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BUTLER, Charles Edward, 1937-
THE CULTURE TRAIT OF HIERARCHY AND JUNIOR
HIGH SCHOOL SOCIOECONOMIC STATUS IN A LARGE
URBAN SCHOOL DISTRICT.

The University of Oklahoma, Ed.D., 1970
Education, administration

University Microfilms, A XEROX Company, Ann Arbor, Michigan

THE UNIVERSITY OF OKLAHOMA
GRADUATE COLLEGE

THE CULTURE TRAIT OF HIERARCHY AND JUNIOR HIGH
SCHOOL SOCIOECONOMIC STATUS IN A LARGE
URBAN SCHOOL DISTRICT

A Dissertation

Submitted to the Graduate Faculty

in partial fulfillment of the requirements for the

degree of

Doctor of Education

By

CHARLES EDWARD BUTLER

1970

THE CULTURE TRAIT OF HIERARCHY AND JUNIOR HIGH
SCHOOL SOCIOECONOMIC STATUS IN A LARGE
URBAN SCHOOL DISTRICT

BY

Robert E. Ohay
Donald K. Smith
Glenn Snider
Phil D. C.
Dissertation Committee

ACKNOWLEDGEMENTS

This writer acknowledges his indebtedness to the many persons who contributed generously of their time and intellect in the development and completion of this investigation. A special indebtedness is recognized to Dr. Robert Ohm, Chairman of this writer's doctoral committee, for his guidance, his encouraging optimism and his sustaining interest during the entire course of the study.

This writer is also indebted to the members of the doctoral committee: Dr. Glenn R. Snider, Dr. Robert F. Bibens, and Dr. Gerald L. Kowitz for their assistance and encouragement.

Thanks and appreciation are extended to the school district officials who gave their approval for this study, to the individual school staff and faculty members who assisted in it and to the ninth grade students who were an integral part of it.

Special thanks and appreciation are extended to Jerry Prather who assisted the writer in computer programming and statistical methods, to Mrs. Helen Massey and Mrs. Vicki Bakke who typed the reading copies and to Mrs. Bennie R. Blalock who typed the final copy.

A very special thanks is expressed to this writer's wife, Doris, and children, Chucky and Charlotte for their understanding patience and unfailing support throughout the doctoral program and especially during the completion of this investigation.

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CHAPTER I

BACKGROUND OF THE STUDY

Introduction

One of the problems of growing concern for school officials in urban areas is that of student unrest and activism. That the problem is not the exclusive domain of institutions of higher learning is indicated by the School Management staff which wrote in its special report on student unrest at the high school level that:

The signs are everywhere. Violence in the schools is sharply on the rise. Student boycotts and picketing are no longer uncommon. In some districts, suburban as well as urban, student violations of the law on school grounds are so flagrant that principals find it expedient to look the other way. High school student protests, underground newspapers and activist groups are springing up everywhere. Agitation by outside forces has been reported in a number of districts and, in more than a few, students and parents are teaming up to mount sharp attacks on school authorities. . . .

Those expecting the worst are likely to find it.¹

¹"Special Report on Student Unrest in the Public Schools," School Management, XII (November, 1968), 50.

Currently, considerable effort is being made by educators and other concerned individuals and groups to understand the problem and devise effective techniques for resolving it.

While it is necessary to treat the symptoms of the problem, it is more important that its causes be determined. There has been considerably speculation as to the causes of the problem but a consensus among researchers has not emerged.

Many theorists view the problem as an intensification of a persistent problem encountered by administrators--that of reconciling the needs of the organization with those of the individuals in it. This problem, according to Bennis,² lay in the formal organizational structure, the bureaucracy, characterized by well-defined assignments of authority on a hierarchial pattern and impersonal relationships between these formal positions.

Argyris³ summarized the research in personality and human development and information on the properties of formal organizations and offered three propositions that suggested a lack of congruence between the needs of the individual and the demands of the organization. This incongruent relationship, he felt, caused personality disturbance characterized by frustration, failure, conflict, and lack of perspective.

²Warren G. Bennis, Changing Organizations: Essays on the Development and Evolution of Human Organizations (New York: McGraw-Hill Book Co., 1966), pp. 1-15.

³Chris Argyris, "The Individual and Organization: Some Problems of Mutual Adjustment," Administrative Science Quarterly, II (June, 1957), 1-24.

These difficulties result in the creation of competition, rivalry, hostility, and an inability on the part of the individuals to view the problems from a broad perspective.

Stinchcombe⁴ hypothesized that (1) high school rebellion and expressive alienation accrued when future status is not closely related to present performance, (2) when the symbols of the formal school structure fail to provide a satisfactory identification with the role of adolescent, students identify with adult symbols, and expressive alienation results, and (3) whenever the goals of success are strongly internalized but inaccessible, expressive alienation results.

Because the continued existence of an organization is dependent upon its ability to achieve its goals, it is important that problems of incongruency and alienation be resolved. The goals of the organization and the goals of the individual must not conflict severely lest organizational goal achievement be adversely affected. The school principal has the difficult task of reconciling the goals in the educational organization and of immediately suffering the consequences if reconciliation attempts fail.

According to Etzioni, "one important factor determining the degree of goal realization is the nature of the

⁴Authur L. Stinchcombe, Rebellion in a High School (Chicago: Quadrangle Books, 1964), p. 8.

authority structure of the organization."⁵ Pursuing Bennis'⁶ notion that the problem of authority is essentially a problem of superior-subordinate relationships, he noted that

Line and staff analysis as well as bureaucratic theory assumes that there is only one major structure of authority (the line). It may be very complicated and have many branches but it always has one center of authority where final decisions are made and conflicts can be resolved. The main authority line is directly related to the primary goal activity of the organization and only indirectly to secondary (means) activities.⁷

Applied to the educational organization, which may be termed a bureaucracy since it manifests the bureaucratic characteristics described by Etzioni,⁸ the principal is the center of authority for his school. As such he makes final decisions regarding student and staff behavior in their institutional roles. The principal's behavior as he exercises the prerogatives of his position may intensify or decrease incongruency and alienation on the part of both students and staff.

Whether or not the exercise of authority by the principal reduces the degree of incongruency and alienation on

⁵Amitai Etzioni, "Authority Structure and Organizational Effectiveness," Administrative Science Quarterly, IV (June, 1959), 43.

⁶Warren G. Bennis, "Leadership Theory and Administrative Behavior: The Problem of Authority," Administrative Science Quarterly, IV (December, 1959), 262.

⁷Etzioni, op. cit., p. 60.

⁸Amitai Etzioni, Modern Organization (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1964), pp. 53-54.

the part of students is determined by the loyalty of the students to a codified and rationalized body of rules and law.⁹

If students feel that school rules and laws are not justifiable or legitimate and if they are not committed to the status system which rewards conformity and obedience to rules, bureaucratic authority, as exercised by the principal, becomes ineffective. "This connection between authority and the status system means that attitudes toward the status system itself partly determine attitudes toward authorities."¹⁰

Brummer stated the practical consequences of Weber's and Stinchcombe's theories thusly:

A central issue in teenager rebellion is adult power and control. In our effort to impose a semblance of order and continuity on our society, we enforce standards and limits of behavior of the young. This effort to mold behavior and to impose rules often takes an excessively zealous form of petty rules and procedures to the point where youths feel that they have no rights, no freedom to choose, no privacy, no ear that will listen to their criticism and opinions. . . .

. . . They feel "put down" by adults whenever they speak up on controversial issues. Adults interpret their expressive efforts as "impertinence" and lack of respect. The inevitable result is conflict and teenage response is reluctant conformity, pressure or overt rebellion.¹¹

He continued:

Some causes lie in school traditions and attitudes.

⁹Stinchcombe, op. cit., p. 5.

¹⁰Ibid., p. 26.

¹¹Lawrence M. Brummer, "The Coming Revolt of High School Students," The National Association of Secondary School Principals' Bulletin (September, 1968), 15-17.

Schools as social institutions generally have a stifling effect on student involvement. . . . Discipline in the average school is rigid and repressive. A vicious circle of rules, flaunting of rules, crackdowns, resentment, and more rule breaking is common place. The rebellious minority generates an almost intolerable plethora of additional rules and disciplinary procedures for the conforming but increasingly hostile majority. . . .¹²

Bennis pessimistically predicted that the structure will fail in the next 20-25 years because new social systems better able to cope with the demands of the twentieth century will emerge.¹³

Defending the bureaucratic organization as being embedded in the culture, Wilcox¹⁴ suggested that the demise of the bureaucracy was not imminent and that organizational theorists must continue to regard it in formulating theories. He proceeded to test the hypothesis that the bureaucratic organization is embedded in the culture with an instrument developed by himself and administered to white elementary, secondary and college students drawn chiefly from a middle-class suburban community in California. He concluded that

. . . the elementary and high school students to whom the test was administered are bearers of the culture trait of hierarchy and that that trait has a close¹⁵ correspondence to the principles of organization.

Wilcox's conclusions indicated that middle-class

¹²Ibid.

¹³Bennis, Changing Organizations, p. 4.

¹⁴Herbert G. Wilcox, "The Culture Trait of Hierarchy in Middle Class Children," Public Administration Review (May, June, 1968), 222-224.

¹⁵Ibid., p. 232.

white children show definite signs, as measured by his test, of having internalized the bureaucratic organizational concept. Though he made no attempt to relate this internalization to specific school problems, inferences based upon knowledge of differences between urban and suburban school systems are possible. The current emphasis on the concern about the problems of urban education, particularly those dealing with student activism and unrest, speaks eloquently of these differences.

If the culture trait of hierarchy, the latter being a primary characteristic of bureaucracy, is embedded in the culture and is borne by middle class, white children, the question of whether this trait is borne by children of other ethnic and socioeconomic groups warrants investigation.¹⁶ Sharing a common culture, children of other ethnic and socioeconomic groups should manifest this trait to a greater or lesser degree. This conjecture is warranted in view of the acceptance by scholars and researchers that differences in values, life styles, and expectations do exist in various ethnic and socioeconomic groups.¹⁷

If schools are viewed as bureaucracies and the trait of hierarchy is embedded in the culture, then behavior within the school bureaucracy may well be stereotyped by the

¹⁶Ibid.

¹⁷Arnold M. Rose, "Characteristics of Socio-economic Status Among Whites and Non-whites," Urban Schooling (New York: Harcourt, Brace and World, Inc., 1968, pp. 151-176.

trait and be hidden from those involved in the resolution of problems of student behavior. In fact Waldo suggested that a culture trait which embraced the classical organizational theory was an independent variable that consequently determined the characteristic of the organization under consideration.¹⁸ With respect to student unrest and activism, the culture trait hypothesis may provide the necessary insights to resolve this problem. Specifically, the existence of schools manifesting varying types of student deviant behavioral problems may possibly be related to the degree to which the culture trait of hierarchy is found in the students who attend the various schools. If such relationships are found, educators may validly seek to determine factors related to the development of the trait and ways of influencing this development to their advantage.

Purpose of the Study

The major purposes of this study were to: (1) determine if the degree of the culture trait of hierarchy varied in children of certain racial groups attending lower socioeconomic schools and if this variance was related to the absence of fathers from their homes; (2) determine if a relationship existed between the degree of the culture trait

¹⁸Dwight Waldo, "Theory of Organization: Status and Problems," The Study of Organizational Behavior: Status, Problems and Funds (Washington, D.C.: Comparative Administration Group, American Society for Public Administration, 1966), pp. 14-16.

of hierarchy found in students attending various lower socioeconomic schools and the proportion of certain types of discipline problems encountered by these schools.

A secondary purpose was to determine how students felt about the pattern of authority relations found in their schools.

This study rests on the assumption that (1) racial, socioeconomic and family circumstances significantly influence the nature of the students that comprise the educational organization, and (2) school systems are bureaucratic in nature and their schools function from a set of common rules and regulations.

Statement of the Problem

The problem of this study can be stated by the following questions:

1. Does the degree of the culture trait of hierarchy, as measured by the Culture Trait Test, vary significantly in children of Negro, Caucasian and Indian racial origins who attend lower socioeconomic schools?

2. Is this variance related to the absence of fathers from the home?

3. Does the degree of the culture trait of hierarchy, as measured in students by the Culture Trait Test, vary significantly in lower socioeconomic schools?

4. Is this variance related to the proportion of certain types of discipline problems found in these schools?

5. What are the feelings and opinions of students

regarding authority relations in their schools?

With regard to the problem of this study the following null hypotheses were tested:

HO₁ There will be no significant differences in variance in the degree of the culture trait of hierarchy, as measured by the Culture Trait Test, among Caucasian, Negro and Indian student groups.

HO₂ There will be no significant interaction of variance between the variables, race and father status, based on the degree of the culture trait of hierarchy, as measured by the Culture Trait Test, found in the students.

HO₃ There will be no significant differences in variance in the degree of the culture trait of hierarchy, as measured by the Culture Trait Test, between students with fathers present and students with fathers absent.

HO₄ There will be no significant differences in variance in the degree of the culture trait of hierarchy, as measured in students by the Culture Trait Test among the lower socioeconomic schools.

HO₅ There will be no significant relationship between the degree of the culture trait of hierarchy, as measured in students by the Culture Trait Test in each school and the proportion of certain types of discipline problems found in each school.

In addition to the testing of these hypotheses, data from a questionnaire designed to determine the feelings of students about the authority relations in their schools was compiled and analyzed non-statistically.

Significance of the Study

This study was deemed significant in that it sought to add to existing knowledge regarding organizational and administrative theory, particularly within the educational organization. It may aid urban school principals in understanding problems of student unrest and deviant behavior stemming from the pervasive influence of the bureaucratic-type relationships in our society and provide clues for dealing effectively with them.

Definition of Terms

Culture Trait of Hierarchy: A conceptualization of the existence of internalization by students of the pattern of superordinate-subordinate relationships characteristic of the nation's cultural organization, particularly business organizations.

School Socioeconomic Status: A conceptualization based on the commonly accepted theory that a school reflects the average socioeconomic status of the students it serves. The socioeconomic status of the students is generally determined by family occupation, education, income and race.

Junior High School: A school composed of the third three-year period of a pupil's education; it normally includes

grades 7-8 or 7-9.

Limitations of the Study

The following were regarded as limitations of this study:

1. This study was limited to the six junior high schools having the lowest socioeconomic status in a large independent school district.
2. This study was limited to ninth grade students from these junior high schools.

Data Collection

In order to test the hypotheses of this study statistically, it was necessary to acquire the following data:

- (1) student data--race, score on the Culture Trait Test, presence or absence of father, and opinions and feelings concerning the authority relations in their schools; (2) school data--socioeconomic status and types of discipline problems.

Student data. A sample of ten percent of the ninth grade students from each school was randomly selected. They were administered the Culture Trait Test and the specially designed opinion questionnaire. Information regarding race and father status was obtained from school records, school

officials and students themselves. Appropriate hypotheses were tested for significance using analyses of variance.

School data. Information regarding school socioeconomic status was obtained through ratings of a panel of judges based on accepted criteria. Information regarding behavior problems was obtained by examining school discipline records. The relational hypotheses were tested using methods of correlation.

A more complete explanation of data collection techniques is provided in Chapter III.

Overview of the Study

The study is divided into five chapters. Chapter I contains the introduction, background of the study, its need and justification, definition of the problem and terms to be used. A review of related literature is found in Chapter II. Chapter III deals with the design, procedures, instrumentation, test administration and scoring, and statistical treatment, Chapter IV with the analysis and interpretation of data, and Chapter V consists of the summary, conclusions and recommendations.

CHAPTER II

REVIEW OF SELECTED AND RELATED LITERATURE

The problem of this study concerned itself primarily with bureaucracy, the culture trait of hierarchy, and social class in education, and secondarily with student school behavior and father absence as it affects school children. The concept of the cultural trait of hierarchy, which stems from considerations of the nature of the bureaucracy, is of recent vintage and, consequently, relatively unresearched. Therefore, separate consideration, in terms of related research, was not possible. Consequently, consideration of related literature and research was presented under the following headings: (1) bureaucracy, (2) social class in education, (3) father absence, and (4) student school behavior.

Bureaucracy

Over the past half century considerable study by students and scholars of organization has been devoted to the theory of bureaucracy. The result of this study has been a large body of literature which attempted to analyze and refine the theory and apply it to organizations in various

fields. Because of this munificence, consideration of this literature was limited to that which was representative of the field and lent itself to an understanding of school organizational behavior on the part of students.

