of socialization.

School can be described as a system within which an interchange of observation, reaction, and modification occurs in the environment of which all the actors — teachers and students — are a part. A student will behave in a manner which he perceives as acceptable to "other" persons who are "significant" to him.

In the 17th and 18th centuries, several British philosophers, especially John Locke and David Hume, proposed that human nature consisted, not of innate abilities, but of skills acquired in the course of men's interacting with their fellows. Speculations about the exact process by which human nature emerged in interaction continued in Europe and the United States throughout the 19th century (Hughes 1958: 36). It was, however, not until the early decades of the twentieth century that Cooley (1909) and Mead (1934) provided a detailed and explicit account of the origins of human nature as aspects of the rise of symbolic interaction.

The term symbolic interaction refers to the process by which individuals relate to their own minds or the minds of others; the process, that is, in which individuals take account of their own or their fellows' motives, needs, desires, means and ends, knowledge, and the like. This process was first labeled symbolic interaction by Blumer in his

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Social Psychology (1937: 144-98). The view of group life in Blumer's symbolic interaction is stated:

... human group life is that held by those social psychologists whom we have termed the symbolic interactionists. They, also, recognize that the life of human groups presents itself in the form of a body of customs, traditions, institutions, and so on, but they do not regard these forms of culture as consisting merely of so many different individual ways of acting. Instead, they believe that these forms of culture consist of common symbols, which are mutually shared and possessed by the members of the groups. Individual ways of acting are alike because these individuals are guiding their behavior by a symbol which they share in common. Thus, individuals wear clothing, in accordance with the custom of their group, because each of them shares the common understanding that he is ~~supposed~~ to wear clothing. In the same way, any custom, folkway, or way of acting common to a group of individuals is traceable back to their possession of a common symbol or understanding (p. 158-59).

... the group setting into which the child is born is made up of cooperative forms of activity that prevail because the people in the group possess a set of common symbols or understandings. What is important in the setting or milieu of the child is not primarily the activities of the individuals account it, but the symbols and understanding that guide these activities is symbolic. This, then, is the view of the symbolic interactionists (p. 159).

In the definition of symbolic interaction the word "mind" was employed by C.S. Peirce, William James, John Dewey, and George Herbert Mead. C.W. Morris in his Six Theories of Mind (1932) distinguished among mind as substance, mind as process, mind as relation, mind as intentional act, mind as substantive, and mind as function. For the pragmatic orientation in his theory of the mind as function, Morris stated:

Certain phases of the functional approach to mind precede or fall outside of the American pragmatic movement— of these phases only a bare mention will be made. A discussion of the functional view of mind as appears in the thought of Peirce, James, Mead, and Dewey constitutes the major task of the chapter VI: "Mind as Function". The central place which Dewey holds in this development is justification for the extended consideration of his views (p. 275).

Writers who shared Mead's position objected to the conceptions of organized social life, particularly the cultural determinism which was

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prevalent in the literature of their time. By contrast, the interpretations of social life as symbolic interaction conceived of actors as constantly establishing and re-establishing their mutual relations, modifying or abandoning them as the occasion demanded.

One branch of the pragmatist movement made a special contribution to symbolic interaction theory, namely, that associated with Charles Horton Cooley and George Herbert Mead, which eventuated in a special kind of social psychology. According to Talcot Parsons, it was Cooley who first took seriously the truly indeterminate character of the self as a structure independent of others. This led to the idea that the self developed in the process of interaction with others. As Mead said, to Cooley the "other" belonged in the same field as the self and was just as immediately given (Mead 1964: 293-307).

To Cooley, it was a structure and process which is particularly found in the vehicles of communication, that is, everything that interrelates the conduct of members of society, and which become therefore symbols in their minds. Cooley presented the conception of the relation of social mind to the organic structure and process of society:

By communication is here meant the mechanism through which human relations exist and develop — all the symbols of mind, together with the means of conveying them through space and preserving them in time... All these taken together, in the intricacy of their actual combination, make up an organic whole corresponding to the organic whole of human thought; and everything in the way of mental growth has an external existence therein. The more closely we consider this mechanism the more intimate will appear its relation to the inner life of mankind, and nothing will more help us to understand the latter than such consideration. ... Without communication the mind does not develop a true human nature, but remains in an abnormal and nondescript state neither human nor properly brutal (Cooley 1962: 61-62).

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Mead, however, took the essential step of treating the individual as being both subject and object at the same time and in the same interpersonal system. Furthermore, he was clearer than Cooley in showing that the personality of the individual emerges from the process we now call socialization, precisely through the interplay between these subjective and objective aspects.

Mead also contributed the most important conception in his idea of the generalized other. Through symbolic interaction the individual learns to use and develop generalized codes that can interrelate a conception of the particular other with generalized categories and collectivities. This is the foundation, in the process of socialization, of the internalization of cultural as well as social systems, which in turn came to be differentiated from each other.

Social psychology demonstrated and analyzed the intimacy of the relation between personality and social system by showing that the personality cannot be understood independently of its articulation, including its genetic involvement, with social interaction.

Parsons (1968: 435) stated that Mead also surpassed Freud in beginning the exploration of truly symbolic processes and in building a bridge between behavior theory and linguistics. There was certainly impressive convergence between this version of "symbolic interaction" theory and the ideas of both Freud and Durkheim on the internalization of social objects.

Mead (1934) defined "self" as follows:

... the individual becomes a social object in experience to himself. This takes place when the individual assumes that attitude or uses the gesture which another individual would use and responds to it himself or tends to respond. The child gradually becomes a social

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being in his own experience, and he acts toward himself in a manner analogous to that in which he acts toward others.

Cooley (1902: 184) earlier studied the self-other relationship and developed the concept of "the looking-glass self". According to him, a social self of this sort might be called the reflected or looking-glass self:

" Each to each a looking-glass
Reflects the other that doth pass".

As we see our face, figure, and dress in the glass, and are interested in them because they are ours, and pleased or otherwise with them according as they do or do not answer to what we should like them to be; so in imagination we perceive in another's mind some thought of our appearance, manners, aims, deeds, character, friends, and so on, and are variously affected by it.

From a self-idea of this sort, Cooley classified three principal elements: the imagination of our appearance to the other person; the imagination of his judgement of that appearance, and some sort of self-feeling, such as pride or mortification.

Johnson (1970: 85) summarized what he calls an excellent example of a formal theory:

The actual responses of others to the individual will be important in determining how the individual will perceive himself; this perception will influence his self-conception which, in turn, will guide his behavior. The way in which the responses of others affect an individual's self-concept needs some further elaboration. The responses of one's associates do not automatically form one's self-concept. One must (1) accurately perceive how he is being responded by others around him and (2) compare this reflection of self against a standard, a set of expectations that he and his "reference groups" hold as to how he should behave and what characteristics he should have (Backman & Secord 1968).

In the theoretical tradition of symbolic interaction, each actor is indeed a product of the interplay between the environment and himself. A unique aspect of this theory is the inclusion of the parents with regard to their input into the school environment and their subsequent behavior

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in return. The most prominent feature of this theory is that conceptualizations of the school climate facilitate maximal or minimal student performance. As McDill indicated earlier, the climate aspects were more highly related to achievement than socio-economic status, even when the effects of both intelligence and socio-economic status were controlled the effects of climate still had some explanatory power with regard to academic achievement. An important aspect of the current study is to test the basic hypothesis that the academic behavior of black children in biracial schools would be highest in integrated settings.

This hypothesis can be derived from the findings of extensive laboratory research on black performance in biracial situations, conducted over the past decade by Irwin Katz:

Katz has summarized and discussed his research in three papers, the first of which is especially relevant to this study's hypothesis: Irwin Katz, "Review of Evidence Relating to Effects of Desegregation on the Intellectual Performance of Negroes", American Psychologist, 1964 Vol. 19:381-99; Irwin Katz, "The Socialization of Academic Motivation in Minority Group Children", in D. Levine, Ed., Nebraska Symposium on Motivation, 1969, Lincoln, Nebraska: University of Nebraska Press, 1969: 133-91; and Irwin Katz, "A Critique of Personality Approaches to Negro Performance, with Research Suggestions", Journal of Social Issues, Vol. 25, 1969: 13-27.

Katz found in one experiment after another that black subjects performed best in interracial situations free of stress and threat, moderately well in all-black situations, and worst in interracial situations characterized by stress and threat. Katz (1964) concluded:

The psychological evidence that I have presented is consistent with a definition of racial integration which emphasizes the beneficial effects to black pupils if genuine respect and acceptance prevails.

REFERENCE GROUP

Sociologists, social psychologists, and cultural anthropologists have usually operated on the fundamental assumptions that an individual's attitudes and conduct are shaped by the group in which he has membership and that self-appraisal and the correlative feelings and behavior flow from the individual's location in a particular group within a social hierarchy. The evidence in support of such principles is abundant (Brookover and Erickson, "Group norms and expectations" 1969: 64-98; Merton "Contributions to the theory of reference group behavior" 1968: 279-440); but, at times, faith in the principles becomes shaky in the face of contradictory examples:

- (1) Upper-class individuals with radical ideologies and revolutionary allegiances,
- (2) Those who feel deprived despite relatively advanced positions,
- (3) The products of an orthodox milieu who end up as nonconformists,
- (4) Social reformists, revolutionaries, and creative innovators and enterprisers, etc.

In the process of self-appraisal, from many possible groups available as a framework for social comparison, students make their own particular selections, thus reflecting the true complexities of their social location in the class and school setting. In shaping their attitudes students may orient themselves to groups other than their own. If their peer groups to which students refer themselves (their reference groups) are empirically determined, knowledge and predictions of attitude, self-evaluation, and conduct will be enhanced; and an understanding of the complex processes by which students relate themselves to their reference groups,

can be enriched. The fact that students may shape their attitudes by reference to peer groups other than their own and may shape their self-evaluations by the choice of unusual points of social comparison is perhaps the most distinctive contribution of reference group theory (Hyman 1968: 354).

Unusual patterns of behavior may be understood without recourse to this concept. Some members of a group may depart from the modal pattern of behavior simply because of their simultaneous membership in other groups. Some students in a particular status (e.g., leaders in extra-curricular activities) may have an incongruent self image because they occupy other statuses as well.

It would then remain problematical to determine which of the multiple memberships and multiple statuses weighs heaviest with the student, and what weights best represent their respective contributions?

DEVELOPMENT OF THE REFERENCE GROUP CONCEPT

The term "reference group" was first used by Hyman, who elaborated the concept and explored some of its properties. Merton (1968: 329-30) stated in "Concepts Kindred to Reference Group Theory" that from allusions scattered through the foregoing discussion, it is evident that certain facts of reference group behavior were noted long before the term, reference group was coined by Hyman in his important study of The Psychology of Status (1942). Kelley (1952: 410) also mentioned reference group by noting that "... the term reference group, first used by Hyman, has come into use to denote any group to which a person relates his attitudes". At about the same time, Newcomb (1943/1957) searching to understand

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processes of attitude change, or lack or change, among individuals, systematically explored in his Personality and Social Change: Attitude Formation in a Student Community (1943/1957), by interview and repeated testing, the various ways in which students at Bennington College related themselves to the college community— that is, chose this community as a reference group. These first systematic studies by social psychologists stimulated a few others to study reference groups. One of them is Sherif who emphasized reference groups in his An Outline of Social Psychology (1948/56), which included a summary by Newcomb of his Bennington study, rephrased in terms of the explicit concept reference group:

Reference groups are those groups to which the individual relates himself as a part or to which he aspires to relate himself psychologically (p. 175).

Newcomb also defined membership group as "... One in which a person is recognized by others as belonging..." (Social Psychology 1950:225).

Similarly, Stouffer and his associates were led in their study The American Soldier (1949, Vol. 1) to the concept of relative deprivation, a close relation to the concept of comparative reference group, as they confronted the apparent contradictions between feelings of satisfaction or deprivation and the objective situation among groups of soldiers. They then invoked the interpretive principle that the soldier's sense of deprivation was not dependent on any absolute level but was relative to the perceived level in the groups with which he compared himself. These ideas and concepts, became prominent when Merton and Kitt (1950) synthesized and presented them in systematic form.

Merton discussed the concept of relative deprivation, noting that the authors of The American Soldier have, on the whole, centered their

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attention on the deprivation component rather than the relative component of the concept. He also pointed out that it is in the very first instance of such use, for example, that the authors refer to the nature of the theoretical utility of the conception and to its possible kinship to other, established concepts of sociological theory:

The idea "of relative deprivation" is simple, almost obvious, but its utility comes in reconciling data, especially in later chapters, where its applicability is not at first too apparent. The idea would seem to have kinship to and, in part, include such well-known sociological concepts as "social frame of reference", "patterns of expectation", or "definitions of the situation"(American Soldier I, 125).

For social comparison, the soldier chooses a group so as to enhance his self-regard or protect his ego. In the search for reference groups such fundamental strivings play an important part. It seems plausible that the institutional arrangements gave such sharp definition and prominence to certain groups that the individuals' attention was drawn to them as points of comparison. For example, Stouffer (1949) inferred that the more advantaged soldiers felt deprived because they chose to compare themselves with others who were even better off.

In the past, one can find pioneers of the ideas implicit in reference group theory. William Graham Sumner's idea of in-groups and out-groups is a distant relation; C.H. Cooley's discussion of selective affinity to groups outside of one's immediate environment is an even earlier and closer relative (Merton & Kitt 1950: 101-02; Merton 1957: 358-59). Cooley's notion of imaginary conversation with an "interlocutor" (dialoguer) anticipates the concept of reference individual and has inspired recent research which applies reference group concepts to mass communication (Bauer 1958). Cooley's remark that "people differ much in the vividness of their imaginative sociability" (1902: 95) is suggestive

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of later findings on individual differences in the use of multiple reference groups. In 1890, William James, in his account of the "social self", suggested that our potential social self is developed and inwardly strengthened by thoughts of remote groups and individuals who function as normative points of reference.

Taking as a comprehensive outline Merton's formulation that "... reference group theory aims to systemize the determinants and consequences of those processes of evaluation and self-appraisal in which the individual takes the values or standards of other individuals and groups as a comparative frame of reference" (Merton & Kitt 1950: 50-51), the shortcomings of the reference group theory and the merit as well will become clear.

DEFINITION/CLARIFICATION OF CONCEPTS

Kelley's distinction (1952) between comparative and normative groups is basic; it corresponds to the two functions of reference groups as standards of comparison for self-appraisal and as the source of the individual's norms, attitudes, and values. These two functions of reference groups may be conceived of as separate but equal in importance for study, having only the common property that the individual's choice of a point of reference is the key to understanding both the process of self-appraisal and the formation of attitudes.

The concept "reference group" has been used by Kelley to describe two kinds of relationships between a person and a group. The first usage has been to denote a group in which the individual is motivated to gain

or maintain acceptance. The motivational aspects are emphasized in Newcomb's distinction between positive and negative reference groups (Kelley 1952: 411):

A positive reference group is defined as one in which the person is motivated to be accepted and treated like a member. A negative reference group is one which the person is motivated to oppose or in which he does not want to be treated as a member.

Sherif's usage falls also into this category. He emphasized the individual's striving to maintain his standing in his reference groups and points out that the norms of the reference group become the person's attitudes.

The second usage of "reference group" has been to denote a group which the person uses as a reference point in making evaluations of himself or others. From Kelley's discussion it is apparent that the term reference group is used to describe two quite different kinds of groups. In the first case the group is in a position to award recognition to the person or to withhold it. In the second the group is merely a standard or checkpoint which the person uses in making judgments. This dual usage of the term suggests that reference groups can play different functions in the determination of a person's attitudes.

The first of these is that of setting and enforcing standards for the person. Such standards are usually labelled group norms, so we may call this the normative function of reference groups. A group can assume this function of norm-setting and norm-enforcement whenever it is in a position to deliver rewards or punishments for conformity or nonconformity. A group functions as a normative reference group for a person to the extent that its evaluations of him are based upon the degree

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of his conformity to certain standards of behavior or attitude and to the extent that the delivery of rewards or punishments is conditional upon these evaluations.

The second of these functions is that of serving as or being a standard of comparison point against which the person can evaluate himself and others. We may refer to this as the comparison function of reference groups. A group functions as a comparison reference group for an individual to the extent that the behavior, attitudes, circumstances, or other characteristics of its members represent standards or comparison points which he uses in making judgments and evaluations.

These two functions, the normative and comparison functions, were frequently served by one and the same group as the case with membership groups, which illustrated the integrated character of the two functions. Examples are found in The American Soldier.

The distinction between the two functions suggested above is important because it makes explicit the two main aspects of reference group theory: the motivational and the perceptual. A comprehensive theory of reference groups consisted of two parts, one having to do with groups as sources and enforcers of standards and the other having to do with groups as the standards themselves.

For the study of normative reference groups, Newcomb's distinction between the positive and negative types (p. 23 in this paper) reminds us that individuals may form their attitudes in opposition to the norms of a group toward which they are negative. The concept of negative reference groups helps this researcher to understand the affective tone and content of an individual's attitude and the organization of his attitudes. There are some examples in social life through which to oppose the norms of

a particular group— for instance, the Republican party and the Democratic party. But there are many other examples where social relations between groups are not patterned in terms of polar opposites. Thus, to regard one's parents or teachers as a negative reference group may provide no other directive to the student than to choose from among the norms of the many groups available.

According to Waller, the student subculture grew out of the fact that socially homogeneous groups of children were drawn together through compulsory mass education. Waller conceived, in his Sociology of Teaching (1932), of the school as being not only a formal organization but a miniature society as well, with teachers and students comprising two subcultures which strive for power within the school society. The teacher subculture, he argued, derived from common professional backgrounds and perspectives. Some observers have challenged the idea of a teacher subculture (Boocock 1972: 182; Bidwell 1969: 1252). Whether teachers typically form a subculture in modern schools is less important for the present study than whether the potential for it exists. Suggesting that students participate in school as a way of life, with virtually total involvement, he believed it inevitable that they would form a subculture centered around values and interests that would be at cross-purposes with those of teachers. The incipient conflict between students and teachers growing out of their subcultural commitments—teachers attempting to maintain order and scholastic motivation, students uniting to avoid or deflect teacher demands—would strengthen and reinforce their respective commitments. One of the hypotheses to be tested in this research is postulated that individuals who form a group of attitudes under the negative reference groups will show the consequences in terms of diffuseness of attitudes,

lack of crystallization, and inconsistency.

The concept referent power, employed by French and Raven (1959), suggested many fundamentals of normative reference group processes. The power of a nonmembership reference group inheres essentially in the fact that the individual, by his sheer identification with the group, willingly accepts what he perceives to be its norms. By contrast, membership groups often have the power, even when the individual does not take them as reference groups, to demand conformity in behavior through brutish means or rewards. When referent power is joined to real power, the combination is stronger. In general referent power will have the broadest range (p. 165). From this distinction another hypothesis was produced that the attitude held reflects the reference group, whereas the attitude expressed reflects the membership group (Smith et al. 1956).

Merton's concept of anticipatory socialization is essential to this discussion of reference group (Merton 1968: 319-20):

For the individual who adopts the values of a group to which he aspires but does not belong, this orientation may serve the twin functions of aiding his rise into that group and of easing his adjustment after he has become part of it. That this first function was indeed served is gist of the finding in The American Soldier that those privates who accepted the official values of the Army hierarchy were more likely than others to be promoted.

Students may take as a reference group a nonmembership group to which they aspire to belong, and begin to socialize themselves to what they perceive to be its norms before they are ever exposed to its influence. The power of some reference groups thus inheres in the fact that they will ultimately be membership groups - at least such is the belief of the aspirant - and therefore can demand some conformity as the price of admission or of more comfortable passage into their ranks. Similarly those students who accept the teachers' values of the school hierarchy will

be more likely to be successful. This is one of the underlying assumptions in this study. Eulau (1962) advanced and then twice tested an original hypothesis: that anticipatory socialization may be an effective means for learning attitudes, but not conduct, since the aspirant will have had little real opportunity to practice the skills required and to be taught the correct performance of the role.

Basic to reference group theory in school setting is the fact that students often have multiple reference groups. There are some students who have limited capacity to use many reference groups — who lack rich "imaginative sociability". Others, however, in appraising the many facets of the self, employ various reference groups, each specialized as a point of comparison for one particular dimension (Hyman, 1942; Stouffer et al., 1949; Turner, 1955).

The limited usage which Sherif and Shibutani prefer, referring to the source of the individual's major perspectives and values, might well be named the identification group. The identification group is the source of values, since the individual takes the role of a member while adopting the members' standpoint as his own. In general, then, it appears that the concepts of reference group and role-taking are closely related. The terms "reference group" and "relevant other" refer to essentially the same phenomena. The reference group is a generalized other which is viewed as possessing member roles and attributes independently of the specific individuals who compose it (Turner 1955: 328).

In forming the total constellation of attitudes, several reference groups may be employed, each accorded a limited power over some specialized attitude field. Studies of normative reference groups have found differences in the rationale that students accord to group promulgating norms in various spheres (Michigan, University of 1960). These studies arrived at the general proposition that one fundamental determinant of group identifications is the proportion of one's life spent in close

psychological contact with the group (Campbell 1960: 180). They also measured group identification and the following hypothesis was supported:

The higher the identification of the individual with the group, the higher the probability that he will think and behave in ways which distinguish members of his group from nonmembers (Ibid., p. 168).

There are also instances where multiple reference groups impinge simultaneously on the same field of comparison or the same domain of attitude, and then they may either reinforce the same outcome or produce conflicting consequences for the individual student (Merton 1968: 295-304; Patchen 1961). Similarly Form and Geschwender (1962: 228) proposed that personal evaluations of life situations are relative to the precise social locations which people occupy in society and the specific groups to which they commit their identities. This is consistent with the general position of Inkeles, "Industrial Man: The Relation of Status to Experience, Perception and Value", Hyman, "The Psychology of Status", and Merton, "Contributions to the Theory of Reference Group Behavior".

Over the life span of any person, there will have been a multiplicity of reference groups. Some old reference groups which are long departed may be carried over in memory. On the other hand, recent groups may be cast out of mind in the eager adoption of a still newer reference group. The relations of multiple reference groups within a sequence suggest many interesting problems that tie into the processes of social mobility (Merton & Kitt 1950: 84-95). Discussions of social mobility often assumed that the past and future reference groups conflict, since the individual presumably wishes to break his ties to the old, inferior group. Litwak (1960), however, presented an interesting reformulation, using the concept of the "stepping-stone" reference orientation. In a situation characterized

by ordered change, Litwak (1960: 72-72) described an illustration relevant to this current study, "where integration into one group is considered to be a prerequisite for integration into a second group... it is possible for the individual to view both his current membership group and his future membership group as reference groups, without risking his integration into his current group and without preventing his joining a different future group". Each group is valued by the individual as a stepping-stone to help him in his advance.

SELECTION OF REFERENCE GROUPS

The concept of reference group has generally implied that one cannot make arbitrary assumptions about the groups to which an individual refers himself. Given the multiplicity of groups and the variability among individuals and situations, must we then, as a Symposium (Foundation ...1956: 1) put it, "determine which kinds of groups are likely to be referred to by which kinds of individuals under which kinds of circumstances in the process of making which decisions...". There will usually be a large amount of empiricism needed, and the development of simple instruments to measure a person's reference groups is of great importance. But, fortunately, research has already established certain regularities in the choices individuals make and some major factors governing selection (e.g., Brookover and Erickson 1969: 68-76).

