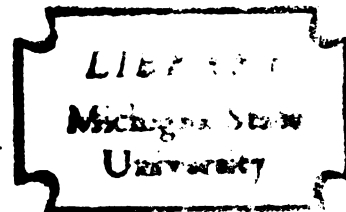


A STUDY OF THE NORMATIVE INFLUENCE OF PARENTS
AND FRIENDS UPON ACADEMIC ACHIEVEMENT

Thesis for the Degree of Ed. D.
MICHIGAN STATE UNIVERSITY
Edsel Lee Erickson
1965

THESIS



This is to certify that the

thesis entitled

A STUDY OF THE MOTIVATIVE INFLUENCE OF PAINTS
TOWARD FRIENDS UPON ACADEMIC ACHIEVEMENT

presented by

Eldsel Lee Erickson

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ABSTRACT

A STUDY OF THE NORMATIVE INFLUENCE OF PARENTS AND FRIENDS UPON ACADEMIC ACHIEVEMENT

by Edsel Lee Erickson

The general purpose of this investigation was to compare the relative influence of student-parent relationships, as opposed to student-friend relationships. The major variables of influence studied were: (1) student perceptions of the academic achievement expectations of parents and friends, (2) perceptions that others attached high importance to carrying out their expectations, and (3) perceptions that, as a student, their behavior was under the surveillance of these others. Situations of normative influences were defined as situations involving these three variables: student perception of achievement expectations from others, to which importance was attached, and that the student perceived that he was under surveillance. A high perceived state of importance and close surveillance attached to expectations was defined as an obligatory condition.

Based upon a theoretical orientation, symbolic interactionism, which emphasized the relevancy of perceived expectations from significant others, research focused upon:

(1) comparing the achievement norms which parents and friends were perceived to hold in their relationships with students, (2) the association of achievement norms with achievement, and (3) the relative association of perceived parental and friendship expectations under conditions of obligation among students who were achieving at a very high level (GPA 3.5 to 4.0) and at a very low level (GPA 0.0 to 0.75). The major theoretical assumption to be investigated emphasized the likelihood of parents being the academic significant others of tenth grade students. It was postulated that student-parent relationships, more than student-friend relationships would involve academic expectations under higher perceived conditions of importance and surveillance.

The population under investigation included all of the tenth grade, caucasian, students of an urban school system on whom complete data was available. Other selective criteria for inclusion in the population: were regularly promoted students who had not withdrawn or re-entered; were not in any special education program; or were not in any special educational research activity. There were 942 students, 425 males and 517 females.

Findings: Achievement Norms and Role-Relationships

1. As anticipated a greater proportion of friends than parents were perceived as being unconcerned about the students' achievement. All students, both males and females,

indicated such parental concern, while 10 per cent of the friends were perceived to be unconcerned about grades.

2. Parents were indicated as academic significant others by students more often than were friends.

3. Parents were perceived by students as holding higher academic achievement expectations than were friends.

4. Parents were perceived by students to attach more importance to their achievement expectations than were friends, regardless of the level of perceived achievement expected of the student, or the achievement level of the student.

5. Parents were perceived by students as holding them (the students) under higher surveillance than did friends.

Findings: Achievement Norms and Achievement

1. The findings in this study support the hypotheses that achievement expectations from parents and friends (when friends hold them) are related to student achievement level.

2. The hypothesis that parental achievement expectations are more related to achievement than friends was accepted for males but not for female students. While the finding that friend's expectations for females was as related to achievement as parent's expectations was not anticipated, it is pertinent to note that parental influence was at least as great as that of friends. The mutual support from friends

may particularly account for females generally achieving at a higher level than males.

3. Another major finding was that parents were in all cases, but one, indicated as academic significant others for high achieving students while friends were mentioned only 33 per cent of the time.

4. In addition the significant others of the high achieving students expected such high performance. In no case did any high achieving student perceive low expectations on the part of parents or friends. While the observed achievement occurred after the measurement of perceived expectations, low or high achievement may be reflected in the expectations of others. Thus, the question of reciprocal influence is not resolved by this study.

5. As anticipated, neither the level of perceived importance, or the level of perceived surveillance of academic behavior were directly associated with achievement. It was hypothesized and accepted, however, that perceived importance and surveillance are conditions which affect the influence of perceived expectations.

6. There were no students who achieved at a high level who indicated parents as holding low expectations and only three of these students had friends who were perceived to hold low expectations under conditions of obligation. Friends were perceived to reinforce parents, or at least not conflict with parents, among 96 per cent of the high achieving

students. It appears that high achievement norms are likely to be a necessary but not a sufficient condition for high achievement.

Findings: Conditions of Academic Obligation and Achievement

1. When parents and friends are perceived to reinforce each other in their achievement expectations under conditions of perceived surveillance and importance there is a greater association of expectations with achievement than when either parents or friends are unconcerned or conflict in their expectations.

2. Conflict in parental and friendship achievement expectations under perceived conditions of obligation is rare (unanticipated finding), only 8 out of 942 students indicated this level of conflict. Thus, it was impossible to test hypotheses pertaining to the dominance of parental relationships over friendship relationships when there is conflict. Possibly conflict between parents and friends in terms of academic achievement expectations is not relevant for most students. When conflict occurs, however, it is as yet unknown which relationship will be most relevant, parents or friends.

3. Achievement at the high levels is characterized by high parental expectations under obligatory conditions (61 out of 67). Perceived expectations from friends under obligatory conditions is not near so prevalent among high

achieving students (29 out of 67).

4. Low achieving students, on the other hand, tend to perceive parents as holding low achievement expectations under obligatory conditions (14 out of 35), or else perceive no obligatory conditions for academic achievement at any level. Only 3 out of 35 parents of low achieving students were perceived to be pleased with high achievement and that such high achievement was important to them (the parents), and that they (the parents) were aware of the students academic behavior. It also appears that friends are perceived to hold low expectations under obligatory conditions, or else they attach no conditions of obligation to achievement.

Major Conclusions

This investigation has supported the view that a student's perceived role-relationship with his parents is more likely to involve normative conditions which specify his academic achievement level than are his perceived relationships with friends. Furthermore, the student's achievement in school, except for females, corresponds more to the norms of parental relationships. In the case of female students, achievement tends to correspond equally to the perceived norms of both parents and friends since parents and friends tend to hold similar expectations. Hence, it was impossible to determine who the females were guided more by, parents or friends. It is significant, however, that no

finding suggested females as being guided more by friends than parents. Thus, while all the findings were not anticipated, they do not give any support to a view that parents have less ability than friends to influence their children's academic performance. The family in its academic expectations has a major role in the performance of the student. Parents are, for tenth grade students at least, most likely to be the academic significant others for students.

The educational relevance of these findings, it is suggested, although it requires further testing for confirmation, is that parents and/or friends can influence students toward higher achievement by enhancing their surveillance of the student and making higher academic demands. It is believed that without importance and surveillance attached to enhanced expectations, the expectations are not as likely to produce enhanced achievement.

It is finally concluded that experimental programs to enhance the performance of low achievers should direct a large part of their efforts intentionally modifying the parent-child relationship by working directly with the parents to: (1) raise parental evaluations of their children's ability to achieve at higher academic levels; (2) hold higher academic expectations for their children; and (3) attach both higher importance and close surveillance to their children's academic performance.

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CHAPTER I

THE PROBLEM

This is an investigation of the relative influence of parents, as opposed to friends, upon student academic achievement in high school. This study proposes a theoretical and empirical strategy for determining the impact of one form of influence which is assumed to be functioning within a student's relationships with his parents and friends, i.e., the student's perceptions of the academic grades he should receive in order to most please his parents and friends.

Major Variables of Influence*

The perceived achievement expectations are particularly relevant variables of influence when they are accompanied by the perceptions that (1) the expecting others attach high importance to their desired expectations, and (2) that the student's academic behavior is under close

*The concepts presented in this portion of the chapter are only primitively defined. In Chapter II and Chapter III, each of these terms will be more completely defined along with a development of theoretical relevancy.

surveillance from these others.

The simultaneous presence of all three variables: perceived expectations, perceived importance, and perceived surveillance is defined as a situation of normative influence. The perception of very high importance and very close surveillance attached to an expectation by another is defined as a "condition of obligation."

Research Objectives

Social and educational psychologists at Michigan State University, led by Wilbur B. Brookover, have begun to apply a theoretical framework, "symbolic interactionism," in research designed to clarify the social psychological context in which learning occurs.¹ While the main focus of

¹A comprehensive overview of this research can be found in Wilbur B. Brookover and Edsel L. Erickson, "Introduction: Symposium on Self-Concept and its Relationship to Academic Achievement: A Longitudinal Analysis," a paper presented at the American Educational Research Association meetings, Chicago, 1965; the research is reported in Wilbur B. Brookover, Ann Paterson, and Shailer Thomas "Self-Concept of Ability and School Achievement," U.S. Office of Education, Cooperative Research Project No. 845 (East Lansing: Office of Research and Publication, Michigan State University, 1962); Wilbur B. Brookover, Jean M. LePere, Don E. Hamachek, Shailer Thomas, Edsel L. Erickson, "Improving Academic Achievement Through Students' Self-Concept Enhancement," U.S. Office of Education, Cooperative Research Project No. 1636 (East Lansing: Bureau of Educational Research, Michigan State University, 1965); and Wilbur B. Brookover, Don E. Hamachek, and Edsel L. Erickson, "Relationship of Self-Concept to Achievement in High School," U.S. Office of Education, Cooperative Research Project No. 2831 (East Lansing: Bureau of Educational Research, Michigan State University, to be published September, 1966).

this undertaking has been upon the self-concepts of students, the investigation has been extended to a study of the students' perceptions of others. These later studies, among other things, investigate the relationship between a student's perception of the achievement expectations imposed by his significant others, and his academic achievement level.

The principle objectives of the present study are to compare (1) the relative extent to which perceived achievement expectations characterize student role relationships with parents as opposed to friends; (2) the association of certain social conditions with perceived achievement expectations, i.e., perceived importance of expectations and surveillance attached to achievement; and (3) the extent that student perception of parental and friendship achievement expectations under "conditions of obligation" are associated with high and low performance.

Research Questions

Achievement norms as part of student-friend and student-parent relationship.--To what extent are student-friend, as opposed to student-parent role relationships, characterized by academic achievement norms?

1. To what extent do students perceive that their parents and friends are concerned about how well they (the students) do in school?

2. To what extent do students perceive that their parents and friends expect them to achieve in school?
3. To what extent do students perceive that their parents and friends attach importance to their achievement expectations?
4. To what extent do students perceive their parents and friends as having their (the students) academic performance under surveillance?

Achievement norms and achievement.--What is the relationship between the normative conditions under investigation in this study and the student's academic achievement?

5. What is the relationship between a student's perception of academic achievement expectations by his friends and parents and his academic achievement?
6. What is the relationship between a student's perception of the importance parents and friends attach to their expectations and that student's achievement?
7. What is the relationship between a student's perception that his academic behavior is under the surveillance of his parents and/or friends and his academic achievement? Is the perception of surveillance by another a relevant predictor of achievement?

Conditions of obligation.--What is the relationship between perceived conditions of obligations which are attached to perceived academic expectations, and student's achievement?

8. Relationship to achievement:

What is the relationship between a student's perception of conditions of obligation attached to achievement expectations by parents and friends and his academic achievement?

9. Conflicting or reinforcing situations:

To what extent are parents and friends perceived as holding conflicting expectations under conditions of obligation?

10. Presence of conditions of obligation:

To what extent do low and high achieving students perceive conditions of obligation attached to their perceptions of achievement expectations from parents and friends?

General Hypotheses

On the basis of discussion and findings to be presented in Chapter II, the following general hypotheses are made concerning the student's perceptions of his parents and friends:

1. "Student-parent" relationships are more likely to involve normative conditions specifying academic achievement than are "student-friend" relationships.

2. Perceived academic achievement expectations are related to achievement.

3. Perceived parental achievement expectations have a greater influence upon student achievement than do the perceived achievement expectations of friends (when friends are perceived as holding such expectations).

4. For a student to perform at the highest academic levels some academic significant other must expect such high performance. (The same hypothesis does not necessarily hold

for low-achieving students as other factors may limit their achievement, i.e., skill, self-concept of ability, emotional interference, etc.)

It will also be developed in Chapter II that the impact of perceived expectations is modified by perceived conditions of importance attached to meeting expectations and close surveillance of the students' behavior. High importance and high surveillance attached to higher or lower academic expectations is seen as an obligatory situation for compliancy to academic norms. The employment of conditions of obligation, as it will be later developed, allows for a more adequate comprehension of the relative influence of parents and friends.

5. Academic achievement, under conditions of obligation, corresponds more with perceived expectations than when these conditions are not present.

Assuming the above hypotheses to be true, the achievement level of students can be hypothesized to rank in the following order:

<u>Perceive Parents as Holding</u>	<u>Perceive Friends as Holding</u>	<u>Achievement Rank</u>
High expectations under obligatory conditions	High expectations under obligatory conditions	1
High expectations under obligatory conditions	No obligatory conditions for achievement	2
No obligatory conditions for achievement	High expectations under obligatory conditions	3
High expectations under obligatory conditions	Low expectations under obligatory conditions	4
Low expectations under obligatory conditions	High expectations under obligatory conditions	5
Low expectations under obligatory conditions	Low expectations under obligatory conditions	6

Furthermore, the relevance of conditions of obligation attached to academic expectations is hypothesized to be an important factor in deviant achievement, that is, achievement which is far above or below the norm for the student population. When a student is performing at a very high level (e.g., GPA 3.5 or better), it is expected that parents will not only hold such expectations, but that these expectations will have conditions of obligation attached to them.

6. For students to achieve at a high level there will be no significant others who hold low expectations under conditions of obligation. It is also hypothesized that the friends of high achieving students will be perceived as tending to support the expectations of the parents, or, at the very least, not make opposing expectations under

conditions of obligation.

7. Low achiever, on the other hand, will perceive few if any parents as making high expectations under conditions of obligation. It is hypothesized that low achievers will perceive that both their parents and friends hold expectations but without conditions of obligation or that low academic expectations are held under conditions of obligation.

Significance and Limitations of Study

The Need for the Study

In every society, role expectations are important in the choice and acquisition of skills and knowledge.² The heuristic worth of this social-psychological proposition to social science is manifested by the magnitude of current research on role analysis.³ This interest in role-expectations, however, has not been so extensively shared by those

²Wilbur B. Brookover and David Gottlieb, Sociology of Education (New York: American Book Company, 1964), p. 465.