Etzioni suggested the pervasiveness of organizational influence in our society when he humorously stated:

We are born in organizations, educated by organizations and most of us spend much of our lives working for organizations. We spend much of our leisure time paying, playing and praying in organizations. Most of us will die in organizations. Most of us will die in organizations, and when the time comes for burial, the largest organization of all--¹the state--must grant official permission.

He pointed out that there are many types of organizations whose chief characteristics are deliberately planned divisions of labor, power and communication responsibilities to enhance the achievement of some goal, the presence of power centers which control the concerted efforts of the total organization toward the goal, and substitution of personnel. Formal organization is viewed as one set of characteristics of an organization, and as being a part of an organization. It is distinguished from the informal part of the organization in that it is more consciously structured. The term bureaucracy, is viewed as an appropriate synonym.² The

¹Amitai Etzioni, Modern Organizations (Englewood Cliffs, New Jersey: Prentice Hall, Inc., 1964), p. 1.

²Ibid., p. 2.

informal organization is viewed as the "other" part of the organization, or as "What the organizational life is really like, as distinct from blueprints and charts."³

It is appropriate to speak of the public schools as an educational organization which, too, has its formal and informal structures. It consists of laws, rules, regulations and patterns, but it also consists of interpersonal relationships, attitudes, and perceptions.

Bennis listed the following characteristics or dimensions of the bureaucracy:

1. A division of labor based on functional specialization.
2. A well defined hierarchy of authority.
3. A system of rules concerning the rights and duties of employees.
4. A system of procedures for dealing with work situations.
5. Impersonality of interpersonal relations.
6. Promotion and selection based on technical competence.⁴

It is apparent that an essential element in the operation of the bureaucracy is that of authority. There must be a center of authority⁵ to insure that things go as planned. Because the hierarchial arrangement permits and demands

³Ibid., p. 20.

⁴Warren G. Bennis, Changing Organizations (New York: McGraw Hill Book Co., 1966), p. 5.

⁵Amitai Etzioni, "Authority Structure and Organizational Effectiveness," Administrative Science Quarterly, IV (June, 1959), 47.

"buck-passing" it is the center of authority who ultimately resolves conflicts and relieves tensions that arise in the organization.

Conflicts and tensions in the bureaucratic organization are inevitable according to many theorists. Argyris⁶ suggested that, in view of current research, the underlying assumption about the essential rationality of the formal organization is not valid. This assumption is that man will behave in a rational manner in accordance with what the formal plan requires. He contended that the requirements of the formal organization were incongruent with the needs of healthy, mature individuals.

Bennis⁷ contended that a major deficiency of bureaucracy was its inability to adapt to change. It is remarkably well suited for a stable, highly competitive, undifferentiated society in which power, knowledge and resources are concentrated in the hands of a few. Factors such as growth of science, research and development activities, intellectual technology and the increase of transactions with increasingly important social institutions have contributed to its demise. He summarized thusly:

⁶Chris Argyris, "The Individual and Organization: Some Problems of Mutual Adjustment," Educational Administration: Selected Readings, eds. Walter G. Hack, John Ramseyer, William G. Gephart and James B. Heck (Boston: Allyn and Bacon, Inc., 1965, pp. 159-182.

⁷Bennis, op. cit., p. 9.

. . . the first assault on bureaucracy arose from its incapacity to manage the tension between individual and management goals. . . . The second and more major shock. . . has been caused by scientific and technological revolution.⁸

Because organizations must maintain themselves if they are to achieve goals, they must be concerned with maintaining people. They must also have the means to motivate people for goal-achieving activities. These means are provided in the authority structure of the organization. The hierarchial authority structure of the bureaucracy has been conceived as an ideal.⁹

Weber presented three types of authority, legal, charismatic, and traditional for inducing organizational conformity.¹⁰ According to Stinchcombe¹¹ legal or bureaucratic authority had its legitimacy based in the loyalty of subordinates to a codified and rationalized body of rules and laws. Weber's theory would seem to suggest that bureaucratic authority is abrogated when subordinates are not loyal to a codified body of rules and regulations. Change is then necessary, either in terms of the rules or regulations or in terms of the adoption

⁸ Ibid., p. 10.

⁹ Etzioni, Modern Organizations, p. 52.

¹⁰ Max Weber, "The Three Types of Legitimate Rule," A Sociological Reader on Complex Organizations (New York: Holt, Rinehart and Winston, Inc., 1969), pp. 6-15.

¹¹ Arthur L. Stinchcombe, Rebellion in a High School (Chicago: Quadrangle Books, 1964), p. 5.

of another type of authority. Bennis's¹² contention concerning adaptability is appropriate for reconsideration.

There are indications that problems of student unrest may stem from their disloyalty to an authority structure based on a structure of rules and regulations that they regard as irrelevant to their perceptions of what school is for.^{13,14,15}

Otten pointed out that the earlier basis for the authority which produced consent and conformity was loyalty to the institution and to its rules and regulations for the sake of the school's reputation. He added that "where there is loyalty, alienation is minimized, order prevails and compliance is automatic."¹⁶ This type loyalty, he insisted, has been declining since 1920. Improved academic standards, increased student populations, particularly at the graduate level, growing student sophistication, deemphasis of extra curricular activities, decreasing isolation, radical politics and war contributed to the decline of this loyalty.¹⁷

¹²Bennis, op. cit., p. 9.

¹³C. Michael Otten, "Ruling Out Paternalism--Students and Administrators at Berkeley," The American Behavioral Scientist, XI, No. 5 (May-June, 1968), 28-32.

¹⁴C. A. Hollister, M. A. McGhehey and M. Chester Nolte, "The Rights of Children," The American School Board Journal, CLVI, No. 12 (June, 1969), 8-16.

¹⁵Brummer, op. cit.

¹⁶Otten, op. cit., p. 28.

¹⁷Ibid., pp. 28-29.

Lopreato¹⁸ found in his study of two groups, "command and obey," differentiated according to authority roles, that the "command" group, having authority, tended to perceive authority as being more legitimate than did the "obey" group and tended to acquiesce more frequently.

Presthus¹⁹ suggested that the American culture, influenced by big business, emphasized conformity, success and authority. He theorized that bureaucratic values were a major element in our culture; they were acquired early in life, and students who acquired them could accomodate the bureaucracy. Wilcox²⁰ attempted to measure the degree to which this trait was acquired in middle-class white students at all educational levels.

There is a growing body of research dealing with bureaucracy as it relates to the school organization. Kidd²¹ investigated to determine if the degree of teacher perceived school bureaucracy was related to the rule orientation of the principal and to his belief system. He found among other things that the bureaucratic norm varied from school

¹⁸Joseph Lopreato, "Authority Relations and Class Conflict," Social Forces, XLVII, No. 1 (Sept., 1968), 70-79.

¹⁹Robert Presthus, The Organizational Society (New York: Vintage Books, 1965), pp. 164-256.

²⁰Wilcox, op. cit.

²¹Jimmy Leroy Kidd, "A Study of Principals' Belief Systems and Rule Orientation as Related to School Organization Bureaucracy," (Unpublished doctoral dissertation, The University of Oklahoma, 1967).

to school and suggested the bureaucratic norms emanating from the central office may have a greater influence on the perceptions of teachers than those norms issuing from the individual school. Prigmore²² concluded in his study that teachers who were strongly rule-oriented perceived their principal as being strongly rule-oriented and vice versa. He pointed up the fact (1) that teachers who were low in rule orientation met the expectations of their students to a greater extent than did teachers who are high in rule orientation, (2) that teachers who experienced less organizational press, incongruence between rule orientation of principals and those of teachers, met student expectations to a greater extent than teachers who experienced high organizational press.

Bier²³ attempted to relate a life style developing among youth to the life style fostered by the bureaucratic organization and industrial humanism organizational approach. He found it to be grossly different from that fostered by the bureaucratic organization and much more similar to that fostered by the industrial humanism approach.

²²Charles Thomas Prigmore, "A Study of Teachers Fulfillment of Student Expectations as Related to School Organization Bureaucracy," (unpublished doctoral dissertation, The University of Oklahoma, 1968).

²³Thomas Edward Bier, "Contemporary Youth: Implications of the Personalistic Life Style for Organizations," (unpublished doctoral dissertation, Case Western Reserve University, 1955).

In a study of men and acting squad leaders from 52 army training squads, Hilmar²⁴ investigated the incompatibilities between the norms of a formal organization and those of informal groups within the organization. The respondents completed questionnaires concerning their own attitudes and their predictions about the probable behavior of themselves, their company commanders, most squad leaders and other superordinate personnel. He found (1) that individuals at the lowest level of the formal hierarchy were less likely than their immediate superiors to accept and conform to the norms of the formal organization, (2) in predicting a particular individual's behavior in conflict situations, other members of the same formal organization would tend to assume that the given individual's behavior would be the same as that which they considered normative for persons holding his formal position in the hierarchy, (3) members would react more favorably toward a superior if they assumed that his behavior in role conflict situations would be similar to their own than if they assumed his behavior would be different from their own.

In a laboratory study in which two contrasting types of organizational structure were created, Paloli²⁵ attempted

²⁴Normal Axel Hilmar, "Conflicting Social Norms in a Formal Organization: A Study of Interpersonal Expectations," (unpublished doctoral dissertation, Cornell University, 1955).

²⁵Ernest C. Paloli, "Organization Types and Role Strains--An Experimental Study of Complex Organizations," Sociology and Social Research, LI, No. 2, (January, 1967), 171-183.

to study their relationships to three types of role strain--role uncertainty, role disparity, and role incompatibility. The two organizations differed in degree of specialization, emphasis on rules and regulations, amount of work pressure, number of formal levels, clarity of goals, differentials in influence-authority-power, and amount of individual freedom. His findings supported his hypothesis that role uncertainty and role disparity would be more frequent in a relatively unstructured organization, while role incompatibility would be more frequent in a more highly structured organization. He also observed that emphasis on work rules was more directly associated with role incompatibility than any other organizational feature, and that stratification emphasis and type of supervision were closely related to the appearance of each role strain.

Social Class and Education

Although few today deny the existence of some form of social differentiation within American society, there is still disagreement as to the nature of social class. With respect to the phenomenon of social class, the controversy has centered around the following questions:

1. Is social stratification a reality in America?
2. Is stratification in this country in the nature of a continuum, or a set of ordered levels?
3. If a set of ordered levels, how many?

4. Does our system of stratification have a single dimension or is it a composite of many dimensions?
5. Does each locality have its own system of stratification or is there a national system?
6. Are there, then, social classes in America?²⁶

Herriott and St. John concluded that:

1. Social stratification is an important characteristic of American society.
2. Stratification is a continuum.
3. This continuum can be divided conceptually into any desired number of levels, but these levels are not clearly distinct from one another.
4. Stratification is a complex, a composite of at least the economic, the prestige and the power dimension and each dimension is capable of subdivision.
5. Systems of social status are more highly developed in small communities where residents are known to each other and form status groups, but the features of these systems are general from community to community. Moreover, the economic hierarchy is not community bound since it is made up of aggregates of people of similar economic position, and therefore of similar opportunities, values, and sub-culture. It is thus realistic to speak of a national stratification system, especially with respect to large urban areas.
6. Contemporary American sociologists vary in their use of the term, social class. A few adhere strictly to Weber's practices, reserving the term for the economic order of stratification. Some use the term loosely to refer to all dimensions of social stratification.

²⁶ Robert E. Herriott and Nancy Hoyt St. John, Social Class and the Urban School (New York: John Wiley & Sons, Inc., 1966), p. 16.

Others, like ourselves, prefer to avoid semantic problems by abandoning the term in favor of the more operational one, socioeconomic status, which represents whatever is measured by the indices used.²⁷

Nowhere are problems of social class as related to education more intense than in the cities. Even the relatively unsophisticated are familiar with problems of population shifts, declining property rates, increasingly elderly, Negro and poor central city populations, deteriorating buildings and neighborhoods, etc. These factors and many more contribute to the sociological and economical problems of both the central city and its schools.

There was substantial research on the relation of social class to education in America. During the last twenty years, and particularly the last 10 years, research of this nature has abounded. However, much of it seemed to be irrelevant to the solutions of contemporary problems because of its emphasis on the social class of the child, instead of the social composition of the school; on slum schools only; rather than contrasting schools of various social class levels; and on the pupils in slum schools, instead of their teachers and principals.²⁸

Many of the earlier studies focused on the influence

²⁷Ibid, p. 5.

²⁸Herriott and St. John, op. cit., p. 5.

of the social class of the individual student in the heterogeneous school to learning. They generally indicated a strong correlation between an individual's social class level and many aspects of his school life.

Hollingshead²⁹ found that students at the bottom of the social hierarchy were significantly lower in all measures of achievement than students at the top of the hierarchy. These students at the bottom also received fewer prizes, lower grades, lower test grades and were less frequently involved in college preparatory courses.

In relating socioeconomic status and intelligence to college planning and eventual college attendance, Sewell and Shah³⁰ found that both socioeconomic level and intelligence had direct effects on planning on college, college attendance, and college graduation. They found that for females socioeconomic level was a more powerful factor than intelligence while the reverse was true for males.

Sugarman,³¹ in investigating the relationships between

²⁹August B. Hollingshead, Elmstown Youth (New York: John Wiley and Sons, 1949).

³⁰William H. Sewell and Uemal P. Shah, "Socioeconomic Status, Intelligence, and the Attainment of Higher Education," The Journal of Creative Behavior, XI, No. 1, (Winter, 1967), 1-15.

³¹B. N. Sugarman, "Social Class and Values Related to Achievement and Conduct in School," The Sociological Review, XIV, No. 3 (November, 1966), 287-301.

social class and values, and achievement and conduct, surveyed 540 male secondary students in four London schools. He found that: (1) over achievement relative to IQ was associated with high scores of middle class orientation, while underachievement was associated with low scores and (2) low scores on middle class orientation was associated with low conduct ratings.

In an unprecedented study comparing different cultural groups on ability and achievement scores at the beginning and end of secondary schools, Stewart, Dole and Harris³² supported contentions that a relationship existed between social class and achievement. Their study involved 815 students from 28 public high schools in Hawaii. The sample included Chinese, Japanese, Caucasians, Hawaiians, Filipinos, mixed and others, unspecified. He found that on all four scores Japanese and Chinese ranked at the top and Hawaiians at the bottom. This finding was made more significant by virtue of the fact that Japanese and Chinese were at the top of the social class hierarchy and Hawaiians were at the bottom. Relative to earlier discussions regarding the prevalence of lower social class students in terminal programs as opposed to college preparatory programs, they found that 80 percent of the Hawaiian

³²Arthur A. Dole, Yewell Y. Harris and Laurence Stewart, "Cultural Differences in Abilities During High School," American Educational Research Journal, IV, No. 1 (January, 1967), 19-29,

females were in terminal programs.

Aside from the effect of social class on school achievement, it was noted that participation in extra-curricular activities, election to student office and membership in high ranking peer group cliques were among the other variables regularly found to be related to the individual's social class background.^{33,34}

With the increasing stratification between schools, resulting in the growth of cities and demographic changes, research emphasis has shifted to studying the effects of the social class composition of the school on the achievement and aspirations of the students. Herriott and St. John³⁵ pointed out that schools attended by children of the poor and lower classes in the cities were found in the older sections of the city; were short of play space; and were suffering from low achievement, high rates of transiency, antisocial behavior, dropouts, over-crowded classrooms and teacher shortages.

Social class differences have also been noted with regard to values. Rothman³⁶ found that among junior high

³³Hollingshead, op. cit.

³⁴C. Wayne Gordon, The Social System of the High School (Glencoe, Illinois: The Free Press, 1957).

³⁵Herriott and St. John, op. cit., p. 4.

³⁶Phillip Rothman, "Expressed Values of Selected Junior High School Students and the Relationship of These Values to Socioeconomic Status," (unpublished doctoral dissertation, New York University, 1954).

school students, lower middle class students expressed a greater amount of aspiration and purpose, more emphasis on college, singing and dancing lessons and attending meetings. Upper lower class students expressed more time on jobs and sports and more intentions of entering the military services.