Theorizing about the choice of reference groups and reference individuals is often based on simple assumptions about motivation. For example, the individual chooses a normative reference group so that in fantasy, or ultimately in fact, he can feel himself part of a more favored

group. Or, facing rapid social change, the individual locks onto a reference group: thus anchored, he has a ready-made perspective to order the distressing complexities of the environment (Shibutani 1955; Eisenstadt 1954).

Shibutani hypothesized that the inconsistency in behavior as person moves from one social context to another is accounted for in terms of a change in reference groups:

The exploits of juvenile delinquents, especially in interstitial areas, are being explained by the expectations of peer-group gangs (p. 562).

Modifications in social attitudes are found to be related to changes in associations. Shibutani examined the conceptions of reference group implicit in actual usage:

One common usage of the concept is in the designation of that group which serves as the point of reference in making comparisons or contrasts, especially in forming judgments about one's self (p. 562). A second referent of the concept is that group in which the actor aspires to gain or maintain acceptance. In the third usage the concept signifies that group whose perspective constitutes the frame of reference of the actor. Thus, Sherif stated of reference groups as groups whose norms are used as anchoring points in structuring the perceptual field (1953: 203-31), and Merton and Kitt discussed of a "social frame of reference" for interpretations (1950: 49-50).

To Shibutani, culture as a continuing process is a product of communication. Social norms are creatively reaffirmed from day to day in social interaction. People in each cultural group are continuously supporting one another's perspectives, each by responding to the others in expected ways:

In his discussion of endopsychic social control Mead spoke of men "taking the role of the generalized other", meaning by that that each person approaches his world from the standpoint of the culture of his group. Each perceives, thinks, forms judgments, and controls himself according to the frame of reference of the group in which he is participating (Shibutani p. 564).

Reference groups, then, arise through the internalization of norms; they constitute the structure of expectations attributed to some audience for whom one organizes his conduct. It has been suggested further that choice of reference groups rested upon personal loyalty to significant others of that social world. Significant others, for Sullivan (Conceptions of Modern Psychiatry 1947: 18-22), are those persons directly responsible for the internalization of norms. Socialization is a product of gradual accumulation of experiences with certain people, particularly those with whom we stand in primary relations, and significant others are those actually involved in the cultivation of abilities, values, and outlooks.

NORMATIVE REFERENCE GROUPS

Spady (1973: 37-35) noted two distinct but related theoretical frameworks of group influence in his recent review of the effects of school resources on students.

The first framework is that of the reference group, which is defined as a group to which the individual belongs or aspires to belong and which influences his norms, attitude, values, and performances (Merton 1968: 288). Kemper (1968) posits three different types of reference group which shape individual performances:

... there are three important types of reference groups which act together to foster achievement level striving. These are the normative group, the role model and the audience. The normative group defines the roles the individual is to assume, the model provides exemplification of how the role is to be performed, at least adequately, and the audience provides anticipation of rewards for outstanding performance in the role (p. 31).

Kemper also contended that achievement is powerfully related to the types of reference groups available to an individual, and that lacking

these groups, his achievement striving will be seriously hampered. Among his three different types of reference groups, only two are relevant to this study. The first is the normative group which provides a set of guides, expectations, and sanctions for individual behavior.

The measures of the environment of the school derive their values from various components of academic and social norms, values and sanctions which impinge on the student.

Research on the selection of normative group is meager especially in the school society. The proposition that students identify with advantaged groups and thereby gain gratification must be qualified in terms of the school social context. Such modes of selection may be characteristic of societies with high rates of upward mobility (Merton 1968: 322). Experimental research demonstrated that situational factors may heighten the saliency of a membership group and increase the likelihood of its being used as a reference group whose perceived norms then affect some specific sphere.

Charters and Newcomb (1952) presented such evidence, but they noted that the salient group sometimes functioned as a negative reference group. That normative reference groups are chosen in the spirit of identification perhaps also needs qualification. It may be true for the student seeking a source of norms and values and attitudes. The student may then choose his reference group in terms of its authority or expertness and with the full awareness that he has no bond of identification. Systematic research on such determinants of choice is open to investigation, since the effects of reference groups on cognitive processes has been neglected.

There are significant relationships between particular behavioral characteristics and the selection of reference groups. For example Carlson (1952), demonstrated differences in the effectiveness with which rural southern blacks dealt with syphilitic infections depended on their reference group, and by the report of a seminar conducted by the Foundation for Research on Human Behavior (1959), which shows that farmers who adopted better practices chose particular reference groups. Farmers did not want to be identified with innovation; they hesitated to adopt a new product until it was known to be acceptable (p. 12).

Ruth Hartley's work on The Acceptance of New Reference Groups (1956) represented a unique program of systematic research on psychological factors that influence the selection of a membership group as a normative reference group (1960a: 87):

In most discussions of the functioning of reference groups, the assumption is made that the individual accepts as guides for his own behavior the standards and norms characteristic of his reference groups.

Hartley also found that the greater the compatibility between the values of the individual and the perceived values of the new group, the more likely the individual is to accept the new group as a reference group (1960c: 189). Using a large college community, Hartley measured the degree to which students adopted their new community as a reference group, and correlated such individual differences with other characteristics. Taking on a new reference group depends on possessing an acceptant personality pattern. A particular reference group is then likely to be chosen if it is seen as fulfilling personal needs and if there is congruity between the individual's personal values and norms and the norms and values he perceives as characteristic of the group.

THE PRINCIPLE OF COMPARISON/SIMILARITY

The second type Kemper labeled the comparison group. He postulated three subtypes of comparison groups, one of which, the role model group, is relevant to this study for conceptualization of environmental influences. This group differs from the normative in that it demonstrates how something is done in the technical sense: "The essential quality of the role model is that he possesses skills and displays techniques which the actor lacks, or think he lacks, and from whom, by observation and comparison with his own performance, the actor can learn" (p. 33).

Turner (1956) hypothesized that only those groups will be taken as points of comparison which are relevant to a particular aspect of self-appraisal: when a group's standing is so high or so low that it is not meaningful to the individual, it will not be used as a comparative reference group. The similarity principle derived by Festinger (1954) in his theory of social comparison processes — an individual chooses others who are close to his level of ability — seems to be congruent with Turner's "relevance principle", as was Merton's hypothesis, based on findings in The American Soldier, the general hypothesis that some similarity in status attributes between the individual and the reference group must be perceived or imagined in order for the comparison to occur at all (Merton 1968: 296).

An evidence in Hyman's interviews also suggested the operation of the similarity principle, or what he called "affinity" in the choice of reference group, but he also observed instances where contrast in status made a reference group prominent:

Reference individuals chosen by virtue of Affinity of Contrast with the subject. The reference individuals in many cases are chosen by virtue of similarity to the subject, proximity to him in life situation, or as the result of objective facts which facilitate such comparison. The term affinity is used to cover such instances. Other reference individuals are chosen for comparisons of status by virtue of contrast with the subject's status (1942: 27).

College students, for example in Turner's Study (1955), seemed to compare themselves with higher reference groups, probably to their present discomfort, since they were future-oriented, desiring to surpass such groups in their future lives.

Patchen (1961) also demonstrated, in his study of industrial workers, systematic evidence on the variables affecting the choice of a reference individual or reference group for economic comparison, and fundamentally clarifies the motivational assumptions of reference group theory. Individuals often choose reference groups which increase their present sense of relative deprivation, because formal institutional arrangements force such groups into attention, and also because informal social influences make such groups salient, as Patchen provided in his theory and hypotheses (p. 9-26). Individuals may choose groups above them at the price of present dissatisfaction. They are future-oriented in their claim. Their status will be higher and their relative deprivation diminished. Comparisons along a particular dimension were made in a cognitive consideration. Low rank, for example, on wages, may appear justifiable in light of the low-ranking individual's and the reference group's relatively high standing on other attributes, e.g. education or age, thus reducing the grounds for dissatisfaction. However, greater feelings of deprivation were created when reference groups were equal in respect to the relevant attributes, but were higher on the dimension of appraisal. Thus the principle of similarity or comparison is specified:

If the direction of choice is upward, deprivation is likely to be contained by choosing a group whose dissimilarity in other attributes legitimizes the present inferior position of the person making the comparison. However, if one selects reference groups similar in these attributes, the direction of comparison is not likely to be upward.

The second frame of reference identified by Spady to which the conceptualization and operationalization for this study can be related is the interpersonal influence paradigm. Spady noted that all of the reference group mechanisms of impact on individual students' behavior are based on the assumption of individual responses to the visibility of trends in the behavior and values of reference groups in the school (p.37). The interpersonal influence paradigm, in contrast, involves a conceptualization that impact from the reference groups of the school is transmitted by participation in specific peer cliques. In examining sources of variation in educational climates of schools, research may focus on a variety of resources in the school studied — finances, curriculum, and teachers — as well as economic and cultural resources and citizen commitment to quality education in the communities served by each school.

In this context this research will present measures of behavior and values of two different types of actors in the school setting who serve as important role models for individual students, the peer group to which the student belongs, and his teachers.

ROLE EXPECTATIONS

In accord with the theory of symbolic interaction and the

reference group, it may be postulated that the types of behavior learned by students in school is affected by the expectations of the groups and reference groups to whom the student refers in evaluating his own behavior. Therefore, an understanding of the differences and/or the similarities in behavior among students in part depends upon an identification of the reference groups and/or the significant others for the students and the expectations which these persons and groups hold for the students. It seems likely, however, that changes in achievement are most likely to occur when all of the reference groups including parents, teachers, and friends hold expectations for a high level of performance. The higher achievement of lower class and disadvantaged black students in predominantly white middle-class schools is an evidence of the impact of higher levels of expectation by all parts of social system (Coleman Report and Racial Isolation in the Public Schools). It seems possible that most of the disadvantaged students can get high levels of achievement if they are allowed to go schools in which teachers, friends, and others in the school expect them, as well as advantaged students, to learn quality academic behavior.

"The Hawthorne Effect" coined by Roethlisberger and Dickson (1939) appears to be the another side of the expectation theory.

Students will respond well, if a program is introduced and students like the idea of participating in the experiment. "The Hawthorne Effect" is apart from any intended effect of the program itself. It is analogous to the placebo effect in medicine which is the relief given the patient by a pill or a treatment having no medicinal value. The existence of these effects is well documented and at least in the case of the placebo has been frequently measured with repeatable results on many populations of

parents. Beecher (1959) reported about 35% of patients were satisfactorily relieved of severe postoperative wound pain by a placebo. The Hawthorne Effect is another example of the significance of perceived expectations and is theoretically based on symbolic interaction.

Expectation theory becomes more informative when we discuss the complimentary construct of aspirations. Individuals who experience consistent positive reinforcement within a particular area will also develop high aspirations concerning their future plans within the area of effort. For example, a student who is expected by his reference groups to be an achiever and experiences some satisfactions early in his education will attain a high self-concept of ability. His level of future educational aspirations will be quite high.

In line with the theoretical frame of reference, a researcher could hypothesize that a relatively high level of academic outcomes could be achieved if there were a high level of expectations held by the reference groups for all students in the school. Just as in actuality the students learn the general behavior of the expected cultural pattern, they would learn academic types of behavior such as mathematics and language if the reference groups held equally high expectations for behavior in these areas.

This hypothesis is postulated on the basis of the performance of students in schools and groups where equally high expectations are held that most of the students would achieve commensurate academic performance when such norms were commonly held by their reference groups.

Those students, for whom different reference groups hold differing expectations, are likely to perform in accord with the expectation held

by the reference groups that is most important to the student. Changes in the expectations of the friends, therefore, are unlikely to have significant impact unless the friend is an important reference for the student.

If all the reference groups with whom the student interacts believe he can learn, and consider high achievement appropriate for the disadvantaged as well as advantaged students, then he will learn.

In accord with the expectation theory, it is postulated that the types of behavior learned by students in school is affected by the expectations of his peer groups and teachers to whom the student refers in evaluating his own behavior. It is also postulated that a more uniformly high level of school performance would be achieved when teachers and peer groups held this expectation for all students (Brookover and Erickson 1969: 97).

The concept of role is also related to the symbolic interactionist tradition of Cooley (1902) and Mead (1934). Krech, Crutchfield, and Ballachey (1962: 338), who define role as:

The pattern of wants and goals, beliefs, feelings, attitudes, values and actions which members of a community expect should characterize the typical occupant of a position. Roles prescribe the behaviors expected of people in standard situations. The various roles of a group are interdependent.

Role behavior, like all other types of social behavior, is a product of the interaction between those situational factors present and such social-psychological factors as cognitions, wants, attitudes, and interpersonal response traits of the individual.

Gross, Mason, and McEachern (1958) have studied the question of how certain aspirations are developed among groups of people, from the

perspective of role theory. Their basic thesis is that individuals who hold certain social positions (for example, a high SES student) will develop high aspirations on the basis of the perceived expectations of the reference groups.

The concept of role has a relatively long history in sociology and has attracted interest from some of its best minds. For instance, Park (1926: 137) in his "Behind Our Masks" (Survey(New York) 56:135-39), noted that "everyone is always and everywhere, more or less consciously, playing a role..... It is in these roles that we know each other; it is in these roles that we know ourselves". In this and most subsequent usages, the following elements appear in the definition of role:

It provides a comprehensive pattern for behavior and attitudes; it constitutes a strategy for coping with a recurrent type of situation; it is socially identified, more or less clearly, as an entity; it is subject to being played recognizably by different individuals; and it supplies a major basis for identifying and placing persons in society (Ralph H. Turner 1968: 552).

Mead's observation (1934) that in mature social behavior the individual works out his own role by imaginatively taking the role of the other soon led to the idea that articulation between the roles played by partners in interaction determines whether interaction is harmonious and productive.

ROSENTHAL'S ANALYSIS OF THE EFFECTS OF TEACHER EXPECTATIONS ON PUPIL PERFORMANCE

As briefly stated earlier, much of the early work in the area of expectations and learning is attributable to the work of Robert Rosenthal, both in his study of animals (1966) as well as his highly important collaborative study (Rosenthal and Jacobson, 1968), on elementary school

achievement.

Rosenthal and Jacobson's experiment was designed to test the proposition that within a given classroom, "those children from whom the teacher expected greater intellectual growth would show such greater growth". The setting for the study was an elementary school in an older section of San Francisco, attended mainly by children from lower-SES, but not desperately poor, families. About one-six of the school's 650 students were of Mexican parentage. Students were organized into three ability tracks, based mainly upon reading performance. The lowest track classes contained disproportionate numbers of Mexican-American and lowest-income children. Another characteristics of the school was the relatively high proportion of transfers; about 30% of the school population transferred in or out during a given year.

As is appropriate in a study based upon a single school, Rosenthal makes no claims for the representativeness of his sample. Rather, by deliberately choosing a "difficult" sample — a school with a large proportion of students from subgroups whose school performance is normally lower than the population at large — he makes the findings of a limited sample seem more convincing than they might otherwise be.

The basic components of Rosenthal's research design are an analysis of the effects of teacher expectations upon pupil performance:

Sample All children (N=320) in grades 1-6 (18 classes) in 1 school.

Experimental and Control Groups Exp. Group=20% of each class selected randomly. Control group=all others.

Experimental Treatment Tell teachers to expect unusual intellectual growth from children in experimental group.

Data collected Flanagan's TOGA (intelligence test) at beginning and end of school year.

Here Rosenthal manipulated the classroom situation, by assigning some of the children to a special treatment which was not accorded to their classmates. Rosenthal's study illustrated the application of a particular kind of research design, the classical experiment, to the classroom situation. To the extent that a design meets the rigorous requirements of the experiment: (including random assignment to the experimental treatment, a matched group of subjects for purpose of comparison, and measurement of all subjects before and after the experimental treatment) the researcher is justified in drawing certain kinds of conclusions that he could not draw in non-experimental research.

All children in grades one through six were given a nonverbal intelligence test, "disguised as a test designed to predict academic 'blooming' or intellectual gain". In each class, about 20% of the students, chosen by means of a table of random numbers, were assigned to the "experimental" condition. "The names of these children were given to each teacher who was told that their scores on the 'test for intellectual blooming' indicated they would show unusual intellectual gains during the academic year.... The experimental treatment for these children, then, consisted of nothing more than being identified to their teachers as children who would show unusual intellectual gains" (Rosenthal and Jacobson, 1966: 115-15).

For the school as a whole, the children from whom the teachers had been led to expect greater gain did show such gain, the difference between experimental and control group was statistically significant at the .02 level. This difference was greatest for the first and second graders; in fact, they accounted for most of the total difference, and

the differences were nonexistent or even in the opposite direction for the older children.

In addition to grade level, Rosenthal controlled for ability track, sex, and ethnic group. The tendency was for the middle track — the more "average" children — to benefit most from the experimental treatment, but the differences were not statistically significant. Sex differences were similarly not large or clear. While girls who were expected to show an intellectual spurt had slightly greater gains in total IQ than boys similarly designated, the relationship was complicated in that girls were overrepresented in the higher ability track, and the sex differences were contingent upon the types of IQ. Rosenthal's summary of the findings involving subjects' sex was that "girls bloom more in the reasoning sphere of intellectual functioning when some kind of unspecified blooming is expected of them. Furthermore, these gains are more likely to occur to a dramatic degree in the lower grades" (Rosenthal and Jacobson, 1968: 81). In other words, high teacher expectations seem to allow children to increase their potential in the area that is not normally perceived as "natural" to their sex, reasoning for girls, verbal skills for boys, and the younger the child, the greater the chances of affecting these abilities. From Rosenthal and Jacobson's study (1968) the most interesting findings were those relating to ethnic groups:

"In total IQ, verbal IQ, and especially reasoning IQ, children of the minority group were more advantaged by favorable expectations than were the other children, though the differences were not statistically significant. For each of the Mexican Children the magnitude of expectancy advantage was computed by subtracting from his or her IQ gain the IQ gain made by the children of the control group in his or her classroom. The resulting magnitudes of expectancy advantage were then correlated with the "Mexican-ness" of the children's faces.... For total IQ and reasoning IQ, those Mexican boys who looked more

Mexican benefitted more from teachers' favorable expectations than did the Mexican boys who looked less Mexican. There is no clear explanation for these findings, but we can speculate that the teachers' pre-experimental expectancies of the more Mexican-looking boys intellectual performance were probably lowest of all. These children may have had the most to gain by the introduction of a more favorable expectation into the minds of their teachers (p. 82)".

In evaluating the results of Rosenthal's study, the first point is that while the findings are generally supportive of Rosenthal's hypothesis, the differences are neither consistently in the direction predicted, nor are they very large. The difference for the school as a whole is mainly accounted for by large differences in two of the six grades tested. The multi-variate analysis suggests complex patterns of interaction among such variables as sex, ability level, ethnicity, and grade in school, with no consistent overall effect of teacher expectations upon all student subgroups. If one takes these various subgroups as replications of the basic experiment, one can say only that the hypothesis is supported in some but not all cases. It should also be noted that in almost all the cases where the difference between experimental and control subjects was significant, the differences were about half a standard deviation or less in magnitude. Such a difference is moderately substantial but not dramatic.

A second type of objection has to do with Rosenthal's choice of measures. The dependent variable, performance on an intelligence test, can be criticized on the grounds that it was a single test and like all single tests, limited in its range. It would have been useful to test also some of the more specific learning that took place. Some data of this sort were undoubtedly available — for instance, results of standard achievement tests or grades in various subjects.

Another objection about the dependent variable is procedural — that is, that in some cases, especially in the younger classes where the experimental treatment had the greatest effects, the post-test was given by the classroom teacher, who had been subjected to the experimental manipulation and who might thus, consciously or unconsciously, aid the children who were "supposed" to bloom. Rosenthal reported that retest resulted in groups tested by their own teacher did not differ significantly from groups tested by a school administrator who did not know which children were in the experimental group, but still one would like to see further testing controlled for possible teacher effects on the post-experimental instruments (note that this in itself would constitute a further test of the basic Rosenthal hypothesis).

With respect to the experimental variable, Rosenthal's manipulation of the teachers' expectations is dramatic, and his random selection of bloomers, by, in a sense holding constant the personal peculiarity of individual students, makes the point that this kind of treatment can produce results with virtually any kind of child and in the absence of any other stimuli to achieve. It does not, however, tell us anything about the normal selection process by which teachers come to hold different expectations for different students. A design alternative would be to manipulate the presentation of students to teachers. Given that certain kinds of children (white, middle-class, suburban) are preferred by many teachers, if one could coach students so that they more closely resembled those youngsters who are favored by the schools, this might lead to teachers' responding to these students differently. The success of researchers prepping children for IQ and achievement tests, job interviews, and so, indicates that this kind of strategy may not be as

difficult as it initially appears, that, indeed, it may be easier to change the attitudes and behavior of children than those of adult educators.

Some of the weakness in the data and its interpretation arise from the unavoidable limitations of any single-school study. Because the total number of subjects was only about 320, or whom only about 65 were in the experimental group, the researchers could say little about the characteristics of children who are most affect by rising expectations. The analysis controlling in turn for sex, ethnic group, and ability group indicated complex patterns of effect, and Rosenthal did attempt to gather some clues from detailed case studies of a small subsample of his subjects. However, in the absence of enough to hold consistent a number of variables simultaneously, understanding of the pattern of relationships is impossible. Similarly, the limited number of classes (18) allows little analysis of the kinds of teachers or teaching which are most responsive to manipulation of expectations.

Lastly, Rosenthal himself raises an important missing element. As he puts it in the summary chapter of his report, "we can only speculate as to how teachers brought about intellectual competence simply by expecting it". A number of possibilities are suggested — paying more attention to these children, treating them in a pleasanter or more encouraging fashion, using new or different teaching techniques, evaluating them differently, demanding more of them. Even by "facial expression, posture, and perhaps by her touch, the teacher may have communicated to the children of the experimental group that she expected improved intellectual performance" (Rosenthal and Jacobson, 1968: 180). The point is, though, that these are simply speculations, and that in order to learn how

attitudes get translated into actual classroom behavior, the researcher needs to be in the classroom. Therefore an important characteristic of the further study is suggested that the researchers do gather data, from observation of ongoing classroom sessions, about what teachers actually do, for instance, Flanders' study of teacher behavior by interaction analysis in his "Teacher Influence, Pupil Attitudes and Achievements (1960)".

One of Boocock's analyses has indicated, however, is that apart from its competition with other institutions, the school has the following characteristics as a social system which prevent it from being as effective as it might be:

"There is some reason to believe that students learn better when their teachers know about them as individuals and expect them to perform well. Unfortunately, in many societies, there are subgroups or categories of children who are not expected to do well in school, and school children, especially the poor and those from racial minority groups, who have been fulfilling our low expectations for them" (Boocock, 1972: 311).