³See Neal Gross, Ward S. Mason and Alexander W. McEachern, Explorations in Role Analysis: Studies of the School Superintendency Role (New York: John Wiley and Sons, Inc., 1958); and Clinton A. Snyder, "Variations in Expectations for the Teacher Role, as Related to General and Specific Roles, Expectation Categories, and Social Distance," Ph.D. dissertation, Michigan State University, 1963, pp. 21-34.

concerned with research in education. Among those few who do share such an interest teacher roles have received the greater attention.⁴ Minor attention has also been given to the influence upon academic performance of general adolescent roles, such as friend, member of a play group and brother.⁵ James S. Coleman's recent and popular study of "The Social Life of the Teenager and Its Impact on Education" is a case in point.⁶ Research which stresses the influence of nonacademic role expectations upon academic performance may not provide an adequate enough understanding. The thesis presented in this study is that knowledge is required concerning academic role expectations, such as student expectations specifying achievement. Research which concentrates on student role expectations, however, is limited.⁷ Analysis of group expectations of a particular actor in the position of student, as perceived by the actor, is even more limited.⁸

⁴See the recent work of Gross, Mason, and McEachern op. cit.; for a discussion of the relevancy of "particular" expectations see Wilbur B. Brookover, "Research on Teacher and Administrator Roles," Journal of Educational Sociology, XXIX (1955), pp. 2-13; Bruce Biddle, et al., Studies in the Role of the Public School Teacher, Volume A (Columbia: University of Missouri Press, 1961); Snyder, op. cit.; Brookover and Gottlieb, op. cit., Chapters XII, XIII, and XIV.

⁵James S. Coleman, The Adolescent Society (Glencoe, Illinois: The Free Press, 1962).

⁶Ibid.

⁷Brookover and Gottlieb, op. cit., p. 480.

⁸Ibid., pp. 453-458.

A review of the literature indicates no research on student perception of "primary" expectations, (e.g., perceived grade achievement expectations) and its impact upon academic performance.⁹

This lack of research suggests that even less is known about the conditions which affect the assumed relationship between academic expectations and academic performance.

Until research establishes the relationship between the perception of student role expectations and academic achievement, along with the conditions which affect that relationship, the value of social psychological theories which emphasize role analysis are seriously limited in their contribution to educational theory and practice. Research is needed which will clarify the relationship between perceived academic achievement expectations and achievement.

Other Types of Influence by Parents and Friends

It is assumed that a student's achievement is influenced by many forces functioning within the reciprocal roles he has with others. Thus, it is relevant that perceived academic achievement expectations are distinguished from other variables of possible impact upon achievement.

⁹Brookover (1955), op. cit., pp. 2-13.

An implication of this is that prior to a statement of the relative importance of one set of reciprocal relationships (e.g., student-friends) over another (e.g., student-parent) as having a greater effect upon academic performance, each one should be determined for its contribution to achievement under varying conditions.¹⁰

Other influences upon academic achievement which parents and friends are assumed to have, but which are not under investigation in this study, are: (1) as a source of students' self concept of academic ability;¹¹ (2) as a source of academic values, e.g., academic aspirations;¹²

¹⁰The interactive effect of variables under varying conditions as specified in the analysis of variance model is an appropriate model for theoretical conceptualization. It is not implied, however, that there are as yet appropriate methods for such analysis with present types and levels of observations concerning social influence. See: Sidney Siegel, Nonparametric Statistics, for the Behavioral Scientists (New York: McGraw-Hill, 1956), p. 33; and William S. Ray, An Introduction to Experimental Design (New York: Macmillan Company, 1960), p. 2. For a discussion of the problems in determining the relative influence of parents and peers see: Brookover and Gottlieb, op. cit., Chapter XVI.

¹¹Brookover, LePere, Hamachek, Thomas, and Erickson (1965), op. cit., Chapters I and IV; and Robert E. Herriot "Some Social Determinants of Educational Aspiration," Harvard Educational Review, XXXIII (1963), 157-177.

¹²Ralph H. Turner, "Some Family Determinants of Ambition," Sociology and Social Research, XLVI (1962), 397-411. For a discussion of the dependence of norms upon shared values see Talcott Parsons and Edward Shils (eds.), Toward A General Theory of Action (Cambridge: Harvard University Press, 1952), p. 397.

(3) as a source of nonacademic values, e.g., obsession with "getting into the right crowd" which interferes with the study-time necessary for desired grades;¹³ (4) a source of skills and knowledge, e.g., language facility, decorum, etc.;¹⁴ and (5) affective influence, e.g., a parent or some other might cause a student to be overly fearful of academic tasks.¹⁵

It is not contended that the above cited influences, along with perceived norms, are clearly separate and disparate phenomena, or that these factors make up the total influence functioning within role relationships, or that one influence is a more important factor in academic achievement than another. To the contrary, as previously contended, there is a multiple and interactive impact upon achievement.¹⁶ The postulation of these forms of influence is made, not to be definitive, but rather to clarify and guide in the choices

¹³James S. Coleman, "The Adolescent Subculture and Academic Achievement," American Journal of Sociology, LXV (1960), 341.

¹⁴Esther Milner, "A Study of Relationship Between Reading Readiness in Grade-One School Children and Patterns of Parent Child Interaction," Child Development, XXII (1951), 59-112.

¹⁵J. L. Linger, "Projected Familial Attitudes as a Function of Socio-Economic Status and Psychopathology," Journal of Consulting Psychopathology, XVIII (1954), 99-104; and Carl Weinberg, "Family Background and Deviance or Conformity to School Expectations," Journal of Marriage and Family, XXVI (1964), 89-91.

¹⁶Siegel, op. cit.; and Ray, op. cit.

of evidence and inference concerning the impact of achievement expectations upon achievement; and to indicate what is not being directly studied in this investigation. Hence, conclusions concerning the overall impact which parents and friends may have is restricted. What can be determined, however, is an assessment of the relative influence of parents and friends upon achievement, through the perception of their academic achievement expectations under varying conditions.

It is also assumed, as previously stated, that perceived normative prescriptions concerning many types of behavior, other than academic achievement, affect achievement. Norms dealing with dating, clothing, vocational aspirations, and "getting into the right crowd" may be assumed to have an impact upon academic performance levels.¹⁷ Norms of this kind may not necessarily prescribe academic behavior per se, but rather, interfere with, or enhance achievement by placing a premium upon other activities which, for example, take away, or provide for more study time.¹⁸

¹⁷This is the theme of Coleman in "The Adolescent Subculture and Academic Achievement" (1960), op. cit. See also E. Rosen, "Conflicting Group Membership: A Study of Parent-Peer Cross Pressures," American Sociological Review, XX (1955), 153-162.

¹⁸Brookover and Gottlieb, op. cit., Chapter XV.

Direct Impact of Norms Governing Academic Roles

Achievement norms may also have a direct influence upon achievement by becoming internalized,¹⁹ as for example, when the academic expectations of a role are taken over by a student and become his aspirations.

And, finally, achievement norms may have a direct and salient impact upon achievement as in the case of compliant behavior.²⁰ An example of this would be academic achievement prescriptions, enforced by sanctions for which compliance is demanded and surveillance is present.

It appears that James Coleman²¹ has been primarily engaged in a study of the more indirect, though not always the less important, norms which affect academic achievement. Coleman's²² efforts represent a needed interest in acquiring a more complete understanding of the influences upon educational achievement. It is, however, not yet possible to

¹⁹See for an early discussion of the internalization of the views of others George Herbert Mead, Mind Self and Society (Chicago: University of Chicago Press, 1934). Of particular relevance are discussions of socialization through "role-taking" and "role-playing" in Robert K. Merton, Social Theory and Social Structure (Glencoe, Illinois: The Free Press, 1957), p. 369; and Ralph Turner, "Role-taking and Role-standpoint, and Reference-group Behavior," American Sociological Review, VI (1956), 317.

²⁰One of the general hypotheses of this investigation.

²¹Coleman (1960), op. cit., and Coleman (1962), op. cit.

²²Coleman (1962), op. cit.

draw definitive conclusions which imply that the indirect norms which govern dating, athletics, and "getting into the leading crowd" have a greater bearing upon school achievement than do direct norms which deal specifically with academic prescriptions.²³

Similarly, one should be hesitant concerning any conclusions as to the relative importance of categories of others, parents, friends, or teachers, without regard to particular activities and situations.²⁴ For instance, clothing behavior in one situation may be better explained by the expectations of friends than by the expectations of parents. In another situation the expectations of teachers may be most significant. This may be the case with academic achievement. What is needed is an understanding of the influence which the perceived academic achievement expectations of parents, friends, teachers, and others have upon school achievement. Then it will be possible to assess the relative importance of various norms with categories of others' expectations.

²³Coleman states: "Industrialization and the rapidity of change itself, has taken out of the hands of the parent the task of training his child . . ." and "in effect, then, what our society has done is to set apart, in an institution of their own, adolescents for whom home is little more than a dormitory. . . ." Coleman (1960), op. cit., p. 337. It will be contended later in this study that Coleman, as have many others, underestimated the important influence which parents currently have and, indeed, have not lost upon the academic achievement of their high school children.

²⁴Ibid.

The task of this study will be to analyze perceived academic achievement expectations within the parent-student and student-friend relationships under perceived conditions of obligation, i.e., high perceived importance attached to expectations and high perceived surveillance by others.

Summary

The general purpose of this investigation is to compare the relative influence of student-parent relationships, as opposed to student-friend relationships. The major variables of influence to be studied are (1) student perceptions of the academic achievement expectations of parents and friends, (2) perceptions that others attached high importance for their expectations being met, and (3) the perceptions that, as a student, their behavior is under the surveillance of these others. Situations of obligation are defined as situations involving the presence of all three of these variables.

This investigation has as its central hypotheses the view that a student's perceived role-relationship with his parents is more likely to involve conditions of obligation which specify academic achievement level than are his perceived role-relationships with friends. Furthermore, the student's achievement in school will correspond more to the achievement norms of parental relationships than to the

achievement norms of friendship relationships. And finally, hypotheses were made which test the relevance of impact upon achievement of obligatory situations, i.e., perceived importance attached by another to carrying out his expectations and close surveillance of the student by this other person.

CHAPTER II

THEORETICAL DEVELOPMENT AND REVIEW OF LITERATURE

General Theoretical Orientation

Major Propositions¹

The major theoretical propositions under investigation in the Brookover studies at Michigan State University and to which this investigation contributes are:

1. The self-concept-of-ability is a "functionally limiting" variable in school performance.
2. Students develop their self-concept-of-ability largely through their perceptions of how their "significant others" evaluate their ability.

For any student to purposively organize his behavior to achieve in a given task, he must think there is some possibility of his being "able" to meet the expectations

¹The development of these theoretical propositions are presented more fully in Brookover, LePere, Hamachek, Thomas and Erickson (1965), op. cit., and in Brookover, "A Social Psychological Conception of Classroom Learning," School and Society, LXXXVII (1959), 84-87. The major sources of influence have been the writings of Mead, op. cit.; John W. Kinch, "A Formalized Theory of the Self-Concept," The American Journal of Sociology, LXVIII (1963), 481-486; and Arthur Combs and Donald Snygg, Individual Behavior (New York: Harpers, 1959).

associated with the task.²

3. The student must further believe that engaging in such a task is the appropriate thing to do.
4. Whether or not a given task is viewed as appropriate by the student is dependent upon his "self-identity" in relation to others.

Perceived evaluations of ability, cited in proposition number 2, are not considered "prescriptive."³ For example, if a student perceives that a significant other evaluates him as "being able" to perform a given task at some level, it does not necessarily follow that he is "expected" to engage in that activity.

Since symbolic interaction theory proposes that the individual ". . . enters his own experience as a 'self' or

²Refers to self-concept of academic ability: Brookover, LePere, Hamachek, Thomas and Erickson (1965), op. cit., Chapters I and VI; see also Robert Faris, "Reflections on the Ability Dimension in Human Society," American Sociological Review, XXVI (1961), 835-843.

³"Expectation" and "prescription" are used synonymously and have reference to the particular behaviors an individual perceives others in his social system expect of him because he occupies a particular position (i.e., friends and child) in reference to them. Except as to the addition of the term "perceived" this use of "expectations" is similar to that of Ralph Linton, The Study of Man (New York: Appleton-Century-Crofts, Inc., 1936), p. 113-114; Robert K. Merton, op. cit., p. 369. For a discussion of the relevancy of "appropriate" behavior see: Brookover (1959), op. cit.

individual, not directly . . . but by taking the standpoint of others."⁴ It is postulated that the student must either think that a task is appropriate, or else he must perceive that some other person wants him to achieve in that task.

This alone does not guarantee that he will act. The student must learn from his parents or others that he is capable of achieving adequately, his self concept of ability being such as to not limit his achievement. He must also have learned that the activity is important; that such activity will positively affect the social relationships he presently values or aspires to attain. Under these conditions the likelihood of his pursuing the activity will be substantially enhanced.

The Student's Role in Reference to Parents and Friends

Three important basic relationships are dealt with in the Brookover studies at Michigan State University. These are: student-friend, student-parent, and student-teacher. The theoretical rationale for employing these concepts is drawn from the early work of Ralph Linton and the recent writings of Robert K. Merton dealing with "role set."⁵

⁴Mead, op. cit., pp. 138 and 225.

⁵Ralph Linton (1936), op. cit., pp. 113-114; Merton (1957), op. cit.; the theoretical importance of stressing research upon "student role" is developed in Chapter XVI in Brookover and Gottlieb, op. cit.

As the student moves among relationships with his parents, teachers, or friends, he may maintain a common set of role expectancies centering upon his being defined as "student." Furthermore, as symbolic interaction theory stresses, in addition to taking into account those who are in physical proximity (e.g., talking to teachers) he may symbolically take into account other relationships which include his student identity (e.g., parent expectations).⁶ This is not to be confused with the playing of multiple roles such as: boy, student, son, responsible person, etc.