Tefft³⁷ studied culture change and values among teenage students from two Plains Indian tribes, the Arapaho and Shoshone, and compared the findings with those for whites. The three groups, which composed the 310 Wind River High School students participating in the study, were given the modified Howard Value Questionnaire. The white group was at the top of the social class hierarchy, followed by the Shoshones and then the Arapahos at the bottom. The students were comparable in terms of achievement and ability. He found that the Arapahos showed a lower agreement on how to rank value choices than did the other groups. He concluded that Arapaho teenagers felt unable to make a firm commitment to any set of values which they felt were consistently rewarded by their peers. This seemed to be related to their apathy, low aspiration, escapism, and self-to-other alienation.

Significant and important intergroup differences in

³⁷Stanton K. Tefft, "Anomy, Values and Culture Change Among Teenage Indians: An Exploratory Study," Sociology of Education, XL, No. 1, (1967), 145-157.

attitudes and values were pointed out by Thomas³⁸ with respect to importance of school, people in authority, public and private, and manners and grooming.

The most comprehensive study of school socioeconomic status was done by Herriott and St. John³⁹ as they attempted to determine its effect on the attitude and behaviors of principals and teachers. Of import to this study was the methodology for determining school socioeconomic status. They chose socioeconomic status rather than social class for its functional advantages. Collecting data from a nationwide sample of 41 cities drawn from cities with populations of 50,000 or more during the 1960-61 school year, the researchers interviewed 409 principals to determine the socioeconomic status of the school. During the interview

. . . each principal was asked to estimate the percentage of pupils in his school where:

1. The father is an unskilled or semi-skilled worker.
2. The father is a professional person, business executive, or manager.
3. Neither person has received any education beyond high school.
4. At least one person is a college graduate.
5. The combined family income is less than \$5,000.
6. The combined family income is \$10,000 or more.⁴⁰

Utilizing the statistical technique of factor analysis, "the resulting weights on the first principal component was used to compute a school SES for each school."⁴¹ An examination

³⁸R. Murray Thomas, Social Differences in the Classroom (New York: David McKay Company, Inc., 1965), pp. 24-25.

³⁹Herriott and St. John, op. cit. ⁴⁰ibid., p. 18.

⁴¹Ibid.

of the supplementary tables for the investigation indicated that at the junior high school level, equal proportions of the schools were found in the highest and lowest socioeconomic categories.⁴² Of the junior high schools in the highest socioeconomic categories, an average of 3.49 percent of the students were Negro while in the schools of lowest socioeconomic categories 49 percent were Negro.⁴³ The following chart⁴⁴ suggests the relationship between the six⁴⁵ questions asked in the interview and the final socioeconomic ratings:

	<u>Highest SES</u>			<u>Lowest SES</u>		
	M	S.D	N	M	S.D	N
1. Come from homes where at least one parent is a college graduate.	51.3	18.2	37	2.1	1.9	36
2. Come from homes where neither has gone beyond high school.	24.3	15.4	37	89.4	17.4	37
3. Come from homes where the father is a professional person, business executive, or manager.	50.0	17.3	37	2.1	2.2	36
4. Come from homes where the father is an unskilled or semi-skilled worker.	18.9	12.6	36	84.5	13.4	37
5. Come from homes where the combined family income is \$10,000 or more.	40.2	20.9	37	1.5	2.5	34
6. Come from family where family income is less than \$5,000.	12.4	9.7	37	79.6	17.5	37

⁴²Ibid., p. 22.

⁴⁴Ibid., p. 216.

⁴³ibid., p. 217.

⁴⁵ibid., p. 18.

When the determinations of socioeconomic status utilizing interviews with principals were compared with those achieved utilizing census tract data, the coefficient was found to be .81 at the elementary level, .68 for the junior high schools and .62 for senior high schools.⁴⁶

Stinchcombe's study, limited in applicability in that it involved high school students in a logging and sawmill town of about 4,000, tested three hypotheses concerning the causes of rebellion. One of these hypotheses was that high school rebellion and expressive alienation occurred when future status was not clearly related to present performance.⁴⁷ He argued that social class determined or influenced students' perceptions of what the future held for them. He found (1) that while working class boys were not significantly more rebellious than middle class boys, working class girls were more rebellious than middle class girls, and (2) working class boys were more likely to be rebellious than middle class boys only if they were interested in college preparatory curricula.⁴⁸

Father Absence

Fatherhood is a relatively unresearched area compared to motherhood. It was estimated that there are fifteen times

⁴⁶Ibid., p. 19.

⁴⁷Stinchcombe, op. cit., p. 5.

⁴⁸Ibid., p. 83.

as many publications dealing with the mother-child relationship as with that between father and child.⁴⁹ According to Clausen and Williams, "the importance of the father as a role model for the son, facilitating the appropriate sex-role identification, is one of the basic concepts in psychoanalytic theory."⁵⁰ Though not serving as a role model, the father also facilitates the sex-role identification of the daughter. Bronfenbrenner asserted that it was the behavior of the father that explained the differential effect of parental behavior on the two sexes and individual differences within each sex. Where fathers played a predominately affectionate role, both responsibility and leadership were fostered by the relative predominance of the same sex--boys tended to be more responsible when the father was principal disciplinarian; girls when mother assumed the major disciplinarian role.⁵¹

A prevalent notion regarding the significance of parents in the personality development of children was that children were best reared in homes where two understanding

⁴⁹Leonard Benson, Fatherhood: A Sociological Perspective (New York: Random House, 1968).

⁵⁰John S. Clausen and Judith R. Williams, "Sociological Correlates of Child Behavior," Child Psychology, The second Yearbook of the National Association for the Study of Education (Chicago: The University of Chicago Press, 1963), p. 94.

⁵¹Urie Bronfenbrenner, "The Changing American Child-A Speculative Analysis," The School and Urban Crisis: A Book of Readings, eds. Barbara Bommerito and August Keiber (New York: Holt, Rinehart and Winston, 1966), pp. 140-141.

and loving parents were present. A second was that a child needed the father as an object of love security during every developmental phase of childhood. The McCords and Thurber concluded that "it would be surprising if the absence of the father had no effect on the child."⁵²

Studies dealing with father absence have generally been of several types: the matriarchial Negro family with a high incidence of desertion, long lasting absences of sailor fathers and long-lasting, but single-time absences of fathers in military service.⁵³ In studies comparing united homes with those in which the father was temporarily or permanently absent and in psychological and psychoanalytic theory concerning paternal absence, the focus had been on three areas of personality development: the extent to which a child developed a feminine or a masculine self-image, the quality and quantity of anxiety he experienced and the probability he would engage in deviant behavior.⁵⁴

According to Clausen and Williams, Tiller⁵⁵ studied families of Norwegian merchant marine officers, each of which had a child from 8-9 years of age. These children

⁵²Joan McCord, William McCord and Emily Thurber, "Some Effects of Paternal Absence on Male Children," School Children in the Urban Slum--Readings in Social Science Research, ed. Joan Roberts (New York: The Free Press, 1967), p. 484.

⁵³Clausen and Williams, op. cit., p. 94.

⁵⁴McCord, McCord, and Thurber, op. cit., pp. 484-485.

⁵⁵Clausen and Williams, op. cit.

were found to be more dependent than children of families with fathers present. Lynn and Sawrey⁵⁶ who also studied children of Norwegian merchant marine officers, found the boys showed greater peer adjustment while girls were more dependent. Sears, Pintler and Sears, along with Stolz, found the boys from wartime absent fathers were less aggressive than boys from intact families.^{57a}

In a five-year study,⁵⁷ between the ages of 10 and 15, 105 lower class boys from broken homes where the father was absent because of death, desertion, divorce or incarceration in prisons or mental hospitals were compared with 150 boys from intact families. In contrast to studies with younger boys whose fathers were temporarily out of the home, aggressive behavior was more prevalent among boys from broken homes. Two other types of problem behaviors were found more often in broken homes: high sex anxiety and adult criminality. However, rates of these problem behaviors were not higher than rates among intact families with intense conflicts.

Considerable insight into the relationship between father absence and attitudes toward authority was offered by Liff⁵⁸ in his study of interpersonal attitudes of

⁵⁶Ibid., p. 95.

^{57a}Ibid.

⁵⁷McCord, McCord, and Thurber, op. cit., pp. 484-497.

⁵⁸Zanuel A. Liff, "A Comparison of Interpersonal Attitudes to Male and Female Authority Figures Among Delinquent Institutionalized Boys," (unpublished doctoral dissertation, New York University, 1955).

institutionalized boys toward authority figures of different sexes. His findings suggested that the sexual role of the authority figure was of less importance in the attitudes expressed than the particular qualities perceived in the authority role. Walsh⁵⁹ found that the father's attitude was not significantly related to the development of self-control in the children of his study.

The conclusions reached and suggested by the reported research and literature indicated the importance of the quality of parental influence rather than the quantity. A basic inference that might be drawn is that the absent parent had an effect on the present parent which, in turn, determined the quality of the parental influence. Nonetheless the premise that the absence of the father affected the personality and behavior of children, especially boys, was supported.

Student School Behavior

There is no dearth of research dealing with the problem of student school behavior. Much of this research was technique-oriented and, as such, was focused primarily on the classroom teacher. Since this study attempted to view school behavior from a total school reference, such research seemed irrelevant. However, it is clear that total school behavior

⁵⁹Richard P. Walsh, "Self Control in Children," (unpublished dissertation, Southern Illinois University, September, 1966).

included student classroom behavior along with other behavior at school. That all types of school behavior and behavior outside the school led to perceptions about the relative state of rest or unrest existing in the school was the essential premise of this study.

Previous sections in this chapter have suggested that behavior was complex and influenced by many variables. School behavior as such may be but manifestations of non-school related behavior by family, friends, institutions and others. In view of this fact, the emphasis of this section was on describing the behavior which may be termed authority-confrontation, thus indirectly describing the opposite type.

One of the arguments in support of the junior high school concept was that students of this age group, roughly 12-15, were undergoing the problems of adolescence, an extremely stressful period. Van Til⁶⁰ and others suggested that adolescence were grappling with the problems of finding their identity and learning independence and thus required a period of exploration and testing. According to Horrocks:

1. Adolescence tends to be a time of seeking status as an individual. There is a tendency to attempt emancipation from childish submission to parental authority and in general a struggle against relationships with adults where the adolescent is subordinated on the basis of inferiority in age, experience and skill.

⁶⁰William Van Til, Gordon F. Vars, and John Lounsbury, Modern Education for the Junior High School Years, 2nd ed. (Indianapolis: The Bobbs-Merrill Company, Inc., 1967), pp. 121-146.

2. Adolescence tends to be a time when group relationships become of major importance. The adolescent is usually most anxious to attain status with, and recognition by, his age mates. He tends to desire intensely to conform to the actions and standards of his peers. It is also a time of emerging heterosexual interests that bring complexity and sometimes conflict to emotions and activities.⁶¹

There were indications that at the junior high school level, the ninth grade manifested more problems of pupil adjustment than the other two grades. Scholars and researchers of the junior high school pointed out that the difference between a seventh grader and a ninth grader was much more pronounced than that between a ninth grader and an eleventh grader, both psychologically and physiologically. Thus the question of whether the ninth grade should be separate or attached to the junior or the senior high school remained basically unanswered. Coleman found a difference between the rural ninth grade student and his urban counterpart. The latter was much more disdainful of childhood ways, while the former was more obedient to teachers.⁶²

Goodman investigated conformity behavior in adolescence utilizing 1303 students. These students were asked what they expected of themselves and what they believed their fathers, mothers, friends and best-liked teachers expected of them in their roles of family members, peer group members

⁶¹John E. Horrocks, The Psychology of Adolescence, 2nd ed. (Boston: Houghton Mifflin Company, 1962), p. 25.

⁶²James S. Coleman, "Social Change: Impact on the Adolescent," Bulletin of the National Association of Secondary School Principals, (April, 1965), p. 13.

and students. They were also asked how they themselves and the important others viewed their actual behaviors in reference to their expectations. The study results indicated that (1) the adolescent conformed more to the norms of his friends than to those of his parents or even his own; (2) he conformed more to the demands of his peers and of one or both of his parents than to those of his teacher for the student role, and to his peers for the family member role; (3) he conformed more to his parents' demand for peer role behavior than to his friends' norms and (4) he believed that his parents and peers were aware of his conformity and deviance and this knowledge was his way of maintaining his own integrity.⁶³

White and Charry⁶⁴ found in their investigation to assess the variables related to pupil maladjustment and to determine if differential treatment was accorded maladjusted pupils that pupil school disorder was more related to low IQ than to low socioeconomic status.

In Mutimer's⁶⁵ study, the ratings of students and teachers regarding the seriousness of fifty behaviors of children and adolescents were compared. The ten most serious

⁶³Norman Goodman, "Adolescent Norms and Behaviors: Organization and Conformity," Merrill Palmer, XV, No. 2 (July, 1969), 199-211.

⁶⁴Mary Alice White and June Charry, "School Disorder, Intelligence and Social Class," (published dissertation, Columbia University, 1966).

⁶⁵D. J. D. Mutimer, "A Comparative Study of the Ratings of Students and Teachers Regarding the Seriousness of Fifty Behaviors Commonly Observed in Children and Adolescents," (unpublished doctoral dissertation, Northern Illinois University, 1967).

and ten least serious of the fifty behaviors as rated by students is shown below:

<u>Most Serious</u>	<u>Least Serious</u>
1. Stealing	41. Tardiness
2. Destroying school property	42. Carelessness
3. Untruthfulness	43. Unhappiness
4. Masturbation	44. Selfishness
5. Enuresis	45. Nervousness
6. Cheating	46. Restlessness
7. Disobedience	47. Dreaminess
8. Profanity	48. Shyness
9. Temper tantrums	49. Whispering
10. Obscene notes-talk	50. Inquisitiveness

Boys and girls did not agree regarding the seriousness of the behaviors. Teachers and students agreed less on the ten most serious behaviors than on the ten least serious behaviors. The disagreements centered on the behaviors of "masturbation," "enuresis," "disobedience," "profanity," "obscene notes-talk," "nervousness," "unhappiness," and "restlessness." Forty per cent of the ten most and ten least serious behaviors differed significantly in the teacher-student comparison.

Attempting to discover ways in which students misbehaved in a metropolitan high school system, Zeitlin⁶⁶ collected data from actual disciplinary reports. He discovered that 82 per cent of the discipline problems fell into the classifications of disturbance, disobedience and disrespect. Such problems as cheating, theft, gambling were reported least,

⁶⁶Herbert Zeitlin, "Disciplinary Problems Reported by Teachers in a Metropolitan High School System," (unpublished doctoral dissertation, Stanford University, 1956).

each with less than 1 per cent. Disturbance and disobedience were first or second for all groups, with girls having a significantly higher per cent than boys in misrepresentation, cheating and disobedience. Negro and Caucasian students were most alike while Spanish and Caucasian students were least alike when the kinds of problems were ranked in order of frequency. Negro students had a higher percent of problems, proportionally, in the traditional "all-white" school. In addition, ninth grade students had a proportion of problems equal to that of each of the upper three grades. Teachers in schools with student courts cited 50 per cent more students than those in schools without courts.

Summary

Though a vast amount of research had been accumulated relative to the bureaucratic structure, its nature and its effects, few had focused on the educational organization since educators had not been prime contributors to this accumulation. The literature clearly suggested that the bureaucratic structure affected the personalities and behaviors of many, and by its nature, may be a contributor to problems of student unrest and activism. Wilcox's study represented the first attempt to determine the pervasiveness of the concept of hierarchy, indicating that white children in middle class schools internalized it at an early age. The degree of internalization by children of other ethnic and socioeconomic groups had yet

to be determined. This study was intended to provide that information and possibly new insights into the causes of student school behavior.

Studies dealing with the social class were legion. A vast majority of these studies are aimed at determining the effects of social class on the personality and behaviors of children. Others attempted to compare various classes and ethnic groups across socioeconomically-based variables. The difficulty surrounding the definition of social class, though the existence of social stratification was well accepted, limited the validity and reliability of many of these studies. Few attempts had been made to assess the impact of the socioeconomic status of the school on the students. The concept of school socioeconomic status recognized the effect that peer groups have on individual students, the fact that in urban areas the school population may not reflect the socioeconomic level of the neighborhood, and the effects of desegregation on many of the urban schools.