A SYMBOLIC INTERACTIONIST FRAME OF REFERENCE/A SOCIAL-PSYCHOLOGICAL THEORY OF LEARNING

The three theoretical concepts, symbolic interaction, reference group, and role expectation, which have been discussed may be considered as different aspects of the social-psychological theory of human behavior, which provides the theoretical base for the present study. These social-psychological concepts are found in a social interactionist theory dealing with the method by which individuals operating within various social situations and perceiving various expectations from "others" toward their actions, develop the "appropriate" behavior in their academic role within

the school social system. A social interactionist theory of learning in school is derived from this more general theory of human behavior in which symbolic interaction, reference group and role expectation are integral parts. The concept of "academic self" can be stated as an intervening variable between the normative patterns of the social group and the role expectations held by the reference groups on one hand and the learning of the individual on the other. The expectations of others must be internalized and become part of the person's conception of oneself in order to be functional in one's behavior in the school learning situation. By taking the role of other, the student acquires a perception of his ability as a learner of the various types of skills and subjects which constitute the school curriculum. If the student perceives that he can do well in school if he works hard, this self-concept of his ability becomes the functionally increasing factor of his school achievement. On the contrary, functional limit is the term used to emphasize the perceptions of what is appropriate, desirable, and possible for the person to learn rather than the genetic organic limits on learning. Those perceptions actually operate, within broader organic limits, in determining the behavior learned.

This theoretical perspective provides the rationale for assessing the variation in school normative learning climates. The norms and expectations which characterize a school social system within which students interact are assumed to significantly affect the learning behavior of the students.

This study will examine the extent to which these climates have a relationship to varying racial composition of the school beyond the effect of such structural variables as SES of the school population, urban-rural community types, and the mean achievement of the student body.

CHAPTER III

REVIEW OF RELATED RESEARCH

SCHOOL CLIMATE

The origin of the assumption of school climate, according to McDill and Rigsby (1973), can be traced to Willard Waller's classic study (1932) on the sociology of school. The school was conceived by Waller as being a formal organization and a small society with teachers and students comprising two subcultures. The teacher subculture, Waller discussed, derived from common professional backgrounds and perspectives. Boocock (1972: 182) and Bidwell (1969: 1252) have challenged the idea of a teacher subculture.

However, McDill and Rigsby (1973) argue that whether teachers typically form a subculture in modern schools is less important for the present purposes than whether the potential for it exists. According to Waller, the student subculture grew out of the fact that socially homogeneous groups of children were drawn together through compulsory mass education. Suggesting that students participate in school as a way of life, with virtually total involvement, he believed it inevitable that they would form a subculture centered around values and interests that would be at cross-purposes with those of teachers. The conflict between students and teachers growing out of their subcultural commitments—teachers attempting to maintain order and scholastic motivation, students uniting to avoid or deflect teacher demands — would strengthen and reinforce their respective

commitments.

As indicated by Boocock (1966: 27), the terms "adolescent society", "youth society", and "adolescent subculture" are used interchangeably by writers. The phenomenon to which they refer has been considered by social scientists at several different levels, ranging from small friendship cliques in schools to a distinct youth society at the national level with its own recognizable "style of life". Regarding the amount of published literature on youth, Jahoda and Warren (1965: 138) reported: "the number of publications on adolescent behavior recorded in the Psychological Abstracts has almost trebled since 1930 in absolute terms and, relative to the overall number of publications, more or less doubled".

Many explanations for the source and persistence of a youth subculture have been offered. A substantial number of social scientists tend to agree on two points:

First, that the youth subculture does exist, and has concerns distinct from those of adult society (Gottlieb and Ramsey, 1964: 29-33; Boocock 1966: 27); One must hasten to add, however, that there is controversy on the point among researchers.

Second, that the adolescent peer group is an important force in shaping the attitudes of individual students toward school, as well as influencing their educational aspirations and achievement.

A position currently held by some scientists concerned with the study of youth in school settings is that adolescents actually comprise a semi-independent social system with distinct norms and values.

This separate system ranks its members according to criteria it defines, and has a social structure or pattern of interaction which helps

shape its cultural content. The works of Gordon (The Social System of the High School 1961) and Coleman (The Adolescent Society 1961) represent the prototype of this position.

This adolescent society is seen as the product of the rapid technological change characteristic of modern industrialized society-change which has widened the gap between generations, made parental knowledge outdated, and rendered the family incapable of adequately socializing the child (Coleman 1961: 2). By extending the period of training necessary for a child to take his place in the community, the modern industrial society has forced the school to become a major socializing agency. It controls an ever increasing amount of his time and assumes more and more responsibility for developing conformity not only with norms of scholastic achievement, but also of a much wider range of social behavior. But the school is having trouble doing the job. Students often reject many of these norms, especially scholastic ones, and fail to conform to them.

Coleman's explanation of the teenager's lack of commitment to education or outright rejection of scholastic norms is that the adolescent society's interest is focused on matters far removed from education: that is, adolescent systems often direct the flow of the participants' energies into activities which conflict with achievement goals, often subverting the efforts of the schools. This study attempts to identify certain aspects of adolescent society and the impact they have on the achievement of individual students. The principal aspects of concern are the scholastic and social "climates" of high schools.

This study takes as its starting point the results reported by

Coleman in the provocative work The Adolescent Society (1961). A number of important ideas about the sources of variation in high school social systems and their efforts on the academic attitudes of students emerged from Coleman's research on ten midwestern high schools, but several of them are either unsubstantiated or have been questioned, especially those having implications for educational policy. As the school comes to play a larger role, both in the adolescent's life and in the national development.

REVIEW OF THE RELATED RESEARCHES

McDill and Rigsby (1973: 6) pointed out that social scientists engaged in research on students in school settings have tended to direct their inquiries either toward (1) the relations between participants in the institutions, through ad hoc descriptive studies (e.g., Hollingshead, Elmtown's Youth, 1949); or (2) the relationships of individual attributes such as family socioeconomic status, sex, intelligence, and motivation to educational outcomes. The latter studies have largely been outside the realm of problems concerned with the school as a social system (e.g., Sewell, Haller, and Strous, Social Status and Educational and Occupational Aspirations 1957). Both of these lines of inquiry have ignored a promising research strategy — that of contextual analysis, which relates characteristics of the social environment to attributes of individuals (Coleman, Relational Analysis: The study of Social Organization with Survey Methods 1958). Only in recent years has attention been directed to the influence of educational and social climates on the academic behavior of students, but there have been few serious attempts to identify those factors of the school environment which are related to what and how much students learn.

Throughout this paper "behavior" is used in the broadest sense to include attitudes, perceptions, values, orientations, and aspirations as well as overt performance.

The literature reviewed here represents research on both the informal and formal aspects of school organization which are said to influence the academic behavior of students from varying backgrounds. Throughout this chapter, research at the elementary, secondary, and college levels is cited, despite the fact that the present study is restricted to elementary school environments, because we believe there are certain factors in all these environments which affect the behavior of students regardless of the age group to which they belong. For example, Coleman's research at the high school level (The Adolescent Society 1961) and Wallace's work at the college level ("Institutional and Life-Cycle Socialization of College Freshmen 1964", and "Peer Influences and Undergraduates' Aspirations for Graduate Study 1965") show similar effects of peer groups on intellectual orientation as well as McDill et al.'s study at high school level and Brookover et al.'s study at elementary level (1973) also showed similar effects of school climates on academic achievement.

Other research on the effects of group atmosphere in schools suggest that climate has its effect through providing social rewards for certain activities and not for others. In turn, those activities which are rewarded by the group are the ones in which there is strong competition and high motivation (Coleman, "The Adolescent Subculture and Academic Achievement" 1960). Such a formulation has some support among sociologists and psychologists, who report that individual students tend to adopt

the scholastic norms of the majority group (Dittes and Kelly, "Effects of Different Conditions of Acceptance upon Conformity Group Norms" 1956).

At the college level, Davis, employing a sample of students from 135 institutions, found an inverse relationship between college size and student commitment to "intellectualism". This finding is consistent with the assumption that the high intellectual commitment of student bodies in small liberal arts colleges is partly the result of low student-faculty ratios and opportunities for students to have frequent, personal contact with teachers.

Newcomb argues that intellectual productivity is a function of such factors as ability, motivation, work habits, and prevailing norms of students and faculty rather than the commonly held hypothesis by both college faculty and students that there is some magic in 'student-faculty' contact ("Student Peer-Group Influence" 1962: 485).

It would seem obvious, however, that student input factors such as sex ratio, ability level, and field of concentration and institutional environments interact to produce variations in the academic behavior of students. That is, outstanding institutions attract able students who, in turn, contribute to and reinforce those aspects of the campus environment conducive to intellectual commitment and high achievement of all students.

Two of the more notable attempts to understand the social system of a single school are Hoolingshead's study on Elmtown's Youth 1949, done in a small Illinois community in the 1940s, and Gordon's research on The Social System of the High School (1957) in the 1950s of a larger school of 600 students located in a suburban Indiana community with a heterogeneous class structure. Hollingshead focused on the relationship

of a variety of student behaviors in the school setting to the class structure of the community. He showed the extent to which both the school staff and the student social structure reflected and reinforced that of the larger community and the extent to which educational aspirations, dating behavior, clique membership, and involvement in extracurricular activities were a function of the student's family background. He also concluded that teachers gave preferential treatment to students of "privileged" backgrounds.

Gordon's study of "Wabash High" is the most comprehensive and detailed case study of a single school society. He provided a wealth of insights and supporting data on teacher-student relationships, the adolescent subsystem of the school, and the consequences of participation in this system for the student. He reported that the most important prerequisite for boy's status was participation in athletics; for girls, clothes, "personality", and puritan morality were most important. Among both sexes, intellectual commitment contributed very little to enhancing prestige. Prestige in the student structure did depend to some extent on conformity to the teacher's demands because of the teacher's capacity to disperse grades. However, the student subculture rewarded such achievement mainly because it was a requisite for participation in nonacademic activities, not because of any intrinsic value placed on learning. The overall effect of the adolescent social system was to focus the student's interests on matters removed from intellectual pursuits.

Wilson, in his "Residential Segregation of Social Classes and Aspirations of High School Boys, 1959", studied the peer group norms of boys in eight West Coast high schools. He showed that the socioeconomic

composition of the student body, which he interpreted as indexing "value climate", affects academic achievement and aspirations, occupational choices, and even the potential preferences of individual students. These contextual effects were maintained when personal and social background factors were controlled. His findings regarding climate effects on educational aspirations have been supported by Michael, using a less restrictive sample in his study on "High School Climates and Plans for Entering Colleges, 1961".

Michael's data were drawn from a large number of senior in a representative sample of more than five hundred high schools. He found that the "educational milieu" of the high school had an impact on the college plans of students, when both scholastic aptitude and socioeconomic background of students were controlled.

Turner (1964), in an attempt to understand the social context in which ambition develops, studied the effects of family background, neighborhood, and socioeconomic context of the high school on educational and occupational aspirations of high school seniors in Los Angeles. He found that the socioeconomic context of the school was almost as important as family background in accounting for variation in ambition.

Boyle (1966), in a review of four major studies of the effects of high school climate on student behavior, stated that adolescents in high school encounter experiences that have an important influence on their aspirations for further education. When high schools are classified according to the average socio-economic status of the student body, the aspirations of the individual students are influenced in the direction of the majority. Thus, working-class students attending predominantly middle-class high schools plan to attend college much more frequently than those

attending predominantly working-class high schools. The reverse process is evident among middle-class students attending working-class high schools.

Boyle goes on to discuss the importance of the effect of family background. He concludes that, of the three variables-ability, social-class background, and organizational climate-ability and social-class background are probably the most important, but they are significantly affected by the climate of the school. In those high schools with a climate supporting college attendance, ability was the most important predictor of educational aspirations, although social background also influenced a senior's decision. In the least favorable climate, social class was the more important variable.

More recently, Boyle (1966) investigated the effects of the socio-economic context of the high school on the educational aspirations of female seniors in seventy high schools in western Canada. He discovered that the social composition of the student body has an important effect on individual aspirations, but that its influence is stronger in large cities than in small communities. His results suggest that a partial explanation for this difference is the greater success of metropolitan high schools in developing the scholastic aptitude of students.

Coleman (1961), in his research on ten midwestern high schools, claimed to document the pervasive influence of adolescent social systems on student academic values and performance and on their social activities. According to McDill and Rigsby (1973: 12-13), this is one of the most important and controversial studies of the relationship between adolescent subcultures and educational outcomes conducted in the last decades. Therefore, more important findings of the study will be reviewed here.

In each of the ten schools, Coleman found that scholastic achievement was less valued by the students than other activities. On this point Tannenbaum (1962) reported a similar finding:

"Athletic-mindedness was rated as a more desirable trait than its absence. The students who stressed athletics received higher mean scores than non-athletes".

Boys valued athletics most highly; girls favored "being popular" and "being a leader in extracurricular activities". Furthermore, students of high sociometric status were less favorable toward being remembered as brilliant students than were the various student bodies as a whole, even though these "elites" came from higher socioeconomic backgrounds and were more likely to have college plans. Other comparisons between elite and nonelites led to the conclusion that the latter valued scholastic success more highly than the former.

The criteria for status in the adolescent social system were determined for boys by comparing those chosen by their peers as "best athletes" with those chosen as "best students". Girls, chosen as "best students" were compared with girls chosen as "being most popular with boys". The sociometric comparisons revealed that "athletes" were more likely to be elites than were "scholars". Similarly, "popular" girls were much more likely to have high status than were "scholars". The student body of the most affluent suburban school — the institution in which the largest proportion of students came from college-educated families and in which the highest proportion planned to enroll in college — did not highly value brilliance (it ranked seventh among the ten schools).

Unlike earlier studies in this area, Coleman attempted to show how the content of peer norms affects both academic performance and valuation

of intellectual activities. His analysis revealed that, in the schools in which grades were an important criterion for social status, students of high ability were most strongly motivated to academic achievement. That is, students of better average intellect were motivated to achieve when they received social rewards from their peers. Otherwise, their talents and energies were invested in non-scholastic activities. Coleman suggested that, in the typical high school, adolescent social systems channel the energy of teenagers in certain directions, and that they offer a set of rewards and punishments which support athletics and extracurricular activities and discourage intellectual activities.

Although Coleman's conclusion has supporters among some educational researchers, it also appears to be an over-simplification of a complex set of social-psychological processes operating in the high school and does not square with evidence from other sources. For example, achievement levels among high schools students on standardized tests are higher, on the average, than they were two decades ago, and significantly larger percentages of high school graduates are enrolled in college. These facts do not support the notion that students in general are anti-intellectual or that they typically oppress each other for intellectual or scholarly pursuits. Instead, they strongly suggest that there are many motivations for academic activities and that some of them may be non-intellectual or even anti-intellectual — for example, a desire to "get ahead in life", a desire to conform to parental pressures to achieve, or the knowledge that to avoid "unpleasant" work, one must obtain advanced education. Furthermore, "career" or job-oriented programs such as business, engineering, and pre-professional curricula attract most students to

colleges and universities, especially to the developing institutions of higher learning.

In sum, it seems unrealistic to claim that an "anti-intellectual" school climate is the major influence on students' academic performance and aspirations.

It was our proposition that students do influence each other both inside and outside the high school, but that they do so more on short-term, specific matters — e.g., music and clothes — than on long-term, general ones such as college plans, achievement, and careers.

In Turner (1964: 138-47), the influence of the youth subculture is segmental in impact and somewhat ritualistic in adherence; that is, it has jurisdictional competence only over selected aspects of the values and behavior of youth. In this light, Boocook's criticisms (1966: 28-29) of the Adolescent society are relevant:

My own reservations can perhaps be summed up by saying that many of the findings are inconsistent... For example, the members of leading crowds tended to value academic performance less but get better grades than the non-elites; the same was true of girls as compared to boys; academic values were not high in schools in which the highest proportions of students planned to attend college. That is, both on the individual and system levels there seems to be an inconsistency between the values of groups of respondents and their subsequent behavior. Three possibilities are suggested: the validity of Coleman's measures of value climate can be questioned; the peer culture may not be the only, or the strongest, influence in certain areas, such as academic performance; a lot of youngsters are under a lot of strain as a result of inconsistency between their stated values and their actual behavior.

Some of Coleman's data and conclusions regarding the existence of adolescent subcultural effects on the academic behavior of students have been challenged by other researchers and observers of adolescent behavior. For Example, Epperson (1964) has questioned his description of the conflict relationships between adolescents and adults. He presented evidence

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based on data gathered from students in a large comprehensive high school and using items selected from Coleman's original questionnaire. He also gathered data on preadolescents in the same community to test the hypothesis that, if adolescents have a distinct subculture, there should be a difference between elementary and high school students in the extent to which they are concerned about parental disapproval. His results indicated adolescents were more concerned about parental disapproval of their behavior than were preadolescents. He concluded that there is a need for a conceptual scheme which takes into account the multiple loyalties of the adolescent (e.g., to family, peers, and teachers) and the relations of these loyalties to specific situations.

Britain, in an experimental study of parent-peer expectations of adolescents, reached a similar conclusion:

"Choices of adolescents tend to derive meaning from either of two general references groups, or both: the peer society in which many status and identity needs are gratified, and the larger society in which the status positions which one can aspire to as an adult are found. When choices pertain to the latter, parents are perceived as the more competent guides" (1963: 389).

A more fundamental criticism of Coleman's work has been made by Berger (1963: 369) and by Jahoda and Warren (1965: 143), who take issue with his assumption that a separate adolescent subculture exists. Berger argues that "almost all of the values and interests of adolescents revealed by Coleman's data seem to be derivative from and shared by the great majority of their parents. It was noted that Coleman, in his most recent writing (1970: 20), did not place heavy emphasis on a separate adolescent subculture, focusing instead on adolescents' distinctiveness from other age groups in several ways: for example, clothes, language, political beliefs, and social values.

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Nevertheless, Coleman offers a rebuttal to writers such as Berger (1963), who adhere to what he refers to as the "cultural derivation" model to explain adolescent behavior. For example, Coleman argues first, that the cultural derivation mode of explanation fails to account for the fact that many of the activities engaged in by adolescents are done in the company of other adolescents and in the absence of adult; and, second, that the model fails to account for New Left Political movements and hippies, which have no analogues in the adult society.

Jahoda and Warren contend that Coleman and many other social scientists studying adolescents assume the existence of such a subculture, and select data to support their preconceptions, without even having a clear definition of concept. According to the citations in Gottlib and Ramsey (1964: 31) and in Jahoda and Warren (1965: 146-48), the Sherifs' research strategy (1940) avoided the "adolescent subculture" pitfall. They advocate approaching the study of adolescents in terms of specific social settings, concentrating on the distinctiveness of the status and normative systems to which they belong, and determining how these peer group norms and values are linked to those of the adult society.

McDill, McPartland, and Sprehe (1971) point out that the crucial issue is whether or not there are any important consequences for advancing the understanding of adolescent behavior by adhering to the view that there is an adolescent subculture (p. 537):

The answer one gives to the question of subcultural existence is a determinant of the kind of heuristic stance taken in research. To see secondary school students as comprising a subculture is to choose to study them as a relatively autonomous social system and to look for the sources of individual behavioral differences within various adolescent peer groups. To view adolescents as an age group in continuity with adults is to attempt to locate sources of their

behavior in the transmission of values from parents. Depending on the specific social setting under investigation — and this is a crucial condition — either approach can be fruitful, for the approaches represent basically a choice of intellectual strategies.

McDill and Coleman (1963 and 1965), employing a longitudinal design, further investigated the effects of high school status on academic behavior. Utilizing a freshman-to-senior-year panel analysis in six of Coleman's original ten schools, they assessed the interdependent effects of achievement orientation and school status upon college plans. They discovered that students with high status were more likely to change to a positive orientation toward college attendance and a negative orientation toward achievement than lower-status students. Conversely, students with college plans were more likely to achieve high status than those without such plans. Finally, students with a negative orientation toward achievement were more likely to gain prestige in the eyes of their peers than those positively oriented.

These results led to the inference that different socialization processes operate in the social system of the high school for students of different status. That is, for high status students, college plans were a consequence of parental or peer group socialization, while for students of lower prestige, they derived from an academic orientation toward college. Furthermore, it was inferred that high status students appeared to gain an interest in college because of the social activities it required, not because of an interest in academic achievement.

In a second study, McDill and Coleman (1965) documented the increasing effect of high school status on college plans from the beginning to the end of the high school career and showed how this influence can overcome the disadvantages of a low status family background. The study

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also revealed the differential impact of family and school status on college plans in school settings where the intellectual climate varied.

At the high school level, a limited number of researchers have been concerned with the immediate interpersonal influences of friendship cliques or peer groups on the educational and occupational aspirations of students within the institution. Haller and Butterworth (1960) used a sample of male students enrolled in a Michigan high school to test the hypothesis that occupational and educational aspirations of reciprocally chosen best friends should vary together. Their findings were inconclusive but tended, overall, not to refute the hypothesis.

Alexander and Campbell (1964), using a balance model (Heider, 1958), studied friendship influences on the college aspirations, plans, and attendance of a large sample of male high school seniors in North Carolina. They found that they were directly influenced by those of the student's friends, regardless of his socioeconomic background. These relationships were more pronounced when the friendship choices were reciprocated. In a follow-up study (Campbell and Alexander, 1965), they found support for the hypothesis that the association between the educational climate of the high school and students' college plans could be accounted for by the intervening variables of the "interpersonal influence" of close friends. Thus, they concluded that an important interpretive link between the larger social collectivity (as represented by the school) and the educational orientation of the individual student is the influence of his immediate peer group.

Several investigators have documented the influence of immediate peer groups on various measures of educational outcome at the college level.

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One of the most creative of these is a longitudinal investigation of a small midwestern liberal arts college by Wallace (1965). He found a high rate of change in graduate school aspirations among freshmen during the first two months of attendance, with the distribution of their aspiration shifting toward those of upperclassmen. Of special importance, he discovered that freshmen were more likely to move toward the prevailing upperclass aspiration toward graduate school when a higher proportion of their interpersonal contacts were non-freshmen.

Another article by Wallace (1964), from the same study, demonstrates strong peer group effects on changes in the value placed on academic achievement. One of the most important points in this article is his conclusion that different parts of a student's interpersonal environment have different influences on values relating to the future. He found that the students in the freshman's environment with whom he spent most time had more influence on his long-range goals (graduate school aspirations) than on his short-range good (importance of good grades).

At the postgraduate level, the study of a medical school by Hughes, Becker, and Geer (1962) provides further evidence of the impact of peer groups on student performance and the role such groups play in aiding the individual student to adjust to a highly competitive and threatening environment.

From the review of related research, one of the most widely accepted propositions is "the greater the degree of academic concern and emphasis in a school, the higher the achievement and aspiration levels of individual students". However, most of the research on specific aspects of school climate has been conducted at the college and high school levels, with

such investigations in elementary schools being neglected. When investigators do conduct contextual research at school, their tendency is to use educational or occupational aspirations as the dependent variable⁽¹⁾ and the average socioeconomic background of the student body as the contextual variable.⁽²⁾

(1) On this point Wilson reached a similar conclusion: Since the 1964 decision of the Supreme court requiring racial desegregation of schools, there has been a growing accumulation of social research exploring the relationships between aggregative characteristics of schools and the development of individual students attending these schools. The great majority of these studies has documented the thesis that the school environment has an independent effect molding the educational aspirations and orientation of students. Until the publication of the Coleman Report, however, there was little available evidence about the effects' of school characteristics upon measured academic achievement (1968: 80-81).

(2) These two points characterize each of the following well-known studies reviewed in this chapter: Wilson (1959), Michael (1961), Turner (1964), Campbell and Alexander (1965), and Boyle (1966). Coleman's study is an exception in that he developed direct measures of student value climates for his sample of ten schools. However, he did not have a standardized measure of achievement available, relying instead on grade-point averages as a criterion. There is a widespread tendency to "measure" the differences (between academic and social activities in the school) by merely comparing the average socioeconomic level of students across schools. Whether more direct measures of normative climates than the socioeconomic level of the neighborhood or school would reveal a closer relationship with educational aspirations must await new evidence based on actual assessments of these climates. Such evidence was not available in this study, nor has it been presented in any of the past studies" (Sewell and Armer, 1966a: 168).