Reciprocal Role Relationships

A student may learn that he is obliged by others either to engage or not engage in certain tasks at a particular level in order to maintain his relationship with these

⁶See: George Herbert Mead, op. cit., pp. 151-157 and p. 201. An example of this process is given in terms of the contrast between disorganized "play" and the organized "game," a situation which Mead uses often in developing illustrations of his theoretical propositions. "If he gets in a ball nine he must have the responses of each position involved in his own position. He must know what everyone else is going to do in order to carry out his own play. He has to take all of these roles. They do not all have to be present in consciousness at the same time, but at some moments he has to have three or four individuals present in his own attitude, such as the one who is going to throw the ball, the one who is going to catch it, and so on. These responses must be, in some degree, present in his own make-up. In the game, then, there is a set of responses of such others so organized that the attitude of one calls up the appropriate attitudes of the other."

others or to bring about a desired relationship.⁷ A relationship such as this is termed a "reciprocal-role relationship" in that it is based upon a reciprocity of actions. A reciprocal-role relationship exists when an individual "enacts a social role which is defined with reference to another role, as in the relationship between patient and doctor,⁸ or between student and history teacher. Kelman notes,⁹ ". . . if an individual finds a particular relationship satisfying, he will tend to behave in such a way as to meet the expectations of the other." He behaves in terms of his perception of the demands of that relationship.

From this frame of reference it is important to determine those reciprocal-role relationships of a student which affect his academic achievement by specifying academic performance norms.

The theoretical relevancy of determining the reciprocal-role relationships of students, including school performance expectations, rests upon the additional assumption that a student, in organizing his behavior, acts with an awareness of others who are taking him (the student) into

⁷Herbert C. Kelman, "Processes of Opinion Change," Public Opinion Quarterly, XXV (1961), 64.

⁸Ibid., p. 64.

⁹Ibid.

account.¹⁰ Lindesmith and Strauss expressed this view while alluding to the notion of "surveillance" by stating: ". . . he regulates his behavior in terms of these supposed opinions and attitudes of others. He imagines what 'people' would say 'if they knew' or what they will say 'when they know.'"¹¹

When a role-relationship is valued by a student as very important to him, and also views the others in that relationship as being concerned about how he (the student) behaves in school, a reciprocal relationship exists.¹² When the reciprocal-role relationship of a student involves a reciprocal who is a "significant other," the perceived expectations are assumed to be even more binding. Under such conditions, it is believed, the significant other has his greatest influence over the academic behavior of the student.

¹⁰Use of the construct "role-taking" of "significant" and "relevant-others" is appropriate and is based upon the views of C. Wright Mills. Mills argues that individuals respond to particular given persons or groups and not to all persons in the form of a "generalized-other." "Individuals respond only in terms of significant other persons rather than all others in the situation." C. Wright Mills, "Language, Logic, and Culture," American Sociological Review, IV (1939), p. 671.

¹¹Alfred R. Lindesmith and Anselm L. Strauss, Social Psychology, revised ed. (New York: The Dryden Press, 1956), p. 394.

¹²This position was inferentially developed out of the views stressing the influence of significant others vs. the influence of generalized others in C. Wright Mills, op. cit., p. 671, and the development of reciprocal roles in Kelman, op. cit., p. 65.

Therefore, information concerning who students perceive as being "important to them," and "as being concerned about them," is most pertinent to this investigation. It is assumed that a perception of such a concern on the part of another would be indicative of perceived academic evaluations and expectations.

Importance of Parents and Their Academic Concern

It has been frequently claimed that as the youngster grows into adolescence, parents become less and less the children's academic significant others, and that peers or friends take over as being the important people in the lives of the students. A common inference is that it is the friends who exert the most influence over the academic behavior of the student.

This is the position of Coleman¹³ and others who argue that student academic achievement is more likely to be a function of adolescent subcultural norms. Coleman states:

In effect, then, what our society has done is to set apart, in an institution of their own, adolescents for whom home is little more than a dormitory and whose world is made up of 14 activities peculiar to their fellows. . . .

In a school where achievement brings few social rewards (social rewards defined as means for

¹³Coleman (1960), op. cit., p. 339.

¹⁴Ibid., p. 339.

getting into leading crowd) those who go out for scholarly achievement will be few.¹⁵

Recent research by Brookover and his associates¹⁶ seriously questions the validity of the view that parents through the junior and senior high school years have less and less ability to influence their children's performance. It was found in a series of cross-sectional studies of students in the seventh through tenth grades, concerning their significant others that the students consistently named parents, over 95 per cent of the time, on an open ended question, as being important in their lives¹⁷ (see Table 1). In a longitudinal study¹⁸ covering the eighth, ninth and tenth grades, in which the same students were asked at each grade level to indicate those individuals who were important in their lives, again over 94 per cent of the students indicated parents (see Table 2). As Table 2 indicates, there appears

¹⁵Ibid., p. 341. For a similar view see C. Wayne Gordon, The Social System of the High School (Glencoe, Ill.: The Free Press, 1957).

¹⁶Brookover, Paterson, and Thomas (1962), op. cit.; Brookover, LePere, Hamachek, Thomas, and Erickson (1965), op. cit.; and Brookover, Hamachek, and Erickson (in process), op. cit.

¹⁷Reported by Edsel L. Erickson and Shailer Thomas, "The Normative Influences of Parents and Friends Upon School Achievement," a paper presented at meetings of American Educational Research Association, Chicago, Illinois (1965), p. 7.

¹⁸Brookover, LePere, Hamachek, Thomas and Erickson (1965), op. cit., Chapter VI.

to be little difference between males and females in their identification of parents as general significant others.

Table 1. Proportion of students at each grade level, seventh through tenth, who named at least one parent and/or one friend as being important in their lives and as being concerned about how well they did in school (cross-sectional study)*

Significant Others	7th Grade N = 130		8th Grade N = 1751		9th Grade N = 1769		10th Grade N = 1755	
	Important to Student	Concerned about Student	Important to Student	Concerned about Student	Important to Student	Concerned about Student	Important to Student	Concerned about Student
	%	%	%	%	%	%	%	%
Parents	99	98	96	95	95	95	95	95
Peers, same sex	47	16	47	11	54	14	33	12
Peers, opposite sex	6	1	26	12	29	12	27	14

*Edsel L. Erickson and Shailer Thomas, op. cit., p. 7.

Table 2. Proportion of the same students who in the eighth, ninth, and tenth grades named at least one parent and/or one friend as being important in their lives, and as being concerned about how well you do in school (longitudinal study)*

		8th Grade		9th Grade		10th Grade	
		Important to Student	Concerned about Student	Important to Student	Concerned about Student	Important to Student	Concerned about Student
Significant Others		%	%	%	%	%	%
Parents	Males	96	97	95	95	95	94
	Females	98	98	99	99	98	98
Peers, same sex	Males	42	3	50	6	28	6
	Females	57	14	66	21	45	16
Peers, opposite sex	Males	17	4	19	6	13	7
	Females	33	5	36	12	37	20

Males = 204; Females = 259.

*Brookover, LePere, Hamachek, Thomas and Erickson (1965), op. cit., Chapter VI.

It was also found that students named parents over 94 per cent of the time when they were asked, on an open ended question, to name those who were concerned about how well they did in school.¹⁹

Further evidence that parents are academic significant-others may be found in experiments in which parents intentionally enhanced their children's self-concept of academic ability, and thereby affected achievement, and similar findings showing significant relationships between self-concept and parental evaluations.²⁰

Importance of Friends and Their Academic Concern

In contrast to the overwhelming proportion of students who indicate that their parents were important to them (95 to 99 per cent), and that their parents were also concerned about how well they did in school (94 to 98 per cent), friends were mentioned as being important by only 13 to 16 per cent of the students, depending upon the grade level and sex of student, and whether the friend was of the same or

¹⁹Erickson and Thomas, op. cit.; and Brookover, LePere, Hamachek, Thomas, and Erickson (1965), op. cit., Chapter VI.

²⁰Brookover, LePere, Hamachek, and Erickson (1965), op. cit., Chapters IV and VII. See also: Fred L. Stroudback, "Family Interaction, Values, and Achievement," in David C. McClelland, et al. (eds.), Talent and Society (New York: Van Nostrand, 1958); and Bernard Rosen, "The Achievement Syndrome," American Sociological Review, XXI (1956), 203-211.

opposite sex²¹ (Table 2). The proportion of friends who mentioned either of the same, or opposite sex, ranged from 38 to 72 per cent depending upon grade level.²² Thirty-eight per cent of the males indicated that their friends were important in their lives, while 65 per cent of females indicated that their friends were important.²³ At each grade level there appears to be a difference based upon sex according to the data reported in Table 2.

Normative Influence²⁴

The influence of perceived academic norms learned in one social system (reciprocal-relationship) upon achievement may be viewed as having different forms of impact. From one

²¹Brookover, LePere, Hamachek, Thomas and Erickson (1965), op. cit., Chapter VI.

²²Unreported data to be published in Brookover, Hamachek, and Erickson (in process), op. cit.

²³Ibid.

²⁴For a recent discussion of the varying ways in which norms can be considered see Richard T. Morris, "A Typology of Norms," American Sociological Review, October, 1956, 610-613. The use of "normative" with an individual's perception of expectations is based upon the hypothesis that an individual tends to perceive commonly held (shared) expectations on the part of others in his social system. "Norms" are defined as a commonly held behavioral expectation. Frederick L. Bates, "Position, Role, and Status: A Reformulation of Concepts," Social Forces, XXIV (1956), 313-321; two recent treatments of "norms" and "roles-analysis," which are of particular relevance for education are Brookover and Gottlieb, op. cit., Chapter XVI; and Neal Gross, Ward S. Mason, and Alexander W. McEachern, op. cit.

social system a student may learn (1) how he is to behave to meet the obligations of that system; and (2) how he is to behave to meet the obligations of another system.²⁵ For example, a child may learn that certain academic demands must be met in order for his relationship with his parents to continue; e.g., in the typical urban American family the ten year old child has learned that he has simply no other choice as far as his parents are concerned in that he must go to school. Should the child not go to school, he jeopardizes his status with his parents.

The second form of normative influence, as indicated above, specifies that a person learns in one role-relationship how he is to behave to meet the demands of another relationship; e.g., a child may learn from his parents that in order for him to have a particular relationship with his friends, teachers or others, he will have to behave in a certain fashion. A student may learn from his father that a "gentleman's C" is the academic grade which most "desirable" employers prefer."²⁶

²⁵The permeating influence of one social arrangement, or institution, upon a member's actions within his other social systems is so commonly discussed in the literature of social science that no documentation is necessary. However, see: Ralph Linton, The Cultural Background of Personality (New York: Appleton-Century-Crofts, Inc., 1945), pp. 97-98.

²⁶This form of influence is amply described and dramatized by Arthur Miller in Death of a Salesman (New York: Viking Press, 1949), where the father impresses upon his sons that employers prefer average grades from students.

Academic Achievement Viewed as
Compliant to the Perceived
Expectations of Parents and
Friends

While educational philosophy generally advocates having students striving for "A's,"²⁷ it is a basic assumption of this study that much that is "internalized" is initially acquired through behaving (playing at a role) on a compliant basis.²⁸ A further assumption of this study is that academic achievement is often "compliant" to the expectations of others under conditions of obligation by others. The empirical clarification of the extent to which high or low academic achievement is in compliance with the perceived academic achievement expectations of parents and friends under perceived conditions of obligation is one of the principle aims of this investigation.

While the focus is upon academic achievement as "compliant behavior," this is not, however, contrary to a conceptualization of academic behavior as "internalized" or

²⁷Robert Ulich, Philosophy of Education (New York: American Book Company, 1961); and Earl Kelly, Abraham H. Maslow, Carl R. Rogers, and Arthur Combs, Perceiving Behavior, Becoming: A New Focus for Education: Yearbook 1962 (Washington, D. C.: Association for Supervision and Curriculum Development, National Educational Association, 1962).

²⁸Early statements giving differing views that through playing roles one "internalizes" or "takes on the role" can be found in Mead, op. cit.; and Piaget, op. cit.

"self-organized behavior."²⁹ Academic behavior which, given the necessary skills and ability, is primarily engaged in by a student to achieve self-valued aspirations (perceived observation or surveillance by others is not a necessary condition for the occurrence of academic achievement of this sort),³⁰ can be distinguished from academic behavior which is adopted primarily to meet the perceived expectations of others, who are perceived to be, or will become, aware of the student's compliance with their expectations.

Without the perceived possibility of surveillance compliant behavior does not occur.³¹ The social influence of parents, teachers, friends and others functions in both compliant and self valued behavior. This paper emphasizes,

²⁹For a clearly stated formalization of the theory that social behavior is a function of the self-concept see John W. Kinch, op. cit., pp. 481-486.

³⁰Kelman, op. cit., p. 67.

³¹Discussions concerning surveillance and compliant behavior which support this view may be found in Kelman (1961), op. cit., and in Lloyd H. Strickland, "Surveillance and Trust," Journal of Personality, XXVI (1958), 200-215; a counter position, that surveillance, or what is termed as "awareness of the sociality of the situation" has little effect upon behavior, is presented by Joseph B. Sidowski in "Reward and Punishment in a Minimal Social Situation," Journal of Experimental Psychology, LIV (1954), 318-326. Sidowski's experiment, as he indicates, examined "presence of others" who were not previously related to the subject. This research intends to examine perceived surveillance by significant others in the life of the student, namely, parents and friends. See Couch and Murray (1964), op. cit.

however, the nature and extent to which the academic achievement of tenth grade students is based upon compliance with the relative academic expectations of parents and friends, under conditions of obligation.

This research focuses on three variables of normative influence, assumed to be functioning within the reciprocal-role relationships of students, in order to assess their separate and collective impact upon academic achievement as "compliant behavior." Two of these variables are viewed as conditions of obligation attached to the academic achievement expectations. These variables are: (1) the perceived academic expectations of others, i.e., an individual's perceptions of the academic behavior he should or should not exhibit in order to please certain others; (2) the relative importance which he perceives these others attach to their academic expectations of him; and (3) the perceived surveillance these others are making of his academic performance, i.e., the individual's perception of whether these others will be aware of whether he carries out their expectations.³² As previously indicated, the perception that others attach high importance to their academic expectations of the

³²The view that surveillance is a relevant factor in student academic achievement grew out of a discussion with Dr. Carl Couch and Dr. Wilbur B. Brookover. A similar orientation can be found in Kelman, op. cit., and in Carl Couch and John Murray (1964), op. cit.

student and that they are observing the student's academic performance is referred to as a condition of obligation.

It seems conceivable, under this orientation, that observations may be made of students who perceive parents or friends as expecting varying levels of achievement under or not under conditions of obligation. Some students may also be observed to perceive that their parents or friends are not concerned about achievement, i.e., they do not expect any particular academic achievement.