One of the many factors blamed for the problems youth face in our society today was the deterioration of the family. This deterioration was seen as resulting from the changing role of the father from that of a primary seat of authority to a more passive one. However, research still supported the importance of the role played by the father in the development of the personality of the child. Though few, relative

to those focused on the role of the mother, these studies generally stresses the importance of the father in the development of aggression, independence, and sex identity. The absence of the father seemed to result in this development to a lesser degree. While some studies suggested that the absence of the father had a direct relationship to an increase in deviant behavior among boys, others suggested that this relationship is indirect and simply represented the effect the absent father has on the mother who performed both parental roles.

Research concerning student behavior suggested many causes for behavior. Available research dealt with factors influencing behavior and techniques for preventing and resolving problems of discipline. Many of these had only classroom applicability and were not relevant to the purposes of this study. A few studies, however, attempted to categorize and classify student misbehavior problems, relating them to socioeconomic status, intelligence, achievement, peer group and family group influences and teacher behavior. They did provide a basis for attempting to categorize the schools to be used in this study in terms of types of discipline problems.

This review of literature suggested that researchers had not viewed the problem of student unrest and activism at the junior high school level. Ostensibly, no attempt had

been made to assess the impact of the bureaucratic organizational structure on the junior high school level. Articulation of feelings regarding this structure had not generally emanated from junior high school students. Most importantly, no researcher had explored the possibility that student deviant behavior might result from a relative ignorance of the bureaucratic organizational imperatives and that this ignorance might have some relationship to absence or presence of fathers in the student's home. Students simply might not be aware of the bureaucratic relationships and thus have not developed strategies for redressing grievances within the system. This study attempted to fill in these gaps in educational research.

CHAPTER III

RESEARCH DESIGN AND PROCEDURE: THE PILOT STUDY, INSTRUMENTATION, SAMPLE SIZE, TEST ADMINISTRATION AND SCORING AND STATISTICAL TREATMENT

This study was designed primarily to determine if the degree of the culture trait of hierarchy varied in ninth grade students of different ethnic groups attending lower socioeconomic schools and if the observed variance was related to the absence of fathers from the home. It also sought to determine if the schools varied in the degree of the culture trait measured by student scores and if the observed variance was related to the types of discipline problems reported for the ninth grade class. Secondarily, it sought to determine what the opinions of students were concerning the hierarchial relations that functioned in their schools.

Permission was sought and received to conduct the study in the Oklahoma City School district.

Because coefficients of reliability and validity had not been established on the Culture Trait Test for Oklahoma

students, it was necessary to conduct a pilot study. It was anticipated that such a study would provide additional information that would be useful to this investigator in completing the major study.

The Pilot Study

To provide this investigator with a better understanding of the Culture Trait Test as a basis for making more intelligent projections for the pilot study, the culture trait test was administered to four of this investigator's colleagues. Three of them held doctorates in Educational Administration; the fourth was a candidate for the same degree. This investigator also took the test. They were requested to rank the items of the test in order of increasing difficulty. The item ranked 1 was judged the easiest; the item ranked 20 was judged the most difficult.

According to Siegel, Kendall's coefficient of concordance, W , expressed the degree of association between variables (judges) and was a useful measure of interjudge or intertest reliability.¹ He stated that:

When N is larger than 7, W is distributed approximately as chi-square, using the formula

$$x^2 = \frac{S}{1/12 kN(N-1)}.$$

N = number of items to be ranked,
 K = number of judges and S = sum of the squared differences between the sums of the ranks for an individual item and the mean of the sum of the ranks

¹Sidney Siegel, Nonparametric Statistics for the Behavioral Sciences (New York: McGraw Hill Book Company, Inc., 1956), p. 229.

the ranks for all items.²

Table I shows the rankings of the four colleagues and this investigator.

TABLE 1
RANKINGS OF TEST ITEMS BY COLLEAGUES AND INVESTIGATOR

Judges					Items															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
A	5	20	1	17	13	19	7	6	14	4	10	16	3	11	12	18	15	8	9	2
B	1	20	2	4	19	17	12	11	10	3	16	18	7	6	13	14	15	8	9	5
C	16	6	17	15	1	7	10	11	5	12	4	18	19	20	2	13	8	3	14	9
D	1	14	3	4	8	10	13	17	15	7	6	18	19	20	2	16	12	11	9	5
E	6	17	1	14	20	19	8	12	7	3	18	13	4	15	10	9	5	11	16	2
i	29	77	24	54	61	72	50	57	51	29	54	83	52	72	39	70	55	41	57	23

$$\Sigma(\Sigma i) = 1050 \quad S = \Sigma \Sigma i - \frac{\Sigma(\Sigma i)^2}{N} = 5831 \quad W = X^2 = \frac{S}{1/12kN(N+1)}$$

$$\frac{(\Sigma i)}{N} = 52.5$$

$$\begin{aligned} k &= 5 \\ N &= 20 \\ df &= N-1 = 19 \end{aligned}$$

$$W = 33.3^*$$

*significant at the .02 level of confidence

Siegal stated:

A high or significant value of W may be interpreted as meaning that the observers or judges are applying essentially the same standard in ranking the N objects under study. Often their pooled ordering may serve as a (standard) especially when there is no relevant external criterion for ordering the objects.³

The items of the Cultural Trait Test were reordered with the item having the smallest sum of rankings becoming item 20. Table II shows the ordering of the items on the

²Ibid., p. 237.

³Ibid., p. 239.

revised Culture Trait Test. The number in parenthesis is the sum of the five rankings of the item ($\sum i$).

TABLE II
REVISED ORDERING OF TEST ITEMS

<u>Rank</u>	<u>Item No.</u>	<u>Rank</u>	<u>Item No.</u>
1	20 (23)	11	11 (54)
2	3 (24)	12	17 (55)
3	1 (29)	13	19 (57)
4	10 (29)	14	8 (57)
5	15 (39)	15	5 (61)
6	18 (41)	16	16 (70)
7	7 (50)	17	14 (72)
8	9 (51)	18	6 (72)
9	13 (52)	19	2 (77)
10	4 (54)	20	12 (83)

Item 20 became item 1, item 4 became item 10, item 6 became item 18, etc.

Observation indicated that items 2, 6, 12, and 16 were among the five most difficult items. This was in agreement with Wilcox's observation of item difficulty based on item error rate.⁴

This investigator requested and received permission from the superintendent of a middle-sized Oklahoma school district to conduct the pilot study in the district's three junior high schools. The district contained a major city of approximately 50,000 persons which served as a service and

⁴Wilcox, op. cit., p. 230.

distribution center for the primarily rural communities which surrounded it. Compared to other school districts in the state, the pilot district area was classified as middle class. The relative nature of social class made possible the existence of the three accepted socioeconomic levels. The school student population totals 9,231 and was distributed racially approximately as follows: 72 per cent Caucasian, 22 per cent Negro and 6 per cent Indian.

School A served a predominantly Negro student population of 450, 148 of whom were ninth graders. Its student body was primarily low socioeconomic, but included the bulk of the junior high school students from the small Negro middle class.

School B served a predominantly Caucasian student body of 1,250 which had 405 ninth grade students. Twenty of the ninth grade students were Indian and five were Negro. The bulk of the low socioeconomic Caucasian and Indian students attended this school.

School C also served students from the three primary ethnic groups. Of its 262 ninth grade students, 23 were Indian and 30 were Negro. A large majority of the high socioeconomic students were enrolled in this school.

This investigator's professional association with the key school district and collaboration with colleagues and key persons in the district resulted in the rating of the schools socioeconomically as follows: School A, low

socioeconomic; School B, middle socioeconomic; and School C, high socioeconomic.

Each of the three ninth grade counselors were requested to select 30 students to be tested with the Culture Trait Test. They were requested to select equal proportions of both sexes and of students with fathers present and fathers absent. Schools B and C were to select equal proportions of white and Indian students.

Table III, below, shows the final pilot study sample.

TABLE III
DISTRIBUTION OF PILOT STUDY SAMPLE

School A (Low SES)			School B (Middle SES)				School C (High SES)				Total
<u>Negro</u>			<u>Caucasian</u>		<u>Indian</u>		<u>Caucasian</u>		<u>Indian</u>		
M	F		M	F	M	F	M	F	M	F	
FA	8	6	3	3	2	5	2	2	6	1	38
FP	7	9	5	4	6	3	8	6	1	2	51
N	15	15	8	7	8	8	10	8	7	3	
Sub Total	(30)		(15)		(16)		(18)		(10)		(89)
Total	30		31				28				89

The tests were administered in special morning sessions. Prior to the administration of the tests, students were talked to regarding the purpose of the study, nature of the test, assurances of anonymity and disposition of the data.

The tests were handscored and the statistics derived

from them were manually computed. Each of the test items was scored as correct or incorrect and assigned the values of 1 and 0 respectively. Because of its nature, question 1 was not scored, but was observed to provide clues for further analyses of the test. Thus the range of possible scores was 0-19.

Some of the items required the use of more than one number in order to be scored as correct. Partial answers received fractional values and resulted in scores like 13.3, 17.8, 16.8, etc. Question 15 required a written word or words. It was assigned values of 0 or 1 based on the judgment of this investigator as to the adequacy of the response.

Table IV shows the distribution of scores for the total pilot sample in terms of primary statistics.⁵

TABLE IV

PRIMARY STATISTICS FOR TOTAL PILOT SAMPLE

Mean	15.1
S.D.	4.49
Range.	1-19
Mode	16.5
N	89

⁵J. P. Guilford, Fundamental Statistics in Psychology and Education, 4th ed. (New York: McGraw-Hill Book Company, Inc., 1965), p. 12.

A precursory examination of the data from the pilot study generally supported Wilcox's later findings⁶ in which highest scores were associated with highest socioeconomic status. Additionally Caucasians scored highest, Negroes next highest, and Indians lowest. Father-present students were generally higher than those for father-absent students.

Instrumentation

In view of the distribution of scores obtained in the pilot study, the Culture Trait Test was item-analyzed to determine how the various items were contributing to the total test score and if modifications in the items were desirable.

The point biserial correlations were computed. Item 1, which was not used in deriving the statistics presented in the table above, was scored and figured in the computation of the correlations. The point biserial correlations, R_{pbi} 's, are presented in Table V below.

According to Ferguson, "the point biserial coefficient provides a measure of relationship between a continuous variable and a two-categorized or dichotomous variable."⁷ In the Culture Trait Test, the continuous variable was the individual test items, while the categorized variable is the mean score

⁶From tables provided this researcher by Mr. Wilcox.

⁷George A. Ferguson, Statistical Analysis in Psychology and Education (New York: McGraw-Hill Book Company, 1959), p. 239.

TABLE V

POINT BISERIAL CORRELATIONS FOR CULTURE TRAIT TEST

Question	Rphi	High Variable (No. Correctly Responding)	Mean	Low Variable (No. Incorrect- ly Responding)	Mean t Score	dF=87
1	.34	56	16.63	33	13.39	3.34
2	.82	78	16.85	11	5.36	13.18
3	.70	73	16.95	16	8.50	9.16
4	.84	77	16.96	12	5.58	14.41
5	.51	78	16.31	11	9.18	5.48
6	.66	75	16.75	14	8.36	8.19
7	.52	76	16.42	13	9.62	5.67
8	.54	57	16.85	22	11.09	5.93
9	.73	77	16.75	12	6.92	9.84
10	.77	74	17.04	15	7.47	11.41
11	.29	74	16.03	15	12.47	2.80
12	.72	72	17.04	17	8.59	9.62
13	.52	72	16.60	17	10.47	5.68
14	.56	81	16.25	8	7.13	6.36
15	.46	38	17.89	51	13.59	4.83
16	.61	72	16.81	17	9.59	7.23
17	.72	79	16.62	10	6.00	9.80
18	.55	51	17.63	38	12.47	6.15
19	.44	38	17.79	51	13.67	4.58
20	.65	65	17.25	24	10.50	7.91

of students correctly responding to an item and the mean score of those incorrectly responding. The correlation can also "be interpreted as a measure of the degree to which the continuous variable differentiates or discriminates, between the two categories of the dichotomous variable."⁸

Item 2 had 78 persons responding correctly to it and 11 responding incorrectly. The mean score of the "incorrect response group" was 6.85 and 5.36 for the "incorrect response group." The Rphi was .82 indicating high discriminatory

⁸Ibid., p. 241.

powers for the item. On the other hand, the 72 persons who correctly responded to item 11 had a mean score of 16.03; the 17 responding incorrectly had a mean score of 12.47. However, the Rpbj for this item was .29 indicating it had low discriminatory power relative to the mean scores of the two groups.

The t-test of the differences between the means of the two variable groups for each item was employed to test the significance of Rpbj from zero. All Rpbj's were significant beyond .01.⁹

Guilford,¹⁰ in his discussion of the relationship between reliability and validity, suggested that the goals of each are often incompatible. He later stated that:

Maximal reliability requires high inter-correlations among items; maximal predictive validity requires low intercorrelations. Maximal reliability requires items of equal difficulty; maximal predictive validity requires items differing in difficulty.¹¹

He continued:

There must be some compromising of aims; both reliability and validity cannot be maximal. . . the item-test correlations for well constructed items range between .30 and .80 which means item intercorrelations approximately between .10 and .60. Items within these ranges of correlation should provide tests of both satisfactory reliability and validity.¹²

⁹Guilford, op. cit., p. 581. ¹⁰ibid., p. 481.

¹¹Ibid.

¹²Ibid.

Inspection of Table V reveals a range of 29-82 consistent with Guilford.¹³ Thus the Culture Trait Test was assumed to be of satisfactory reliability and validity.

As a check on the reliability of the culture trait test, the reliability coefficient, R_{tt} , was computed from the data in Table V using the formula:

$$R_{tt} = \frac{NR_{it}^2}{1 + (n-1)R_{it}^2} \quad 14$$

Here $n = 20$ and R_{it} = correlation between the item i and the total test score. It yielded an $R_{tt} = .93$ which compared favorably with Wilcox's¹⁵ .937 for ninth grade students. The culture trait test is shown in Appendix B.

To determine the socioeconomic status of the schools it was necessary to develop a simple instrument. The resulting instrument was based on Herriott and St. John's study which identified three major determinants of socioeconomic status: occupation of father, educational level of family, and family income.¹⁶ It required that a panel of judges rank the population of 7-9 junior high schools on the basis of the percentage of each school's children coming from families having highest total income, highest educational

¹³Ibid.

¹⁴Guilford, op. cit., p. 463.

¹⁵Wilcox, op. cit., 227.

¹⁶Robert E. Herriott and Nancy Hoyt St. John, Social Class and the Urban School (New York: John Wiley and Son, Inc., 1966), p. 216.

levels and fathers in executive, managerial and professional jobs. Appendix B shows the developed instrument.

Four judges were asked to rank the twelve 7-9 junior high schools in the Oklahoma City School District according to the criteria provided in the instrument. Judge I was the Director of Secondary Education for the school district and has served in all areas of it. Judges II, III, and IV were colleagues of this investigator and had served in the district at various levels and in various areas. Two of them still resided in the district. In addition, all of them have been involved in the development of desegregation plans for the district and had access to the schools and to information upon which to make sound judgments.

The junior high schools that were rated are listed below alphabetically and assigned identification letters as follows: (A) Capitol Hill, (B) Central, (C) Eisenhower, (D) Harding, (E) Hoover, (F) Jackson, (G) Jefferson, (H) Kennedy, (I) Moon, (J) Roosevelt, (K) Taft, and (L) Webster. The rankings of the four judges are shown in Table VI.

TABLE VI
RANKINGS OF EACH SCHOOL'S SOCIOECONOMIC STATUS

Judges	Schools											
	A	B	C	D	E	F	G	H	I	J	K	L
I	9	8	3	5	1	10	4	11	12	7	2	6
II	8	9	4	6	1	11	3	11	12	7	2	5
III	8	10	6	5	1	9	3	11	12	7	2	4
IV	8	9	6	5	1	11	4	10	12	7	2	3
i	33	36	19	21	4	41	14	43	48	28	8	18 = 313

$$\sum(\sum i) = 313; \quad \frac{\sum(\sum i)}{N} = 26.08 \quad S = \sum[\sum i - \frac{\sum(\sum i)}{N}]^2 = 2240.9$$

$$W=X^2 = \frac{S}{1/12 \cdot k \cdot N(N+1)} = 43.09$$

*Significant beyond the .001 level

The judges applied the same criteria in ranking the schools¹⁸ and it was assumed they were the same as those given in the instrument instructions.

The six schools having the largest total sum of rankings were selected for this study and were designated as "lower socioeconomic" schools. Table XVII shows that these schools were schools A, B, F, H, I and J.