This review of related studies emphasized the need for systematic investigation of the two interrelated problems. First, this study attempts to develop direct and systematic measures of the educational and social climates of elementary schools. As noted by Bidwell (1965: 992), researchers have concentrated too much on the student society, ignoring the teacher colleague group and the degree of social integration of the two components in the school society. This criticism applies to one of the most widely known and often cited works in this area, Coleman's

The Adolescent Society, which focused almost exclusively on the student social system of the school. In investigating the variations in dimensions of climates across schools, this study includes specific academic and social characteristics of the relationships among students and between students and teachers.

Second, this research focuses on a search for the sources of school climate effects by considering factors which earlier and speculative writings have suggested are important in accounting for the variations in the academic output of elementary school. The factors considered were mainly social psychological variables.

It is necessary to know whether variation in the quality of elementary schools has any effect on academic performance and aspirations of students, and, if so, what specific components of the school make a difference. It may be emphasized in this connection that the authors of recent studies at both the high school (Hauser, 1969: 611) and college (Astin, 1968: 688) levels have interpreted their data in such a way as to raise questions regarding the validity of the proposition that school quality per se is positively related to achievement of students.

It seems crucial that educational researchers systematically test this proposition in a variety of institutional settings with diverse student populations, for, if school quality makes little or no difference, radical transformations are called for throughout the entire educational system. In addition, if characteristics of school environments produce either overachieving or underachieving students, it is essential to locate their causes so that educational policymakers can effectively change the organization of school and community to enhance the academic commitment and performance of students.

In investigating the first question, a greater emphasis will be placed on aspects of the informal social organization of schools. The first is the characteristic overall demands, features, or emphases of the school in terms of relationships among students and relationship between students and teachers.

INTERRACIAL CLIMATE AND ACHIEVEMENT

Interracial contact in schools can range from acceptance and friendship to hostility; some schools are effective settings for intellectual development and others are ineffective. Racially mixed schools can be either "desegregated" or "integrated". A desegregated school includes both black and white children, but contact between races is minimal and tense; an integrated school also is interracial, but there is considerable cross-racial interaction and friendship.

Moynihan, et al. (1972) sought to investigate the notion that these differences among biracial schools are systematically related to achievement. Their basic hypothesis was that the academic achievement of Negro children in biracial schools would be highest in integrated settings. This hypothesis derived directly from the findings of extensive laboratory research on Negro performance in biracial situations, conducted over the past decade by Irwin Katz (1964, 1969a, 1969b). He found, in one experiment after another, that black subjects performed best in interracial situations free of stress and threat, moderately well in all-Negro situations, and worst in interracial situations characterized by stress and threat. Katz concluded:

The psychological evidence that I have presented is consistent with

a definition of racial integration which emphasizes the beneficial effects to Negro pupils of attending racially balanced classes when an atmosphere of genuine respect and acceptance prevails.

According to Moynihan et al. the Equal Educational Opportunity survey presents the first opportunity to pursue Katz's findings outside the laboratory. The questionnaires contain two items which may tap the integration-desegregation continuum. The first item asked teachers to judge the extent of racial and ethnic hostility in their schools; the second item asked students to estimate the extent to which their friendship groups were interracial. The latter serves as a direct measure of the interracial climates of schools, as called for by their hypothesis. Although it turned out that neither measure was really suitable for analysis, it is worth briefly recounting the reasons for this.

Coleman's study shows the importance of the attributes of other students. The educational background and aspirations of the majority of students in a school account for most variation in improving achievement patterns. He concludes that a disadvantaged child will probably not improve if he attends school with similarly disadvantaged peers. However, if the other pupils have better backgrounds and higher aspirations, he is likely to improve significantly. By contrast, white pupils from homes that value education highly who attend a school with a majority of lower-ability pupils do as well as they would with peers sharing their aspirations. These results confirm the important influence of a family background supportive of educational achievement. When this is lacking, attending a school where one's peers are academically-oriented may be an adequate substitute.

Coleman's study (1966) found that minority-group students in integrated schools were somewhat more likely to feel that they could

control their destinies than did minority-group students in segregated schools. It may be possible, therefore, to increase the internalization of formal school norms and values in minority-group students by integrating schools. By properly mixing the middle-class and lower-class students within the classroom, it is possible to increase motivation of the lower-class children.

CHAPTER IV

METHOD AND FACTOR ANALYSIS

This study examined the difference in school climate factors as perceived by black and white students in schools with varying segregated and mixed racial composition when SES and achievement controlled. The hypotheses were tested using one way analysis of variance procedure. Mean scale scores on student and teacher climate factors were used as the dependent variables. The independent variables were race, SES, urban-rural community types, and varying white and black student composition.

This study was made possible by the State of Michigan Department of Education, statewide assessment program for elementary schools, in 1970. Under this program, each elementary school in the state administered a battery of instruments to each of its students in the fourth grade, which included among its items, a standardized achievement test and an index of socioeconomic status. The mean school data from every elementary school in the state, on SES, race, and achievement were obtained from the State assessment data. Thus, the following design factors, based upon State Assessment Measurements, are applied to this research.

The structural variables, used as independent variables in this study were racial and socio-economic status composition and school achievement levels.

1. Socio-economic status Index

The index of SES, employed in this study for school selection, was developed by "The Michigan State School Assessment SES Index 1969-70".

Its purpose is to measure differences in life style and consumption patterns which, within the social structure of the United States, are generally associated with differing SES levels. Items measuring amount of family travel, parental education, stability of the home, and the students educational aspirations were also included. Those schools having a mean SES above 49.0 were considered to be high SES schools and those below were designated as low SES schools.

2. Racial Composition

School racial composition information regarding the percentage of black and white students was compiled from school records available in the Michigan State Department of Education. The chief criterion designating a school as either black and white was a student body composition of at least 70% for either race. The mixed schools in this study were 62% black.

3. Achievement Index

The standardized index of achievement is a composite score of three separate achievement tests: reading, English expression, and arithmetic. Identical tests were administered to all fourth grade students in the State. The school means for the 1970-71 school year, upon which this analysis was based, range from approximately 37.0 to 63.0. High-achieving schools had a mean score of at least 49.0.

SAMPLE

The sample for this research consists of eleven elementary schools located in various parts of the State of Michigan. This sample originally was selected non-randomly, on the basis of SES and achievement, within

three strata: predominantly white schools and predominantly black schools in urban community; and predominantly white schools and mixed schools in rural area. In order to facilitate some separate analysis, both SES and achievement were classified into high and low scoring schools.

Those schools having a mean SES above 49.0 were considered to be high socioeconomic schools and those below were designated as low SES schools.

TABLE IV-1 CHARACTERISTICS OF SCHOOLS OF SELECTED FOR STUDY: RACE, SES, ACHIEVEMENT, URBAN-RURAL, AND SAMPLE NUMBERS OF STUDENT AND TEACHER.

School	SES	Achievement	% White	Student	Teacher	
				1	2	3
1	44.9 Lower	44.6 Lower	100 (100)	53 (88)	3 (3)	Urban
2	46.8 Lower	43.7 Lower	96 (95)	54 (81)	3 (3)	
		44.2 (average)		107 (169)	6 (6)	
3	46.7 Lower	38.0 Lower	7.4 (13.8)	68 (105)	5 (6)	
4	46.7 Lower	39.6 Lower	3.5 (5.3)	227 (384)	8 (11)	
		38.8		295 (489)	13 (17)	
5	47.8 Lower	45.6 Lower	100 (100)	29 (40)	2 (2)	Rural
6	37.8 Lower	42.5 Lower	100 (100)	6 (9)	1 (1)	
		44.1		35 (49)	3 (3)	
7	47.6 Lower	45.3 Lower	28.2 (38.3)	85 (107)	6 (6)	
8	47.0 Lower	46.0 Lower	55.9 (38.6)	118 (146)	6 (6)	
		45.6		203 (253)	12 (12)	
				640 (960)	34 (38)	
9	55.1 Higher	59.6 Higher	88.6 (85)	105 (140)	6 (6)	Urban
10	58.2 Higher	54.4 Higher	100 (100)	211 (224)	8 (9)	
11	61.3 Higher	55.1 Higher	36 (30)	178 (276)	6 (6)	
				494 (640)	20 (21)	
Total				1134 (1600)	54 (59)	

1),2),3) -- Original sample numbers, included missing data.

Data were collected from the students in these sample schools. during the 1970-71 school year. The final sample consisted of all students as a group of each sampled school who were in the fourth, fifth, and some sixth grades, although the SES and achievement used for sample selection was based on data obtained from the fourth grade students the previous year. Brookover, et al. stated the reasons for which this larger sample was required:

First, this gave us the ability to check if the fifth grade population was representative of the larger group within the school. Secondly, this wider sample constitutes the "upper grades", composed of those students in the school who could best read and understand the questionnaire, as well as those having the greatest familiarity with the school, thus better able to act as reporters of the normative climate.

At that time, the rural schools closed earlier for the summer and were therefore, surveyed during the 1971-72 school year. Their selection was thus based on the fourth grade State Assessment results, Which the sixth grade students had two years earlier. Their inclusion was allowed only after a check that the most recently available State achievement results had revealed no significant change to have taken place from one year to the next (School-7-State Assessment Achievement results, 1969-70 =42.5; 1970-71=43.0).

Data were also collected from every fourth, fifth, and sixth grade teachers in each sampled school.

INSTRUMENTATION

The instruments employed for the current analysis consisted of two separate but interrelated questionnaires, one each for students, and for teachers. These were originally developed in 1969, for use in the

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study of school social environments, by Wilbur B. Brookover and Richard Gigliotti. The two questionnaires are interrelated in that they contain a core of similar questions designed to elicit attitudes and beliefs or perceptions of attitudes and beliefs of those individuals sampled. The original instruments were pre-tested in a moderate size industrial city, which the subjects were judged to have experienced difficulty in understanding the intended meaning. The two instruments are attached in Appendices.

DATA COLLECTION

Student data were collected through the use of a group administered questionnaire technique, as a part of Brookover et al.'s U.S. Office of Education Research Project No. 1-E-107 (1973). Depending upon student literacy, the questionnaire may have been read to the students in its entirety or students were asked, after a period of short instruction, to complete the instrument on a self-administered basis. This method of data collection was found to be both inexpensive and efficient.

The teacher questionnaire was strictly self-administered. It was completed by the subject during the same time period that their students were completing theirs. This allowed the research team maximum use out of time spent in the building, and also reinforced the guarantee of anonymity to the students by having their teacher out of the room.

ANALYSIS

One of the aims of this study is to analyze the differences and similarities of certain social psychological attitudinal variables

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within the group of schools in various socioeconomic, racial, and community types.

To accomplish this goal, factor analysis of a varimax rotation type was based upon patterns of variable inter-correlations, where on the basis of the response patterns of subjects, the variables are given a weighted loading score within a number of factors, which in turn are judged by the researcher as to their theoretical sense. For the present analysis, four separate varimax rotation factor analyses were performed. The first used low SES and low achievement student subjects as individual respondents and 71 items from the student questionnaire. A second analysis used 30 teachers of this low SES and low achievement schools, also treated as individuals, having their responses to 51 attitudinal items analyzed. The third factor analysis was performed on high SES and high achievement students. The fourth analysis was administered on all teachers for comparing purposes between high SES and high achievement and low SES and low achievement schools. Regarding the use of individual rather than school mean scores, for the factors, Schneider (1973: 81-82) stated that "... it added much greater stability and reliability to the results, the decision to proceed in this manner did give much greater weight to the larger schools". All individual subjects, from all schools, that had completely answered all items analyzed were given equal weight in the factor analysis.

2. FACTOR ANALYSIS

This section reports the findings, using a varimax rotation factor analysis upon data from the samples of students and teachers. The

questions related to the factor analysis were as follows: 1) In the low socioeconomic status and low achievement school setting, is the factor structure identified by school social environment questionnaire the same as the factor structure identified by the original large sample schools? 2) Would a factor analysis of responses from the low SES and low achievement school sample identify the same factors in high SES and high achievement schools? These questions were answered. The number of identifiable factors was not the same as the number in the original study; this finding was expected because of the difference in the character of the two samples. In other words, factoranalysis depends on the population which has been surveyed. Different populations did show different factors when responses were analyzed. Determination of number of factors was also an important problem. Kaiser (1960: 141-51) considered the closely interlocked problem of the number of factors. It would appear that there have been four distinguishable bases for determining the number of factors. In order of increasing importance these are (1) statistical criteria of significance, (2) algebraic criteria of necessity, (3) psychometric criteria of reliability, (4) psychological criteria of meaningfulness. Kaiser discuss these in detail. The principal component technique was used to extract the factors, and the eigenvalue criterion suggested by Kaiser (1960) was employed to determine the number of factors to be extracted. Using this criterion, the number of common factors should be equal to the number of eigenvalues greater than 1.0, if unities are used in the diagonals of the correlation matrix. Harman (1960: 363) also pointed out that this is a highly practical criterion.

The other similar way of determining the number of factors is to

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plot the eigenvalues and examine the plot for breaks in the curve (Cattell's Scree Test). The eigenvalues for the current data were presented in appendices. When eigenvalues were plotted which showed a break after four eigenvalues, in teacher data. Thus one possibility was a solution consisting of four factors in teachers and five factors in student data, according to Cattell's Scree Test.

SCHOOL CLIMATE FACTORS

I. IN LOW SES LOW ACHIEVEMENT SCHOOLS

STUDENT FACTORS

Factor 1- Student perceptions of the present evaluations-expectations of others in their school social system.

Factor 2- Student perceptions of the future evaluations-expectations of others in their school social system.

Factor 3- Student perception about the level of feeling of futility permeating the social system of the school.

Factor 4- Student perception about the level of feelings of reward/feedback for their achievement from their parents and social system.

Factor 5- Student perception of those school norms stressing academic achievement which exist in their school social system.

TEACHER FACTORS

Factor 1- Teacher reported push for competition.

Factor 2- Teacher perceived expectations.

Factor 3- Job satisfaction/commitment.

Factor 4- Teacher reported community press for achievement.

II. IN HIGH SES HIGH ACHIEVEMENT SCHOOLS

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STUDENT FACTORS

Factor 1- Student perceived present evaluations-expectations.

Factor 2- Student perceived future evaluations-expectations.

Factor 3- Student perceived sense of futility.

Factor 4- Reported student press for competition/push.

Factor 5- Importance of student role identity.

IN LOW SES AND LOW ACHIEVEMENT SCHOOLS

Factor 1- Student perceived present evaluations-expectations

The evaluations-expectations variable is divided into two separate school climate factors on the basis of a varimax factor analysis. High loading into the first of these variables were those items which concentrated upon the expectations and evaluation of others (e.g., parents, teachers, friends), as well as the students own "self-concept of academic ability" from the present through the completion of high school. The items which were loaded highly on this factor and their loading scores are below.

Question #	Proportion of Variance = .0901	
	Factor Loading Score	
65. How good of a student do your parents expect you to be in school?		-.6456
67. Would your mother and father say that your grades would be with the best, same as most, or below most of the students when you finish high school?		-.6435
66. Think of your mother and father. Do your mother and father say you can do your school work better, the same or poorer than your friends?		-.6280
44. Would your best friend say that your grades would be with the best, same as most, or below most of the students when you graduate from high school?		-.6175
59. Think of your teacher. Would your teacher say you can do school work better, the same, or poorer than other people your age?		-.6159

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|-----|--|---------|
| 37. | Forget how your teachers mark your work. How good do <u>you</u> think your own work is? | - .5892 |
| 60. | Would your teacher say that your grades would be with the best, same as most, or below most of the students when you graduate from high school? | - .5777 |
| 33. | When you finish high school, do you think you will be one of the best students, about the same as most of the students, or below most of the students? | - .5511 |
| 43. | Think of your best friend. Would yourbest friend say you can do school work better, the same, or poorer than other people your age? | - .5369 |
| 58. | How good of a student does <u>the teacher you like the best</u> expect you to be in school? | - .5229 |
| 32. | Think of the students in your class. Do you think you can do school work better, the same, or poorer than the other students in your class? | - .5210 |
| 38. | What marks do you think you <u>really can</u> get if you try? | - .5155 |
| 63. | What grades does your teacher think you can get? | - .4950 |
| 35. | If you went to college, do you think you would be one of the best students, about the same as most of the students, or below most of the students? | - .4940 |
| 47. | What grades does your best friend think you can get? | - .4905 |
| 31. | Think of your friends. Do you think you can do school work better, the same, or poorer than your friends? | - .4864 |
| 70. | What grades do your mother and father think you can get? | - .4609 |
| 42. | How good of a student does your best friend expect you to be in school? | - .4442 |

The present evaluation-expectations factor is operationally defined as the mean of the summed factor scores for the students within each of the sampled schools strata. For clarity of interpretation, a transformation was made on all of the resulting mean factor scores of the school strata category, thus a higher score in this factor means a more positive present evaluation-expectation. Strata factor scores for this evaluations-expectations are shown in Table 1.

Factor 2- Student Perceived Future Evaluations-Expectations

The second factor related to the evaluations-expectations variable of interest dealt with student perceptions of the beliefs of others (significant reference group: parents, teachers, friends and principals) concerning the subject's chances of future academic accomplishments. Also loading highly on this factor were items related to the student's future "self-concept of academic ability" and self evaluation. More specifically, the high loaded items within this factor are those items related to the reported beliefs and perceptions of beliefs about college attendance and success. The items which loaded highly on this variable are as follows. (Transformation was made on all of the resulting mean factor scores, thus allowing a higher figure in this factor score to mean more positive future evaluations-expectations. These factor scores are shown in Table 1).

Question #	Proportion of Variance = .0674	
	Factor Loading Score	
41. How far do you think your best friend believes you will go in school?		.6312
68. Do they think you could finish college (mother & father)?		-.6032
64. How far do you think your parents believe you will go in school?		.5905
45. Does your best friend think you could finish college?		-.5901
69. Remember you need more than four years of college to be a teacher or doctor. Do your mother and father think you could do that?		-.5546
57. How far do you think <u>the teacher you like best</u> believes you will go in school?		.5524
61. Does your teacher think you could finish college?		-.5197

46.	Remember you need more than four years of college to be a teacher or doctor. Does your best friend think you could do that?	-.5165
9.	If you could go as far as you wanted in school, how far would you like to go?	.4836
62.	Remember you need more than four years of college to be a teacher or doctor. Does your teacher think you could do that?	-.4656
36.	If you want to be a doctor or a teacher you need more than four years of college. Do you think you could do that?	-.4358
34.	Do you think you could finish college?	-.4176
14.	If most of the students here could go as far as they wanted in school how far would they go?	.4134
75.	How many students in this school do you think the principal believes will finish college?	-.3991
74.	How many of the students in this school do you think the principal believes will go to college?	-.3706

Factor 3- Student Perceived Sense of Futility

The most important items within this factor are those which were modification of the "sense of control" questions used by Coleman (1966). There are several additional items, however, which loaded highly on student perceived sense of futility. These items dealt with reported student perceptions of teachers' press for competition and demand for performance and to a lesser extent of other students, feelings of hopelessness or lack of caring about academic achievement, as an existing factor of school climate. The following are the high load items for this factor.

Question #	Proportion of variance = .0507	
	Factor Loading Score	
27.	People like me will never do well in school even though we try hard.	.5204
30.	You have to be lucky to get good grades in this school.	.5200

53.	Of the teachers that you know in this school how many don't care how hard the student works as long as he passes?	.5049
50.	Of the teachers that you know in this school how many don't care if the students get bad grades?	.4660
52.	Of the teachers that you know in this school how many make the students work too hard?	.4570
49.	How many teachers in this school tell students to try and get better grades than their classmates?	.4437
29.	In this school students like me don't have any luck.	.4097
26.	People like me will not have much of a chance to do what we want to in life.	.4091
54.	If the teachers in this school think a student can't do good work how many will try to make him work hard anyway?	.4010
55.	Of the teachers that you know in this school, how many think it is not good to ask more work from a student than he is able to do?	.3310
13.	How many students in this school do more studying for weekly tests than they have to?	.3118
28.	I can do well in school if I work hard.	-.2562
24.	Think about the boys and girls you play with at recess or after school. How often do they read in their free time?	.2371
25.	When you and your friends are together after school or on weekends, how often do you talk about your school work?	.2278

Factor 4- Student Perceived Rewards/Feed Back for their Achievement

Items high loaded in this student factor were those evaluating the student perceptions about the reaction toward their achievement by parents, and social system and himself. The high loaded items on this student perceived rewards/feed back for their achievement were as follows:

Question #	Proportion of Variance = .0382 Factor Loading Score
77. If I do well in school, it will be easier for me to get the job I want when I graduate.	-.6198
79. If you came home with a good report card, what would your parents most likely do?	-.6096
80. If you came home with a poor report card, what would your parents most likely do?	-.5986
76. When I do a good job on my school work, I am more popular with other students.	-.5963
81. Sometimes what you <u>want</u> to happen is not what you <u>think</u> will happen. How far do you <u>think</u> you will go in school?	-.5887
78. My parents allow me greater freedom when I do well in school.	-.5778

Factor 5- Student Perception of School Academic Norms

Items high loading in this student factor were those assessing the student perceptions about the amount of pressure placed upon achievement by members of the school social system and school bureaucracy. Within this factor, the student perception concerning the evaluation-expectations of their principal, appears to be complexly interwoven into the general normative academic push of the school environment. Other variables which have combined to form student perception of school academic norms were items designed to measure the amount of student reported teacher press for competition and demand for performance within the environment, as well as the reported and perceived importance of the student self identity or role. The following items were the high loading questions for the student perception of school academic norms factor.

Question #	Proportion of Variance = .0564 Factor Loading Score
17. If your parents told you that you were a poor student, how would you feel?	.5094
20. How do you think most of the teachers in this school react when one of the students does a bad job on school work?	.4932
23. How important do you think most of the students in this school feel it is to do well in school work?	.5062
16. How important is it to you to be a good student?	.4677
15. If the <u>teacher you like best</u> told you that you were a poor student, how would you feel?	.4453
73. How many students in this school do you think the principal believes will finish high school?	.4406
22. How important do most of the students in this <u>class</u> feel it is to do well in school work?	.4405
11. How many students in this school will work hard to get a better grade on their weekly tests than their friends do?	.4404
71. How many students in this school do you think the principal believes can get high grades?	.4275
18. If your <u>best friend</u> told you that you were a poor student, how would you feel?	.4252
48. Of the teachers that you know in this school, how many tell students to try hard to do better on tests?	.4129
10. How many students in this school try hard to get a good grade on their weekly tests?	.3879
51. Of the teachers that you know in this school, how many tell students to do extra work so that they can get better grades.	.3441
72. How do you think your principal would grade the work of the students in this school, compared to other school?	.3153
12. How many students in this school don't care if they get bad grades.	-.3083

19.	How do you think most of the students in this school react when one of you does a bad job on school work?	.2881
56.	Of the teachers that you know in this school, how many believe that students should be asked to do only work which they are able to do?	.2422
21.	What do you think most students say when a student has done good or better than he usually does in his school work?	-.0963

IN HIGH SES AND HIGH ACHIEVEMENT SCHOOLS

The following three factors consist of similar items with the factors in low SES and low achievement schools which were mentioned earlier. Therefore we do not need to repeat redundant explanations.