Summary

In this chapter the theoretical frame-of-reference has been presented along with a review of the literature. The major postulates state that for a student to organize his behavior to purposively achieve in some task he must hold both the view that it is possible for him to be able to achieve, and that to achieve in that task is the appropriate thing to do in order that he may meet his own or another's expectations. In general, this investigation is concerned with the relative impact of parental and friendship relationships. In particular, the focus is upon perceived "grade achievement" expectations from parents and friends under varying perceived conditions of obligation.

Such a focus upon perceived expectations from others stresses the proposition, though seldom researched, that a student, in behaving, takes into account those who take him

into account. Student concern with the academic achievement expectations of parents and friends is assumed to be related to academic performance. The relevance of parental achievement expectations is not to be discounted as Coleman and others have contended (see page 24).

Implied in the above view is the postulate that the academic achievement of most students is a "compliant type activity," i.e., academic achievement is governed by achievement norms. Achievement is engaged in not because of an achievement preference per se, but because the preferences of other persons concerning a student's academic achievement is valued by the student and he feels he must satisfy these preferences in order to maintain or gain a certain desired social relationship. Hence conditions which affect the need for compliancy are pertinent to a study of education achievement. Conditions which are assumed to have an impact upon achievement governed by norms are those perceptions a student has of the importance others attach to his carrying out certain academic expectations and the student's perception that these others will be aware of whether or not he carries out their expectations, i.e., perceived surveillance.

The primary postulates which are subject to test, and which this research focuses upon are that (1) the perceived achievement norms of parents, as opposed to friends,

are the more important factors in the academic achievement level of students; (2) academic achievement is less a function of adolescent subcultural relationships than of family relationships; and (3) conditions of obligation (i.e., perceived high importance and high surveillance) attached to academic expectations are important factors in the performance levels of students and are more likely to be a part of student-parent relationships than student-friend relationships.

CHAPTER III

METHODOLOGY¹

In this chapter the population and site of research is described; the operational definitions of the major concepts and instruments are specified; and the procedures and designs employed to test each of the hypotheses are presented.

Population and Site of Research

The population under analysis included all of the tenth grade students in an urban school system (the city had a 1960 population of 107,807)² who met the following requirements:

1. Caucasian
2. Complete school data from the ninth and tenth grades was available (reading scores, intelligence test scores, and grades in mathematics,

¹The population and data are a part of a larger study supported by the U.S. Office of Education, Cooperative Research Project No. 2831, to be presented in Brookover, Hamachek and Erickson, op. cit.

²United States Bureau of the Census in Information Please Almanac, Atlas and Yearbook, 1965 (New York: Simon and Schuster, 1964), p. 402.

English, social studies and science).

3. Complete questionnaire data was available for the tenth grade.
4. All students were promoted regularly from grades nine to ten. Students who repeated grade or who withdrew and reentered were excluded.
5. All were participants in the regular school program. All students who were or had participated in special education programs of any type were excluded.
6. All subjects who participated in other phases of investigation by Brookover and his associates were excluded from the study (e.g., participated in experiments to enhance self-concept of ability).

There were 942 students who met the above requirements (425 males and 517 females) and constituted the general population of analysis. Since statistical analysis included the entire population there were no sampling procedures. Further clarification of these populations will be stated later where necessary.

Operational Definitions of Major Concepts and Specification of Instruments

Academic Achievement

For the purpose of this study, "academic achievement" was operationally defined as the total grade-point average of a subject's grades for the first semester of the tenth grade. Grade-point averages were obtained by averaging grades in English, mathematics, social studies and science.

For purposes of comparing students by achievement level, all of the students in the total population (N = 942) who achieved a grade-point average in reference to standard deviations from the mean were classified as follows:

<u>Classification</u>	<u>Grade- Point Average</u>	<u>SD from Mean*</u>	<u>Number</u>	
			<u>Males</u>	<u>Females</u>
Very High Achievers	3.75-4.00	+ 2SD	5	32
High Achievers	3.00-3.50	+ 1SD	36	85
Average Achievers	1.75-2.75	<u>+</u> 1SD	229	301
Low Achievers	1.00-1.50	- .1SD	114	81
Very Low Achievers	0.00-0.75	- .2SD	<u>41</u>	<u>18</u>
Totals			425	517

In addition, the above categories of students are combined, or further divided, depending upon analysis requirements. Further clarification of these classifications of achieving students will be stated later in this chapter.

Perceived Academic Achievement Expectations³

Perceived academic achievement expectations refers to those academic grades which a student thinks he should

*Total population mean GPA = 2.26, SD = .76.

³See Appendix A for instruments measuring "Perceived Academic Achievement Expectations of Parents," and "Perceived Academic Achievement Expectations of Friends."

receive in school in order for him to most please another. Operationally, "perceived academic achievement expectations," refers to the student's response to a scale asking: "For your parents/friends to be most pleased with you, what kind of grades should you get in school?" There were ten possible responses ranging from "mostly A's" to "mostly E's," with one alternative being: "My grades do not make any difference to my parents (or as the case may be: friends). The instrument was scored as follows:

"For your PARENTS to be most pleased with you, what kind of grades should you get in school in general?"

	<u>Scored</u>
a. Mostly A's	9
b. A's and B's	8
c. Mostly B's	7
d. B's and C's	6
e. Mostly C's	5
f. C's and D's	4
g. Mostly D's	3
h. D's and E's	2
i. Mostly E's	1
j. My grades do not make any difference to my parents	0

High Perceived Academic Achievement Expectation is operationally defined as a subject's scored response of an "8" or "9" on the above instrument.

No Perceived Concern for Academic Achievement is operationally defined as a student's response on the above instrument that: "My grades do not make any difference to my parents/friends."

Perceived Importance Attached
to Expectations⁴

This variable refers to the extent of relative importance which a student thinks his parents or friends place upon his achieving in accordance with their academic achievement expectations of him. Operationally, "perceived importance attached to expectations" by parents and friends is defined as the scored response of a student to a fixed response scale asking the student: "How important is it to your parents/friends that you get these grades?" ("These grades" refers to those grades the student has indicated as most pleasing his parents and/or friends.) There were four possible responses ranging from "very important" to "My grades don't matter to my parents/friends at all," and were scored as indicated:

"How important is it to your PARENTS/FRIENDS that you get mostly B's or better?"

	<u>Scored</u>
a. Very important	4
b. Important	3
c. Not particularly important	2
d. My grades don't matter to my parents at all.	1

High Importance Attached to Expectation is operationally defined as a subject's scored response of a "3" or "4" on the above instrument.

⁴See Appendix B for instruments measuring: "Perceived Importance Attached to Expectations by Parents" and "Perceived Importance Attached to Expectations by Friends."

Low Importance Attached to Expectation is operationally defined as a student's response of a "1" or "2" on the above instrument.

Perceived Surveillance Attached to Expectations⁵

Perceived surveillance attached to expectations by parents and friends is defined as the extent to which a student thinks his parents/friends "are aware" or "will be aware" of his academic behavior. Operationally such perceived surveillance is defined as the scored response of a student to a fixed response scale asking:

"How well informed are your parents/friends about what you are doing in school work?" Choose the statement which comes closest to describing your parents/friends.

- | | <u>Scored</u> |
|---|---------------|
| a. <u>They are extremely well informed.</u> They pay very close attention to what I am doing in my school work. Regularly I or others keep them informed. No matter how well or how poorly I am doing they will find out. | 5 |
| b. <u>They are well informed.</u> They know quite a bit about what and how well I am doing. They generally know what and how well I am doing, but they don't always know. | 4 |
| c. <u>They are fairly well informed.</u> Occasionally they ask and once in awhile I or someone else tells them what I am doing. | 3 |

⁵See Appendix C for instruments measuring: "Perceived Surveillance Attached to Expectations by Parents" and "Perceived Surveillance Attached to Expectations by Friends."

- d. They are only slightly informed. They pay very little attention to what I am doing. Seldom do I or does anyone else tell them. 2
- e. They know nothing about what or how well I am doing in my school work 1

High Surveillance Attached to Expectations is operationally defined as a subject's scored response of a "4" or "5" on the above instrument.

Low Surveillance Attached to Expectations is operationally defined as student's scored response of "1" or "2" on the above instrument.

Conditions of Obligation

The perception of high importance attached to any level of perceived academic achievement expectation, coupled with the perception of high surveillance of academic performance by the expecting other is defined as a "condition of obligation." Operationally, "condition of obligation" is defined as a student's scored response as indicated on the following instruments:

<u>Instruments</u>	<u>Scores of</u>
Perceived Academic Achievement Expectations (Parents/Friends)	1 through 9 (zero excluded)
Perceived Importance Attached to Expectations (Parents/Friends)	3 or 4
Perceived Surveillance Attached to Expectations (Parents/Friends)	4 or 5

No Perceived Condition of Obligation refers to a student's scored response of either a "1" or "2" on the instruments measuring perceived importance attached to expectations, or a scored response of "1," "2," or "3" on the instruments measuring perceived surveillance attached to expectations.

Academic Significant Others⁶

The names of individuals who were academic significant others were obtained through students' response to two open-ended questions: (1) "Who are the people who are important to you?" and (2) "Who are the people who you feel are concerned about how well you do in school?" No specifications were given as to the number or type of individuals to be listed. The operational definition of a parent or a friend as a significant other refers to a parent and/or a friend being designated in response to both questions above.

Measured Intelligence

Measured intelligence was operationally defined as scores on the California Test of Mental Maturity, (CTMM), a group intelligence test. The CTMM was administered during the ninth grade and equivalent "IQ" scores obtained. In

⁶See Appendix D for instruments measuring the academic significant others of students.

order to control for the possible inference that most low achievement is due to a lack of "intelligence" and therefore not attributable to perceived expectations, a series of hypotheses were tested with a group of students achieving two or more standard deviations below the mean achievement level of all ninth graders, (GPA 0.00-0.75), and who were no lower on measured intelligence than one standard deviation below the mean for the group ("IQ" = 91 or higher).

Statistical Procedures

Hypothesized Differences in Proportions

$M_R: P_1 - P_2 > 0$: In order to determine differences between proportions of large independent samples, the delta hypotheses ($H_{\Delta}: \delta \leq 0$) indicating direction were tested by a one-tailed "z test of proportions."⁷

$H_R: P_1 > P_2$: Determination of differences between proportions of large and related samples, was made by the use of a "chi-square test"⁸ to test the null hypotheses of no difference between proportions ($H_0: P_1 = P_2$). The square roots of the resultant chi-square values are equal to "z"

⁷John B. Peatman, Introduction to Statistics (New York: Harper and Row, 1963), pp. 263-265.

⁸Ibid., p. 268.

values,⁹ thus, these values were referred to a normal distribution.

Hypothesized Differences in Means

$H_R: \mu_1 - \mu_2 = 0$: A one-tailed "z" test of mean difference,¹⁰ was used to test delta hypotheses ($H_\Delta: \mu_1 - \mu_2 \leq 0$) indicating direction when variances were unequal and samples were large and independent.

When the samples were independent and the variances were equal, a one-tailed "t" test was used.¹¹

$H_R: \mu_1 \neq \mu_2 \neq \mu_3$: Where there were three independent estimates of variance, normality of populations was assumed, and there was homogeneity of variances, "simple analysis of variance" with the F statistic¹² was employed to test the null hypotheses ($H_0: \sigma_1 = \sigma_2 = \sigma_3$). Since the null hypothesis was accepted, no significant differences (.05 level of significance) were found between the variance estimates no further analysis of the variances was engaged in.

⁹Ibid., p. 269.

¹⁰Ibid., p. 297.

¹¹Ibid., p. 294.

¹²Ibid., pp. 351-355.

F Test for Homogeneity of Variance¹³

In order to make a decision as to whether to treat the statistical findings as if obtained from parent populations with equal variances, or as if the findings were from parent populations with different variances, the null hypothesis: $H_0: \sigma_1^2 - \sigma_2^2 = 0$, was tested by a ratio of sample variances which yielded a F statistic. The Alpha significance was set at the .05 level.

Hypothesized Relationships

$H_R: \rho > 0$: Pearson's Product Moment correlations¹⁴ were computed to test hypotheses of association between perceived academic achievement expectations and grade-point average. The zero order (r) correlations, along with means and standard deviations were computed at the Michigan State University Computer Laboratory on the CDC 3600.

The zero order correlations were tested for significance at the .05 level (one-tailed test) by reference to tabled values of r for a given number of degrees of freedom.¹⁵ The null hypothesis is: $H_0: \rho = 0$.

¹³Ibid., pp. 290-292.

¹⁴Ibid., p. 33.

¹⁵Ibid., p. 302.

Hypothesized Differences in Relationships

$H_R: \rho_1 - \rho_2 > 0$: Differences in Pearson's Product Moment Correlations for independent populations was determined by a one-tailed z test¹⁶ where values of ρ are converted to Z scores (Hence $H_A: \rho_1 - \rho_2 \leq 0$).

Where correlations were dependent associations, a one-tailed t test¹⁷ was used.

Level of Significance

For all null or delta hypotheses the region of rejection was set as equal to or beyond the .05 level of statistical significance. One-tailed tests were used when direction was hypothesized and two-tailed tests were used when direction of difference was not hypothesized. In addition, analysis also includes statements of probability associated with varying observed distributions.

Other Findings

Data will also be presented which is pertinent to the study in frequency counts and proportions which can not be appropriately analyzed in terms of standard statistical procedures (chi-squares, t tests, etc.).

¹⁶Ibid., p. 306.

¹⁷Ibid., p. 309.

CHAPTER IV

RESEARCH FINDINGS

The tests of hypotheses and other analysis of data is presented in the same form and order as their theoretical development in Chapter II.

Achievement Norms as Part of Role-Relationships

The research interests in this section are in determining: (1) if parents are perceived to be more concerned about student achievement in school than are friends; (2) who, parents or friends, are more likely to be perceived as being unconcerned about the grades of the student; (3) who the student views as paying attention to his school achievement; (4) who the student's significant others are, as far as their academic achievement is concerned; (5) the nature of the perceived academic achievement expectations from parents and friends; and (6) the extent of importance parents and friends place upon the student meeting their achievement expectations of him.