A second instrument was developed to find out what students thought about authority relations and patterns of organizational communications¹⁹ in their schools. They were asked to respond to questions regarding possible organizational structures and how much voice different levels of the school organization should have. This instrument is shown in Appendix B and was administered at the same time as the Culture Trait Test.

Discipline incidents of the ninth grade class were divided into two types: (1) Direct authority confrontation type and (2) Indirect authority confrontation type. Direct confrontation types included classroom disturbance, disobedience

¹⁷Siegel, op. cit., p. 229. ¹⁸ibid., p. 239.

¹⁹Barry E. Collins and Harold Guetzkow, A Social Psychology of Group Processes for Decision-Making (New York: John Wiley and Sons, Inc., 1964), p. 205.

and disrespect to those in authority. Indirect confrontation problems consisted of all other problems. Incidents of the former type were those where students openly defied authority. Incidents of the latter type are those where students did not openly defy authority and took the chance that they would not be caught and punished.

The total number of reported discipline incidents was computed for each school. This number was divided into the total number of incidents in the direct authority confrontation category to produce a percentage figure. A school could be said to have a certain percentage of direct authority confrontation discipline incidents. Because of the administrative policies it was not possible to categorize the incidents of discipline problems for school B.

Sample Size

The sample of schools utilized in this study was determined at the same time socioeconomic status of schools was established. The procedure has previously been described.

Table VII provides a racial profile of the student populations for the selected schools.

O'Toole suggested that the total sample size should be developed around the breakdowns anticipated and the hypotheses to be tested.²⁰ Because race was an important variable

²⁰A. L. O'Toole, Elementary Practical Statistics (New York: The Macmillan Company, 1964), pp. 44-45.

TABLE VII

PROFILE OF STUDY SCHOOLS: NINTH GRADE STUDENTS BY RACE

School	C	N	I*	Total
A	319	6	8	333
B	238	45	23	306
F	300	5	21	326
H	2	415	0	417
I	0	187	0	187
J	421	0	18	439
Total	1280	658	70	2008

*Includes only students 1/4 Indian or more.

in the study, it was necessary to insure that a sufficient sample of each of the three major racial groups was obtained. Thus, all of the Indian students identified by school officials and school records were included in the study.

A minimum of ten percent of each school's ninth grade students were tested. Those schools where more than ten percent of the students were tested were schools with Indian students.

The procedure involved random sampling ten per cent of each school's ninth grade enrollment as a base. To this figure was added the number of Indian students in the ninth grade. No special attempts were made to insure that Negro

students would be included in the samples from schools A, B, and F since they would be included in the samples from schools H and I. It was assumed, however, that some Negro students would be randomly selected from schools A, B, and F.

It was felt that the above sampling method would produce in schools A, B, F and J a sample size exceeding ten per cent allowing some students to be absent without seriously affecting the ten per cent total desired. In the case of schools H and I ten per cent of the base ten per cent was added to insure that absences would not affect the desired sample.

Thus in the case of school B, the sampling technique was anticipated to produce a maximum of fifty-four students (ten per cent of 306 plus 23, or 31 plus 23). This total was twenty-three more than the ten per cent, thirty-one, students needed. In school I, the method was anticipated to produce twenty-one students (ten per cent of 187, or 19, plus ten per cent of 19, 2). This total was two more than needed for the sample. However, because of conflicting reports from the IBM school enrollment print-outs, twenty-seven students were sampled for this school.

It was assumed that the random sampling technique would produce relatively equal proportions of males and females. The same assumption was made regarding father-absence or presence, particularly in view of existing knowledge of lower class families.

The final sample of students utilized in the study is given in Table VIII below.

TABLE VIII
PROFILE OF STUDENT SAMPLE BY VARIABLES
RACE AND FATHER STATUS

School	Negro	Indian	Cauca- sian	Father Absent	Father Present	Missing	Total
A	0	6	33	7	30	2	39
B	4	17	21	11	30	1	42
F	1	12	28	10	29	2	41
H	45	0	0	13	29	3	45
I	27	0	0	15	12		27
J	0	17	38	4	50	1	55
Total	77	52	120	60	180	9	249

Test Administration and Scoring

The Culture Trait Test was administered to the pre-selected sample of students at a place and time agreed upon by this investigator and school officials.

Prior to the administration of the test, the purposes and procedures were explained to the students who were assured of anonymity and of the fact that their participation would not affect themselves or their schools negatively.

The procedure required that students first complete the culture trait test and then a questionnaire designed to determine how they felt about certain practices at school.

Both instruments were matched by numbers to insure that neither was misplaced for any student.

The students were not allowed to assist each other but were requested to raise their hands for assistance from this investigator if necessary. Assistance was provided in cases where students were unsure about where to place a response, the type of response required or the meaning of a question. The requests for assistance were minimal.

The Culture Trait Test was scored similarly as reported in the pilot study with the exception that Item 1 was included. The inclusion of item 1 required that the investigator make a judgment relative to the adequacy of the response to it.

The questionnaire had its responses tabulated across the variables, race, father-status and school. The results were presented in terms of the percentage of students responding in a certain manner on the items of the questionnaire.

Question 6 requested the students to sketch an organizational structure they liked best. These sketches were examined with the help of a colleague and categorized according to their similarity to the four sketches on the questionnaire and the traditional hierarchial model in the culture trait test. Thus five responses were possible on this question.

Statistical Treatment

Siegel²¹ suggested that parametric tests, when all of the assumptions were met, were the most likely to reject the null hypothesis when it is false. These assumptions are: independence of observations, normalcy of population, equal variance, and additive property of effects due to columns and/or rows.²²

He continued by stating:

With the possible exception of homocedascity (equal variance) these conditions are ordinarily not tested in the course of the performance of a statistical analysis.²³

Consequently, it was assumed that these conditions were met in the utilization of analysis of variance to test hypotheses 1-3.

Ferguson's²⁴ special formulae for computing the components of variance for the case of unequal subclasses were used. The use of these formulae depended upon whether or not the cell frequencies in the rows and columns departed significantly from proportionality. To test the proportionality of these frequencies, he provided the formula

$$\chi^2 = \sum_{R=1}^R \sum_{C=1}^C \frac{(n_{rc} - \bar{n}_{nr})^2}{\bar{n}_{nr}} \quad \text{where } \bar{n}_{rc} = \frac{n_{.r} \cdot n_{.c}}{N}; \text{ dF} = (R-1)(C-1) \quad 25$$

²¹Siegel, op. cit., p. 19.

²²Ibid.

²³Ibid.

²⁴Ferguson, op. cit., p. 321.

²⁵ibid., pp. 321-322.

These formulae, after randomly reducing the original sample, produced an $X^2 = 5.13$ which was not significant at the .05 level. Proportionality of the cell frequencies was assumed.

The following formulae, taken from Ferguson,²⁶ were used by this investigator to manually compute the components of variance:

$$\text{Rows} : \sum_{n=1}^R \left(\frac{T_{n.}^2}{n_{n.}} \right) - \frac{T^2}{N}$$

$$\text{Columns} : \sum_{c=1}^C \left(\frac{T_{.c}^2}{n_{.c}} \right) - \frac{T^2}{N}$$

$$\text{Within} : \sum_{n=1}^R \sum_{c=1}^C \left(\frac{\bar{n}_{nc}}{n_{nc}} \sum_{i=1}^{n_{nc}} X_{nci}^2 \right) - \sum_{n=1}^R \sum_{c=1}^C \left(\frac{T_{nc}^2}{\bar{n}_{nc}} \right)$$

$$\text{Interaction} : \sum_{n=1}^R \sum_{c=1}^C \left(\frac{T_{nc}^2}{\bar{n}_{nc}} \right) - \sum_{n=1}^R \left(\frac{T_{n.}^2}{n_{n.}} \right) - \sum_{c=1}^C \left(\frac{T_{.c}^2}{n_{.c}} \right) + \frac{T^2}{N}$$

$$\text{Total} : \sum_{n=1}^R \sum_{c=1}^C \left(\frac{\bar{n}_{nc}}{n_{nc}} \sum_{i=1}^{n_{nc}} X_{nci}^2 \right) - \frac{T^2}{N} \quad 26$$

The following hypotheses were tested using this model:

HO_1 There will be no significant differences in variance in the degree of the culture trait of hierarchy, as measured by the Culture Trait Test, among Caucasian, Negro, and Indian student groups.

HO_2 There will be no significant interaction of variance between the variables, race and father status, based on the degree of the culture trait of hierarchy, as measured by the Culture Trait Test, found in students.

HO_3 There will be no significant differences in variance in the degree of culture trait of hierarchy, as

²⁶Ibid., pp. 321-322.

measured by the Culture Trait Test, between students with fathers absent and those with fathers present.

Guilford's²⁷ analysis of variance methods were used to test the following hypothesis:

HO₄ There will be no significant differences in variance in the degree of the culture trait of hierarchy, as measured in students by the Culture Trait Test, among the lower socioeconomic schools.

Spearman's coefficient for rank correlation,

$$P = \frac{1 - 6 \sum d^2}{N(N^2 - 1)}$$
²⁸ was used to test the following hypothesis:

HO₅ There will be no significant relationship between the degree of the culture trait of hierarchy, as measured in students by the Culture Trait Test, in each school and the proportion of certain types of discipline problems found in each school. The Spearman method is convenient in cases where the number of pairs were less than thirty.²⁹

Because of its popular acceptance by researchers, the .05 level of confidence was used in the testing of these hypotheses. Responses on the student questionnaire were compiled, patterns were observed, and statements concerning them were presented as findings.

²⁷J. P. Guilford, Fundamental Statistics in Psychology and Education, 3rd ed. (New York: McGraw-Hill Book Co., Inc., 1956), pp. 258-262.

²⁸Ferguson, op. cit., p. 217.

²⁹Guilford, 4th ed., op. cit., p. 305.

CHAPTER IV

PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA

This chapter presents, analyzes and interprets the data derived from the study. The general format consists of tables describing the appropriate sample component and primary statistics for precursory examination. These are followed by interpretations of the applied statistical methods with reference to the tested hypotheses. In the case of the questionnaire, responses on each question were separately reported and analyzed.

HO_1-HO_3 were tested using Ferguson's¹ special analysis of variance formulae, HO_4 with Guilford's² analysis of variance techniques and HO_5 with Spearman's³ rank correlation method. Comparisons of pairs of group means followed the testing of HO_1-HO_3 and the table of critical values was used to test the significance of the Spearman coefficient.

The chapter is divided into three sections: culture

¹Ferguson, op. cit., pp. 320-322.

²Guilford, 3rd ed., op. cit., pp. 260-261.

³Ferguson, op. cit., p. 219.

trait test data, questionnaire data and summary.

Culture Trait Data

H_{01} - H_{03} are concerned with the variables of race and father status. Table IX gives a profile of the subsample used in testing these hypotheses.

TABLE IX
PROFILE OF SUBSAMPLE USED IN TESTING H_{01} - H_{03}

Father Status	Negro	Indian	Caucasian	Total
Father Absent	20	11	19	50
Father Present	<u>44</u>	<u>40</u>	<u>96</u>	<u>180</u>
Total	64	51	115	230

Table X shows the primary statistics for the three racial groups--Negroes, Indians and Caucasians.

TABLE X
MEAN SCORES OF THE THREE RACIAL GROUPS ON THE
CULTURE TRAIT OF HIERARCHY TEST

	<u>Negro</u>	<u>Indian</u>	<u>Caucasian</u>
	12.77	15.36	15.80
N	66	40	96

Caucasians scored highest; Indians scored second highest and Negroes scored lowest.

Tests of Differences Among Racial Groups

Hypothesis 1 stated: There will be no significant difference in the degree of the culture trait of hierarchy, as measured by the Culture Trait Test, among Caucasian, Negro and Indian student groups.

TABLE XI
ANALYSIS OF VARIANCE FOR THE RACIAL GROUPS
ACROSS FATHER STATUS VARIABLE

Source of Variance	Sum of Squares	df	Variance	F
Rows (Father Status)	98.10	1	98.10	16.79*(HO ₃)
Columns (Race)	396.99	2	198.50	33.99*(HO ₁)
Interaction (Race and Father Status)	1226.72	2	613.36	105.04*(HO ₂)
Within	1308.93	224	5.84	5.84
Total	3030.74	229		

*Significant

F = 33.39 was significant beyond the .01 level of significance. Hypothesis 1 was rejected. There were significant differences among the three racial groups.

To locate the differences evidenced by the analysis of variance above, the means of the possible pairs were compared. The comparisons of possible pairs are presented in Table XII below.

TABLE XII

COMPARISONS OF MEAN SCORES FOR
THE RACIAL GROUPS

<u>Groups</u>	<u>F Ratio</u>
Negro vs Indian	31.94*
Negro vs Caucasian	65.5 *
Indian vs Caucasian	1.07

df (groups) = 1 df (within variance) = 224
*significant beyond the .01 level of confidence.

Both the Indian and Caucasian groups scored significantly higher than the Negro group on the Culture Trait Test. The difference between the scores of the Indian and Caucasian groups was not significant.

Hypothesis 3 stated: There will be no significant differences in the degree of the culture trait of hierarchy, as measured by the Culture Trait Test, between students with fathers present and students with fathers absent.

Table XIII shows the means for the two groups.

TABLE XIII

MEAN SCORES OF THE FATHER STATUS GROUPS
ON THE CULTURE TRAIT OF HIERARCHY TEST

<u>Father Present</u>	<u>Father Absent</u>
Mean 15.21	13.63
N 180	50

Table XI indicates that the F-ratio, 16.79, for rows (father status) was significant beyond the .01 level of

confidence. Hypothesis 3 was rejected. There was a significant difference between the scores of students with fathers present and those with fathers absent.

Hypothesis 2 stated: There will be no significant interaction of variance between the variables, race and father status, based on the degree of the culture trait of hierarchy, as measured by the Culture Trait Test, found in students.

Table XI indicates that the F ratio for interaction was 105.4 and was significant beyond the .01 level of confidence. Hypothesis 2 was rejected. There was significant interaction between race and family status as reflected in student scores on the Culture Trait Test. Father status did have an effect on the scores of the various racial groups--students with fathers present, regardless of race, scored higher than students with fathers absent.

Hypothesis 4 stated: There will be no significant differences in variance in the degree of the culture trait of hierarchy, as measured in students by the Culture Trait Test, among the lower socioeconomic schools.

Table XIV shows the mean score and N for each of the six schools in the sample.

TABLE XIV

MEAN SCORES FOR THE SAMPLE SCHOOLS ON
THE CULTURE TRAIT OF HIERARCHY TEST

School	Mean	N
A	16.51	33
B	13.55	31
F	14.78	33
H	14.46	42
I	9.46	19
J	16.98	44
Total		202

The analysis of variance among the schools is presented in Table XV.

TABLE XV

ANALYSIS OF VARIANCE FOR THE SAMPLE SCHOOLS

Components	Sum of Squares	df	Variance	F
Between sets	900.74	5	180.15	7.63*
Within sets	4629.74	196	23.62	
Total	5530.48	201		

*significant

The F of 7.63 was significant at the .01 level and hypothesis 4 was rejected. There were significant differences among the schools in terms of scores on the Culture Trait Test. It was interesting to note that school I which had the lowest mean score was also ranked lowest in terms of socioeconomic levels.

Hypothesis 5 stated: There will be no significant relationship between the degree of the culture trait of hierarchy, as measured in students by the Culture Trait Test, in each school and the proportion of certain types of discipline problems found in each school. Table XVI shows the percentage of direct authority confrontation problem.

TABLE XVI
PERCENTAGE OF DIRECT CONFRONTATION PROBLEMS BY SCHOOL

School	Percentage of Problems
A	25
F	38
H	70
I	43
J	34

As previously noted, data on discipline problems for school B was not available. The range of percentages for direct confrontation discipline problems was noteworthy.

Table XVII shows the rankings of mean test scores and percentages of direct confrontation discipline problems for each school and the calculations for the Spearman Rho, p .