Factor 1- Student Perceived Present Evaluations-Expectations

Question #	Proportion of Variance = .1086	
	Factor Loading Score	
67.	Would your mother and father say that your grades would be with the best, same as most, or below most of the students when you finish high school?	-.6821
60.	Would your teacher say that your grades would be with the best, same as most, or below most of the students when you graduate from high school?	-.6709
58.	How good of a student does <u>the teacher you like the best</u> expect you to be in school?	-.6547
33.	When you finish high school, do you think you will be one of the best students, about the same as most of the students, or below most of the students?	-.6481
37.	Forget how your teachers mark your work. How good do <u>you</u> think your own work is?	-.6355
44.	Would your best friend say that your grades would be with the best, same as most, or below most of the students when you graduate from high school?	-.6311

65.	How good of a student do your parents expect you to be in school?	-.6239
59.	Think of your teacher. Would your teacher say you can do school work better, the same, or poorer than other people your age?	-.6230
66.	Think of your mother and father. Do your mother and father say you can do your school work better, the same, or poorer than your friends?	-.6142
43.	Think of your best friend. Would your best friend say you can do school work better, the same, or poorer than other people your age?	-.5890
35.	If you went to college, do you think you would be one of the best students, about the same as most of the students, or below most of the students?	-.5604
32.	Think of the students in your class. Do you think you can do school work better, the same, or poorer than the other students in your class?	-.5563
42.	How good of a student does your best friend expect you to be in school?	-.5441
63.	What grades does your teacher think you can get?	-.5415
47.	What grades does your best friend think you can get?	-.5343
38.	What marks do you think you <u>really can</u> get if you try?	-.5307
31.	Think of your friends. Do you think you can do school work better, the same, or poorer than your friends?	-.4959
70.	What grades do your mother and father think you <u>can</u> get?	-.4646
34.	Do you think you could finish college?	-.3499

Factor 2- Student Perceived Future Evaluations-Expectations

	Proportion of Variance = .0743	
Question #	Factor Loading Score	
41.	How far do you think your best friend believes you will go in school?	.6723

64.	How far do you think your parents believe you will go in school?	.6455
68.	Do they think you could finish college (mother & father)?	-.6443
9.	If you could go as far as you wanted in school, how far would you like to go?	.6356
69.	Remember you need more than four years of college to be a teacher or doctor. Do your mother and father think you could do that?	-.6097
81.	How far do you think you will go in school?	.5870
45.	Does your best friend think you could finish college?	-.5718
57.	How far do you think <u>the teacher you like best</u> believes you will go in school?	.5618
61.	Does your teacher think you could finish college?	-.5395
46.	Remember you need more than four years of college to be a teacher or doctor. Does your best friend think you could do that?	-.5369
62.	Remember you need more than four years of college to be a teacher or doctor. Does your teacher think you could do that?	-.4936
36.	If you want to be a doctor or a teacher you need more than four years of college. Do you think you could do that?	-.3819
14.	If most of the students here could go as far as they wanted in school how far would they go?	.3354
28.	I can do well in school if I work hard.	-.2317

Factor 3- Student Perceived Sense of Futility

Question #	Proportion of Variance = .0460	
	Factor Loading Score	
50.	Of the teachers that you know in this school how many don't care if the students get bad grades?	.6317
30.	You have to be lucky to get good grades in this school	.4909

27.	People like me will never do well in school even though we try hard.	.4875
52.	Of the teachers that you know in this school how many make the students work too hard?	.4744
53.	Of the teachers that you know in this school how many don't care how hard the student works as long as he passes?	.4352
26.	People like me will not have much of a chance to do what we want to in life.	.3857
29.	In this school students like me don't have any luck.	.3763
12.	How many students in this school don't care if they get bad grades.	.3051

Factor 4- Reported Student Press for Competition and Push

It appears clear, from the research evidence which is currently available, that in group climate of the two different conditions comparing academic performance in cooperative and competitive situations, cooperation creates a more pleasant environment. Deutsch (1962) theorized that when a learning environment is cooperative, the goals of individuals are so linked that they reinforce each other, creating a high correlation between the goal attainment of group members. The outcome of this situation leads to higher group achievement. Research concluding that a cooperative climate is more advantageous to group situations was conducted upon college students by Deutsch (1949), and Hains and McKeachie (1967). While neither study was able to show that a cooperative learning situation had a significant impact upon academic achievement, they did find that cooperation produced friendlier discussion groups, the memberships of which were more satisfying, less anxious, less self-oriented, more respectful of others, and displayed more apparent security. Johnson (1970) cites conflicting

evidence concerning cooperation and achievement through Gurnee's (1968) findings that maze learning was significantly greater under instructions to cooperate and Julian and Perry's (1967) findings that group members were more motivated and productive under certain degrees of competition. The short duration of two hours in Julian and Perry study, however, makes it unfair to generalize to cooperative groups where members know one another.

In cooperative situations, individuals have been found to imitate others in the group (O'Connell, 1965). This would appear to be important to achievement and to grouping practices found within schools. Sexton (1961) attributes the success Soviet education entertains at producing higher achievement might be the result of using group cooperation rather than competition. This conflicting evidence may partially be explained by the findings of French, Israel, and As (1960) in their attempted replication of the original Coch and French (1948) study, which had concluded that members involved in group democratic participation are more readily inclined to accept new group goals. The later study found that positive and negative attitudes of workers directly related to their own perceived legitimacy of involvement. It is therefore possible that achievement under conditions of cooperation and competition might be related, to the extent that students believe that it is "... right and proper to engage in the decision making process" (Schneider 1973: 62). This factor to emerge was based upon the following designated items: reported student press for competition (3 items), reported teacher press for competition (3 items), reported principal's expectations for students (3 items), academic norms of the school (2 items), reported teacher demand for performance (2

items), and reported principal's evaluations of all students (2 items).

The items which were loaded highly on this factor and their loading scores are shown below.

Question #	Proportion of Variance = .0590	
	Factor Loading	Score
74. How many of the students in this school do you think the principal believes will go to college?	.6993	
75. How many students in this school do you think the principal believes will finish college?	.6715	
73. How many students in this school do you think the principal believes will finish high school?	.6511	
71. How many students in this school do you think the principal believes can get high grades?	.6130	
72. How do you think your principal would grade the work of the students in this school, compared to other schools?	.4752	
10. How many students in this school try hard to get a good grade on their weekly tests?	.4317	
23. How important do you think most of the students in this school feel it is to do well in school work?	.4202	
22. How important do most of the students in this <u>class</u> feel it is to do well in school work?	.3812	
13. How many students in this school do more studying for weekly tests than they have to?	.3768	
11. How many students in this school will work hard to get a better grade on their weekly tests than their friends do?	.3700	
51. Of the teachers that you know in this school, how many tell students to do extra work so that they can get better grades.	.3687	
56. Of the teachers that you know in this school, how many believe that students should be asked to do only work which they are able to do?	.3682	
49. How many teachers in this school tell students to try and get better grades than their classmates?	.3450	

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|-----|---|-------|
| 54. | If the teachers in this school think a student can't do good work how many will try to make him work hard anyway? | .3391 |
| 48. | Of the teachers that you know in this school, how many tell students to try hard to do better on tests? | .3151 |

Factor 5- Importance of student Role Identity

This variable was based on the concept that an individual who had experienced previous success, would continue his efforts as a means of self-esteem maintenance. This development of a self role variable is, of course, tightly interwoven with both the expectations held by his significant others and the norms present within his environment.

The original construct was developed by Brookover et al. (1965) as part of the longitudinal study of self-concept of academic ability. It was modified and placed into its present form by Gigliotti (1969, 1972) during the preliminary phase of the present research. Although this variable has not been the subject of extensive investigation, there is indication that the importance of student role identity is positively associated with the level of school achievement. The items which loaded highly on this variable follow.

Question #	Proportion of Variance = .0416	
	Factor Loading	Score
15.	If the <u>teacher you like the best</u> told you that you were a poor student, how would you feel?	.6855
17.	If your parents told you that you were a poor student, how would you feel?	.6239
18.	If your <u>best friend</u> told you that you were a poor student, how would you feel?	.5981
19.	How do you think most of the students in this school react when one of you does a bad job on school work?	.4385

25.	When you and your friends are together after school or on weekends, how often do you talk about your school work?	.4082
16.	How important is it to you to be a good student?	.3809
24.	Think about the boys and girls you play with at recess or after school. How often do they read in their free time?	.3113

TEACHER FACTORS

A third varimax rotation factor analysis was run on the basis of the inner correlations of 51 items from the teacher questionnaire. The procedure employed was exactly the same as that used in the analysis of the student data. The teacher subjects were treated as individual respondents, rather than using school mean scores of items as a basis for factoring. This was again done in order to gain greater factor stability, but again schools which had greater numbers of teachers had greater weight than did the smaller schools in the sample. Only those teachers who had no missing data were considered for analysis, thus decreasing the number of subjects from 59 to 54. From the responses, four interpretable factors eventually emerged, these factors were:

1. Teacher reported push for competition
2. Expectations
3. Job Satisfaction (commitment)
4. Community press for achievement.

Factor 1- Teacher Reported Push for Competition

Those items which loaded highly in this factor were those which pertained to the amount of academic push which the teachers perceived to

be coming from sources other than school personnel. This, of course, appears to be closely interwoven with those questions designed to assess the perceptions of teachers about the educational values which were held within the homes of the students attending their schools. Also the items comprising this factor were those which were designed to measure the amount of push that teachers were willing to exert upon individual students in order to encourage performance greater than the teacher expectations. The following questions are the ones which highly loaded in this factor.

Question #	Proportion of Variance = .1471	
	Factor Loading Score	
56. How many students in your class will seek extra work so that they can get better grades?		.7877
55. How many students in this <u>school</u> will seek extra work so that they can get better grades?		.7492
52. How many students in your class will try hard to do better on tests than their classmates do?		.6667
50. How many students in your <u>class</u> try hard to improve on previous work?		.6648
57. How many students in this <u>school</u> don't care when other students do much better than they do?		.6613
51. How many students in this school will try hard to do better on tests than their friends do?		.6521
58. How many students in your <u>class</u> don't care when other students do much better than they do? •		-.6519
44. It is unfair to demand more work from a student than he is capable of giving.		-.6363
53. How many students in this <u>school</u> are content to do less than they should?		.5885
54. How many students in your <u>class</u> are content to do less than they should?		-.5787

46.	For most students you are careful not to push them to their frustration level.	-.5273
41.	For those students who do not have the resources which will allow them to go to college, you are careful not to promote aspirations in them which probably cannot be fulfilled.	-.4271
49.	How many students in this <u>school</u> try hard to improve on previous work?	.4741
42.	The teacher in this school push students to work too hard.	-.4046
45.	If you think a student is not able to do some of the school work you won't try to push him very hard.	-.3715

Factor 2- Teacher Evaluations of Student in Their School

The items forming this factor are those which pertain to teacher expectations of students from the immediate present and continuing through high school to college. Some items are of a more general expectations nature, with the teacher both reporting for himself, and giving his perceptions of the beliefs held by the school principal.

Question #	Proportion of Variance = .1389	
	Factor Loading Score	
19.	What percent of the students in your <u>class</u> do you expect to <u>attend</u> college?	.8023
18.	What percent of the students in this school do you expect to <u>attend</u> college?	.7771
21.	What percent of the students in your <u>class</u> do you expect to <u>complete</u> college?	.7259
34.	What percent of the students in this school do you think the principal expects to <u>attend</u> college?	.6772
15.	On the average what level of achievement can be expected of the students in your <u>class</u> ?	.6596
35.	What percent of the students in this school do you think the principal expects to <u>complete</u> college?	.6590

17.	What percent of the students in your <u>class</u> do you expect to complete high school?	.6444
20.	What percent of the students in this <u>school</u> do you expect to <u>complete</u> college?	.6341
39.	Completion of college is a realistic goal which you set for what percentage of your students?	.6222
38.	Completion of high school is a realistic goal which you set for what percentage of your students?	.6166
14.	On the average what level of achievement can be expected of the students in this <u>school</u> ?	.5616
16.	What percent of the students in this <u>school</u> do you expect to complete high school?	.5557
22.	How many of the students in this school are capable of getting mostly A's and B's?	.5527

Factor 3- Teacher Reported Feelings of Job Satisfaction

An unpure factor, as measured by the number of high load items emerging from our factor analysis, consisted of a broad range of items, designed to assess degree of teacher commitment with his present school, reported principal evaluations-expectations, community press for achievement and teacher press for performance. The following items are those high loading within this factor.

Question #	Proportion of Variance = .0995	
	Factor Loading Score	
36.	How many students in this school do you think the principal believes are capable of getting mostly A's and B's?	.7896
37.	How do you think the principal rates the academic ability of students in this school, compared with other schools?	.6221
29.	How much do you enjoy your teaching responsibilities in this school?	.6094

30.	If someone were to offer you an interesting and secure non-teaching-job for \$1,000 more a year, how seriously would you consider taking the job?	-.5468
43.	How many teachers in this school aren't concerned how hard most students work as long as they pass?	-.5231
48.	How many teachers encourage students go seek extra work so that the students can get better grades?	.4749
31.	If someone were to offer you an interesting and secure non-teaching-job for \$3,000 more a year, how seriously would you consider taking the job?	-.4085
61.	How many parents in this school service area expect their children to complete high school?	.4026
40.	How often do you stress to your students the necessity of a post high school education for a good job and/or a comfortable life?	.3727
62.	How many parents in this school service area expect their children to complete college?	.3523
33.	What percent of the students in this school do you think the principal expects to <u>complete</u> high school?	.3377

Factor 4- Community Press for Achievement

This factor also ranged broadly, from community press for educational achievement of students, reported aspirations of students, to reported teacher press for student competition. The following items are those high loading within this factor.

Question #	Proportion of Variance = .0956	
	Factor Loading Score	
24.	How would you rate the academic ability of the students in this <u>school</u> compared to other schools?	-.6158
27.	What percent of the students in this school would you say want to go to college?	-.6138
32.	How often do you stay after school to help students?	-.5884

60.	The parents of this school service area are deeply concerned that their children receive a top quality education.	-.5854
25.	What percent of the students in this <u>school</u> would you say want to complete high school?	-.5475
28.	What percent of the students in your <u>class</u> would you say want to go to college?	-.5380
59.	The parents in this school service area regard this school primarily as a baby-sitting agency.	-.5359
64.	How many of the parents in this school service area like feedback from the principal and teachers on how their children are doing in school?	-.5323
63.	How many of the parents in this school service area don't care if their children obtain low grades?	-.5316
23.	How many students in your <u>class</u> are capable of getting mostly A's and B's?	-.5293
47.	How many teachers in this school encourage students to try hard to improve on previous test scores?	.4631
26.	What percent of the students in your <u>class</u> would you say what to complete high school?	-.4532

In order to compare the teacher attitudinal climate difference between high SES-high Achievement and low SES low achievement schools in the same basis, the fourth factor analysis was run in all teacher data (N=100), and similar four factors were emerged as the factors in the low SES low achievement schools.

Factor 1- Teacher Evaluations-Expectations

Question #	Proportion of Variance = .1761	
	Factor Loading Score	
20.	What percent of the students in this <u>school</u> do you expect to <u>complete</u> college?	.8179

35.	What percent of the students in this school do you think the principal expects to <u>complete</u> college?	.8100
18.	What percent of the students in this school do you expect to <u>attend</u> college?	.7991
21.	What percent of the students in your <u>class</u> do you expect to <u>complete</u> college?	.7987
34.	What percent of the students in this school do you think the principal expects to <u>attend</u> college?	.7975
19.	What percent of the students in your <u>class</u> do you expect to <u>attend</u> college?	.7821
62.	How many parents in this school service area expect their children to complete college?	.6876
39.	Completion of college is a realistic goal which you set for what percentage of your students?	.6625
27.	What percent of the students in this school would you say what to go to college?	.6312
22.	How many of the students in this school are capable of getting mostly A's and B's?	.6246
37.	How do you think the principal rates the academic ability of students in this school, compared with other school?	.6011
28.	What percent of the students in your <u>class</u> would you say want to go to college?	.5924
36.	How many students in this school do you think the principal believes are capable of getting mostly A's and B's?	.5880
23.	How many students in your class are capable of getting mostly A's and B's?	.5460
24.	How would you rate the academic ability of the students in this <u>school</u> compared to other schools?	.5384
26.	What percent of the students in your class would you say want to complete high school?	.3458

Factor 2- Reported Student Press for Competition

Question #	Proportion of Variance = .1090	
	Factor Loading Score	
57.	How many students in this <u>school</u> don't care when other students do much better than they do?	-.7994
58.	How many students in your <u>class</u> don't care when other students do much better than they do?	.7475
52.	How many students in your class will try hard to do better on tests than their classmates do?	-.7126
51.	How many students in this school will try hard to do better on tests than their friends do?	-.7049
63.	How many of the parents in this school service area don't care if their children obtain low grades?	-.5974
55.	How many students in this <u>school</u> will seek extra work so that they can get better grades?	-.5415
60.	The parents of this school service area are deeply concerned that their children receive a top quality education.	-.5328
56.	How many students in your class will seek extra work so that they can get better grades?	-.5280
54.	How many students in your <u>class</u> are content to do less than they should?	.5245
53.	How many students in this school are content to do less than they should?	-.4801
50.	How many students in your <u>class</u> try hard to improve on previous work.	-.4107
40.	How often do you stress to your students the necessity of a post high school education for a good job and/or a comfortable life?	-.2623

Factor 3- Teacher Demand for Performance

Question #	Proportion of Variance = .0870	
	Factor Loading Score	
16.	What percent of the students in this <u>school</u> do you expect to complete high school?	.6770

17.	What percent of the students in your <u>class</u> do you expect to complete high school?	.5880
33.	What percent of the students in this school do you think the principal expects to <u>complete</u> high school?	.5823
38.	Completion of high school is a realistic goal which you set for what percentage of your students?	.5437
14.	On the average what level of achievement can be expected of the students in this <u>school</u> ?	.5317
61.	How many parents in this school service area expect their children to complete high school?	.5072
15.	On the average what level of achievement can be expected of the students in your <u>class</u> ?	.4918
44.	It is unfair to demand more work from a student than he is capable of giving.	.4785
45.	If you think a student is not able to do some of the school work you won't try to push him very hard.	.4048
46.	For most students you are careful not to push them to their frustration level.	.3940
41.	For those students who do not have the resources which will allow them to go to college, you are careful not to promote aspirations in them which probably cannot be fulfilled.	.3707
43.	How many teachers in this school aren't concerned how hard most students work as long as they pass?	-.3678
47.	How many teachers in this school encourage students to try hard to improve on previous test scores?	.3370
42.	The teacher in this school push students to work too hard.	.1999

Factor 4- Job Satisfaction (Commitment)

Question #	Proportion of Variance = .0817	
	Factor Loading Score	
30.	If someone were to offer you an interesting and secure non-teaching-job for \$1,000 more a year, how seriously would you consider taking the job?	-.7432

31.	If someone were to offer you an interesting and secure non-teaching-job for \$3,000 more a year, how seriously would you consider taking the job?	-.6757
29.	How much do you enjoy your teaching responsibilities in this school?	.6217
59.	The parents in this school service area regard this school primarily as a "baby-sitting" agency.	.4684
49.	How many students in this school try to improve on previous work?	.4658
64.	How many of the parents in this school service area like feedback from the principal and teachers on how their children are doing in school?	.4118
25.	What percent of the students in this <u>school</u> would you say want to complete high school?	.3650
48.	How many teachers encourage students to seek extra work so that the students can get better grades?	.3015
32.	How often do you stay after school to help students	.1520

The factor analysis from the two sub-samples, low SES low achievement and high SES high achievement schools, revealed quite similar factors with minor differences. In both samples, factor 1- present evaluations-expectations included 18 items and factor 2- future evaluations-expectations included 14 items were exactly same. Factor 3- sense of futility were also quite similar structures. Factor 3 consisted of 14 items in low SES and low achievement schools, and only 7 of these items in high SES and high achievement schools. Factor 4- reward/feedback did not appear in high SES and high achievement schools. Factor 5 in low SES and low achievement schools was identified as school norms. This consisted of 18 items, which included 9 items dealing with press for competition or push which made up a part of factor 4 in high SES and high achievement schools, 5 items dealing with importance of student role identity which

were in factor 5 in high SES and high achievement schools, and 4 items which did not appear in high SES and high achievement school factors. The difference in last two factors may result from the different sample structure: (1) higher vs. lower in school mean SES; (2) higher vs. lower in school mean achievement; (3) urban population vs. urban-rural mixed composition of population in low SES and low achievement schools. It was found that the three major factors were quite similar, but the differences indicated appeared in two factors. SES, achievement, community types appeared to be not an important discriminator for factor structures in these schools.

CHAPTER V

RESULTS OF DATA ANALYSIS

In this chapter the results of data analysis are reported. The statistical hypotheses were tested using one way analysis of variance procedures. Mean scale scores on student and teacher climate factors were used as the dependent variables. The independent variables were race, socio-economic status, and rural-urban community types. The major analyses examined the difference in school climate factors among varying racial groups when the socio-economic status composition and achievement level in the schools were controlled. All hypotheses were tested using the .05 alpha level with the appropriate degrees of freedom. A summary of the data analysis is reported according to the hypotheses.

HYPOTHESIS 1- Students' climate scores will differ significantly among predominantly urban white, urban black, rural white, and rural mixed schools with low SES and low achievement.

TABLE 1- THE DIFFERENCES IN STUDENTS' CLIMATE FACTOR SCORES AMONG URBAN WHITE, URBAN BLACK, RURAL WHITE, AND RURAL MIXED SCHOOLS WITH LOW SES AND LOW ACHIEVEMENT.

(1)				
Factor	Category	Mean	SD	Probability
1. Present evaluations- expectations	1	-.249	.906	.0005 **
	2	.135	1.019	
	3	-.433	1.190	
	4	.010	.946	

TABLE 1 (continued)

Factor	Category	Mean	SD	Probability
2. Future evaluations- expectations	1	.014	1.017	.039 *
	2	.110	.974	
	3	-.146	1.082	
	4	-.142	1.004	
3. Sense of futility	1	.236	1.082	.0005 **
	2	-.207	1.027	
	3	.182	.897	
	4	.144	.874	
4. Reward/feedback	1	.237	.672	.005 **
	2	-.244	1.266	
	3	.230	.625	
	4	.190	.609	
5. School norms	1	-.203	1.004	.136
	2	.056	1.052	
	3	.074	.929	
	4	.013	.926	

* $p < .05$ ** $p < .01$

(1) Category	1. Students in urban white schools	N= 107
	2. Students in urban black schools	293
	3. Students in rural white schools	35
	4. Students in rural mixed schools	203
	Total	604

Hypothesis 1 was accepted except factor 5, there were significant differences in students' climate factors except school norms among urban white, urban black, rural white, and rural mixed schools with low SES and low achievement.

TABLE 1 (A) - RANK ORDER IN STUDENTS' CLIMATE FACTOR SCORES AMONG URBAN WHITE, URBAN BLACK, RURAL WHITE, AND RURAL MIXED SCHOOLS WITH LOW SES AND LOW ACHIEVEMENT LEVELS.