Perceived Concern About Grades

H_1 : As perceived by students, a greater proportion of friends than parents will be unconcerned about the grades the students perceive.

$$H_R: P_1 > P_2$$

As indicated in Table 3, a greater proportion of students hold the view that their friends are unconcerned about the grades they receive than are parents. This conforms to the view that parents are more likely to hold academic expectations than friends. The interesting finding is that 100 per cent of the students indicated that their parents expected them to achieve at a certain level. There is no evidence in this data to suggest that friends are proportionately more likely to be perceived as holding achievement expectations or as being proportionately more concerned about the students achievement in school.

Table 3. Number and proportion of students who indicate that grades do not make any difference to their parents or friends

		"My grades do not make any difference to my friends"		"My grades do not make any difference to my parents"	
		No.	%	No.	%
Males	N = 425	36	09	None	00
Females	N = 517	51	10	None	00

H_1 : Accepted. However, the fact that zero parents were indicated as being unconcerned, prevented an appropriate statistical test (chi-square, related proportions).

Academic Significant Others

H_2 : A greater proportion of parents than friends are the academic significant others of students.

$$H_R: P_1 - P_2 > 0$$

$$H_A: P_1 - P_2 \leq 0$$

Statistic: one-tailed, chi-square test.

The findings presented in Table 4, indicate that parents are much more likely to be perceived by students as being both important to them and as being concerned about how well they (the students) do in school. The delta hypothesis that students perceive parents as significant others equally or less than friend was rejected at the .05 level of significance for both males and females.

Table 4. Number and proportion of students who indicate that their parents and/or friends are their academic significant others

	Indicate Parents as Academic Sig. Others		Indicate Friends as Academic Sig. Others		Z = <u>5.2</u>
	N	%	N	%	
Males					
N = 425	374	88	46	11	17.83
Females					
N = 517	472	91	128	24	17.77

Significant beyond .05 level, H_2 : Accepted.

Perceived Academic Expectations

H₃: As perceived by students, parents hold higher academic expectations than do friends.

$$H_R: \mu_1 - \mu_2 > 0$$

$$H_A: \mu_1 - \mu_2 \leq 0$$

Statistic: one-tailed, t test.

An examination of the data presented in Table 5 indicates that parents are viewed as holding higher academic expectations than friends among both males and females.

Table 5. Mean perceived academic expectation levels of parents and friends (t tests)

	Mean Perception of Parental Academic Expectations Level		Mean Perception of Friends Academic Expectations Level		t
	\bar{X}	SD	\bar{X}	SD	
Males					
N = 425	7.44	1.19	6.39	2.38	8.11*
Females					
N = 517	7.66	1.15	6.65	2.41	8.58*

*P beyond .01 level, H₃: Accepted.

Perceived Importance Attached to
Achievement Expectations

The finding that the academic expectations of parents and friends differ is not sufficient evidence alone for assuming that parents place greater importance upon their expectations than do friends.

On the basis that the parent-student relationship involves a greater stress upon achievement expectations than the student-friend relationship it was hypothesized and confirmed that:

H_4 : Parents, on the average, are perceived by students as placing more importance upon achievement expectations than are friends (t tests)

$$H_R: \mu_1 - \mu_2 > 0$$

$$H_A: \mu_1 - \mu_2 \leq 0$$

Statistic: one-tailed, t test.

Table 6. Comparison of student perceptions of the importance attached to their academic expectations by their friends and parents (t tests)

	Perceived Importance Attached to Expectations				
	Friends \bar{X}	SD	Parents \bar{X}	SD	t
Males N = 425	2.36	0.82	3.71	0.51	28.73*
Females N = 517	2.50	0.74	3.59	0.56	26.69*

*P beyond .001, H_4 : Accepted. In addition, no difference in males and females were found, .05 level, one-tail t test.

As was suggested in Chapter II it may seem conceivable that the importance which parents and friends are perceived to attach to grade expectations would differ between low-achieving students (GPA of 0.00 to 0.75), average achieving students (GPA 2.25) and high achieving students (GPA of 3.50 to 4.00). It was also stated, however, that such a view would be contrary to the theoretical orientation of this study. Since the overwhelming majority of students indicated that parents were their academic significant others (Tables 1 and 2 and confirmed in Table 3), the parents of each category of achieving students will be perceived as attaching more importance to their academic expectations (high or low) than will be friends. Therefore, it is hypothesized:

H₅: As perceived by students, parents of low achieving students place more importance upon achievement expectations than do friends.

$$H_R: \mu_1 - \mu_2 > 0$$

$$H_A: \mu_1 - \mu_2 \leq 0$$

Statistic: one-tailed, t test.

H₆: As perceived by students, parents of average achieving students place more importance upon achievement expectations than do friends.

$$H_R: \mu_1 - \mu_2 > 0$$

$$H_A: \mu_1 - \mu_2 \leq 0$$

Statistic: one-tailed, t test.

H₇: As perceived by students, parents of high achieving students place more importance upon achievement expectations than do friends.

$$H_R: \mu_1 - \mu_2 > 0$$

$$H_A: \mu_1 - \mu_2 \leq 0$$

Statistic: one-tailed, t test.

One confirmation of these hypotheses can be noted by referring to Table 7.

Table 7. Comparison of student perceptions of the importance attached to academic expectations by friends and parents of low achieving, average achieving and high achieving students, tenth grade (t tests and analysis of variance)

Students	Perceived Importance Attached to Expectations				
	Parents*		Friends*		
	\bar{X}	SD	\bar{X}	SD	t
High Achieving (3.50-4.00 GPA)					
Female N = 56	3.32		2.55		
Male N = 11	3.63		2.18		
Combined N = 67	3.37	0.48	2.49	0.68	8.52**
Average Achiev. (2.25 GPA)					
Female N = 61	3.70		2.42		
Male N = 54	3.68		2.44		
Combined N = 115	3.69	0.48	2.43	0.82	14.05**
Low Achieving (0.00-0.75 GPA)					
Female N = 18	3.27		2.38		
Male N = 41	3.63		2.46		
Combined N = 59	3.52	0.70	2.44	0.81	7.67**

*Analysis of variance indicated no difference among friends or among parents by level of achievement (.05 level).

**P beyond .01 level, H₅, H₆, and H₇: Accepted.

It is concluded, through the confirmation of alternate hypotheses 4 through 7 above, that parents regardless of the achievement levels of their students are perceived as attaching more importance to their expectations than friends. In addition analysis of variance revealed no significant differences (.05 level) in the perceived importance attached to grades at each of the three achievement levels among friends or among parents (see Table 7).

It appears that the parental relationships of students is much more likely to be perceived as stressing academic behavior than are peer relationships. This appears to be confirmation of ranking of significant others in Tables 1 and 2.

This hypothesized parental stress upon achievement norms is even further emphasized by hypothesizing that even low achieving students perceive their parents as attaching more importance to their grades than do high achieving students so perceive their friends.

H₈: Parents of low achieving students are perceived as attaching more importance to grades than are friends of high achieving students.

$$H_R: \mu_1 - \mu_2 > 0$$

$$H_A: \mu_1 - \mu_2 \leq 0$$

Statistic: one-tailed, t test.

Table 8. Comparison of student perceptions of importance which parents of low achieving students (GPA 0.00-0.75) and friends of high achieving (GPA 2.50-4.00) attached to grades (t tests)

Perception of Importance Attached to Expectations				
Parents of Low Achieving N = 59		Friends of High Achieving N = 67		t
\bar{X}	SD	\bar{X}	SD	
3.5254	.7036	2.4925	.6825	8.2872*

*P beyond .01; H_8 : Accepted.

In addition, the parents of low achievers and high achievers were perceived as attaching comparable importance to their academic expectations (refer back to Table 7). Only three parents among the low achievers were perceived as attaching low importance to their expectations. The friends of both high and low groups were also perceived as holding comparable views toward their academic expectations. Hence, it is concluded that the importance which parents and friends are perceived to attach to their academic expectations does not account for the variations in performance between high and low achievers.

The important differences are: (1) Parents were indicated to attach more importance to academic expectations regardless of student achievement level, than were friends;

and (2) low achievers indicated their parents as having lower academic expectations than did high achievers.

Perceived Surveillance

Assuming that parental relationships specify academic norms more than do friendship relationships, it was hypothesized that this is reflected in a greater student perception of parental surveillance of their academic behavior than surveillance by friends.

H_0 : As perceived by students, parents have the student's academic behavior under greater surveillance than do friends.

$$H_R: \mu_1 - \mu_2 > 0$$

$$H_A: \mu_1 - \mu_2 \leq 0$$

Statistic: one-tailed, t test.

Confirmation of hypothesis 9, above, is reported in the following table.

Table 9. Comparison of perception of surveillance by parents and friends (t test)

		Friends		Parents		
		\bar{X}	SD	\bar{X}	SD	t
Males	N = 425	3.45	0.97	3.85	0.80	6.34*
Females	N = 517	3.68	0.86	3.90	0.79	2.23*

*P beyond .05; H_0 : Accepted.

Summary

It appears, on the basis of the confirmation of all hypotheses above, that academic achievement norms (perceived expectations, importance attached to expectations, and perceived surveillance of academic behavior) are more likely to characterize student-parent relationships, regardless of students achievement level, than student-friend relationships. It may also be concluded that parents are more likely to be the academic significant others of students than friends. Academic achievement, it is believed, is less of a perceived concern within student-friend relationships.

Achievement Norms and Achievement

It has been assumed that there is an association between achievement norms and achievement. While the perceived importance attached to expectations and perceived importance are assumed to be factors which influence achievement, it is also held that achievement cannot be predicted from these variables alone. The perceived expectations indicate grade achievement but importance and surveillance can be attached to any level of expectations.

Expectations and Achievement

A basic assumption of this study is that when academic achievement expectations are perceived on the part of either parents or friends, they will be reflected in the student's achievement. Therefore it was hypothesized that:

H₁₀: The perceived achievement expectations of parents are positively related to achievement.

H_R: $P > 0$

H_A: $P \leq 0$

Statistic: "Students t," one-tailed.

H₁₁: The perceived achievement expectations of friends are positively related to achievement.

H_R: $P > 0$

H_A: $P \leq 0$

Statistic: "Students t," one-tailed.

As shown in Table 10, hypotheses 10 and 11 were accepted for males and females. All correlations between achievement and expectations were significant beyond the hypothesized .01 level.

While the perceived expectations of friends by male students, as reported in Table 10, does not seem to have the clarity of association with grades (i.e., lower r's) as do perceived parental expectations, a relationship is apparent (P beyond .01 level).

Table 10. Correlations of students' perception of the academic achievement expectations held by parents and friends with measured intelligence, general self-concept of academic ability, and academic achievement

		Academic Achievement Expectations of Friends r's*	Academic Achievement Expectations of Friends r's*
Males	N = 425		
Females	N = 517		
I.Q. (Calif. Test Mental Maturity)	Girls	.35	←→ .41
	Boys	.29	←→ .47
Self-Concept of Ability	Girls	.57	←→ .62
	Boys	.47	←→ .58
Grade-Point Average	Girls	.44	←→ .43
	Boys	.35	←→ .46

*All r's significant, P beyond .01 level, H_{10} and H_{11} : Accepted. ←→ Sig. different r's, P beyond .05 level, one-tailed, t test. H_{12} : Accepted for males, not accepted for females.

A Comparison of Association

A comparison of the associations between the achievement expectations of parents and friends with grade-point averages was determined by testing the delta of the following hypothesis:

H_{12} : Perceived parental achievement expectations are more related to students' achievement than are perceived friends expectations.

$$H_R: S_1 - S_2 > 0$$

$$H_\Delta: S_1 - S_2 \leq 0$$

Statistic: t test, related, one-tailed.

Also indicated in Table 10, hypothesis 12 is accepted for males but not for females. While not anticipated, thus limiting this interpretation, it is suggested that possibly this difference in females and males is due to females, more than males, selecting friends who are more similar in terms of parental expectations.

Furthermore, as Table 10 indicates, the correlations between friends and parents achievement expectations and measured intelligence and general self-concept of academic ability are also statistically different (P beyond .05 level) for males but not for females. In addition, the association of friends expectations with achievement, self-concept of ability, and intelligence differed for males and females. When the finding that females are more likely to have friends as academic significant others is considered (Table 4), along with the finding that the achievement of females is equally associated to the expectations of friends and parents (Table 10), it can be reasoned that the friends of female students have a greater impact upon female achievement than do the friends of male students upon male achievement in school. As previously stated, these interpretations require further research prior to acceptance.

While it has been hypothesized and accepted that there is an association between perceived expectations and achievement, variation in the associations are apparent in that the observed correlations are somewhat less than perfect (ranging

from .345 to .457). Such variation in association between expectation and achievement is not anticipated, however, for those students who achieve at the highest level. It was hypothesized that for a student to perform at the highest levels, some significant other must be perceived as expect-such high performance. (It is assumed that low expectations from significant others is not as pertinent in explaining low achievers where other factors are more likely to limit achievement, e.g., skill, emotional interference, self-concept of ability, etc.)

Parents or friends are academic significant others:

H₁₃: High achieving students (GPA 3.5 or higher) will perceive that either their parents or friends are their academic significant others (i.e., perceive that parents and/or friends are both important in their lives and are concerned about how well they, the students, do in school).

Academic significant others expect high performance:

H₁₄: High achieving students will perceive that their academic significant others (either parents or friends) expect them to achieve as such.

It was found that all subjects who were high achieving students (GPA 3.5 to 4.0) indicated that either a parent or as in one case, a teacher, were both important in their lives and that these others were concerned about how well they did in school (see Table 11).

Table 11. Number and proportion of students with high grades (GPA 3.50-4.00) who have indicated parents or friends as significant others and who perceive that either these friends or parents expect such high academic achievement

Students with High Grades N = 67** (GPA 3.5 - 4.0)	Parents or Friends Perceived as Expecting High Achievement*	
	No.	Percentage
Indicate Parents as Their Academic Significant Others	66	.99
Indicate Friends as Their Academic Significant Others	22	.33

*Expect all "A's" or all "A's" and "B's" from students.

**There was one case from original N = 67, where parents were not indicated as academic significant others. In this case the subject mentioned teacher as an academic significant other who expected him to get all "A's."

H_{13} and H_{14} are accepted.

There may be an important implication in the fact that there were so many achievers (45 out of 67) who failed to indicate their friends as academic significant others (Table 11). One inference, compatible with the frame-of-reference of this study, is that the influence of academic expectations of friends in general (for high achievers) is not as great as the influence of parental expectation. It is interesting, however, that in no case did friends who were significant others expect lower than "B's" and "C's," although in one case a friend was perceived as being unconcerned about academic performance (see Appendices "E" and "F").