TABLE XVII

RANK DIFFERENCE CORRELATION BETWEEN SCHOOL SCORE
AND PERCENTAGE OF DISCIPLINE PROBLEMS

School	School Score Rank	Discipline	Percentage Rank	d	D ²
J	1		4	-3	9
A	2		5	-3	9
F	3		3	0	
H	4		1	3	9
I	5		2	3	9

P = -.80 (not significant)

d²=36

Since P was not significant, Hypothesis 5 could not be rejected. Though the relationship was not statistically significant, it was sufficiently high to suggest a possible relationship. The negative correlation suggested that increases in one variable were accompanied by decreases in other variables. Applied to the data above, the percentage of direct confrontation discipline problems decreased as school score on the Culture Trait Test increased though not significantly.

Questionnaire Data

The data derived from the questionnaire which was administered at the same time as the Culture Trait Test was also analyzed. Each of the six questions that comprised the questionnaire was treated separately. Because of the nature of the data, no attempt was made to analyze it statistically. Instead, general response patterns were observed and reported

as findings. Appendix D contains tables that reflect the compiled data from which the response patterns were discerned.

Table XVIII presents a profile of the sample from which the questionnaire data was derived.

TABLE XVIII
PROFILE OF SAMPLE RESPONDING TO QUESTIONNAIRE

Father Status	Negro	Race		Total
		Indian	Caucasian	
Father Absent	30	11	19	60
Father Present	44	40	96	180
Missing	3	1	5	9
Total	77	52	120	249

Question 1 of the questionnaire asked: Which of the four signs above do you think is better for your school than the sign on the test you have just finished?

Sign A indicated an organizational communication system where persons at the lower organizational levels could initiate communications with a peer or with a person at a higher level to ultimately reach the authority figure. Sign B indicated open communications from any person at any level directly to the authority figure. Sign C showed an individual at the bottom of the organization communicating through several hierarchial levels to reach the two authority figures. Sign D was similar to Sign C, except there was only one

authority figure.

The response pattern for question 1 indicated that students generally felt Signs A and B were better for their schools. Sign A was slightly more favored than Sign B.

Question 2 of the questionnaire asked: Which of the four signs above do you think is worse for your school than the sign on the test you have just finished?

The pattern of responses for question 2 showed that students generally felt that Sign D was worst for their school.

Question 3 of the questionnaire asked: Should students have more voice in (a) punishing students? (b) choosing classes they take? (c) choosing student class and council officers? (d) using their free time? (e) making school rules? (f) choosing people who speak to students at school? (g) choosing principals, teachers and counselors? (h) choosing books? (i) choosing the food served in the lunchroom? (j) the way grades are given?

The students responded by placing yes or no in the blanks preceding each sub-question.

Regarding the response pattern for question 3, students generally felt that they should have more voice in: choosing the classes they took, choosing student class and council officers, the use of their free time at school, making school rules, choosing people who speak to students at school, choosing the books they used at school, and the

way grades were given. They did not feel that they should have more voice in punishing students and in choosing the principals. The feeling was mixed concerning the punishing of students.

Question 4 asked: Who should have the most to say about (a) what students wear? (b) what students do after school? (c) what is taught in the classroom, and (d) student appearance (long hair, beards, make-up, etc.).

Students responded by placing the initials S (students), P (principal), T (teachers), and St (superintendent).

Responses to question 4 indicated that students generally felt that they should have most to say about: what students wore, what they did after school and student appearance in general. They felt that teachers should have most to say about what was taught in the classroom.

Question 5 asked: Who should have the least to say about (a) what students wear? (b) what students do after school? (c) what is taught in the classroom and (d) student appearance?

Students responded by placing the initials S (students), P (principal), T (teacher), and St (superintendent).

Regarding question 5, students generally felt that principals should have least to say about what students wore, what they did after school and student appearance in general. They felt that students should have least to say about what was taught in the classroom.

Question 6 stated: Draw a sign you think is better than all of those you have seen, using the letters S (students), P (principal), T (teachers) and St (superintendent).

The response pattern to question 6 showed that students generally drew signs resembling Sign A of the questionnaire, placing students in slots near the top of the sign.

Generally, the response patterns for the questionnaire did not appear to differ according to race, father status or school.

Summary

Significant differences were found in the degree of the culture trait of hierarchy, as measured by the culture trait test, among students from the Indian, Negro and Caucasian groups. Additionally, significant differences were found between Negro and Caucasian groups in favor of Caucasians, and between Negro and Indian groups, in favor of Indians. There was no significant difference between Caucasian and Indian groups.

The degree of the culture trait of hierarchy found in students was affected by the status of the father. Students with fathers present scored significantly higher than students with fathers absent.

There was a relationship between race and father status, suggesting that the absence or presence of the father from the home did affect the scores of each of the racial groups.

The degree of the culture trait of hierarchy, as measured by school mean scores on the Culture Trait Test, found in the six schools varied significantly. A high but statistically insignificant negative relationship existed between the mean school scores and the percentage of direct confrontation-type discipline problems in the schools. Schools with higher scores tended to have lower percentages of direct confrontation-type discipline problems.

Race and father status and school attended did not appear to be variables that significantly affect the opinions of low socioeconomic students regarding the hierarchial relationships that function in the bureaucratic school.

Students generally felt that an organizational structure which provided either multi-communications channels or direct access to the organizational authority figure was preferable. The direct access system was slightly more favored.

Organizational arrangements which restricted communications one way, upward through single persons at successively higher hierarchial levels to the authority figure, were least preferable.

Students generally felt that students should have more voice in choosing the classes they took, choosing class and student council officers, use of their free time, making school rules, choosing school books, choosing the food that was served in the lunch room and choosing the speakers who

spoke to students at the school. They did not feel that they should have more voice in choosing principals and teachers and in the way grades were given out.

Students generally felt that students should have the most to say about what students wore, student appearance, and what students did after school. They felt that the principal, the teacher and the superintendent, in that order, should have the next most voice in those matters. Teachers, in their opinion, should have most to say about what is taught in the classroom.

Students generally felt that students should have least voice in what is taught in the classroom and principals should have least to say about what students wore, what students did after school and student appearance. Generally principals, teachers and superintendents, authority figures, were felt to have least to say about the three student matters above.

When students were allowed to sketch the sign they felt was better for their school than those they had seen, they sketched signs resembling Sign A. Sign A represented an arrangement which provided the most direct communications between students and authority persons.

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

Public education in the past five years has been threatened to the depth of its foundation by the occurrence of overt manifestations of student unrest. This unrest has taken the form of aggressive, unabashed activity on the part of students. Strikes, boycotts, demonstrations, destruction of school and private property, physical violence and even death has resulted from this activity.

Though this activity seemingly had its origin on campuses of institutions of higher education, it has filtered down to the secondary schools at an accelerated rate. School administrators expect the trend to continue indefinitely, accompanied by a further filtering down to the lower levels of public education.

The vast amount of available research on the problem of student unrest and activism has been related to the higher education level. Very little of it focused on the secondary schools, particularly junior high schools.

Many educators view the problem as a reflection of

the increasing disdain on the part of students for all of society's basic institutions and have concluded that administrators are powerless to deal with it short of substantial assistance from other segments of society. Others see the problem as being associated with particular issues like war, poverty, racism, exploitation, etc. They conclude that the solution to problems of student unrest will follow resolutions of those issues.

There seems to be a low awareness level regarding the impact that the bureaucratic institution has on the personalities of those who are forced to participate in it, as is the case of secondary students.

A constant criticism of the bureaucratic organization, one of which is the public schools, is that students do not frequently have any voice in the educational decisions that affect their lives. They complain that no one listens to them and seems concerned about how they feel.

A present frequently employed strategy for dealing with the problem is to find out how students feel and what they want. None of the student spokesmen have been junior high school students.

Equally noteworthy is the fact that little effort has been made to determine whether or not students were sufficiently knowledgeable regarding the functional relationships that characterize, and indeed, sustain the bureaucratic structure. Students, particularly junior high school students,

may not know enough about the system to perceive that legitimate strategies are possible for negotiating the system. On the other hand, they may understand these relationships very well and perceive that only aggressive, illegitimate strategies are effective. In either case, educational administrators should be aware of these implications for future decisions.

Related to low socioeconomic schools, two variables usually are discussed: family background and race. Does the lack of understanding of authority relationships, characteristic of the bureaucratic organization, relate to what different racial subcultures teach their offspring relative to authority? Does this teaching depend on whether or not children learn it from fathers? Or are the hierarchical relationships so culturally pervasive that students learn them regardless of other considerations?

The purpose of this study was to determine if Indian, Negro and Caucasian students differed in the degree of the culture trait of hierarchy they possessed and if this difference was related to the absence of fathers from the home. It also purported to determine if among the lower class schools, the degree of the culture trait of hierarchy varied and if this variance was related to the type of discipline problems faced by these schools. Finally the study aimed at determining the students' opinions about authority relationships that existed in their schools.

The Culture Trait of Hierarchy Test and the opinion

questionnaire was administered to 249 ninth grade students from the six lowest socioeconomic junior high schools of a large school district. Randomly selected groups of the students were used in the testing of the hypotheses of the study.

Analysis of variance methods was used to determine if the three racial groups varied in the amount of the culture trait of hierarchy possessed, as measured by the Culture Trait Test. This same statistical treatment was applied to determine whether or not racial scores were affected by the status of the father in the family.

Analysis of variance followed by the Spearman Rank Correlation Method was used to determine if the schools varied in the degree of the culture trait of hierarchy and if the variance was related to the incidence rate of direct-authority confrontation problems.

The following null hypotheses were tested:

HO_1 : There will be no significant differences in variance in the degree of the culture trait of hierarchy, as measured by the Culture Trait Test, among Caucasian, Negro and Indian student groups.

HO_2 : There will be no significant interaction of variance between the variables, race and father status, based on the degree of the culture trait of hierarchy, as measured by the Culture Trait Test, found in the students.

HO_3 : There will be no significant differences in variance in the degree of the culture trait of hierarchy,

as measured by the Culture Trait Test, between students with fathers present and students with fathers absent.

HO₄: There will be no significant differences in variance in the degree of the culture trait of hierarchy, as measured in students by the Culture Trait Test, among the lower socioeconomic schools.

HO₅: There will be no significant relationship between the degree of the culture trait of hierarchy, as measured in students by the culture Trait Test, in each school and the proportion of certain types of discipline problems found in each school.

Conclusions

The following conclusions regarding the purposes of this study grew out of the data collected:

1. The range of understanding regarding the hierarchical relationships within the bureaucratic organization is shared by the three racial groups.

2. Ninth grade Caucasian students, as a group, have a better understanding of the hierarchical relationships within the bureaucratic organization than do Negro and Indian ninth grade student groups. Indians as a group have a better understanding of these relationships than do Negroes as a group. The closer identification of Indians and Caucasians to the majority culture possibly accounts for this difference.

3. The absence of fathers from the homes affects

the acquisition of understanding concerning the hierarchial relationships within the bureaucracy in all racial groups. This conclusion suggests that the father continues to be a key person in the development of understanding regarding authority relations within the bureaucratic structure. Negro students appear to be more affected by this absence than Caucasian or Indian students. Caucasians are less affected than Indian students.

4. There are differences in the general understanding of hierarchial relationships within the bureaucracy among the lowest socioeconomic schools. Some all-Negro schools are apparently not overcoming the deficiencies that possibly accrue from lack of close identification with the majority culture. The bureaucratic practice of passing down unexplained directives possibly does not facilitate development of these understandings.

5. Understanding of the bureaucratic relationships is a factor influencing the type of student deviant behavior experienced by schools. When students understand these relationships, they tend not to confront authority directly. Educational administrators concerned about the development of problems of student unrest, as manifested in confrontation tactics by students, should consider educational programs that increase student knowledge of bureaucratic principles.

6. Neither race, nor father status, affects the opinions of students concerning authority relations within

the school. This suggests that whatever effect the bureaucratic school organization has on the students' perceptions are equally distributed, possibly supporting Kidd's¹ contention that the bureaucratic norm emanates from the central office rather than from the individual school.

7. Students desire total involvement in the formal school communications system and desire the option of communicating directly with the school authority figure. This suggests that junior high school principals may profit by improving student accessibility to them and by improving the quality of present communications.

8. Similar to students at higher educational levels, ninth grade students want more voice in making school decisions that are basically personal in nature.

9. Problems of high school student unrest and activism possibly originate at the ninth grade level or below.

Recommendations

The findings of this study seem to support the following recommendations:

1. That additional studies be conducted with ninth grade students to determine the effects of sex and intelligence on (a) the possessed degree of the culture trait of hierarchy, and (b) opinions regarding the authority relations with the schools.

¹Kidd, op. cit., p. 83.

2. That additional studies be conducted with ninth grade students to (a) determine if there are different degrees of the culture trait of hierarchy possessed by upper socioeconomic students and lower socioeconomic students, and (b) opinions regarding the authority relations in the schools.

3. That additional studies be conducted at other grade levels to determine the degree of the culture trait of hierarchy found in students.

4. That future research explore possible relationships between various aspects of administrative behavior and the degree of the culture trait of hierarchy possessed by students in the schools.

5. That future research explore the possible relationships between various aspects of the school environment and the degree of the culture trait of hierarchy possessed by the students in the schools.

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APPENDIX A

CORRESPONDENCE RELATED TO STUDY

August 19, 1969

Dr. Herbert G. Wilcox
Kanawha Valley Graduate Center
West Virginia University
Nitro, West Virginia

Dear Dr. Wilcox:

In our telephone conversation yesterday regarding the use of your cultural trait questionnaire, you suggested that I write you a letter indicating what we hope to determine by its use.

As I stated, our center attempts to assist school districts in the identification and resolution of problems incidental to school desegregation. One broad problem area of tremendous concern to school districts affected by desegregation is that of behavior-discipline. Many persons feel that a student's behavior is determined primarily by the training that he receives at home; and, consequently, that children vary in behavioral patterns according to their ethnic and/or socio-economic backgrounds. One may expect, then, that certain traits are acquired to a greater or lesser degree by children of certain ethnic and socio-economic backgrounds. You have indicated that the trait of hierarchy is found in white, middle class suburban children. Is this trait found to a lesser or greater degree in black or Indian students in various socio-economic classes; or, for that matter, in other white students in other socio-economic classes?

Our staff suspects that there is a relationship between the degree to which the trait is present in certain schools (desegregated and segregated) and the types of behavior problems these schools experience. If this is true, then our center may be better able to assist school districts in preparing for more effective school desegregation and in dealing with the behavior problems that arise. If this is not true, we also need to know that.

Dr. Herbert G. Wilcox
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Dr. Wilcox, I do hope that the questions you raised relative to our objectives in this study have been answered satisfactorily. If not, please feel free to call me collect at Area Code 405, 329-2260, Extension 486 or 487. Our staff hopes that you will grant permission to use the questionnaire and other instruments which you feel are pertinent to the study as it has been described.

Please be assured that you will be given due and proper recognition in any research we undertake using your questionnaire and that no changes or modifications will be made in it without your permission.

Thank you in advance for the help I feel you will give me. I remain,

Yours truly,

Charles E. Butler
Field Consultant

CEB/jlw

WEST VIRGINIA UNIVERSITY
Kanawha Valley Graduate Center
Division of Management and
Governmental Sciences

P.O.Box 547W
Nitro, West Virginia
25143
Phone: Area Code 304
755-4313
August 25, 1969

Mr. Charles E. Butler
Field Consultant
Southwest Center for Human
Relations Studies
The University of Oklahoma
Norman, Oklahoma 73069

Dear Mr. Butler:

I have received your letter and read it carefully.

The questions you raise are important and interesting.

Replying to them adequately will require careful consideration of the data I presently have at hand, as well as problems I am currently working on in the general area of child socialization, development, and acculturation.

You can expect from me an attempt to formulate some tentative answers within two weeks. If the need arises, I will be telephoning you.

I sincerely hope that I can make a contribution to your objectives.

Sincerely yours,

Herbert G. Wilcox
Associate Professor

HGW:ck

WEST VIRGINIA UNIVERSITY
Kanawha Valley Graduate Center
Division of Management and
Governmental Sciences

P.O.Box 547W, Nitro,
West Virginia 25143
Area Code 304 755-4313

Mr. Charles E. Butler
Field Consultant
Southwest Center for Human
Relations Studies
The University of Oklahoma
Norman, Oklahoma 73609

Dear Mr. Butler:

I have found time to consider your letter carefully and to formulate a reply.