	Factos ⁽¹⁾				
	1 **	2 *	3 **	4 **	5
Urban white schools	3	2	4	1	4
Urban black schools	1	1	1	4	2
Rural white schools	4	4	3	2	1
Rural mixed schools	2	3	2	3	3

* $p < .05$ ** $p < .01$

- (1) Factor 1- Present evaluations-expectations.
 Factor 2- Future evaluations-expectations.
 Factor 3- Sense of futility.
 Factor 4- Reward/feedback.
 Factor 5- School norms.

Among three main factors; present evaluations-expectations, future evaluations-expectations, and sense of futility, the rank order from more favorable climate factor was as follows:

1. urban black schools (N= 295).
2. rural mixed schools (N= 203).
3. urban white schools (N= 107).
4. rural white schools (N= 35).

Predominantly black schools and mixed schools in which black students are majority (62%) scored more favorably in the three main climate factor scores than predominantly white schools with low SES and low achievement levels.

HYPOTHESIS 2- White students in urban white, rural white, and rural mixed schools with low SES and low achievement will perceive school climate differently.

TABLE 2- THE DIFFERENCES IN WHITE STUDENTS' CLIMATE FACTOR SCORES IN URBAN WHITE, RURAL WHITE, AND RURAL MIXED SCHOOLS WITH LOW SES AND LOW ACHIEVEMENT LEVELS.

Factor	(1)			
	Category	Mean	SD	Probability
1. Present evaluations- expectations	1	-.249	.906	.382
	2	-.433	1.190	
	3	-.161	.993	
2. Future evaluations- expectations	1	.014	1.017	.026 *
	2	-.146	1.082	
	3	-.381	.983	
3. Sense of futility	1	.236	1.082	.456
	2	.182	.897	
	3	.382	.836	
4. Reward/feedback	1	.237	.622	.995
	2	.230	.672	
	3	.242	.625	
5. School norms	1	-.203	1.004	.230
	2	.074	.929	
	3	-.033	.855	

* $p < .05$

(1) Category	1. Urban all white students	N= 107
	2. Rural all white students	35
	3. White students (38%) in rural mixed schools	90
	Total	232

In general, hypothesis 2 was rejected in factors 1, 3, 4, and 5. Significant difference was found only in factor 2 among three groups. The white students in rural mixed schools scored lower than urban all white students and rural all white students in future evaluations-expectations.

HYPOTHESIS 3- White student (38%) and black students (62%) in rural mixed schools with low SES and low achievement will perceive school climate differently.

TABLE 3- THE DIFFERENCE IN CLIMATE FACTOR SCORES BETWEEN WHITE STUDENTS (38%) AND BLACK STUDENTS (62%) IN RURAL MIXED SCHOOLS WITH LOW SES AND LOW ACHIEVEMENT LEVELS.

(1)				
Factor	Category	Mean	SD	Probability
1. Present evaluations-expectations	1	-.161	.993	.022 *
	2	.145	.889	
2. Future evaluations-expectations	1	-.381	.983	.002 **
	2	.049	.983	
3. Sense of futility	1	.382	.836	.0005 **
	2	-.045	.861	
4. Reward/feedback	1	.242	.564	.270
	2	.147	.641	
5. School norms	1	-.033	.855	.536
	2	.049	.981	

* $p < .05$ ** $p < .01$

(1) Category	1. White students (38%) in rural mixed schools	N= 90
	2. Black students (62%) in rural mixed schools	113
	Total	203

The hypothesis 3 was accepted except factors 4 and 5.

Significant differences between white and black students in mixed rural schools with low SES and low achievement levels were found in three main factors; present evaluations-expectations, future evaluations-expectations, and sense of futility. The black majority students (62%) scored more favorably in the three main factors 1, 2, and 3.

HYPOTHESIS 4- White students (38%) in rural mixed schools will perceive a more favorable climate than students in all white rural schools with low SES and low achievement levels.

TABLE 4- THE DIFFERENCE IN CLIMATE FACTOR SCORES BETWEEN WHITE STUDENTS (38%) IN RURAL MIXED SCHOOLS AND STUDENTS IN ALL WHITE RURAL SCHOOLS WITH LOW SES AND LOW ACHIEVEMENT LEVELS.

Factor	(1)		Mean	SD	Probability
	Category				
1. Present evaluations- expectations	1	-.433	1.190	.196	
	2	-.161	.993		
2. Future evaluations- expectations	1	-.146	1.082	.245	
	2	-.381	.983		
3. Sense of futility	1	.182	.897	.242	
	2	.382	.836		
4. Reward/feedback	1	.230	.625	.918	
	2	.242	.564		
5. School norms	1	.074	.929	.542	
	2	-.033	.855		
(1) Category 1. All white students in rural schools				N=	35
2. White students (38%) in rural mixed schools					90
Total					125

The hypothesis 4 was rejected, there were no significant difference between all white students and white students in mixed schools with low SES and low achievement levels in five student climate factor scores.

HYPOTHESIS 5- White students (38%) in rural mixed schools will perceive climate factors more favorably than white students in urban all white schools with low SES and low achievement.

TABLE 5- THE DIFFERENCE IN CLIMATE FACTOR SCORES BETWEEN WHITE STUDENTS (38%) IN RURAL MIXED SCHOOLS AND WHITE STUDENTS IN URBAN ALL WHITE SCHOOLS WITH LOW SES AND LOW ACHIEVEMENT LEVELS.

(1)				
Factor	Category	Mean	SD	Probability
1. Present evaluations- expectations	1	-.250	.906	.513
	2	-.161	.993	
2. Future evaluations- expectations	1	.014	1.017	.006 **
	2	-.381	.983	
3. Sense of futility	1	.236	1.082	.299
	2	.382	.836	
4. Reward/feedback	1	.237	.672	.952
	2	.242	.564	
5. School norms	1	-.203	1.004	.206
	2	-.033	.856	

** $p < .01$

(1) Category 1. All white students in urban schools	N= 107
2. White students (38%) in rural mixed schools	90
Total	197

The hypothesis 5 was rejected. There were no significant difference between all white students in urban schools and white students (38%) in rural mixed schools in factors 1, 3, 4, and 5. Significant difference was found only in future evaluations-expectations, but the direction was reversed that all white students in urban schools scored higher in factor 2 than white students (38%) in rural mixed schools.

HYPOTHESIS 6- Black students (62%) in rural mixed schools will perceive climate factors more favorably than black students in predominantly urban black schools with low SES and low achievement.

TABLE 6- THE DIFFERENCE IN CLIMATE FACTOR SCORES BETWEEN BLACK STUDENTS (62%) IN RURAL MIXED SCHOOLS AND BLACK STUDENTS IN PREDOMINANTLY URBAN BLACK SCHOOLS WITH LOW SES AND LOW ACHIEVEMENT.

Factor	(1)		Mean	SD	Probability
	Category				
1. Present evaluations- expectations	1		.135		.928
	2		.145		
2. Future evaluations- expectations	1		.110		.578
	2		.049		
3. Sense of futility	1		-.207		.139
	2		-.045		
4. Reward/feedback	1		-.244	1.267	.002 **
	2		.147	.641	
5. School norms	1		.056		.949
	2		.049		

** $p < .01$

(1) Category 1. Black students in predominantly black urban schools N=295
 2. Black students (62%) in rural mixed schools 113
 Total 408

In general, hypothesis 6 was rejected except factor 4.

There were no significant difference between black students in predominantly black urban schools and black students (62%) in rural mixed schools with low SES and low achievement in factors 1, 2, 3, and 5. Significant difference was found only in reward/feedback, in which black students (62%) in rural mixed schools scored higher than black students in predominantly black urban schools.

HYPOTHESIS 7- Teachers' school climate factor scores will vary significantly among urban white, urban black, rural white, and rural mixed schools with low SES and low achievement.

TABLE 7- THE DIFFERENCES IN TEACHERS' CLIMATE FACTOR SCORES AMONG URBAN WHITE, URBAN BLACK, RURAL WHITE, AND RURAL MIXED SCHOOLS WITH LOW SES AND LOW ACHIEVEMENT.

Factor	Category	Mean	SD	Probability
1. Teacher reported push for competition	1	-.070	1.496	.602
	2	-.424	1.301	
	3	.260	1.327	
	4	.288	.992	
2. Expectations	1	.664	1.567	.545
	2	-.154	1.266	
	3	-.298	.221	
	4	-.143	1.165	
3. Job satisfaction/commitment	1	.467	1.013	.351
	2	-.210	.828	
	3	.507	.482	
	4	-.202	1.023	
4. Community press for achievement	1	-.379	.741	.132
	2	.554	.993	
	3	-.180	.219	
	4	-.181	.780	

(1) Category	1. Teachers in urban white schools	N= 6
	2. Teachers in urban black schools	9
	3. Teachers in rural white schools	3
	4. Teachers in rural mixed schools	12
	Total	30

The hypothesis 7 was rejected, there were no significant differences among four groups in four teachers' climate factors. It is limited to generalize, since the numbers of teachers in each category are very small.

HYPOTHESIS 8- Teachers' perception of school climate factors differ significantly among predominantly white, predominantly black, and mixed schools with low SES and low achievement.

TABLE 8- THE DIFFERENCES IN TEACHERS' CLIMATE FACTOR SCORES AMONG PREDOMINANTLY WHITE, PREDOMINANTLY BLACK AND MIXED SCHOOLS WITH LOW SES AND LOW ACHIEVEMENT.

(1)				
Factor	Category	Mean	SD	Probability
1. Teacher reported push for competition	1	.040	1.366	.418
	2	-.424	1.301	
	3	.288	.992	
2. Expectations	1	.344	1.334	.619
	2	-.154	1.267	
	3	-.143	1.165	
3. Job satisfaction/ commitment	1	.480	.829	.189
	2	-.210	.828	
	3	-.202	1.023	
4. Community press for achievement	1	-.312	.604	.061
	2	.554	.993	
	3	-.181	.780	
(1) Category	1. Teachers in white schools		N= 9	
	2. Teachers in black schools		9	
	3. Teachers in mixed schools		12	
	Total		30	

The hypothesis 8 was rejected, there were no significant differences in four teachers' climate factors among predominantly white schools, predominantly black schools, and mixed schools with low SES and low achievement. It is limited to generalize since the small number of teachers in each category schools.

HYPOTHESIS 9- Black students in predominantly white (85%) and predominantly black (70%) mixed urban schools with high SES and high achievement will perceive school climate factors differently.

TABLE 9- THE DIFFERENCES IN CLIMATE FACTOR SCORES BETWEEN BLACK STUDENTS IN PREDOMINANTLY WHITE (85%) AND PREDOMINANTLY BLACK (70%) MIXED URBAN SCHOOLS WITH HIGH SES AND HIGH ACHIEVEMENT.

Factor	Category ⁽¹⁾	Mean	SD	Probability
1. Present evaluations- expectations	1	-.247	1.072	.035 *
	2	.358	.920	
2. Future evaluations- expectations	1	-.354	1.047	.157
	2	.035	.884	
3. Sense of futility	1	-.355	1.053	.583
	2	-.545	1.151	
4. Press for	1	-.885	.897	.026 *
	2	-.157	1.080	
5. Importance of role identity	1	.337	1.132	.260
	2	-.051	1.127	

* $p < .05$

(1) Category 1. Black students (15%) in predominantly white school N= 12
 2. Black students (70%) in predominantly black school 114
 Total 126

In general, hypothesis 9 was rejected except factors 1 and 4. There were no significant difference between black students (N= 12) in predominantly white (85%) and predominantly black (70%) mixed urban schools with high SES and high achievement in factors 2, 3, and 5. Significant difference was found in present evaluations- expectations and press for competition/push, in which black majority students scored higher than the black minority students.

HYPOTHESIS 10- White students in all white, predominantly white (85%) and predominantly black (70%) urban schools with high SES and high achievement will perceive school climate factors differently.

TABLE 10- THE DIFFERENCES IN CLIMATE FACTOR SCORES AMONG WHITE STUDENTS IN ALL WHITE, PREDOMINANTLY WHITE (85%) AND PREDOMINANTLY BLACK (70%) URBAN SCHOOLS WITH HIGH SES AND HIGH ACHIEVEMENT.

Factor	Category ⁽¹⁾	Mean	SD	Probability
1. Present evaluations- expectations	1	-.159	.981	.0005 **
	2	-.393	.888	
	3	.504	.973	
2. Future evaluations- expectations	1	-.00005	1.085	.570
	2	-.071	.976	
	3	.107	.943	
3. Sense of futility	1	.117	.848	.236
	2	.300	.902	
	3	.214	.947	
4. Press for competition	1	.037	.912	.005 **
	2	-.065	.881	
	3	.419	1.152	
5. Importance of role identity	1	-.034	1.020	.380
	2	-.011	.699	
	3	.155	1.050	

** $p < .01$

(1) Category 1. All white students	N= 211
2. White students (85%) in predominantly white school	93
3. White students (30%) in predominantly black school	64
Total	368

Generally, hypothesis 10 was rejected except factors 1 and 4. Significant differences among white students in all white, predominantly white (85%) and predominantly black (70%) urban schools with high SES and high achievement was found in present evaluations-expectations and press for competition/push. White students (30%) in predominantly black school scored highest and white students (85%) in predominantly white school scored lowest in the factors 1 and 4.

HYPOTHESIS 11- Black students (70%) will perceive the school climate more favorably than white students (30%) in an urban mixed school with high SES and high achievement.

TABLE 11- THE DIFFERENCE IN CLIMATE FACTOR SCORES BETWEEN BLACK STUDENTS (70%) AND WHITE STUDENTS (30%) IN AN URBAN MIXED SCHOOL WITH HIGH SES AND HIGH ACHIEVEMENT.

Factor	Category ⁽¹⁾	Mean	SD	Probability
1. Present evaluations- expectations	1	.504	.973	.320
	2	.358	.920	
2. Future evaluations- expectations	1	.107	.943	.613
	2	.035	.884	
3. Sense of futility	1	.214	.947	.0005 **
	2	-.545	1.151	
4. Press for competition/push	1	.419	1.152	.001 **
	2	-.157	1.080	
5. Importance of role identity	1	.155	1.050	.234
	2	-.051	1.127	

** $p < .01$

(1) Category 1. White students (30%) N= 64
 2. Black students (70%) 114
 Total 178

In general, hypothesis 11 was rejected except factors 3 and 4. There were no significant difference between white and black students in an urban mixed school with high SES and high achievement in factors 1,2, and 5. Significant difference between white and black students in this urban mixed school was found in sense of futility and press for competition/push. It was exceptional that black students (70%) scored favorably than white students (30%) in sense of futility. In press for competition/push, white students scored higher than black students.

HYPOTHESIS 12- White students in an all white urban school perceive climate factors less favorably than white students (30%) in predominantly black urban school with high SES and high achievement.

TABLE 12- THE DIFFERENCE IN CLIMATE FACTOR SCORES BETWEEN WHITE STUDENTS IN AN ALL WHITE URBAN SCHOOL AND WHITE STUDENTS (30%) IN A PREDOMINANTLY BLACK URBAN SCHOOL WITH HIGH SES AND HIGH ACHIEVEMENT.

Factor	Category ⁽¹⁾	Mean	SD	Probability
1. Present evaluations- expectations	1	.504	.973	.0005 **
	2	-.159	.981	
2. Future evaluations- expectations	1	.107		.478
	2	.00005		
3. Sense of futility	1	.214		.437
	2	.117		
4. Press for competition/push	1	.419	1.152	.006 **
	2	.037	.912	
5. Importance of role identity	1	.155		.200
	2	-.034		

**** p < .01**

(1) category 1. White students (30%) in predominantly black school	N= 64
2. White students in all white urban school	211
Total	275

Generally, the hypothesis 12 was rejected except factor 1 and 4. Significant difference between white students in an all white urban school and white students (30%) in a predominantly black urban school with high SES and high achievement was found in present evaluations-expectations and press for competition/push. White students (30%) in a predominantly black urban school scored higher in present evaluations-expectations and press for competition/push than white students in an all white urban school.

HYPOTHESIS 13- White students (85%) perceive the school climate more favorably than black students (15%) in an urban mixed school with high SES and high achievement.

TABLE 13- THE DIFFERENCE IN SCHOOL CLIMATE FACTOR SCORES BETWEEN WHITE STUDENTS AND BLACK STUDENTS (15%) IN AN URBAN MIXED SCHOOL WITH HIGH SES AND HIGH ACHIEVEMENT.

Factor	(1)		Mean	SD	Probability
	Category				
1. Present evaluations- expectations	1	-.393	.888	.600	
	2	-.247	1.072		
2. Future evaluations- expectations	1	-.071	.976	.351	
	2	-.354	1.047		
3. Sense of futility	1	.300	.902	.022 *	
	2	.355	1.053		
4. Press for competition/push	1	-.065	.881	.003 **	
	2	-.885	.897		
5. Importance of role identity	1	-.011	.699	.137	
	2	.337	1.132		

* $p < .05$

** $p < .01$

(1) Category 1. White students (85%) N= 93
 2. Black students (15%) 12
 Total 105

Generally, hypothesis 13 was rejected except factors 3 and 4. Significant difference between black and white students in an urban mixed school with high SES and high achievement was found only factors 3 and 4, sense of futility and press for competition/push, in which white students (85%) scored favorably than the black students (15%). There were no significant difference between white and black students in this urban mixed school among factors 1, 2, and 5.

1

HYPOTHESIS 14- Teachers' school climate factor scores will differ significantly between high-SES-high-achievement and low-SES-low-achievement schools.

TABLE 14- THE DIFFERENCE IN TEACHERS' SCHOOL CLIMATE FACTOR SCORES BETWEEN HIGH-SES-HIGH-ACHIEVEMENT SCHOOLS.

Factor	Category ⁽¹⁾	Mean	SD	Probability
1. Teacher evaluations- expectations	1	-.439	1.044	.0005 **
	2	.604	.888	
2. Reported press for competition	1	-.074	.875	.872
	2	-.023	1.266	
3. Teacher demand for performance	1	-.405	.945	.004 **
	2	.403	.940	
4. Job satisfaction	1	-.450	.640	.044 *
	2	.087	1.089	

* $p < .05$ ** $p < .01$

(1) Category 1. Teachers in high SES and high achievement schools	N= 22
2. Teachers in low SES and low achievement schools	30
Total	52

The hypothesis 14 was accepted except factor 2. Significant difference in teachers' school climate factors was found in evaluations-expectations, demand for performance and job satisfaction, in which teachers in low SES and low achievement schools scored higher than teachers in high SES and high achievement schools. Because of the small number of sampled teachers, generalization is limited.

HYPOTHESIS 15- There will be significant differences in students' climate factor scores among classes in a rural mixed school with low SES and low achievement levels.

TABLE 15- THE DIFFERENCES IN STUDENTS' CLIMATE FACTOR SCORES AMONG CLASSES IN A RURAL MIXED SCHOOL WITH LOW SES AND LOW ACHIEVEMENT (SCHOOL 7).

Factor	Classes	Mean	SD	Probability
1. Present evaluations- expectations	1	.298	.829	.078
	2	-.104	.881	
	3	.156	.826	
	4	-.454	1.064	
	5	-.659	.871	
	6	.116	1.095	
2. Future evaluations- expectations	1	.121	.975	.035 *
	2	-.737	1.140	
	3	-.710	1.124	
	4	-.212	.958	
	5	-.741	.730	
	6	-.00003	.828	
3. Sense of futility	1	.728	.455	.001 **
	2	-.227	.939	
	3	-.135	.662	
	4	-.214	.990	
	5	-.342	1.041	
	6	-.086	.768	
4. Reward/feedback	1	.375	.514	.536
	2	.056	.763	
	3	.165	.321	
	4	.378	1.011	
	5	.198	.482	
	6	.051	.671	
5. School norms	1	.089	.649	.0005 **
	2	.758	.868	
	3	-.735	.786	
	4	-.114	.808	
	5	.412	.797	
	6	.179	.720	

* $p < .05$ ** $p < .01$

TABLE 15-1

NUMBER OF STUDENT IN EACH CLASSROOM (SCHOOL NO. 7/25).

Class	White student	Black student	Total
1	6	16	22
2	2	6	8
3	5	10	15
4	4	6	10
5	3	7	10
6	4	16	20
Total	24	61	85

Hypothesis 15 was accepted except factors 1 and 4. Significant difference in school climate factors among classes in a rural mixed school (No. 7/25) with low SES and low achievement was found in future evaluations-expectations, sense of futility, and school norms. There were no significant difference in present evaluations-expectations and reward/feedback among the classes in the same mixed school with low SES and low achievement level.

TABLE 15-2

THE DIFFERENCES IN STUDENTS' CLIMATE FACTOR SCORES AMONG CLASSES
IN A RURAL MIXED SCHOOL WITH LOW SES AND LOW ACHIEVEMENT (SCHOOL 8).

Factor	Class	Mean	SD	Probability
1. Present evaluations- expectations	1	.216	.960	.016 *
	2	-.402	.924	
	3	-.419	.889	
	4	.118	.991	
	5	.264	.863	
	6	.342	.806	
2. Future evaluations- expectations	1	-.058	1.062	.872
	2	-.131	.880	
	3	-.178	1.127	
	4	-.112	1.177	
	5	-.023	.974	
	6	-.201	.853	
3. Sense of futility	1	.541	.891	.031 *
	2	.320	.861	
	3	.480	.718	
	4	.293	.842	
	5	-.155	1.055	
	6	-.138	.715	
4. Reward/feedback	1	.021	.636	.014 *
	2	.384	.671	
	3	.328	.509	
	4	.417	.694	
	5	.129	.552	
	6	-.157	.404	
5. School norms	1	.380	1.010	.278
	2	.008	.872	
	3	-.219	.800	
	4	.244	1.012	
	5	-.242	.865	
	6	-.087	1.263	

* $p < .05$

TABLE 15-3

NUMBER OF STUDENT IN EACH CLASSROOM (SCHOOL NO. 8/26).

Class	White student	Black student	Total
1	12	7	19
2	14	5	19
3	13	8	21
4	8	7	15
5	12	11	23
6	7	14	21
Total	66	52	118

Hypothesis 15 also accepted except factors 2 and 5 in a similar rural mixed school (No. 8/26) with low SES and low achievement. Significant differences in climate factor scores among classes in this rural mixed school with low SES and low achievement was found in present evaluations-expectations, sense of futility, and reward/feedback. There were no significant differences among classes in this rural mixed school in future evaluations-expectations and school norms.

HYPOTHESIS 16- There will be significant differences in students' climate factor scores among classes in a low SES and low achievement urban black school in which classes are homogeneously grouped by ability.

TABLE 16- THE DIFFERENCES IN STUDENTS' CLIMATE FACTOR SCORES AMONG CLASSES IN A LOW SES AND LOW ACHIEVEMENT URBAN BLACK SCHOOL IN WHICH CLASSES ARE HOMOGENEOUSLY GROUPED BY ABILITY.