Perceived Importance and Achievement

It has been hypothesized and confirmed that parents are more likely to be perceived as placing greater importance on their expectations of students than do friends regardless of expectation level. It has not been assumed, however, that perceived importance is a function of expectation level. Parents or friends, it is assumed, may attach importance to any expectation level. It was not anticipated that there would be statistically significant correlations between level of perceived importance and level of achievement. The data presented in Table 12 confirms this assumption.

Table 12. Correlations between perceived importance attached to achievement expectations by parents and friends achievement

Perceived Importance By		Achievement
Parents		
Males	. . . . .	.001
Females	. . . . .	-.126
Friends		
Males	. . . . .	-.029
Females	. . . . .	.009

No r's significantly different from zero, .05 level.

Perceived Surveillance

As in the case of perceived importance of grades, the extent of perceived academic surveillance is not considered to be indicative of achievement level. This is because high perceived surveillance can be associated with either low or high expectations. The correlations in Table 13 between perceived surveillance and achievement are not significantly different from zero (.05 level). Therefore, the relevance of surveillance as an important variable apart from perceived expectations is not apparent. This suggests, and to be confirmed later in this chapter, that the influence of surveillance is to be considered in terms of its interaction with perceived importance of expectations and perceived expectations. It is concluded that perceived surveillance without perceived academic expectations has little relevance for predicting or explaining student achievement level.

Table 13. Correlations between perceived surveillance of academic behavior by parents and friends and achievement

Perceived Surveillance by	Achievement (r's)
Parents	
Males . . . . .	.092
Females . . . . .	.156
Friends	
Males . . . . .	.102
Females . . . . .	.094

No r's significantly different from zero, .05 level.

Summary

Achievement expectations are related to achievement. High achieving students tend to perceive parents as significant others who hold high expectations. Perceived surveillance and importance can be attached with any expectation level, or with no expectations, thus they are poor predictors, in themselves, of achievement. The perceived expectations of parents has a greater association with achievement than perceived friends expectations for male students. This is not true for females. The friends and family of girls, it appears, are more likely to reinforce each other.

Achievement Expectations Under Conditions of Obligation

It was postulated that the influence of perceived achievement expectations is affected by perceived conditions of importance and surveillance. A condition of obligation occurs when a student perceives that someone desires for him to receive certain grades in school (perceived expectations); and that this other individual places high importance on his achieving the desired grades; and that as a student he is under the close surveillance of this person.

The relative impact of perceived conditions of obligation can be partially assessed by hypothesis testing pertaining to the achievement level of students. It was hypothesized that when both parents and friends are perceived to

hold high expectations under high obligatory conditions the students achievement will be higher than when low expectations, under demand conditions are held by either or both parents and friends. The lowest achievement level would be among students who perceive both parents and friends as holding low expectations ("desiring low grades") under conditions of obligation. Conflict between parents and friends under obligatory conditions, it was hypothesized, favors a greater conformance to parental expectations than friendships expectations.

The Hypothesized Rank Order

The hypothesized rank order is as follows in Table 14.

Serendipity Findings

The most unanticipated finding in this investigation (reported in Table 14) and which made it impossible to test hypotheses pertaining to various categories of expectation and obligation, is the finding that only 25 per cent of the students perceive achievement expectations under conditions of obligation from either parents or friends.

Table 14. Rank achievement level of categories of students who perceive high or low achievement expectations under conditions of obligation, or perceive no obligatory conditions for achievement from parents or friends

Hypothesized Perceived Parents Rank Holding	Perceived Friends as Making	No.	GPA
1. High expectations under conditions of obligation	High expectations under conditions of obligation	41	2.58
2. High expectations under conditions of obligation	No obligatory conditions for achievement	146	2.48
3. No obligatory conditions for achievement	High expectations under conditions of obligation	3	*
4. High expectations under conditions of obligation	Low expectations under conditions of obligation	4 ^a	*
5. Low expectations under conditions of obligation	High expectations under conditions of obligation	4	*
6. Low expectations under conditions of obligation	Low expectations under conditions of obligation	<u>34</u>	1.48
Total who perceive a condition of obligation		232	

Other categories:			
High expectations, no importance or surveillance	High expectations, no importance or surveillance	15	2.10
Low expectations, no importance or surveillance	Low expectations, no importance or surveillance	6	*

*Insufficient number to compute mean.

^aInterestingly, three of these four subjects had GPA's of 3.5 or better.

Another interesting, and unanticipated finding, was that of 942 students only 8 indicated that their parents and friends held conflicting achievement expectations under conditions of obligation (categories 4 and 5, Table 14). Possibly, a concern over parental and peer group conflict is not pertinent for the great majority of students.

In addition, as noted above, only 232 students perceived conditions of obligation attached to any achievement expectation. This suggests that 75 per cent of the students perceive no strong social pressure to achieve at any level per se. Possibly this is due to friends or parents thinking that the students are behaving appropriately and there is no need to pressure them. This view is highly tentative, however, with further study being required before any definitive conclusions can be drawn.

Comparison of Differences of Demand Categories

Analysis of achievement levels of the categories of students in Table 14, indicated no significant differences (.05 level) between students who perceive both parents and friends as holding high expectations under conditions of obligation and students who perceived only parents as holding high expectations under obligatory conditions, while friends were perceived as not holding expectations, or not attaching importance to their expectations, or else as not

having the student's academic behavior under surveillance (Table 15). The most that can be said is that the observed difference is in the hypothesized direction.

Table 15. Differences in achievement between (1) students who perceive both parents and friends as holding high achievement expectations under obligatory conditions and (2) students who perceive only parents as holding high expectations under conditions of obligation and no obligatory conditions for achievement from friends

	Parents and Friends High Expectation- Conditions of Obligation		Parents - High Expectation- Conditions of Obligation Friends - No Obligations		t
	\bar{X}	SD	\bar{X}	SD	
GPA	2.58	0.80	2.48	0.78	0.73

*Not significant at .05 level.

The mean achievement of students who perceived low achievement expectations from both parents and friends under conditions of demand were compared with the achievement levels of students who perceived high achievement expectations from parents and friends under demand conditions. The results reported in Table 16 indicate a large and significantly different (P beyond .001 level) achievement level in the hypothesized direction.

Table 16. Differences in achievement between (1) students who perceive both parents and friends as holding high achievement expectations under conditions of obligation and (2) students who perceive both parents and friends as holding low expectations under conditions of obligation

	Parents and Friends High Expectation- Conditions of Obligation		Parents and Friends Low Expectation- Conditions of Obligation		t
	\bar{X}	SD	\bar{X}	SD	
GPA	2.58	0.80	1.48	0.56	6.93*

*P beyond .001.

When the mean achievement of students who perceived both parents and friends as holding high expectations under conditions of obligation was compared with students who perceived high expectations from parents and friends but did not perceive an attached importance or high surveillance, it was found that there was no significant difference at the .05 level (Table 17). The probability of such a difference in means, however, was beyond the .10 level and in the expected direction. This may be taken as tentative evidence, to be joined with further evidence in a later section, that conditions of obligation have an impact upon achievement.

Table 17. Differences in achievement between (1) students who perceive both parents and friends as holding high achievement expectations under conditions of obligation and (2) students who perceive both parents and friends as holding high expectations but with no conditions of high importance or high surveillance.

	Parents and Friends High Expectations Conditions of Obligation		Parents and Friends High Expectations, No Importance or Surveillance		T
	\bar{X}	SD	\bar{X}	SD	
GPA	2.58	0.80	2.10	0.81	1.60*

*.10 < P > .05.

High Achievers (GPA 3.5 to 4.0)

In order to confirm the hypotheses that: (1) for students to achieve at a high level there must be no parents who are perceived to hold low expectations under obligatory conditions, and (2) that friends of high achieving students will tend to support high parental expectations, or at the very least, not make counter expectations under conditions of obligation, the following sub-hypotheses were made and accepted: (see Table 18). No statistical tests were made because of the apparentness of the findings.

Table 18. Number of parents and friends perceived as holding high or low achievement expectations under conditions of obligation or as not holding obligations for achievement among high and low achieving students with normal or higher measured intelligence*

	High Achievers (GPA 3.5 - 4.0) N - 67	Low Achievers (GPA 0.0 - 0.75) N - 35
<hr/>		
Number of Parents Perceived as Holding:		
High Expectations Conditions of Obligation	61	3
Low Expectations Conditions of Obligation	0	14
No Obligations for Achievement	6	18

Number of Friends Perceived as Holding:		
High Expectations Conditions of Obligation	26	2
Low Expectations Conditions of Obligation	3	6
No Obligations for Achievement	38	27

*All subjects had I.Q. 91 or higher, CTMM, within one standard deviation of mean. I.Q. = 103.59, N = 942. All low achievers are two or more standard deviations below the mean GPA - 2.26, SD - .76.

High Achieving Students (GPA 3.50 to 4.00):

- H_{15} : The proportion of high achieving students who perceive that their parents hold high academic expectations under conditions of obligation will be greater than the proportion who perceive no obligatory conditions attached to parental expectations.

Observed proportions from Table 18:

$$H_{15}: P_1 \left(\frac{61}{67} \right) - P_2 \left(\frac{6}{67} \right) > 0$$

H_{15} : Accepted.

- H_{16} : High achieving students will not perceive that parents hold low academic expectations under conditions of obligation.

Observation from Table 18:

No students indicated parents as holding low expectations under conditions of obligation.

H_{16} : Accepted.

- H_{17} : When high achieving students perceive their friends as holding academic expectations under conditions of obligation, there will be a greater proportion of high than low expectations.

Observed proportions from Table 18:

$$H_{17}: P_1 \left(\frac{26}{67} \right) - P_2 \left(\frac{3}{67} \right) > 0$$

H_{17} : Accepted.

Low Achievers (GPA 0.00 to 0.75)

It was hypothesized that low achievers, on the other hand, would indicate few if any parents as making high expectations under conditions of obligation. In fact, it was hypothesized and accepted that such low achievers will perceive that both their parents and friends hold either no academic obligations or that low academic expectations are held under conditions of obligation.

Low Achieving Students (GPA 0.00 to 0.75):

H₁₈: The proportion of low achieving students who perceive that their parents hold low academic expectations under conditions of obligation is greater than the proportion who perceive that their parents hold high expectations under conditions of obligation.

Observed proportions from Table 18:

$$H_{18}: P_1 \left(\frac{14}{35} \right) - P_2 \left(\frac{3}{35} \right) > 0$$

H₁₈: Accepted.

H₁₉: The proportion of low achieving students who perceive no obligatory conditions attached to parental expectations will be greater than the proportion who perceive that their parents hold high academic expectations under conditions of obligation.

Observed proportions from Table 18:

$$H_{19}: P_1 \left(\frac{18}{35} \right) - P_2 \left(\frac{3}{35} \right) > 0$$

H₁₉: Accepted.

H₂₀: Friends of low achieving students will be perceived as not making high academic expectations under conditions of obligation.

Observation from Table 18:

Only two subjects out of thirty-five indicated that their friends held high achievement expectations for them under conditions of obligation.

H₂₀: Accepted.

Comparison of Obligatory Conditions:
Parents and Friends

As further evidence of the greater influence of parents over friends upon high and low achievement, the following hypothesis was made and accepted (Table 18).

H₂₁: Conditions of obligation are more likely to be perceived by both high (3.5 to 4.0) and low (0.0 to 0.75) achievers as being attached to parental expectations than they are to friends academic expectations.

Observed proportions from Table 18:

High Achievers:

$$H_{21}: P_1 \left(\frac{61}{67} \right) - P_2 \left(\frac{29}{67} \right) > 0$$

Low Achievers:

$$H_{21}: P_1 \left(\frac{17}{35} \right) - P_2 \left(\frac{8}{35} \right) > 0$$

H₂₁: Accepted.

Summary

As indicated in Table 18, the relevance of perceived conditions of obligation is apparent. Summarized, over 40 per cent of the low achieving students perceived their parents as attaching high importance and high surveillance to low grade expectations. Over 50 per cent of the low achievers indicated that their parents were not making academic obligations upon them. Among high achievers, on the other hand, perceived obligatory conditions are extensive. There were no high achievers who perceived low academic expectations from parents and only 6 out of 67 who perceived parental expectations without conditions of obligation. Furthermore, the majority of students (both high and low achievers) indicated that friends made no academic expectations upon them under conditions of obligation.

There was also a tendency for the association between expectations and achievement to be greater when the perceived conditions of obligation were present. It may be tentatively concluded that high expectations under obligatory conditions are necessary conditions for high achievement for most students but that such conditions do not necessarily lead to higher grades.

CHAPTER V

SUMMARY AND CONCLUSIONS

This has been an investigation of student academic achievement as associated with perceived achievement expectations from parents, as opposed to friends, under the social-psychological conditions of perceived importance and perceived surveillance.

Summary of Research Objectives

The research objectives involved assessing (1) the extent to which perceived achievement norms characterized student's role relationships with parents and friends; (2) the association of perceived achievement norms with achievement; and (3) the extent that student perception of parental expectations, as opposed to friends expectations, under perceived conditions of obligation (i.e., perceived high importance and close surveillance attached to carrying out the expectations), were associated with very high and very low academic performance.

Summary of Methodology

The population under investigation included all of the tenth grade, caucasian, students of an urban school system on whom complete data was available. Other selective criteria for inclusion in the population were: regularly promoted students who had not withdrawn or re-entered; not in any special education program; or not under any special educational research activity. There were 942 students, 425 males and 517 females.

To determine the perceived presence of achievement norms within student-parent and student-friend relationships the total population, by sex, was investigated. The total population, by sex, was also studied to determine associations between achievement norms and academic achievement. In order to assess the relative association of parental expectations, versus friendship expectations, under conditions of obligation, with high and low achievement, students were studied who achieved grade-point averages of 0.75 or lower, or 3.5 or higher. In addition, from the low achieving category, those students who scored one or more standard deviations below the mean on standard intelligence tests were partialled out. Thus, the resulting low achieving group which was studied could not be accounted for in terms of measured intelligence.

The major variables under analysis were "academic achievement" (total grade-point average in English, mathematics, social studies and science), perceived academic "achievement expectations" of parents and of friends, perceived "importance attached to achievement expectations" by parents and friends, "perceived surveillance of students academic behavior" by parents and friends, and the student's "academic significant others."