There are limitations in using the culture trait questionnaire as a diagnostic tool. The explanation will be facilitated by reference to working tables for primary and secondary school classes which I have enclosed. The mean scores for elementary classes are from the California School reported in the paper "The Culture Trait of Hierarchy in Middle Class Children" (F), a second California school (P), four schools in Kanawha County, West Virginia, selected so as to tap socio-economic and residence variables (I,II,III,IV); an urban school in Nevada (V). The table for secondary schools gives results for one high school in southern California (F) three high schools in Kanawha County, West Virginia (I,II,III,) a secondary school in Kenya, East Africa (IV); and a high school in Nevada (V). The scores reported are the class means for the 19 item questionnaire.

For the second grade classes on these tables, I used an oral version of this test, which is the same as the one employed with the fourth, sixth and eighth grades except for minor changes in wording of some items and the substitutions of forced choice for open ended questions in items 16 and 19. Information for the oral questions was supplied by a wall mounted organization chart which is a replica of the charts enclosed. While I have enclosed copies of the high school and elementary questionnaires, I have not enclosed answer sheets and questions for the oral version. My reasons are given later in the letter.

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I have not made any tests of statistical significance for these results, but the following conclusions seem warranted:

(1) After eight years of exposure to the institutional and organizational structure of public schools, classes from different backgrounds have marked uniformity in their achievement on the culture trait test. The range for the ninth grade class scores is only 1.99. This includes scores for an upper middle class high school (F), having 93% of the graduates attending college; a high school serving depressed Appalachian communities (I) and a secondary school in Kenya (IV). The last is a government owned and controlled school using the Cambridge University entrance examination as a "pass" qualifying examination for graduation which is pedagogically and administratively staffed by evangelical, white Americans. The school is in the backwoods, serving a student clientele drawn from subsistence farm families, in which, according to the fragmentary evidence available to me, tribal social organization is still consequential. Instruction is in English. Given the great disparities in social and cultural background between these classes, the narrow range in class scores is at the high school impressive.

(2) The second most important conclusion is that at the lower grades the most quickly evident difference is cultural and/or regional. This remark is based upon the assumption that West Virginia departs markedly from national norms in several respects.

With respect to SES and residence variable, the distribution of these West Virginia classes is: (I), low SES - rural; (II), low SES - urban; (III), high SES - rural, (IV), high SES - urban. You will note that the difference between low SES - rural and high SES - urban is 2.35, small as compared with the difference between the highest class in California, 10.42 and West Virginia 5.00 - a difference of 5.42. With respect to this difference several observations are necessary. First, both California schools use ability grouping, and the class scores correspond to the rank of classes in mean student ability. Second, Fullerton, California is a prestige community in Orange County in which social stratification on a residential basis resulting from tract housing development is an outstanding characteristic. In short, it is highly likely that the Fullerton school is higher in class terms than IV, as well as P. Nonetheless, the difference

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between Fullerton and IV reflects a cultural variable. The fact that the Orange County has a highly selective immigrant population in the last decade, while it is probable that the majority of the respondents in IV are from fifth generation or more West Virginia resident population supports this conclusion.

Within the parameters of this cultural variable it is evident that SES status and rural-urban residence does have a consequence for achievement on the test. Scores for both West Virginia and California support this conclusion. As I said before, P is of lower socio-economic status than Fullerton. Further, I was allowed to test only the intermediate and highest of the ability groupings in the second grade at P on the ground that it would be too frustrating an experience for the children in the lowest group.

As to ethnicity or racial factors, I have only the information generated by observation. In Fullerton there were Mexican-Americans and Blacks. Busing had been initiated from the city's miniscule ghetto. Observation indicated that ghetto children were largely in the lowest and intermediate groups. In P there was a higher proportion of Mexican-Americans than in F. In Kanawha County, visual observation indicated that (I) is solidly white, II had a few black children.

I shared this information with you so that you can make some conclusions about the probable influence of these variables upon achievement on the culture trait test which might indicate whether it has any practical value as a diagnostic tool. There are other factors which you should consider, if you have not already. My thinking runs along these lines. The correlation between I.Q. and reading measures is one of the most powerful in educational test and measurements. In general both of these tests correlate with SES status. It would not be surprising if I find that there is a correlation between the culture trait test and both reading and intelligence measurements. (I have the test data for the Kanawha County children but I have yet to make a correlational analysis). Thus the problem of associating behavioral-discipline phenomena etiologically with achievement on the culture trait test with any vigor is formidable. In short, a positive association of low achievement on the culture trait test with high placement on an

Mr. Charles E. Butler
September 16, 1969
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index for behavioral discipline problems, would merely be suggestive that the former is the cause of the latter. To determine causal relationships it would be necessary to secure data for factor analysis.

In using the culture trait questionnaire, I suggest that you test 8th and ninth graders first to determine whether the mean class scores fall within the range I have secured. If they do not, then give considerable time to the research design particularly if you wish to get at racial and ethnic factors. A stepwise procedure starting with the oldest classes first with intensive consideration of the results at each grade level would be the most effective approach. In such an undertaking you have my permission to use the published culture trait questionnaire in both the high school and elementary forms. Of course, I expect that you will make the results of administration of the culture trait questionnaire available to me. I also would welcome your making any alterations or additions to it which would effectively serve your purposes.

My reasons for not enclosing materials relating to the oral version of the culture trait questionnaire are several: First, I have data which gives very powerful evidence that the test instrument has properties which interfere with the respondents perception and disclosure of the culture trait. Second, I am engaged in intensive research now to understand the underlying factors which give rise to this phenomenon. Third, if you used this instrument in its present form, you would contaminate the data source i.e., the children with the result that it would be impossible to get a more accurate measurement of the child's perception of the trait. In brief, while I am confident of the scores reported for the second grades and the relationship between the class means, there are artifactual elements for all classes which serve to appreciably reduce their means. If your organization should wish to go into oral testing of younger children, I would consider the possibility of collaborative research in this area.

A word about the administration of the written questionnaire. The procedure as set forth on page 226 of the paper was followed in both high school and elementary classes. With high school respondents completion time, including the third page on social information takes slightly over twenty minutes. For elementary students, twenty-five minutes is

Mr. Charles E. Butler
September 16, 1969
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sufficient. A warning: Achievement on the test, I believe, is very sensitive to the administrator's demeanor.

I would appreciate greatly having the names of the persons using the questionnaire and the person responsible for the conduct of the project.

If you have any question whatever please do not hesitate to write or telephone. I will cooperate to the extent of my ability.

I look forward to hearing from you.

Sincerely yours,

Herbert G. Wilcox
Associate Professor

HGW:ck

Enclosures

Means for Culture Trait Questionnaire for Elementary
Classes as of 6/10/69

Means for Culture Trait Questionnaire for Secondary
Classes as of 6/10/69

Elementary Questionnaire, number chart, blank chart

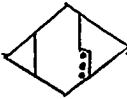

Secondary Questionnaire, number chart, blank chart

APPENDIX B

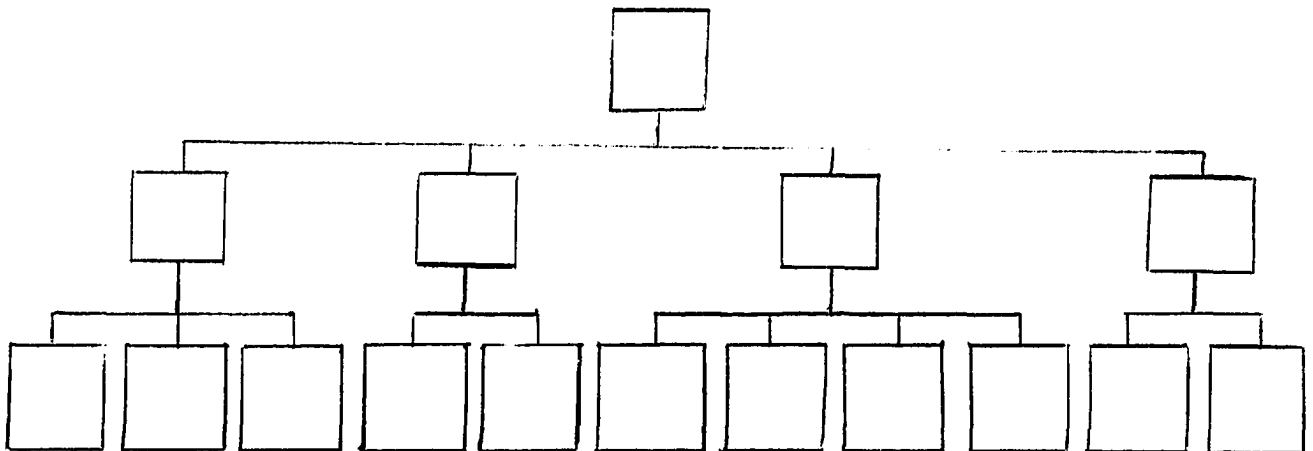
INSTRUMENTS USED IN STUDY

CULTURE TRAIT TEST

People in their daily lives see and know the meaning of many different kinds of signs. Some are words such as card, elephant, car, bookcase and Ford. Numbers like 85, 17, 21 and 13 are also signs. Another sign with which we are familiar is \$, which stands for money. Driving an automobile, we depend on signs for our safety. Two examples are:

(1)  (2)  . Knowing the meaning of signs is very necessary in life today. For example, most people know the meaning of complicated signs such as a floor plan for a house as found in popular magazines or road maps that you get from service stations. Another example of a complicated sign is a graph showing the change in yearly income of the American people from 1900 to 1967.

You are presented with a sign below. Look at it carefully and in the space provided write a sentence telling what this sign is or what it stands for.



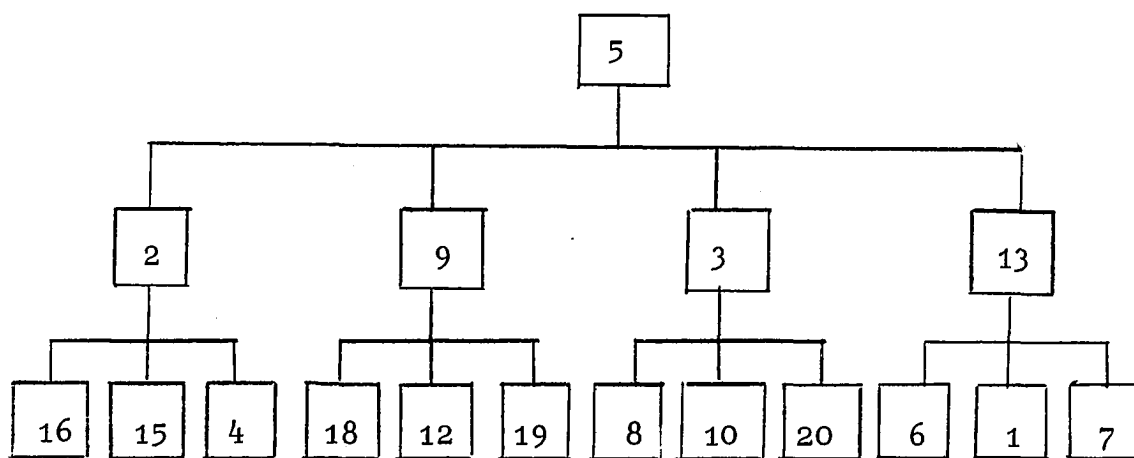
Answer _____

SCHOOL _____

(1) I live with my ☐ mother, ☐ father, or ☐ both.

(2) I am a ☐ boy, ☐ girl.

You are presented here with the same sign which you saw before. However, this one has numbers in each of the boxes to indicate a person or a position.



On the following pages, write the correct number or numbers in the space after the word, "Answer." Remember there may be more than one number for the answer, and Question 15 must be answered in words. Please answer all questions and give a reason for your answer in Question 1.

Do not
Write in
This Box

1. Which would you prefer to be: 8, 3 or 5? _____
Why? _____
2. Which position has control over all others?
Answer _____
3. Who will give orders to 8, 10, and 20?
Answer _____
4. Who would receive the most pay: 5, 10 or 3?
Answer _____
5. Do 2 and 12 have equal control over others or
do 2 and 13?
Answer _____
6. In the event 12 did something wrong, who would
punish him?
Answer _____
7. Which of the following: 2, 9, 3 or 12 will give
orders to 16 concerning official business?
Answer _____
8. Suppose that 8 and 10 were in an argument over
the way the work should be done, who would set-
tle the argument?
9. Who would have the biggest and most comfortable
office?
Answer _____
10. Suppose 12 wanted to speak with 5 about some
official business, whose permission must he
have?
Answer _____
11. Which pair are most likely to be doing the same
kind of work: 4 and 19, or 1 and 7?
Answer _____
12. Who is most likely to have worked the longest?
Answer _____
13. In the event that 10 needed more information
about his work, would he ask 3 or 5?
Answer _____
14. Who has more control and responsibility: 2 or 1?
Answer _____

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____

Do not
Write in
This Box

15. What do you think the sign with the numbers in each of the boxes which you have been given represents?
Answer_____
16. If 10 had a disagreement with 3 to whom would 10 appeal?
Answer_____
17. From whom would 2 and 3 take orders?
Answer_____
18. Suppose that 5 intended to make some plans about official business, with whom is he most likely to talk?
Answer_____
19. If 19 wanted to speak with 15 about some official business, whose permission would he have to have?
Answer_____
20. Suppose that 4 and 3 were in an argument over official business, who would settle it?
Answer_____

15. _____

16. _____

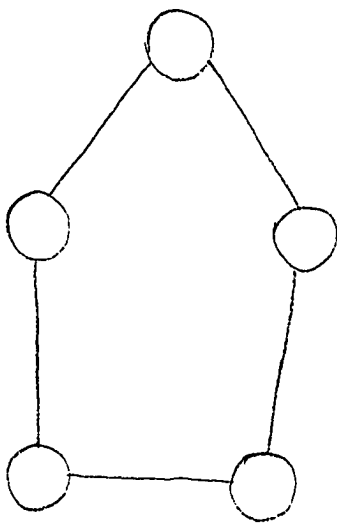
17. _____

18. _____

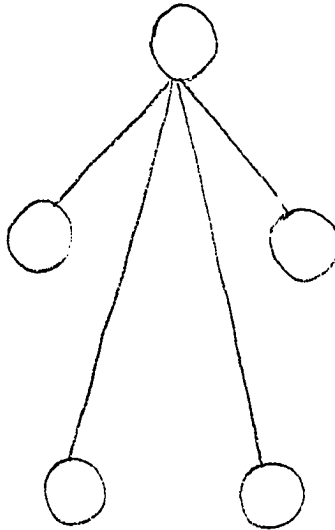
19. _____

20. _____

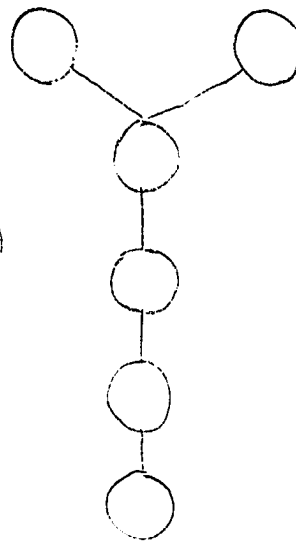
STUDENT QUESTIONNAIRE



SIGN A



SIGN B



SIGN C



SIGN D

Sign A shows that each person talks to those near him on each side.

Sign B shows everybody talking directly to the person at the top.

Sign C shows the bottom person talking through two other people to the two at the top.

Sign D shows everybody talking through someone else to the person at the top.

1. Which of the four signs above do you think is better for your school than the sign of the test you just finished?

___ (A, B, C, or D)

2. Which of the four signs above do you think is worse for your school than the sign of the test you just finished?

___ (A, B, C, or D)

Put Yes or No in the blanks below.

3. Should students have more voice in:

- a. ___punishing students?
- b. ___choosing classes they take?
- c. ___choosing student class and council officers?
- d. ___using their free time?
- e. ___making school rules?
- f. ___choosing people who speak to students at the school?
- g. ___choosing principals, teachers and counselors?
- h. ___choosing books?
- i. ___choosing the food served in the lunchroom?
- j. ___the way grades are given out?

Answer questions 4 and 5 by putting s for students, P for principal, T for teachers and ST for superintendent in the blanks.

- 4. Who should have the most to say about:
 - a. ___what students wear?
 - b. ___what students do after school?
 - c. ___is taught in the classroom?
 - d. ___student appearance (long hair, beards, make-up, etc.)?
- 5. Who should have the least to say about:
 - a. ___what students wear?
 - b. ___what students do after school?
 - c. ___is taught in the classroom?
 - d. ___student appearance (long hair, beards, make-up, etc.)?
- 6. Draw a sign that you think is better than all of those you have seen, using the letters: S (students); P (principal); T (teachers); and ST (superintendent).