Factor	Class	Mean	SD	Probability
1. Present evaluations- expectations	1	.452	1.202	.0005 **
	2	.273	1.237	
	3	.319	.767	
	4	.104	.965	
	5	-.183	.894	
	6	-.034	.730	
	7	.156	.956	
	8	.069	.867	
2. Future evaluations- expectations	1	.258	.903	.008 **
	2	.413	1.058	
	3	.797	.623	
	4	.019	.925	
	5	.195	.926	
	6	.373	.865	
	7	.390	.790	
	8	-.350	.711	
3. Sense of futility	1	-.609	.482	.0005 **
	2	-.117	.756	
	3	-.244	.781	
	4	.022	.942	
	5	.014	1.112	
	6	.022	.966	
	7	.645	.946	
	8	-.026	.803	
4. Reward/feedback	1	-1.853	2.732	.006 **
	2	-.359	1.624	
	3	-.241	.760	
	4	-.183	.509	
	5	-.341	1.512	
	6	-.227	.866	
	7	.072	.622	
	8	-1.379	2.472	
5. School norms	1	-.198	1.174	.427
	2	.381	1.036	
	3	-.413	.652	
	4	-.254	.982	
	5	.009	1.201	
	6	.025	.704	
	7	-.178	1.009	
	8	-.047	1.105	

** $p < .01$

TABLE 16-1

NUMBER OF STUDENT IN EACH CLASSROOM

Class	Student
1	10
2	19
3	18
4	40
5	39
6	17
7	16
8	18
Total	178

Hypothesis 16 was accepted except school norms. Significant differences among classes in a low SES and low achievement urban black school in which classes are homogeneously grouped by ability was found in present evaluations-expectations, future evaluations-expectations, sense of futility, and reward/feedback.

These results, classes have significantly different climate factors, which tell us that classes can be used as an independent unit of analysis in the rural mixed schools with low SES and low achievement and the low SES and low achievement urban black school in which classes are homogeneously grouped by ability.

We can not infer or do not know the cause of the difference in students' climate factors from this data.

In many schools, the nature of the school climate or culture is closely related to the composition of the student body. Thus, the aggregate attitudes of both students and teachers are typically related to the socioeconomic or racial composition of the student body. For example, the educational expectations of students are generally related to the socioeconomic or racial composition of the student body. Coleman Report and other studies demonstrated that the proportion enrolled in college preparatory curricula, the percentage of white classmates, and the proportion of a student body from higher socioeconomic status background are associated with higher achievement.

These structural variables may be the causes of the differences in student factors. Variant attitudes, beliefs, norms, and expectations which reference groups hold for students may also independently account for the differences in student factors.

The difference of climate in the mixed schools tells us that it gives support to the research findings of lower-class students in mixed schools were somewhat more likely to feel that they could control over their environment or destiny than did minority/lower-class students in segregated schools (Coleman 1966).

Since the influence on the attitude/value structure of the school organization is dependent on the attitudes of the members who make up the school social system, one strategy of modifying the school climate is to control the mix of the members' characteristics. It may be possible, therefore, to increase the internalization of the climate of a school in lower-class students by integrating schools

and thus they become more academically motivated. Furthermore, it may postulate that by properly mixing the student composition- racial mixing and middle-class and lower-class mixing- within the classroom it appears to be possible to increase motivation of the lower-class children. It also related with the finding of exceptional schools that low academic motivation is not inevitable in schools composed of lower-class children. Properly mixing the student composition- race and social class- increase motivation of the minority children and it may make a difference in school climate and achievement.

When SES and achievement were controlled, there were fewer mixed school effects, much similar in climate factors between mixed school and predominantly white/black schools. This can be explained that the three variables- SES, achievement, and climate factors- are highly correlated each other. It also supports the conventional research findings that the family background and aspirations of the majority of students in a school is one of the most important factor in improving academic motivation of pupils especially for the disadvantaged minorities. A disadvantaged child will probably not improve if he attends school with similarly disadvantaged peers. However, if the other students have better backgrounds and higher aspiration, he is likely to improve significantly, that is, children from lower SES families attending school predominantly composed of such children generally achieve at significantly lower levels than children from middle class families attending predominantly middle class white schools. Poor motivation produces poor performance in the school and increases the probability of the student dropping out altogether. Motivation is largely determined by family background.

Furthermore, for most disadvantaged students, this lack of adequate motivation is reinforced by peers with similarly deficient motivation. The influence of this deficient family background can be overcome by involving parents in the problems of the school and enlisting their aid in increasing the motivation of their children.

It also interpreted that social class mix appears to be more important to the children's behavior than racial composition in these schools.

Interracial contact was emphasized. In mixed schools, interracial contact in students can range from acceptance to hostility. Considerable cross-racial interaction and friendship are desirable for social climate of the racially mixed schools rather than contact between races is minimal and tense.

CHAPTER VI

SUMMARY

Some exceptional schools demonstrate that low achievement is not inevitable in schools composed of low socio-economic status or minority group children. The identification of such atypical schools provides the opportunity determine what characteristics of the school environment account for the variation in achievement among schools. Much research indicates that children from low SES families and certain minority group families attending schools predominantly composed of such children generally achieve at significantly lower levels than children from middle-class families attending predominantly middle-class white schools.

Since the climate or culture of the school organization may depend to a significant degree on the nature of the entering students, it was postulated that controlling the mix of student characteristics may affect climate.

This study therefore focuses on the differences in social academic climate in schools with varying racial composition in different community settings. More specifically, this study examined the perceptions of school academic climate held by black and white students in schools with similar levels of achievement and similar socio-economic composition, but different types of racial composition. The teachers' opinions of the academic norms and expectations are also examined in schools with varying racial composition.

1

Data were collected from a selected sample, 1134 students and 100 teachers in 8 low SES and low achievement elementary schools in rural and urban areas, and 3 high SES and high achievement elementary schools located in urban areas. Schools within each stratum were selected on the basis of their mean student achievement and SES, as measured by the Michigan State School Assessment Indexes.

The instruments employed in this study were designed to study certain social psychological and structural variables constituting normative academic climate within each of the sampled schools. However, for purpose of the current analysis, only the social psychological variables were examined. The instruments used within each school consisted of a student and a teacher questionnaire with interrelated value, in that they contain similar questions designed to elicit attitudes and beliefs or perceptions of attitudes and beliefs of those individuals sampled. These instruments were administered to fourth, fifth, and sixth graders, and the teachers of the sampled students, in the selected schools. All participants were requested to answer the questionnaires both for themselves and as expert observers of the school's environment.

In order to identify clusters of variables which combined to form meaningful factors, and through this to reduce the number of factors to manageable numbers, a Varimax Rotation Factor Analysis was applied. Five student factors and four teacher factors emerged from this analysis:

SCHOOL CLIMATE FACTORS

I. IN LOW SES AND LOW ACHIEVEMENT SCHOOLS

STUDENT FACTORS

- Factor 1- Student perceptions of the present evaluations-expectations of others in their school social system.
- Factor 2- Student perceptions of the future evaluations-expectations of others in their school social system.
- Factor 3- Student perception about the level of feeling of futility permeating the social system of the school.
- Factor 4- Student perception about the level of feelings of reward/feedback for their achievement from their parents and social system.
- Factor 5- Student perception of those school norms stressing academic achievement which exist in their school social system.

TEACHER FACTORS

- Factor 1- Teacher reported push for competition.
- Factor 2- Teacher perceived expectations.
- Factor 3- Job satisfaction/commitment.
- Factor 4- Teacher reported community press for achievement.

II. IN HIGH SES AND HIGH ACHIEVEMENT SCHOOLS

STUDENT FACTORS

- Factor 1- Student perceived present evaluations-expectations.
- Factor 2- Student perceived future evaluations-expectations.
- Factor 3- Student perceived sense of futility.
- Factor 4- Reported student press for competition/push.
- Factor 5- Importance of student role identity.

FINDINGS

The major findings of this study can be summarized as follows:

1. There were significant differences ($p < .039$) among

urban white,
urban black,
rural white, and
rural mixed schools

with low SES and low achievement levels, in four student climate factor scores,

Present evaluations-expectations,
Future evaluations-expectations,
Feelings of sense of futility, and
Perception of reward/feedback.

The rank order from higher/favorable climate factor scores was:

1. urban black schools,
2. rural mixed schools,
3. urban white schools, and
4. rural white schools.

2. There were significant differences ($p < .026$) among

all white urban schools,
all white rural schools,
white students (38%) in rural mixed schools

with low SES and low achievement levels, only in future evaluations-expectations. The rank order from higher climate factor scores:

1. urban white schools,
2. rural white schools, and
3. white students in rural mixed schools.

3. There were significant differences ($p < .022$) on student climate factor scores,

Present evaluations-expectations,
Future evaluations-expectations, and
Feelings of sense of futility,

between white students (38%) and black students (62%) in rural mixed schools with low SES and low achievement levels.

Black students scored higher in present and future evaluation-expectations, and favorably in sense of futility.

4. There was no significant difference between all white rural school students and white students (38%) in mixed schools in five student factors.
5. All white urban school students scored higher significantly ($p < .006$) in future evaluations-expectations than white students (38%) in rural mixed schools.
6. Black majority students (62%) in rural mixed schools scored higher significantly ($p < .002$) in perception of reward/feedback than students in all black urban schools with low SES and low achievement levels.
7. There were no significant differences among
 - urban white,
 - urban black,
 - rural white, and
 - rural mixed schools
 in four teachers' climate factor scores.
8. There were no significant difference in teachers perceptions of school climate among
 - teachers in white schools,
 - teachers in black schools, and
 - teachers in mixed schools
 with low SES and low achievement levels.
9. There were significant differences ($p < .035$) in two student factors, present evaluations-expectations and press for competition/push, between black minority students (15%) and black majority students (70%) in two mixed urban schools with high SES and high achievement levels.

Black majority students (70%) scored higher in both factors than black minority students (15%).

10. There were significant differences ($p < .005$) in two student factors, present evaluations-expectations and press for competition/push among

all white students,
white majority students (85%), and
white minority students (30%)

in urban mixed schools with high SES and high achievement.

The rank order from higher scores was,

1. white minority students (30%),
2. all white students, and
3. white majority students (85%).

11. In the high SES and high achievement predominantly black school, black students (70%) scored more favorably ($p < .0005$) than white students (30%) in sense of futility. In press for competition/push, white students scored higher ($p < .001$) than black students.
12. White students (30%) in an urban mixed school scored higher significantly ($p < .006$) in two student factors, present evaluations-expectations and press for competition/push, than all white urban school students.
13. There were significant difference ($p < .022$) in two student factors, feeling of sense of futility and press for competition/push, between white students (85%) and black students (15%) in an urban mixed school. White students scored favorably in sense of futility but perceived less press for competition/push than black students.
14. There were significant differences ($p < .035$) among 6 classrooms in each of two low SES and low achievement rural mixed schools on:

present evaluations-expectations,
 future evaluations-expectations,
 sense of futility,
 perception of reward/feedback, and
 schools norms.

15. There were significant differences ($p < .008$) among 8 homogeneously ability grouped classrooms in a low SES and low achievement urban black school on:

present evaluations-expectations,
 future evaluations-expectations,
 sense of futility, and
 perception of reward/feedback.

In both student and teacher data, the evaluations-expectations variable was the most stable factor in the factor analysis. In the mixed black and white school the majority racial group tended to perceive the school climate more favorably than the minority racial group.

Interaction between racial groups in schools may be emphasized. Simply mixing of racial groups in student body appears not to be enough. The basis of social behavior is communication. Socialization in schools may be described as a process in which students are trained to engage in any type of symbolic interaction or communication. Social interaction is not merely a proximity of bodies. It involves for each participant an awareness of others. Each participant interprets and reinterprets the cues provided by those with whom he is interacting. Social interaction involves on the part of each interacting individual an awareness and interpretation of self.

When SES and achievement were controlled, there were fewer mixed school effects than expected. As Wilson (1969) indicated, social class mix appeared to be more important to the children's behavior than racial composition in these schools.

For further study, the following points should be kept in mind:

1. Using data both from student and teacher questionnaires gives more comprehensive measures of school climate than relying on data from a single source.
2. Using aggregative properties of the schools, such as scale scores and class means, rather than individual responses, produces more reliable measures because random response errors and distortions are reduced.
3. Continual refinement of the instrument is recommended, e.g., informant data rather respondent data appeared to have greater validity.
4. Classrooms can be used as the unit of analysis in racially mixed schools with low SES and low achievement.
5. This study also suggest the value of comparison on a cross cultural basis.

RECOMMENDATIONS

On the basis of substantive findings this research makes the following recommendations:

1. Schools can no longer justify the low achievement of their students strictly upon the basis of low socio-economic status, race, or their urban-rural community. Attention must focus on creation of the learning environmental climates within the school social system.
2. As some climate factors relate similarly to all types of schools, other climate factors relate to varying types of schools differently. Therefore, there is more than just one uniform method in which high achievement can be encouraged. It is desirable that each school must have a clear understanding of its unique community and the values that

community perceives as important. It follows, then, that each member of the school bureaucracy must have a clear definition of its function in the service of the school community.

3. Various attempts by the school to promote dialogue and interaction among racial student groups should be implemented. Implications derived from this study indicate that it is desirable to design the teacher education and administrative policy to modify the social climate in schools and to encourage a positive atmosphere in the school through the selection of personnel, such as principals whom students feel free to approach, and teachers who generate expectations for academic achievement and a sense of "I can" in the classroom. Through this, the level of school outcomes may be significantly improved for children in schools with the disadvantaged.

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APPENDICES

4

1

APPENDIX A

STUDENT QUESTIONNAIRE

SCHOOL SOCIAL ENVIRONMENT STUDY
STUDENT QUESTIONNAIRE

Sponsored by

Michigan Department of Education
and
Michigan State University

Dr. Wilbur Brookover, Professor of Sociology and Education, Project Director

DIRECTIONS: We are trying to learn more about students and their work in schools. We would, therefore, like for you to respond to the following questions. This is not a test of any sort and will not affect your work in school. Your teacher and your principal will not see your answers. There are no right or wrong answers, we simply want you to tell us your answer to each question.

1. Name _____

PLEASE ANSWER THE FOLLOWING QUESTIONS BY CIRCLING THE NUMBER ON THE RIGHT OF YOUR BEST ANSWER TO THE QUESTION. PICK ONLY ONE ANSWER FOR EACH QUESTION!

2. How old were you on your last birthday?

9 years old	 1.
10 years old	 2.
11 years old	 3.
12 years old	 4.
13 years old	 5.

3. Are you a boy or girl?

boy	 1.
girl	 2.

4. What grade are you in?

3rd grade	 1.
4th grade	 2.
5th grade	 3.
6th grade	 4.
7th grade	 5.

5. Please write your teacher's name.

6. Please write the name of your school.

7. How many years have you been at this school?

- | | | |
|------------------|-------|----|
| Less than 1 year | ..... | 1. |
| 2 years | ..... | 2. |
| 3 years | ..... | 3. |
| 4 years | ..... | 4. |
| 5 years | ..... | 5. |
| 6 years | ..... | 6. |
| 7 years or more | ..... | 7. |

If your father does not live with you or if he is not alive, please answer this question for the person in your house who makes the most money.

8. What type of work does your father do? (Give a short description of his job)

THE FOLLOWING QUESTIONS ARE TO BE ANSWERED BY CIRCLING THE NUMBER ON THE RIGHT OF THE CORRECT ANSWER. REMEMBER, NO ONE WILL SEE YOUR ANSWERS EXCEPT THOSE OF US FROM MICHIGAN STATE UNIVERSITY, SO PLEASE TELL US JUST WHAT YOU THINK. (Pick only one answer for each question)

9. If you could go as far as you wanted in school, how far would you like to go?

- | | | |
|-------------------------------|-------|----|
| Finish grade school | ..... | 1. |
| Go to high school for a while | ..... | 2. |
| Finish high school | ..... | 3. |
| Go to college for a while | ..... | 4. |
| Finish college | ..... | 5. |

10. How many students in this school try hard to get a good grade on their weekly tests?

- | | | |
|-----------------------------|-------|----|
| Almost all of the students | ..... | 1. |
| Most of the students | ..... | 2. |
| Half of the students | ..... | 3. |
| Some of the students | ..... | 4. |
| Almost none of the students | ..... | 5. |

11. How many students in this school will work hard to get a better grade on the weekly tests than their friends do?

- | | | |
|-----------------------------|-------|----|
| Almost all of the students | ..... | 1. |
| Most of the students | ..... | 2. |
| Half of the students | ..... | 3. |
| Some of the students | ..... | 4. |
| Almost none of the students | ..... | 5. |

12. How many students in this school don't care if they get bad grades?

- | | | |
|-----------------------------|-------|----|
| Almost all of the students | ..... | 1. |
| Most of the students | ..... | 2. |
| Half of the students | ..... | 3. |
| Some of the students | ..... | 4. |
| Almost none of the students | ..... | 5. |

13. How many students in this school do more studying for weekly tests than they have to?
- | | |
|-----------------------------|----------|
| Almost all of the students | 1. |
| Most of the students | 2. |
| Half of the students | 3. |
| Some of the students | 4. |
| Almost none of the students | 5. |
14. If most of the students here could go as far as they wanted in school how far would they go?
- | | |
|-------------------------------|----------|
| Finish grade school | 1. |
| Go to high school for a while | 2. |
| Finish high school | 3. |
| Go to college for a while | 4. |
| Finish college | 5. |
15. If the teacher that you like the best told you that you were a poor student how would you feel?
- | | |
|---------------------------------|----------|
| I'd feel very bad | 1. |
| I'd feel somewhat bad | 2. |
| It wouldn't bother me very much | 3. |
| It wouldn't bother me at all | 4. |
16. How important is it to you to be a good student?
- | | |
|--|----------|
| It's the most important thing I can do | 1. |
| It's important, but other things are just as important | 2. |
| It's important, but other things are more important | 3. |
| It's not very important | 4. |
17. If your parents told you that you were a poor student, how would you feel?
- | | |
|---------------------------------|----------|
| I'd feel very bad | 1. |
| I'd feel somewhat bad | 2. |
| It wouldn't bother me very much | 3. |
| It wouldn't bother me at all | 4. |
18. If your best friend told you that you were a poor student, how would you feel?
- | | |
|---------------------------------|----------|
| I'd feel very bad | 1. |
| I'd feel somewhat bad | 2. |
| It wouldn't bother me very much | 3. |
| It wouldn't bother me at all | 4. |
19. How do you think most of the students in this class react when one of you does a bad job on school work?
- | | |
|--|----------|
| They feel badly and want to help him (her) do better | 1. |
| They feel sorry, but don't say anything | 2. |
| They really don't care | 3. |
| They are secretly happy that it happened | 4. |

20. How do you think most of the teachers in this school react when one of the students does a bad job on school work?

They feel badly and want to help him (her) do better	 1.
They feel badly, but don't really help him (her)	 2.
They get mad and tell him (her) to start working harder	 3.
They get mad but don't say anything	 4.
They really don't care	 5.

21. What do you think most students say when a student has done good or better than he usually does in his school work?

He was just lucky, he won't do that good next time	 1.
Anyone could do it if they studied	 2.
I wish I could do as well as he did	 3.
I'm glad for him I hope he does as well next time	 4.

22. How important do most of the students in this class feel it is to do well in school work?

Almost everybody thinks it is the most important thing you can do.	 1.
Most students think it is quite important to do well	 2.
Doing well in school work is a good thing but other things are important too.	 3.
Most students don't seem to care how well they do, but it's okay for others to do well.	 4.
Most students don't seem to care how good they do, but they don't like other students to do good.	 5.

23. How important do you think most of the students in this school feel it is to do well in school work?

Almost everybody thinks it is the most important thing you can do.	 1.
Most students think it is quite important to do well	 2.
Doing well in school work is a good thing but other things are important too.	 3.
Most students don't seem to care how well they do, but it's okay for others to do well.	 4.
Most students don't seem to care how good they do, but they don't like other students to do good.	 5.

PLEASE ANSWER THE FOLLOWING QUESTIONS BY CIRCILING THE NUMBER WHICH BEST ANSWERS THE QUESTION FOR YOU. PICK ONLY ONE ANSWER FOR EACH QUESTION.

24. Think about the boys or girls you play with at recess or after school. How often do they read in their free time?

Very often	 1.
Quite a bit	 2.
Sometimes, but not very much	 3.
Seldom	 4.
Almost never	 5.

4

25. When you and your friends are together after school or on week-ends, how often do you talk about your school work?
- | | | |
|------------------------------|-------|----|
| Very often | ..... | 1. |
| Quite a bit | ..... | 2. |
| Sometimes, but not very much | ..... | 3. |
| Seldom | ..... | 4. |
| Almost never | ..... | 5. |
26. People like me will not have much of a chance to do what we want to in life.
- | | | |
|-------------------|-------|----|
| Strongly agree | ..... | 1. |
| Agree | ..... | 2. |
| Disagree | ..... | 3. |
| Strongly disagree | ..... | 4. |
27. People like me will never do well in school even though we try hard.
- | | | |
|-------------------|-------|----|
| Strongly agree | ..... | 1. |
| Agree | ..... | 2. |
| Disagree | ..... | 3. |
| Strongly disagree | ..... | 4. |
28. I can do well in school if I work hard.
- | | | |
|-------------------|-------|----|
| Strongly agree | ..... | 1. |
| Agree | ..... | 2. |
| Disagree | ..... | 3. |
| Strongly disagree | ..... | 4. |
29. In this school, students like me don't have any luck.
- | | | |
|-------------------|-------|----|
| Strongly agree | ..... | 1. |
| Agree | ..... | 2. |
| Disagree | ..... | 3. |
| Strongly disagree | ..... | 4. |
30. You have to be lucky to get good grades in this school.
- | | | |
|-------------------|-------|----|
| Strongly agree | ..... | 1. |
| Agree | ..... | 2. |
| Disagree | ..... | 3. |
| Strongly disagree | ..... | 4. |
31. Think of your friends. Do you think you can do school work better, the same, or poorer than your friends?
- | | | |
|----------|-------|----|
| Better | ..... | 1. |
| The same | ..... | 2. |
| Poorer | ..... | 3. |
32. Think of the students in your class. Do you think you can do school work better, the same, or poorer than the students in your class?
- | | | |
|----------|-------|----|
| Better | ..... | 1. |
| The same | ..... | 2. |
| Poorer | ..... | 3. |

33. When you finish high school, do you think you will be one of the best students, about the same as most of the students, or below most of the students?
- | | |
|--|----------|
| One of the best | 1. |
| About the same as most of the students | 2. |
| Below most of the students | 3. |
34. Do you think you could finish college?
- | | |
|---|----------|
| Yes, with no difficulty at all | 1. |
| Yes, as long as I work hard | 2. |
| Yes, but I will probably have a lot of difficulty | 3. |
| No, it will be too difficult | 4. |
35. If you went to college, do you think you would be one of the best students, about the same as most of the students, or below most of the students?
- | | |
|--|----------|
| One of the best | 1. |
| About the same as most of the students | 2. |
| Below most of the students | 3. |
36. If you want to be a doctor or a teacher, you need more than 4 years of college. Do you think you could do that?
- | | |
|---|----------|
| Yes, with no difficulty at all | 1. |
| Yes, as long as I work hard | 2. |
| Yes, but I will probably have a lot of difficulty | 3. |
| No, it will be too difficult | 4. |
37. Forget how your teachers mark your work. How good do you think your own work is?
- | | |
|--|----------|
| Excellent | 1. |
| Good | 2. |
| About the same as most of the students | 3. |
| Below most of the students | 4. |
| Poor | 5. |
38. What marks do you think you really can get if you try?
- | | |
|------------|----------|
| Mostly A's | 1. |
| Mostly B's | 2. |
| Mostly C's | 3. |
| Mostly D's | 4. |
| Mostly E's | 5. |

NOW WE WOULD LIKE YOU TO ANSWER SOME QUESTIONS ABOUT PEOPLE THAT YOU KNOW.
ANSWER THESE QUESTIONS BY CIRCLING THE NUMBER AS YOU DID IN THE OTHER
QUESTIONS. (Pick only one answer)

39. When you do good work in school who do you most want to know about it?
- | | |
|--------------------|----------|
| mother | 1. |
| father | 2. |
| brother or sisiter | 3. |
| teacher | 4. |
| friend | 5. |
| other _____ | 6. |
- (specify)

40. Who is the most interested in your work in school?

- | | | |
|-------------------|-------|----|
| Mother | ..... | 1. |
| Father | ..... | 2. |
| Brother or sister | ..... | 3. |
| Teacher | ..... | 4. |
| Friend | ..... | 5. |
| Other | ..... | 6. |
| (Specify) | | |

NOW WE WOULD LIKE YOU TO ANSWER SOME QUESTIONS ABOUT YOUR BEST FRIEND. STOP FOR A MINUTE AND THINK WHO YOUR BEST FRIEND IS. ANSWER THESE QUESTIONS BY CIRCLING THE NUMBER AS YOU DID IN THE OTHER QUESTIONS. REMEMBER, YOUR BEST FRIEND WILL NOT SEE YOUR ANSWERS. (Pick only one answer)

41. How far do you think your best friend believes you will go in school?

- | | | |
|-------------------------------|-------|----|
| Finish grade school | ..... | 1. |
| Go to high school for a while | ..... | 2. |
| Go to college for a while | ..... | 3. |
| Finish college | ..... | 4. |

42. How good a student does your best friend expect you to be in school?

- | | | |
|----------------------------------|-------|----|
| One of the best | ..... | 1. |
| Better than most of the students | ..... | 2. |
| Same as most students | ..... | 3. |
| Not as good as most students | ..... | 4. |
| He doesn't really care | ..... | 5. |

43. Think of your best friend. Would your best friend say you can do school work better, the same, or poorer than other people your age?