The data was collected through the administration of questionnaires and from the students' school records. The analysis of the data involved the use of z tests and chi-squares procedures for comparing hypothesized proportions, the use of correlated and uncorrelated t tests and simple analysis of variance to determine hypothesized differences in means of populations, and the use of t and z tests for hypothesized differences in related and unrelated correlations, and the use of product moment correlations. In addition, frequency counts and distribution were reported for which statistical tests would have been inappropriate.

Summary of Research Findings

Achievement Norms and Role-Relationships

a. As anticipated a greater proportion of friends than parents were perceived as being unconcerned about the students' achievement. All students, both males and females, indicated parental concern, while 10 per cent of the friends were perceived to be unconcerned about grades (Table 3).

b. Parents were indicated as academic significant others by students more often than were friends (Table 4).

c. Parents were perceived by students as holding higher academic achievement expectations than were friends (Table 5).

d. Parents were perceived by students to attach more importance to their achievement expectations than were friends regardless of the level of perceived achievement expected of the student, or the achievement level of the student (Tables 6, 7 and 8).

e. Parents were perceived by students as holding them (the students) under higher surveillance than were friends (Table 9).

A general conclusion is that all findings support the view that students perceive their relationships with their parents as involving achievement norms more than do their role relationships with friends. In addition, friendship

relationships are perceived to hold lower achievement expectations and attach less importance and surveillance to students' academic achievement.

Achievement Norms and Achievement

a. The findings in this study support the hypothesis that achievement expectations from parents and friends (when friends hold them) are related to student achievement level (Table 10).

b. The hypothesis that parental achievement expectations are more related to achievement than friends was accepted for males but not for female students. While the finding that perceived friends expectations by females was not anticipated, it is of theoretical relevance that parental influence was at least as great as that of friends. The mutual support from friends may partially account for females generally achieving at a higher level than males (Table 10).

c. Another major finding was that parents were in all cases, but one, indicated as academic significant others for high achieving students while friends were mentioned but 33 per cent of the time (Table 11).

d. In addition the significant others of the high achieving students expected such high performance. In no case did any high achieving student perceive low expectations on the part of parents or friends (Table 11). While the observed achievement occurred after the measurement of

perceived expectations, low or high achievement may be reflected in the expectations of others. The question of reciprocal influence is not resolved by this study.

e. As anticipated, neither the level of perceived importance, or the level of perceived surveillance of academic behavior, were directly associated with achievement (Tables 12 and 13). It was hypothesized and accepted, however, that perceived importance and surveillance are conditions which affect the influence of perceived expectations (Tables 14, 15, 16, and 17).

The general conclusion is that achievement expectations have been demonstrated to be associated with and predictive of achievement. It is also concluded that the normative aspects of expectations which include perceived importance and perceived surveillance are not functions of expectation level, e.g., some parents and friends were perceived to desire low achievement to which was attached high importance and close surveillance.

Conditions of Obligation and Expectations

a. Perceived conditions of obligation (high surveillance and high importance) appears to have an important affect upon the relationship of achievement expectations to achievement for tenth grade students (Table 14), and in particular with high achieving students (Table 18).

b. There were almost no subjects who indicated a conflict between parental and friendship expectations under conditions of obligation (8 out of 942, Table 14).

c. Only 25 per cent of the students indicated conditions of obligation on the part of parents or friends for achieving at any level (232 out of 942, Table 14). For most students (75 per cent) neither parents or friends are perceived as holding achievement expectations under obligatory conditions.

d. Perceived reinforced expectations (high or low) from both parents and friends are associated with large and significant differences in achievement (GPA of 2.58 as compared with GPA of 1.48, Table 14).

e. Reinforced high expectations under obligatory conditions from parents and friends were not, as hypothesized, significantly greater than when only parents were perceived to hold high expectations under obligatory conditions and friends were perceived as not holding expectations under such conditions of obligation (Table 14).

f. There were no students who achieved at a high level who indicated parents as holding low expectations and only three of these students had friends who were perceived to hold low expectations under obligatory conditions (Table 18). Friends were perceived to reinforce parents or at least not conflict with parents among 96 per cent of the

high achieving students. It appears that high achievement norms are likely to be necessary but not sufficient conditions for high achievement.

g. Forty per cent of the low achieving students, on the other hand indicated parents as holding low expectations under obligatory conditions (14 out of 35), while 51 per cent indicated that there were no obligatory conditions associated with parental expectations. Only 3 out of 35 parents were perceived to be pleased with high achievement to which such conditions of obligation were attached.

Conclusions Concerning Conditions of Obligation

When parents and friends are perceived to reinforce each other in their achievement expectations under conditions of obligation, there is a greater association of expectations with achievement than when either parents or friends are unconcerned or conflict in their expectations.

Conflict in parental and friendship achievement expectations under perceived conditions of obligation is rare (unanticipated finding) only 8 out of 942 students indicated this level of conflict. Thus, it was impossible to test hypotheses pertaining to the dominance of parental relationships over friendship relationships when there was conflict. Possibly conflict between parents and friends in terms of academic achievement expectations is not relevant for most students. When conflict occurs, however, it is as yet

unknown which relationship will be most relevant, parents or friends.

Achievement at the high levels is characterized by high parental expectations under obligatory conditions (61 out of 67). Perceived expectations from friends under obligatory conditions is not near so prevalent among high achievers (29 out of 67).

Low achieving students, on the other hand, tend to perceive parents as holding low achievement expectations under obligatory conditions (14 out of 35) or else perceive no obligatory conditions for academic achievement at any level. Only 3 out of 35 parents were perceived to be pleased with high achievement to which such achievement was important to them (the parents), and that the parents were aware as to the students performance. It also appears that friends of low achieving students are perceived to hold low expectations under obligatory conditions, or else there is no obligation for achievement.

Major Conclusions and Implications

The relevance of the finding that there is a relationship between the perceived academic expectations under conditions of obligation suggests, although it requires further testing for confirmation, that parents and/or friends can influence students toward higher achievement by enhancing their surveillance of the student and making higher academic demands. The implication is that without importance and surveillance attached to expectations the expectations are not as likely to produce compliant behavior. One inference is that if parents of academically capable low achievers would make higher academic expectations, under obligatory conditions, their children's achievement would show dramatic improvement. This inference needs further verification through experimental programs.

In line with the theory and research of this paper experimental programs to enhance the performance of low achievers should direct a large part of their efforts to intentionally modifying the parent-child relationship by working directly with the parents to: (1) raise parental evaluations of their children's ability to achieve at higher academic levels; (2) hold higher academic expectations for their children; and (3) attach both higher importance and close surveillance to their children's academic performance.

In summary this research refutes the view that the

influence on achievement of the peer group is more important than that of the parents in the area of academic achievement. It was found that academic expectations, and that possibly, the importance attached to these expectations, and the surveillance of the student are crucial factors in the academic achievement of the student. This investigation has supported the view that a student's perceived role-relationship with his parents is more likely to involve norms which specify his academic achievement level than are his perceived role-relationships with friends. Furthermore, the student's achievement in school, except for females, corresponds more to the norms of parental relationships. In the case of female students, achievement tends to correspond equally to the perceived norms of both parents and friends since parents and friends tend to hold similar expectations. Hence, it was impossible to determine if the females were guided more by parents than by friends. It is significant, however, that no finding suggested females as being guided more by friends than parents. Thus, while all the findings were not anticipated they do not give any support to a view that parents have less ability to influence their children's academic performance.

This study seriously challenges the Coleman position that ". . . what our society has done is to set apart in an institution of their own, adolescents for whom home is little more than a dormitory and whose world is made up of activities

peculiar to their fellows. . . ." ¹ The family in its academic expectations has a major role in the performance of the student. Parents are, for tenth grade students at least, most likely to be the academic significant others for students.

The findings of this study do not, however, suggest that the expectations of friends are or never can become academically influential. This investigator believes friends can exert a great deal of influence on achievement. For most students, however, friends are not perceived to be that concerned. If friends are presently influential of student achievement it is not likely to be because of the academic expectations they hold. Any other type of influence upon academic achievement, however, is the subject for other research.

A final suggestion of this study is that academic achievement is in large measure, a reflection of the normative and evaluative influences which occur outside of the classroom (primarily in the family). Hence, if it is important to change the academic behaviors of students, it is also important to effect changes in the relationships these students have with their parents and friends. It would seem that attempts to

¹Coleman (1960), op. cit., p. 339.

improve academic achievement may meet with more success if strategies are developed to influence social-psychological factors impinging on the child from outside the classroom as well as within it.

BIBLIOGRAPHY

- Back, Kurt W. "Influence Through Social Communication," Journal of Abnormal and Social Psychology, XLVI (1951), 9-23.
- Backman, C.W., Second, P.F., and Pierce, J.P. "Resistance to change in the self concept as a function of consensus among significant others," Sociometry, XXVI (1963), 102-111.
- Bates, Frederick L. "Position, Role, and Status: A Reformulation of Concepts," Social Forces, XXIV (1956), 313-321.
- Biddle, Bruce, et al. Studies in the Role of the Public School Teacher. Volume A. Columbia: University of Missouri Press, 1961.
- Brookover, Wilbur B. "A Social Psychological Conception of Classroom Learning," School and Society, LXXXVII (1959), 84-87.
- _____. "Research on Teacher and Administrator Roles," Journal of Educational Sociology, XXIX (1955), 2-13.
- _____, and Erickson, Edsel L. "Introduction: Symposium on Self-Concept and Its Relationship to Academic Achievement: A Longitudinal Analysis," a paper presented at the American Educational Research Association meetings, Chicago, 1965.
- _____, and Gottlieb, David. Sociology of Education. New York: American Book Company, 1964.
- _____, Hamachek, Don E., and Erickson, Edsel L. "Relationship of Self-Concept to Achievement in High School," U. S. Office of Education, Cooperative Research Project No. 2831. East Lansing: Bureau of Educational Research, Michigan State University, to be published September, 1966.

- Brookover, Wilbur B., LePere, Jean M., Hamachek, Don E., Thomas, Shailer, and Erickson, Edsel L. "Improving Academic Achievement Through Students' Self-Concept Enhancement," U.S. Office of Education, Cooperative Research Project No. 1636. East Lansing: Bureau of Educational Research, Michigan State University, 1965.
- _____, Paterson, Ann, and Thomas, Shailer. "Self-Concept of Ability and School Achievement," U.S. Office of Education, Cooperative Research Project No. 845. East Lansing: Office of Research and Publication, Michigan State University, 1962.
- Cartwright, Dorwin. "Achieving Change in People: Some Applications of Group Dynamics Theory," Human Relations, IV (1951), 381-392.
- Chansky, Norman M. "A Note on the Grade Point Average in Research," Education and Psych. Measurement, XXIV (1964), 95.
- Coleman, James S. The Adolescent Society. Glencoe, Illinois: The Free Press, 1962.
- _____. "The Adolescent Subculture and Academic Achievement," Journal of Sociology, LXV (1960), 341-347.
- Combs, Arthur, and Snygg, Donald. Individual Behavior. Second edition. New York: Harpers, 1959.
- Couch, Carl, and Murray, John. "Significant Others and Evaluations," Sociometry, XXII (1964), 502.
- Crandall, V. J., Dathovsky, W., and Preston, A. "A Conceptual Formulation For Some Research On Children's Achievement," Child Development, XXXI (1960), 787-797.
- Crutchfield, Richard S. "Conformity and Character," The American Psychologist, X (1955), 191-198.
- Davidson, H. H., and Lang, G. "Children's Perceptions of Their Teachers' Feelings Toward Them Related to Self-Perception, School Achievement and Behavior," Journal of Experimental Education, XXXX (1960), 107-118.
- Deutsch, Morton, and Gerard, Harold B. "A Study of Normative and Informational Social Influences Upon Individual Judgment," The Journal of Abnormal and Social Psychology, LI (1955), 629-636.

- Deutsch, Morton, and Solomon, Leonard. "Reactions to Evaluations by Others as Influenced by Self-Evaluations," Sociometry, XXII (1959), 93-112.
- Erickson, Edsel L., and Thomas, Shailer. "The Normative Influences of Parents and Friends Upon School Achievement," a paper presented at meetings of American Educational Research Association, Chicago, Illinois, 1965.
- Faris, Robert. "Reflections on the Ability Dimension in Human Society," American Sociological Review, XXVI (1961), 835-843.
- Festinger, Leon, and Carlsmith, James M. "Cognitive Consequences of Forced Compliance," The Journal of Abnormal and Social Psychology, LVIII (1959), 203-210.
- _____, Torrey, Jane, and Willerman, B. "Self Evaluation as a Function of Attraction to the Group," Human Relations, VII (1954), 161-174.
- Gordon, C. Wayne. The Social System of the High School. Glencoe, Illinois: The Free Press, 1957.
- Gross, Neal, Mason, Ward S., and McEachern, Alexander W. Explorations in Role Analysis: Studies of the School Superintendency Role. New York: John Wiley and Sons, Inc., 1958.
- Gouldner, Alvin. "The Norm of Reciprocity: A Preliminary Statement," American Sociological Review, XXV (1960) 170.
- Helper, M. M. "Parental Evaluations of Children and Children's Self-Evaluations," Journal of Abnormal and Sociological Psychology, LVI (1958), 190-194.
- Herriot, Robert E. "Some Social Determinants of Educational Aspiration," Harvard Educational Review, XXXIII (1963), 157-177.
- Hicks, Jack M. "The Influence of Group Flattery Upon Self-Evaluation," Journal of Social Psychology, LVIII (1962), 147-151.
- Hyman, H. H. "The Psychology of Status," Archives of Psychology, 1942, No. 269.