JUDGES' FORM FOR RANKING SCHOOLS BY SOCIOECONOMIC STATUS

According to researchers, socioeconomic status increases as (1) total family income increases, (2) the parental educational level increases, and (3) the occupational type changes from unskilled, semiskilled to managerial, executive and professional. The socioeconomic status of the school is determined by the socioeconomic status of the families from which the majority of the students come.

Would you please rank the junior high schools of the Oklahoma City school districts in descending order beginning with the school which has the majority of its students coming from families which, in your judgment, have highest total family incomes, highest educational levels, and fathers in executive, managerial, and professional jobs.

(The junior high schools to be considered are: Capitol Hill Junior, Central, Eisenhower, Harding, Hoover, Jackson, Jefferson, Kennedy, Moon, Roosevelt, Taft, Webster.)

_____	1
_____	2
_____	3
_____	4
_____	5
_____	6
_____	7
_____	8
_____	9
_____	10
_____	11
_____	12

APPENDIX C

VARIABLE IDENTIFICATION AND INDIVIDUAL STUDENT SCORES BY SCHOOLS

VARIABLE IDENTIFICATION AND MEAN SCORES FOR
SCHOOL A

No.	Race	Father Status	Score
219	I	FP	0.0
220	C	FP	4.0
221	C	FP	15.0
222	C	FP	18.5
223	C	FP	17.0
224	C	FP	19.3
226	I	FP	19.5
228	C	FP	15.8
230	C	FA	17.3
231	C	FP	20.0
232	C	FP	18.0
233	C	FP	19.5
234	C	FP	13.0
235	C	FP	17.8
237	C	FP	16.8
238	C	FP	17.0
239	C	FP	18.0
241	C	FP	14.8
242	C	FA	8.5
243	C	FA	18.0
246	C	FP	17.0
247	C	FP	11.3
248	C	FA	17.0
249	I	FP	15.0
250	I	FA	15.0
252	C	FP	18.5
253	C	FP	17.5
254	C	FP	18.5
255	C	FP	18.0
256	C	FP	15.8
258	I	FP	11.3
261	C	FA	19.0
262	C	FP	19.0
264	C	FP	17.0
265	C	FP	14.5
267	C	FA	16.0
268	C	FA	18.0
270	I	FP	14.3
271	C		8.5

VARIABLE IDENTIFICATION AND MEAN SCORES FOR
SCHOOL B

No.	Race	Father Status	Score
169	C	FP	6.5
170	I	FP	15.5
171	C		20.0
172	I	FA	19.0
174	I	FA	17.5
175	C	FP	18.0
176	C	FP	0.0
177	I	FP	16.5
178	C	FP	20.0
181	I	FP	19.0
182	I	FP	18.0
183	I	FA	17.0
184	C	FP	18.5
185	C	FP	18.5
187	C	FP	17.5
188	N	FP	2.0
189	N	FP	5.8
190	N	FP	16.5
191	C	FP	3.0
192	I	FP	14.5
194	C	FA	3.3
195	C	FP	18.0
196	C	FP	15.0
197	I	FP	5.0
198	C	FP	16.0
199	C	FP	18.0
200	C	FP	18.0
201	C	FP	14.3
202	N	FA	19.5
203	C	FP	15.0
205	I	FP	2.3
206	C	FA	18.0
207	I	FP	13.5
208	I	FP	2.0
209	I	FP	20.0
211	C	FA	18.0
212	I	FA	4.0
213	C	FP	15.5
215	I	FA	19.0
216	C	FP	19.0
217	I	FA	12.8
218	I	FA	16.3

VARIABLE IDENTIFICATION AND MEAN SCORES FOR
SCHOOL F

No.	Race	Father Status	Score
1	C	FP	16.5
2	C	FP	16.5
3	C	FP	16.8
4	I	FP	17.5
5	C	FP	18.0
6	N	FA	17.8
7	I		17.5
8	I	FP	18.0
9	C	FA	14.3
10	C	FP	14.5
11	C	FP	18.0
12	C	FP	18.3
13	C	FP	14.8
14	I	FP	19.0
15	I	FP	19.3
16	C	FP	6.0
17	I	FP	16.5
18	C	FA	16.5
23	C	FP	14.8
24	C	FP	12.3
25	C	FP	16.3
26	C	FP	7.0
27	C	FA	13.8
28	C	FA	13.5
29	C	FA	12.5
30	C	FP	13.8
31	C	FP	16.8
32	C		17.3
33	C	FP	18.5
34	C	FA	4.8
35	I	FP	2.0
36	C	FP	18.0
37	I	FA	18.3
38	C	FA	7.0
39	I	FP	19.0
40	I	FP	16.3
41	C	FP	18.5
42	I	FP	18.0
43	I	FP	16.8
44	C	FP	14.8
45	C	FP	15.8

VARIABLE IDENTIFICATION AND MEAN SCORES FOR
SCHOOL H

No.	Race	Father Status	Score
70	N		9.0
79	N	FA	19.0
84	N	FP	18.0
90	N	FA	15.5
98	N	FP	2.0
99	N	FA	15.5
108	N	FP	11.5
113	N	FP	13.5
125	N	FP	6.3
126	N	FA	17.8
127	N	FA	8.8
128	N	FP	13.3
129	N	FP	15.8
130	N	FA	19.0
131	N	FA	13.0
132	N	FP	19.0
133	N	FA	14.0
134	N	FP	14.5
135	N		16.5
136	N	FP	18.5
137	N	FP	18.8
138	N	FP	17.0
139	N	FP	17.8
140	N	FP	18.3
141	N		19.0
142	N	FP	6.0
143	N	FA	16.5
144	N	FP	15.3
145	N	FA	9.0
146	N	FP	14.8
147	N	FP	11.0
148	N	FA	15.8
149	N	FP	19.0
150	N	FA	17.8
151	N	FP	13.0
152	N	FP	8.0
153	N	FP	10.3
154	N	FA	11.5
155	N	FP	14.8
156	N	FP	19.0
157	N	FP	16.0
158	N	FP	17.8
159	N	FP	17.0
160	N	FP	18.0
161	N	FP	6.3

VARIABLE IDENTIFICATION AND MEAN SCORES FOR
SCHOOL I

No.	Race	Father Status	Score
19	N	FP	2.5
20	N	FA	11.0
21	N	FP	19.3
22	N	FA	4.5
47	N	FP	16.0
48	N	FA	6.0
49	N	FP	14.0
50	N	FA	13.8
51	N	FP	4.0
53	N	FA	19.0
54	N	FP	10.3
55	N	FP	17.0
56	N	FA	8.0
57	N	FP	3.0
58	N	FA	17.8
59	N	FA	4.0
60	N	FP	18.5
61	N	FA	2.0
62	N	FP	18.0
63	N	FP	14.0
64	N	FA	8.8
65	N	FA	5.0
66	N	FA	2.0
67	N	FA	2.0
68	N	FP	1.0
69	N	FA	2.0
77	N	FA	13.3

VARIABLE IDENTIFICATION AND MEAN SCORES FOR
SCHOOL J

No.	Race	Father Status	Score
71	C	FP	17.0
72	C	FP	19.0
73	C	FP	11.0
74	C	FP	17.5
75	C	FP	19.0
76	C	FP	16.8
77	C	FP	13.0
78	C	FP	19.5
80	C	FP	14.5
81	C	FP	18.0
82	C	FP	18.5
83	C	FP	14.5
85	C	FP	19.0
86	C	FP	15.8
87	C	FP	19.0
88	C	FP	19.0
89	C	FP	19.0
91	C	FP	19.0
92	C	FP	20.0
93	C		19.0
94	C	FP	17.0
95	C	FP	18.0
96	C	FP	19.0
97	C	FP	18.5
100	C	FA	17.5
101	C	FP	17.0
102	C	FP	19.0
103	C	FP	16.8
104	C	FP	17.5
105	C	FP	18.3
106	C	FA	15.5
107	C	FP	20.0
109	C	FP	18.0
110	C	FP	19.5
111	C	FP	17.0
112	C	FP	19.0
114	C	FP	10.8
115	C	FP	15.8
116	I	FP	17.0
117	I	FP	17.8
118	I	FP	15.8
119	I	FP	17.0
120	I	FA	18.0

SCHOOL J--Continued

No.	Race	Father Status	Score
121	I	FP	16.0
122	I	FP	17.3
123	I	FP	19.0
124	I	FP	19.5
326	I	FP	18.0
327	I	FP	19.0
328	I	FP	19.0
329	I	FA	12.8
330	I	FP	15.3
331	I	FP	19.0
332	I	FP	17.0
333	I	FP	18.0

APPENDIX D

DATA COMPILED FROM QUESTIONNAIRE

RESPONSES TO QUESTION 1 BY RACE

Race	N	Percentage Responding to Possible Responses				Total Percentage
		A	B	C	D	
Negro	77	43	45	3	9	100
Indian	52	37	48	4	11	94
Caucasian	120	38	43	8	5	100

RESPONSES TO QUESTION 1 BY FAMILY STATUS

Father Status	N	Percentage Responding to Possible Responses				Total Percentage
		A	B	C	D	
Father Absent	60	42	45	5	8	100
Father Present	180	43	44	4	8	99

RESPONSES TO QUESTION 1 BY SCHOOLS

School	N	Percentage Responding to Possible Responses				Total Percentage
		A	B	C	D	
A	33	45	39	9	6	99
B	31	39	45	3	15	100
F	33	45	42	3	9	99
H	42	45	48	0	7	100
I	19	37	53	5	5	100
J	44	50	40	9	2	101*

RESPONSES TO QUESTION 2 BY RACE

Race	N	Percentage Responding to Possible Responses				Total Percentage
		A	B	C	D	
Negro	77	12	11	9	64	97
Indian	52	15	15	13	56	99*
Caucasian	120	4	18	6	70	98

RESPONSES TO QUESTION 2 BY FATHER STATUS

Father Status	N	Percentage Responding to Possible Responses				Total Percentage
		A	B	C	D	
Father Absent	60	10	10	10	70	100
Father Present	180	8	19	8	64	99*

RESPONSES TO QUESTION 2 BY SCHOOLS

School	N	Percentage of Responses to Possible Responses				Total Percentage
		A	B	C	D	
A	33	0	15	9	76	100
B	31	6	16	10	68	100
F	33	12	18	6	64	100
H	42	12	7	12	70	101*
I	19	16	26	11	47	100
J	44	2	23	0	75	100

RESPONSES TO QUESTION 3 BY RACE

Race	N	Percentage of Responses to Possible Responses															
		a		b		c		d		e		f		g		h	
		N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y
Negro	77	40	57	82	13	77	22	86	12	65	31	53	43	34	64	53	44
Indian	52	56	44	90	10	90	10	87	13	63	37	65	35	42	58	60	40
Caucasian	120	37	63	83	15	70	28	83	16	68	30	66	33	20	78	46	53

RESPONSES TO QUESTION 3 BY FATHER STATUS

Father Status	N	Percentage of Responses to Possible Responses															
		a		b		c		d		e		f		g		h	
		y	N	y	N	y	N	y	N	y	N	y	N	y	N	y	N
Father Absent	60	47	53	82	18	65	35	83	17	70	30	58	42	33	67	60	40
Father Present	180	41	57	89	11	80	18	84	12	66	31	63	37	29	69	50	48

RESPONSES TO QUESTION 3 BY SCHOOLS

Percentage of Responses to Possible Responses																					
School	N	a		b		c		d		e		f		g		h		i		j	
		Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N		
A	33	39	57	87	9	63	33	81	15	63	33	54	42	24	72	48	48	81	15	36	60
B	31	51	45	70	22	67	26	83	13	58	38	67	29	29	67	54	42	77	16	45	51
F	33	21	79	70	30	61	39	73	27	52	48	61	39	21	79	39	68	70	30	33	67
H	42	36	63	93	7	81	19	88	12	77	22	55	43	31	69	46	54	83	17	50	50
I	19	47	53	80	20	80	20	90	5	53	47	53	47	37	63	63	37	84	16	20	80
J	44	46	54	95	5	79	21	12	88	79	21	72	28	25	75	50	50	92	8	48	52

RESPONSES TO QUESTION 4 BY RACE

Percentage Responding to Possible Responses																	
Race	N	a				b				c				d			
		S	P	T	St	S	P	T	St	S	P	T	St	S	P	T	St
Negro	77	51	25	7	12	66	16	1	10	8	10	66	9	43	26	12	13
Indian	52	76	10	0	11	82	6	4	0	10	4	68	17	65	21	4	8
Caucasian	120	68	17	3	12	89	4	2	3	8	4	76	7	62	22	3	10

RESPONSES TO QUESTION 4 BY FATHER STATUS

Percentage Responding to Possible Responses																		
		a				b				c				d				
		N	S	P	T	St	S	P	T	St	S	P	T	St	S	P	T	St
Father																		
Absent	60	63	19	7	5	83	9	0	5	10	10	65	12	51	29	3	15	
Father																		
Present	180	68	15	2	13	84	8	3	4	8	4	75	10	59	21	7	8	

RESPONSES TO QUESTION 4 BY SCHOOLS

Percentage Responding to Possible Responses																		
School	N	a				b				c				d				
		S	P	T	St	S	P	T	St	S	P	T	St	S	P	T	St	
A	33	69	12	0	18	93	3	3	0	6	3	84	6	42	36	3	9	
B	31	64	19	6	6	86	6	0	2	6	16	58	10	58	19	6	6	
F	33	54	18	3	21	84	3	3	3	6	15	63	12	45	18	6	24	
H	42	60	31	2	7	72	14	2	12	10	5	75	10	55	19	14	12	
I	19	47	11	16	16	69	16	5	5	11	11	53	16	37	32	5	16	
J	44	81	9	2	9	94	2	0	5	5	0	92	2	76	16	2	7	

RESPONSES TO QUESTION 5 BY RACE

Race	N	Percentage Responding to Possible Responses															
		a				b				c				d			
		S	P	T	St	S	P	T	St	S	P	T	St	S	P	T	St
Negro	77	13	33	29	18	9	36	26	22	40	14	14	23	18	22	33	22
Indian	52	2	48	23	27	6	42	25	25	49	25	6	19	11	42	23	21
Caucasian	120	8	29	27	33	6	48	13	32	39	25	10	25	12	31	24	29

RESPONSES TO QUESTION 5 BY FATHER STATUS

Father Status	N	Percentages Responding to Possible Responses															
		a				b				c				d			
		S	P	T	St	S	P	T	St	S	P	T	St	S	P	T	St
Father Absent	60	5	42	22	22	10	46	20	18	35	22	9	29	14	24	30	27
Father Present	180	12	32	28	30	7	41	21	30	42	26	10	18	14	34	21	26

RESPONSES TO QUESTION 5 BY SCHOOLS

School	N	Percentage Responding to Possible Responses															
		a				b				c				d			
		S	P	T	St	S	P	T	St	S	P	T	St	S	P	T	St
A	33	9	39	30	15	6	48	12	30	36	27	12	21	18	39	24	15
B	31	13	22	13	48	10	32	19	32	29	16	6	45	10	26	16	45
F	33	9	39	18	27	9	45	18	21	48	15	12	15	9	27	24	27
H	42	17	36	26	19	12	36	29	22	48	10	14	26	32	11	26	20
I	19	5	26	47	16	11	37	20	20	26	20	16	26	32	11	26	20
J	14	2	23	28	48	2	54	16	28	44	30	2	23	8	37	21	35

RESPONSES TO QUESTION 6 BY RACE

Race	N	Signs				
		Sa	Sb	Sc	Sd	Sh
N	77	18	12	1	9	17
I	52	15	13	8	11	25
C	120	37	13	7	8	12

RESPONSES TO QUESTION 6 BY SCHOOLS

School	N	Sa	Sb	Signs		
				Sc	Sd	Sh
A	33	45	18	3	3	9
B	31	32	10	0	2	19
F	33	24	9	6	24	6
H	42	19	17	2	14	14
I	19	26	0	0	5	20
J	14	25	16	18	7	18

RESPONSES TO QUESTION 6 BY FATHER STATUS

Family Status	N	Sa	Sb	Signs		
				Sc	Sd	Sh
Father Absent	60	22	12	5	9	15
Father Present	180	28	14	4	9	26