- | | | |
|----------|-------|----|
| Better | ..... | 1. |
| The same | ..... | 2. |
| Poorer | ..... | 3. |

44. Would your best friend say that your grades would be with the best, same as most, or below most of the students when you graduate from high school?

- | | | |
|---------------|-------|----|
| With the best | ..... | 1. |
| Same as most | ..... | 2. |
| Below most | ..... | 3. |

45. Does your best friend think you could finish college?

- | | | |
|-------|-------|----|
| Yes | ..... | 1. |
| Maybe | ..... | 2. |
| No | ..... | 3. |

46. Remember you need more than four years of college to be a teacher or doctor. Does your best friend think you could do that?

- | | | |
|-------|-------|----|
| Yes | ..... | 1. |
| Maybe | ..... | 2. |
| No | ..... | 3. |

47. What grades does your best friend think you can get?

- Mostly A's 1.
 Mostly B's 2.
 Mostly C's 3.
 Mostly D's 4.
 Mostly E's 5.

NOW WE WOULD LIKE TO ASK SOME QUESTIONS ABOUT THE TEACHERS IN THIS SCHOOL. ANSWER THESE QUESTIONS AS YOU ANSWERED THE OTHER ONES BY CIRCLING THE NUMBER. REMEMBER, NO TEACHER WILL SEE YOUR ANSWERS SO BE AS HONEST AS YOU CAN.

48. Of the teachers that you know in this school how many tell students to try hard to do better on tests?

- Almost all of the teachers 1.
 Most of the teachers 2.
 Half of the teachers 3.
 Some of the teachers 4.
 Almost none of the teachers 5.

49. How many teachers in this school tell students to try and get better grades than their classmates?

- Almost all of the teachers 1.
 Most of the teachers 2.
 Half of the teachers 3.
 Some of the teachers 4.
 Almost none of the teachers 5.

50. Of the teachers that you know in this school how many don't care if the students get bad grades?

- Almost all of the teachers 1.
 Most of the teachers 2.
 Half of the teachers 3.
 Some of the teachers 4.
 Almost none of the teachers 5.

51. Of the teachers that you know in this school how many tell students to do extra work so that they can get better grades?

- Almost all of the teachers 1.
 Most of the teachers 2.
 Half of the teachers 3.
 Some of the teachers 4.
 Almost none of the teachers 5.

52. Of the teachers that you know in this school how many make the students work too hard ?

- Almost all of the teachers 1.
 Most of the teachers 2.
 Half of the teachers 3.
 Some of the teachers 4.
 Almost none of the teachers 5.

53. Of the teachers that you know in this school how many don't care how hard the student works, as long as he passes?

Almost all of the teachers 1.
 Most of the teachers 2.
 Half of the teachers 3.
 Some of the teachers 4.
 Almost none of the teachers 5.

54. If the teachers in this school think a student can't do good work, how many will try to make him work hard anyway?

Almost all of the teachers 1.
 Most of the teachers 2.
 Half of the teachers 3.
 Some of the teachers 4.
 Almost none of the teachers 5.

55. Of the teachers that you know in this school, how many think it is not good to ask more work from a student than he is able to do?

Almost all of the teachers 1.
 Most of the teachers 2.
 Half of the teachers 3.
 Some of the teachers 4.
 Almost none of the teachers 5.

56. Of the teachers that you know in this school, how many believe that students should be asked to do only work which they are able to do?

Almost all of the teachers 1.
 Most of the teachers 2.
 Half of the teachers 3.
 Some of the teachers 4.
 Almost none of the teachers 5.

57. How far do you think the teacher you like the best believes you will go in school?

Finish grade school 1.
 Go to high school for a while 2.
 Finish high school 3.
 Go to college for a while 4.
 Finish college 5.

58. How good of a student does the teacher you like the best expect you to be in school?

One of the best 1.
 Better than most of the students 2.
 Same as most students 3.
 Not as good as most students 4.
 She doesn't really care 5.

59. Think of your teacher. Would your teacher say you can do school work better, the same, or poorer than other people your age?

Better 1.
The same 2.
Poorer 3.

60. Would your teacher say that your grades would be with the best same as most, or below most of the students when you graduate from high school?

With the best 1.
Same as most 2.
Below most 3.

61. Does your teacher think you could finish college?

Yes 1.
Maybe 2.
No 3.

62. Remember you need more than four years of college to be a teacher or doctor. Does your teacher think you could do that?

Yes 1.
Maybe 2.
No 3.

63. What grades does your teacher think you can get?

Mostly A's 1.
Mostly B's 2.
Mostly C's 3.
Mostly D's 4.
Mostly E's 5.

NOW, WE WOULD LIKE YOU TO ANSWER SOME QUESTIONS ABOUT YOUR PARENTS.
ANSWER THEM THE SAME WAY YOU ANSWERED THE OTHER ONES.

64. How far do you think your parents believe you will go in school?

Finish grade school 1.
Go to high school for a while 2.
Finish high school 3.
Go to college for a while 4.
Finish college 5.

65. How good of a student do your parents expect you to be in school?

One of the best 1.
Better than most of the students 2.
Same as most of the students 3.
Not as good as most of the students 4.
They don't really care 5.

66. Think of your mother and father. Do your mother and father say you can do school work better, the same, or poorer than your friends?

Better 1.
Same as most 2.
Poorer 3.

67. Would your mother and father say that your grades would be with the best, same as most, or below most of the students when you finish high school?

The best 1.
 Same as most 2.
 Below most 3.

68. Do they think you could finish college?

Yes 1.
 Maybe 2.
 No 3.

69. Remember, you need more than four years of college to be a teacher or doctor. Do your mother and father think you could do that?

Yes 1.
 Maybe 2.
 No 3.

70. What grades do your mother and father think you can get?

Mostly A's 1.
 Mostly B's 2.
 Mostly C's 3.
 Mostly D's 4.
 Mostly E's 5.

NOW WE WANT TO ASK YOU SOME QUESTIONS ABOUT THE PRINCIPAL OF THIS SCHOOL. REMEMBER, YOUR PRINCIPAL WILL NOT SEE YOUR ANSWERS.

71. How many students in this school do you think the principal believes can get high grades?

Almost all of the students 1.
 Most of the students 2.
 Half of the students 3.
 Some of the students 4.
 Almost none of the students 5.

72. How do you think your principal would grade the work of the students in this school, compared to other schools?

Would grade it much better 1.
 Would grade it somewhat better..... 2.
 Would grade it the same 3.
 Would grade it somewhat lower 4.
 Would grade it much lower 5.

73. How many of the students in this school do you think the principal believes will finish high school?

Almost all of the students 1.
 Most of the students 2.
 Half of the students 3.
 Some of the students 4.
 Almost none of the students 5.

74. How many of the students in this school do you think the principal believes will go to college?
- | | |
|-----------------------------|----------|
| Almost all of the students | 1. |
| Most of the students | 2. |
| Half of the students | 3. |
| Some of the students | 4. |
| Almost none of the students | 5. |
75. How many of the students in this school do you think the principal believes will finish college?
- | | |
|-----------------------------|----------|
| Almost all of the students | 1. |
| Most of the students | 2. |
| Half of the students | 3. |
| Some of the students | 4. |
| Almost none of the students | 5. |
76. When I do a good job on my school work, I am more popular with other students.
- | | |
|-----------------------------|----------|
| Yes | 1. |
| No | 2. |
| Doesn't make any difference | 3. |
77. If I do well in school, it will be easier for me to get the job I want when I graduate.
- | | |
|----------------|----------|
| Yes | 1. |
| No | 2. |
| Doesn't matter | 3. |
78. My parents allow me greater freedom when I do well in school.
- | | |
|----------------|----------|
| Yes | 1. |
| No | 2. |
| Doesn't matter | 3. |
79. If you came home with a good report card, what would your parents most likely do?
- | | |
|--------------------------------------|----------|
| Nothing in particular | 1. |
| Praise me | 2. |
| Give me special privileges | 3. |
| Give me money or some special reward | 4. |
| Other _____ | 5. |
| (specify) | |
80. If you came home with a poor report card, what would your parents most likely do?
- | | |
|--------------------------------|----------|
| Nothing in particular | 1. |
| Scold me | 2. |
| Take away privileges | 3. |
| Punish me severely in some way | 4. |
| Other _____ | 5. |
| (specify) | |
81. Sometimes what you want to happen is not what you think will happen. How far do you think you will go in school?
- | | |
|-------------------------------|----------|
| Finish grade school | 1. |
| Go to high school for a while | 2. |
| Finish high school | 3. |
| Go to college for a while | 4. |
| Finish college | 5. |

APPENDIX B

TEACHER QUESTIONNAIRE

Teacher Questionnaire
(Revised Draft)

School Social Environment Study

Sponsored by

Michigan Department of Education
and
Michigan State University

This research project is being
carried out under the supervision of

Dr. Wilbur B. Brookover
Professor of Sociology and Education, and
Associate Director, Center for Urban Affairs
Michigan State University
East Lansing, Michigan
Tel. 517 353-9506

Any questions should be directed to Dr. Brookover

Directions: The information which you give us on this questionnaire is completely confidential. No one will see your answers except the members of our research staff. Reports will be made with aggregate data, and no one person will be identified with his or her data. After your questionnaire has been completely coded and punched on IBM cards (without your name), your questionnaire will be destroyed. Complete confidentiality is assumed. It is very important that you be as candid as possible in your answers.

Please do not
write on this
side of the
line.

1. Name _____ 1 2
2. Sex (Please check appropriate line) 3
 - female _____
 - male _____
3. Please write the name of this school 4 5

4. How long have you taught in this school? 6 7
(Include this year) _____
5. How long have you taught school? 8 9

6. What grade level are you teaching? 10

7. How much formal preparation do you have? (circle the number of 11
the correct answer)
 1. less than a Bachelors degree
 2. Bachelors degree
 3. some graduate work but less than Masters degree
 4. Master's degree
 5. more than Masters degree but not Doctorate
 6. Doctor's degree
8. How did you feel about this school before coming here? (give 12
general attitude)

9a. Has your attitude changed since? (circle number of correct answer)

1. yes
2. no

9b. If so, how?

We would like to ask you some questions about grouping practices and use of standardized tests in this school. Please feel free to write any additional comments after each question.

10. In general, what grouping procedure is practiced across sections of particular grade levels in this school?

1. homogeneous grouping according to ability
2. heterogeneous grouping according to ability
3. random sampling
4. no intentional grouping
5. other (indicate) _____

11. In general, what grouping procedure is practiced within your class?

1. homogeneous grouping according to ability
2. heterogeneous grouping according to ability
3. random grouping
4. no intentional grouping
5. other (indicate) _____

12. How important do you think the standardized test scores of your students are?

1. very important
2. somewhat important
3. not very important
4. not important at all

13

14

15

16

13. How often do you use the standardized test scores of your students? 17
1. very often
 2. often
 3. sometimes
 4. seldom
 5. never

Please answer each of the following questions by encircling the letter before the choice which most nearly answers the question for you.

14. On the average what level of achievement can be expected of the students in this school? 18
1. much above national norm
 2. slightly above national norm
 3. approximately at national norm
 4. slightly below national norm
 5. much below national norm
15. On the average what level of achievement can be expected of the students in your class? 19
1. much above national norm
 2. slightly above national norm
 3. approximately at national norm
 4. slightly below national norm
 5. much below national norm
16. What percent of the students in this school do you expect to complete high school? 20
1. 90% or more
 2. 70% or more
 3. 50% or more
 4. 30% or more
 5. less than 30%

17. What percent of the students in your class do you expect to complete high school? 21

1. 90% or more
2. 70% or more
3. 50% or more
4. 30% or more
5. less than 30%

18. What percent of the students in this school do you expect to attend college? 22

1. 90% or more
2. 70% or more
3. 50% or more
4. 30% or more
5. less than 30%

19. What percent of the students in your class do you expect to attend college? 23

1. 90% or more
2. 70% or more
3. 50% or more
4. 30% or more
5. less than 30%

20. What percent of the students in this school do you expect to complete college? 24

1. 90% or more
2. 70% or more
3. 50% or more
4. 30% or more
5. less than 30%

21. What percent of the students in your class do you expect to complete college? 25

1. 90% or more
2. 70% or more
3. 50% or more
4. 30% or more
5. less than 30%

22. How many of the students in this school are capable of getting mostly A's and B's? 26
1. 90% or more
 2. 70% or more
 3. 50% or more
 4. 30% or more
 5. less than 30%
23. How many of the students in your class are capable of getting mostly A's and B's? 27
1. 90% or more
 2. 70% or more
 3. 50% or more
 4. 30% or more
 5. less than 30%
24. How would you rate the academic ability of the students in this school compared to other schools? 28
1. ability here is much higher
 2. ability here is somewhat higher
 3. ability here is about the same
 4. ability here is somewhat lower
 5. ability here is much lower
25. What percent of the students in this school would you say want to complete high school? 29
1. 90% or more
 2. 70% or more
 3. 50% or more
 4. 30% or more
 5. less than 30%
26. What percent of the students in your class would you say want to complete high school? 30
1. 90% or more
 2. 70% or more
 3. 50% or more
 4. 30% or more
 5. less than 30%

27. What percent of the students in this school would you say want to go to college?

51

1. 90% or more
2. 70% or more
3. 50% or more
4. 30% or more
5. less than 30%

28. What percent of the students in your class would you say want to go to college?

52

1. 90% or more
2. 70% or more
3. 50% or more
4. 30% or more
5. less than 30%

Please remember, your answers to all of these questions is completely confidential. No one but our research staff will see your answers.

29. How much do you enjoy your teaching responsibilities in this school?

53

1. very much
2. much
3. average
4. little
5. not at all

30. If someone were to offer you an interesting and secure non-teaching job for \$1,000 more a year, how seriously would you consider taking the job?

54

1. very seriously
2. somewhat seriously
3. not very seriously
4. not at all

31. If someone were to offer you an interesting and secure non-teaching job for \$3,000 more a year, how seriously would you consider taking the job?

1. very seriously
2. somewhat seriously
3. not very seriously
4. not at all

32. How often do you stay after school to help students?

1. very often
2. often
3. sometimes
4. seldom
5. never

33. What percent of the students in this school do you think the principal expects to complete high school?

1. 90% or more
2. 70% or more
3. 50% or more
4. 30% or more
5. less than 30%

34. What percent of the students in this school do you think the principal expects to attend college?

1. 90% or more
2. 70% or more
3. 50% or more
4. 30% or more
5. less than 30%

35. What percent of the students in this school do you think the principal expects to complete college?

1. 90% or more
2. 70% or more
3. 50% or more
4. 30% or more
5. less than 30%

35

36

37

38

39

36. How many students in this school do you think the principal believes are capable of getting mostly A's and B's. 40
1. 90% or more
 2. 70% or more
 3. 50% or more
 4. 30% or more
 5. less than 30%
37. How do you think your principal rates the academic ability of the students in this school, compared to other schools? 41
1. rates it much better
 2. rates it somewhat better
 3. rates it the same
 4. rates it somewhat lower
 5. rates it much lower
38. Completion of high school is a realistic goal which you set for what percentage of your students? 42
1. 90% or more
 2. 70% or more
 3. 50% or more
 4. 30% or more
 5. less than 30%
39. Completion of college is a realistic goal which you set for what percentage of your students? 43
1. 90% or more
 2. 70% or more
 3. 50% or more
 4. 30% or more
 5. less than 30%
40. How often do you stress to your students the necessity of a post high school education for a good job and/or a comfortable life? 44
1. very often
 2. often
 3. sometimes
 4. seldom
 5. never

41. For those students who do not have the resources which will allow them to go to college, you are careful not to promote aspirations in them which strongly can not be fulfilled. 45
1. strongly agree
 2. agree
 3. not sure
 4. disagree
 5. strongly disagree
42. The teachers in this school push students to work too hard. 46
1. strongly agree
 2. agree
 3. not sure
 4. disagree
 5. strongly disagree
43. How many teachers in this school aren't concerned how hard most students work, as long as they pass? 47
1. almost all of the teachers
 2. most of the teachers
 3. half of the teachers
 4. some of the teachers
 5. almost none of the teachers
44. It is unfair to demand more from a student than he is capable of giving. 48
1. strongly agree
 2. agree
 3. not sure
 4. disagree
 5. strongly disagree
45. If you think a student is not able to do some of the school work you won't try to push him very hard. 49
1. strongly agree
 2. agree
 3. not sure
 4. disagree
 5. strongly disagree

46. For most students you are very careful not to push them to their frustration level. 50
1. strongly agree
 2. agree
 3. not sure
 4. disagree
 5. strongly disagree
47. How many teachers in this school encourage students to try hard to improve on previous test scores? 51
1. almost all of the teachers
 2. most of the teachers
 3. about half of the teachers
 4. some of the teachers
 5. almost none of the teachers
48. How many teachers encourage students to seek extra school work so that the students can get better grades? 52
1. almost all of the teachers
 2. most of the teachers
 3. about half of the teachers
 4. some of the teachers
 5. almost none of the teachers
49. How many students in this school try hard to improve on previous work? 53
1. almost all of the students
 2. most of the students
 3. about half of the students
 4. some of the students
 5. almost none of the students
50. How many students in your class try hard to improve on previous work? 54
1. almost all of the students
 2. most of the students
 3. about half of the students
 4. some of the students
 5. almost none of the students

51. How many students in this school will try hard to do better on tests than their friends do? 55
1. almost all of the students
 2. most of the students
 3. about half of the students
 4. some of the students
 5. almost none of the students
52. How many students in your class will try hard to do better on tests than their classmates do? 56
1. almost all of the students
 2. most of the students
 3. about half of the students
 4. some of the students
 5. almost none of the students
53. How many students in this school are content to do less than they should? 57
5. almost all of the students
 4. most of the students
 3. about half of the students
 2. some of the students
 1. almost none of the students
54. How many students in your class are content to do less than they should? 58
1. almost all of the students
 2. most of the students
 3. about half of the students
 4. some of the students
 5. almost none of the students
55. How many students in this school will seek extra work so that they can get better grades? 59
1. almost all of the students
 2. most of the students
 3. about half of the students
 4. some of the students
 5. almost none of the students

56. How many students in your class will seek extra work so that they can get better grades?
1. almost all of the students
 2. most of the students
 3. about half of the students
 4. some of the students
 5. almost none of the students
57. How many students in this school don't care when other students do much better than they do?
5. almost all of the students
 4. most of the students
 3. about half of the students
 2. some of the students
 1. almost none of the students
58. How many students in your class don't care when other students do much better than they do?
1. almost all of the students
 2. most of the students
 3. about half of the students
 4. some of the students
 5. almost none of the students
59. The parents in this school service area regard this school primarily as a "baby-sitting" agency.
5. strongly agree
 4. agree
 3. not sure
 2. disagree
 1. strongly disagree
60. The parents of this school service area are deeply concerned that their children receive a top quality education.
1. strongly agree
 2. agree
 3. not sure
 4. disagree
 5. strongly disagree

61. How many of the parents in this school service area expect their children to complete high school? 65
1. almost all of the parents
 2. most of the parents
 3. about half of the parents
 4. some of the parents
 5. almost none of the parents
62. How many of the parents in this school service area expect their children to complete college? 66
1. almost all of the parents
 2. most of the parents
 3. about half of the parents
 4. some of the parents
 5. almost none of the parents
63. How many of the parents in this school service area don't care if their children obtain low grades? 67
5. almost all of the parents
 4. most of the parents
 3. about half of the parents
 2. some of the parents
 1. almost none of the parents
64. How many of the parents in this school service area like feedback from the principal and teachers on how their children are doing in school? 68
1. almost all of the parents
 2. most of the parents
 3. about half of the parents
 4. some of the parents
 5. almost none of the parents

APPENDIX C

STATE ASSESSMENT SES INDEX QUESTIONS

SOCIO-ECONOMIC STATUS QUESTIONS USED IN STATE
ASSESSMENT TEST 1969-1970

General Information Questions

Does your family have a dictionary?

- (A) Yes
- (B) No
- (C) I don't know

Does your family have an encyclopedia?

- (A) Yes
- (B) No
- (C) I don't know

Does your family have a vacuum cleaner?

- (A) Yes
- (B) No
- (C) I don't know

Does your family have a typewriter?

- (A) Yes
- (B) No
- (C) I don't know

Does your family have a dishwashing machine?

- (A) Yes
- (B) No
- (C) I don't know

How many cars does your family have? (Don't count trucks.)

- (A) None
- (B) One
- (C) Two or more

Do you have your own wrist watch?

- (A) Yes
- (B) No

Has anyone in your family traveled in an airplane in the last year?

- (A) Yes
- (B) No
- (C) I don't know

How much education does your father have?

- (A) Grade school--Grades 1-8
- (B) High school--Grades 9-12
- (C) College or special training after high school
- (D) I don't know

How much education does your mother have?

- (A) Grade school--Grades 1-8
- (B) High school--Grades 9-12
- (C) College or special training after high school
- (D) I don't know

How many different schools have you gone to since you started first grade? Count only the schools which you went to during the day.

- (A) One--only this one
- (B) Two
- (C) Three
- (D) Four
- (E) Five or more

What is the highest grade you want to finish in school?

- (A) I don't want to go to school any more
- (B) I only want to finish high school
- (C) I want to go to a special school, like a nursing or business school
- (D) I want to go to college

Are you planning to go to college?

- (A) Yes
- (B) No
- (C) I'm not sure