- Kelly, Earl, Maslow, Abraham H., Rogers, Carl R., and Combs, Arthur. Perceiving Behaving, Becoming: A New Focus for Education: Yearbook 1962. Washington, D. C.: Association for Supervision and Curriculum Development, National Educational Association, 1962.
- Kelly, H. H. "Attitudes and Judgments as Influenced by Reference Groups," in Guy Swanson (ed.) Readings in Social Psychology. New York: Henry Holt and Co., 1952.
- Kelman, Herbert C. "Processes of Opinion Change," Public Opinion Quarterly, XXV (1961), 57-78.
- Kinch, John W. "A Formalized Theory of the Self-Concept," The American Journal of Sociology, LXVIII (1963), 481-486.
- Lindesmith, Alfred R., and Strauss, Anselm L. Social Psychology. Revised edition. New York: The Dryden Press, 1956, 394.
- Linger, J. L. "Projected Familial Attitudes as a Function of Socio-Economic Status and Psychopathology," Journal of Consulting Psychopathology, XVIII (1954), 99-104.
- Linton, Ralph. The Cultural Background of Personality. New York: Appleton-Century-Crofts, Inc., 1945, 97-98.
- . The Study of Man. New York: Appleton-Century-Crofts, Inc., 1936, 113.
- Maxwell, P. H., Connor, R., and Walters, J. "Family Member Perception of Parent Role Performance," Merrill-Palmer Quarterly, VII (1961), 31-37.
- McGee, Richard K. "The Prediction of Independent Conformity Behavior," Journal Abnormal and Social Psychology, LXV (1962), 347-351.
- Mead, George Herbert. Mind Self and Society. Chicago: University of Chicago Press, 1934.
- Medinnus, G. R. "Research Implication of Several Parent-Child Concepts," Marriage Family Living, XXI (1959), 329-333.
- Merton, Robert K. Social Theory and Social Structure. Glencoe, Illinois: The Free Press, 1957, 369.

- Merton, Robert K., and Kitt, Alice S. "Contributions to the Theory of Reference Group Behavior," Readings in Social Psychology. R. K. Merton and F. Lazarsfeld (eds.). New York: Holt, 1952.
- Mills, C. Wright. "Language, Logic, and Culture," American Sociological Review, IV (1939), 671.
- Milner, Esther. "A Study of Relationship Between Reading Readiness in Grade-One School Children and Patterns of Parent Child Interaction," Child Development, XXII (1951), 59-112.
- Morris, Richard T. "A Typology of Norms," American Sociological Review, XXX (1956), 610-613.
- Neiman, L. J., and Hughes, J. W. "The Problem of Role - A Re-survey of the Literature," Social Forces, XXX (1951), 141-149.
- Newcomb, T. H. Social Psychology. New York: Dryden Press, 1950.
- Parsons, Talcott, and Shils, Edward (eds.). Toward a General Theory of Action. Cambridge: Harvard University Press, 1952, 397.
- Patterson, F. K. "Adult Role in Adolescent Subculture Innovation: A Case Study," Journal of Educational Sociology, XXX (1956), 58-74.
- Peatman, John B. Introduction to Statistics. New York: Harper and Row, 1963, 263-265.
- Perkins, H. V. "Teachers' and Peers' Perceptions of Children's Self-Concepts," Child Development, XXXX (1958), 203-220.
- Piaget, J. "Principal Factors Determining Intellectual Evolution from Childhood to Adult Life," Factors Determining Human Behavior. Cambridge: Harvard University Press, 1937, 32-48.
- Ramey, J. W. "Relationship of Peer Group Rating to Certain Individual Perceptions of Personality," Journal of Experimental Education, XXVII (1958), 143-149.
- Rasmussen, Glen, and Zander, Alvin. "Group Membership and Self-Evaluation," Human Relations, VII (1954), 239-251.

- Ray, William S. An Introduction to Experimental Design. New York: MacMillan Company, 1960, 2.
- Rosen, Barnard. "The Achievement Syndrome," American Sociological Review, XXI (1956), 203-211.
- Rosen, E. "Conflicting Group Membership: A Study of Parent-Peer Cross Pressures," American Sociological Review, XX (1955), 153-162.
- Rosen, S., Levinger, G., and Lippitt, R. "Desired Change in Self and Others as a Function of Resource Ownership," Human Relations, XIII (1960), 187-192.
- Rosenberg, Leon A. "Conformity as a Function of Confidence in Self and Confidence in Partner," Human Relations, XVI (1963), 131-140.
- Sherif, M. An Outline of Social Psychology. New York: Harpers, 1948.
- _____. "The Self and Reference Groups: Meeting Ground of Individual and Group Approaches," Annals New York Academy Science, XCVI (1962), 797-813.
- Sidowski, Joseph B. "Reward and Punishment in a Minimal Social Situation," Journal of Experimental Psychology, LIV (1957), 318-326.
- Siegel, Sidney. Nonparametric Statistics, for the Behavioral Scientists. New York: McGraw-Hill, 1956, 33.
- Sigel, Irving. "Influence Technique: A Concept Used to Study Parental Behaviors," Child Development, XXXX (1960), 799-806.
- Slocum, W. L., and Stone, C. L. "A Method for Measuring Family Images Held by Teenagers," Marriage and Family Living, XXI (1959), 245-250.
- Smith, Mildred B., and Brahee, Carl I. "Focus on Achievement," Educational Leadership, XX (1963), 314-318.
- Snyder, Clinton A. "Variations in Expectations for the Teacher Role, as Related to General and Specific Roles, Expectation Categories, and Social Distance," Ph.D. dissertation, Michigan State University, 1963, 21-34.

- Stotland, E., Thorley, S., Thomas, E., Cohen, E., and Zander, A. "The Effects of Group Expectations and Self-Esteem Upon Self-Evaluation," Journal of Abnormal and Social Psychology, LIV (1957), 55-63.
- _____, and Zander, A. "Effects of Public and Private Failure on Self Evaluation," Journal of Abnormal and Social Psychology, LVI (1958), 223-229.
- Strickland, Lloyd H. "Surveillance and Trust," Journal of Personality, XXVI (1958), 200-215.
- Strodbeck, Fred L. "Family Interaction, Values, and Achievement," David C. McClelland, et al. (eds.). Talent and Society. New York: Van Nostrand, 1958.
- Tuma, Elias, and Livson, Norman. "Family Socio-Economic Status and Adolescent Attitudes to Authority," Child Development, XXXX (1960), 387-399.
- Turner, Ralph H. "Role-Taking and Role-Standpoint, and Reference-Group Behavior," American Sociological Review, VI (1956), 317.
- _____. "Some Family Determinants of Ambition," Sociology and Social Research, XLVI (1962), 397-411.
- Videbeck, R. "Self-Conception and the Reaction of Others," Sociometry, XXIII (1960), 351-359.
- Weinberg, Carl. "Family Background and Deviance or Conformity to School Expectations," Journal of Marriage and Family, XXVI (1964), 89-91.
- Willis, Richard H. "Two Dimensions of Conformity - None on Formity," Sociometry, XXVI (1963), 499-512.

APPENDIX A

INSTRUMENTS: PERCEIVED ACADEMIC ACHIEVEMENT
EXPECTATIONS BY:

1. Parents
2. Friends

1. For your PARENTS to be most pleased with you, what kind of grades should you get in school in general?
 - a. Mostly A's
 - b. A's and B's
 - c. Mostly B's
 - d. B's and C's
 - e. Mostly C's
 - f. C's and D's
 - g. Mostly D's
 - h. D's and E's
 - i. Mostly E's
 - j. My grades do not make any difference to my parents.

2. For your closest FRIENDS to be most pleased with you, what kind of grades should you get in school in general?
 - a. Mostly A's
 - b. A's and B's
 - c. Mostly B's
 - d. B's and C's
 - e. Mostly C's
 - f. C's and D's
 - g. Mostly D's
 - h. D's and E's
 - i. Mostly E's
 - j. My grades do not make any difference to my friends.

APPENDIX B

INSTRUMENTS: PERCEIVED IMPORTANCE ATTACHED
TO EXPECTATIONS BY:

1. Parents
2. Friends

1. How important to your PARENTS are the grades you get in school?
 - a. Very important
 - b. Important
 - c. Not particularly important
 - d. My grades don't matter to my parents at all.

2. How important to your closest FRIENDS are the grades you get in school?
 - a. Very important
 - b. Important
 - c. Not particularly important
 - d. My grades don't matter to my friends at all.

APPENDIX C

INSTRUMENTS: PERCEIVED SURVEILLANCE ATTACHED
TO EXPECTATIONS BY:

1. Parents
2. Friends

1. How well informed are your PARENTS about what you are doing in school work? Choose the statement which comes closest to describing your parents.
 - a. They are extremely well informed. They pay very close attention to what I am doing in my school work. Regularly I or others keep them informed. No matter how well or how poorly I am doing they will find out.
 - b. They are well informed. They know quite a bit about what and how well I am doing. They generally know what and how well I am doing, but they don't always know.
 - c. They are fairly well informed. Occasionally they ask and once in awhile I or someone else tells them what I am doing.
 - d. They are only slightly informed. They pay very little attention to what I am doing. Seldom do I or does anyone else tell them.
 - e. They know nothing about what or how well I am doing in my school work.

2. How well informed are your closest FRIENDS about what you are doing in school work? Choose the statement which comes closest to describing your best friends.
 - a. They are extremely well informed. They pay very close attention to what I am doing in my school work. Regularly I or others keep them informed. No matter how well or how poorly I am doing they will find out.
 - b. They are well informed. They know quite a bit about what and how well I am doing. They generally know what and how well I am doing, but they don't always know.
 - c. They are fairly well informed. Occasionally they ask and once in awhile I or someone else tells them what I am doing.
 - d. They are only slightly informed. They pay very little attention to what I am doing. Seldom do I or does anyone else tell them.
 - e. They know nothing about what or how well I am doing in my school work.

APPENDIX D

INSTRUMENTS TO IDENTIFY ACADEMIC SIGNIFICANT OTHERS

1. "Important in your life."
2. "Concerned about how well
you do in school."

1. There are many people who are important in our lives. In the space below, list the Names of the people who you feel are important in YOUR life. Please indicate who each person is.

NAMES

WHO IS THIS PERSON?

If you finish before the time limit, please sit quietly.
Do not turn the page.

2. There are many people who are concerned about how well young people do in school. In the space below, list the NAMES of the people you feel are concerned about how well you do in school. Please indicate who each person is.

NAMES

WHO IS THIS PERSON?

If you finish before the time limit, please sit quietly.
Do not turn the page.

APPENDIX E

SCATTER DIAGRAMS OF PERCEIVED ACADEMIC EXPECTATION LEVELS OF PARENTS ASSOCIATED WITH GRADE-POINT AVERAGES

1. Males
2. Females

Scatter Diagram of the Perceived Academic Expectation Levels
of PARENTS Associated with Grade-Point Averages
(Tenth Grade Males)

Grade- Point Average	Perceived Academic Expectation Levels of Parents						
	Uncon- cerned	Less Than C's	C's	C's and B's	B's	B's and A's	A's
0.00	..	1	..	1	..	..	..
0.25	..	1	..	4	..	..	1
0.50	4	5	2	3	..
0.75	5	4	6	2	2
1.00	5	9	6	13	4
1.25	..	1	4	9	7	13	4
1.50	..	1	1	10	5	18	4
1.75	2	16	8	15	6
2.00	1	8	11	17	10
2.25	1	8	10	28	7
2.50	5	6	28	6
2.75	1	4	21	10
3.00	2	1	9	7
3.25	6	5
3.50	1	5
3.75	4
4.00	1	..
N =	..	4	23	82	66	175	75

Total N = 425

Scatter Diagram of the Perceived Academic Expectation Levels
of PARENTS Associated with Grade-Point Averages
(Tenth Grade Females)

Grade- Point Average	Perceived Academic Expectation Levels of Parents						
	Uncon- cerned	Less Than C's	C's	C's and B's	B's	B's and A's	A's
0.00	3	..	1	..
0.25
0.50	2	1	..	2	..
0.75	..	1	1	2	2	1	2
1.00	7	2	3	2
1.25	..	1	..	9	3	6	4
1.50	1	14	9	16	4
1.75	..	3	2	6	7	20	3
2.00	..	2	1	14	8	40	6
2.25	..	1	..	10	10	30	10
2.50	6	9	37	14
2.75	..	1	..	7	10	35	9
3.00	1	3	21	17
3.25	1	..	10	8
3.50	14	10
3.75	12	12
4.00	1	7
N =	..	9	7	81	63	249	108

Total N = 517

APPENDIX F

SCATTER DIAGRAM OF THE PERCEIVED ACADEMIC EXPECTATION LEVELS OF FRIENDS ASSOCIATED WITH GRADE-POINT AVERAGES

1. Males
2. Females

Scatter Diagram of the Perceived Academic Expectation Levels
of FRIENDS Associated with Grade-Point Averages
(Tenth Grade Males)

Grade- Point Average	Perceived Academic Expectation Levels of Friends							
	Uncon- cerned	D's & Lower	D's and C's	C's	C's and B's	B's	B's and A's	A's
0.00	..	..	1	1	..	..	..	..
0.25	..	..	1	1	..	2	1	1
0.50	1	2	..	3	3	2	3	..
0.75	..	..	1	5	4	5	3	1
1.00	3	..	2	5	13	6	5	3
1.25	3	..	..	7	11	6	10	1
1.50	4	1	..	4	7	10	12	1
1.75	3	1	..	5	17	8	11	2
2.00	4	..	..	..	14	10	15	4
2.25	7	..	..	2	10	12	17	6
2.50	3	1	1	1	4	11	21	3
2.75	3	1	..	..	6	6	14	6
3.00	1	1	..	..	3	1	7	6
3.25	3	..	..	1	..	..	5	2
3.50	1	..	..	..	..	..	2	3
3.75	..	..	..	..	..	1	1	2
4.00	..	..	..	..	..	..	1	..
N =	36	7	6	35	92	80	128	41

Total N = 425

Scatter Diagram of the Perceived Academic Expectation Levels
of FRIENDS Associated with Grade-Point Averages
(Tenth Grade Females)

Grade-Point Average	Perceived Academic Expectation Levels of Friends						
	Unconcerned	Less Than C's	C's	C's and B's	B's	B's and A's	A's
0.00	1	..	2	1	..	..	..
0.25	..	..	..	..	..	..	..
0.50	..	..	2	2	1	..	..
0.75	..	..	1	4	1	2	1
1.00	..	..	2	6	3	3	..
1.25	1	..	1	7	5	7	2
1.50	6	..	2	11	15	9	1
1.75	2	2	3	8	10	14	2
2.00	6	2	1	12	20	28	2
2.25	6	..	..	14	13	23	5
2.50	8	..	..	9	13	30	6
2.75	7	..	..	7	11	35	2
3.00	6	1	5	26	4
3.25	2	1	1	12	3
3.50	1	1	17	5
3.75	2	1	3	14	4
4.00	3	1	..	2	2
N =	51	4	14	85	102	222	39

Total N = 517

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