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ABSTRACT

The Educational Opportunity Program (EOP) was established for the sake of students who might not qualify for higher education through regular channels because of their previous financial and scholastic disadvantages. The issue is whether or not EOP is successful in recruiting and developing disadvantaged but high potential students. This report compares EOP and non-EOP children of black, Asian, and white American parents on such variables as family relations, motivation toward learning, achievement, self-concept, political awareness, and social participation. Also, attitudinal changes of EOP students before entering the program and after completing one year will be examined. The research reported was pursued in the framework of motivation toward learning. Motivation is affected by various social factors. It is expected that EOP students, in contrast to non-EOP students, are likely to: (1) show lower motivation toward learning; (2) have lower self-esteem; and, (3) feel powerless in controlling their environment, and hence be politically and socially apathetic. If EOP is effectively operated, it should produce students who are highly motivated, and politically and socially conscious. Although most of the EOP students are from ethnic minority groups, the behavior of low-income students is by no means homogeneous. Attitudes toward education and punishment for failure vary among ethnic groups. (Author/JM)

RESEARCH FINDINGS

Project Title: Black, Asian and White Students in the Educational Opportunity Program

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The Educational Opportunity Program (EOP) was established for the sake of students who might not qualify for a higher education through regular channels because of their previous financial and scholarstic disadvantages. Applicants need not satisfy the regular entrance requirements but are expected to show high potential and motivation. They are admitted to regular classes and some are given financial assistance. Also educational aids are designed to support and improve the chances for success for the student, including college readiness experiences, closed advisement, tutorial assistance, etc.

The issue is whether or not EOP is successful in recruiting and developing disadvantaged but high potential students. There have been many near-sighted, pragmatic or piece-meal evaluations on how the money is spent, how individual students are doing in certain classes, or how the gross grade point average of EOP students compares with that of non-EOPers. However, few studies have been made to assess the overall socio-psychological dynamics of EOP students in contrast to non-EOP students. Some EOP teachers praise their students as highly motivated, while others report that students are opportunistic, taking advantage of the program.

The reported research was pursued in the framework of motivation toward learning. Motivation is affected by various

social factors. Lower-class youths may respond to their caste position by selecting lower goals for themselves, even when their innate capacities would indicate higher achievement motivation. Once they are convinced that school is irrelvant to their immediate needs and future goals, the task of education beceoms almost impossible. Also their lower class environment, particularly a disorganized family and poverty, are likely to produce a negative self-image for the individual, which will affect his behavior. Students with adequate intellectual endowment may do poorly in school because they perceive themselves as not capable.

Thus it is expected that ECP students, in contrast to non-EOP students, are likely to (1) show lower motivation toward learning; (2) to have lower self-esteem; and (3) to feel powerless in controlling their environment, hence to be politically and socially apathetic. If EOP is effectively operated, it should produce students who are highly motivated, and politically and socially conscious.

Although most of the EOP students are from ethnic minority groups, the behavior of low-income students is by no means homogeneous. Attitudes toward education and punishment for failure to attain educational achievement vary among ethnic groups. Because of the long history of discrimination and the caste-like situation in American society, most Negroes had fallen into the state of apathy until recent racial upheavals. Having felt a uselessness of education for getting a job, Negro parents tended to discourage their children from attaining

a higher education. Asians, on the other hand, are known for their emphasis on education. Parents sacrifice their own comforts for the education of their children and consider it shameful if the family is not able to provide higher education for them. Education as the means of occupational success has been the value for the White middle class Americans who set the central value system for everyone. Because of such differences in their attitudes toward educational success, it is expected that these three groups will show different ideas about EOP and will produce different behavior patterns among EOP students.

This report compares EOP and non-EOP students of Black, Asian and White Americans on such variables as family relations, motivation toward learning, achievement, self-concept, political awareness and social participation. Also attitudinal changes of EOP students before entering the program and after completing one year will be examined.

This report consists of three part: (1) Review of the literature; (2) Methodology; (3) Findings.

Part I. Review of Literature

I. Social Class and Achievement Motivation

A. Need Achievement Leading to Social Mobility

From the start, empirical studies of social stratification have acknowledged social psychological factors in status attainment processes. As early as 1927 Sorokin cited the work of Terman (1925), Cattell (1921) and Yerkees (1921) as bearing on a relationship between intelligence and social mobility. In his treatise on social mobility, Sorokin portrayed the role of intellectual and other personality differences quite graphically.

> Besides the above intellectual differences it is likely that there are other psychological differences between the upper and the lower classes. The more important among them seems to be as follows: except during the period of decay, the upper strata are composed of persons possessed of strong ambitions, bold and adventurous characters, with inventive minds, with harsh and non-sentimental natures; with a sort of cynicism and, finally, with a will for domination and power... In order to be a successful ruler or to become a captain of finance, or a great inventor and reformer, intellect alone is not sufficient. It is necessary also, to have a corresponding character, in spite of his talent, cannot become either a great scientist, or money maker, or ruler, or inventor, or leader generally.

While contemporary social scientists may not agree literally with this tooth and claw portrayal of vertical circulation, some students of stratification persist in granting efficacy to personality. For example, Lipset and Bendix (1959) say that they might advance the study of the mechanism of social mobility by merging the sociological and psychological approaches. Achievement motivations are purported by social psychologists and others to be highly relevant to differential mobility in

industrial societies (Crockett, 1966; Duncan, 1968; Duncan, et al., 1968; Duncan, Heller and Portes, 1968; Atkinson, 1957; Crockett, 1962; Rosen, 1964).

More recently, Featherman (1972) found no support for the hypothesis that achievement orientations are highly relevant to the status attainment processes. At least for two separate indexes of achievement orientations of adult males, such motivational personality components are less able to explain how social origins or completed schooling facilitates status attainment than are earlier career achievements.

Motivational factor may or may not bring one an upper social status, but how about the reverse relationship? Does lower social class lead to lower achievement motivation?

B. Lower Social Class Leading to LowerAchievement Motivation

The Poor Mentality. Certain psychological characteristics have been associated with poverty by many researchers. The poor tend to have low self-esteem, to be more authoritarian than the prosperous; more anti-intellectual; more prone to action and less to contemplation; more inclined to personal and concrete and more magical emphasis in religion (Herzog, 1963). Besides material deprivations, the poor tend to develop certain personality traits, such as a lack of future orientation, an inability to defer gratification, apathy and suspiciousness (Oscar, 1961; Stone, 1965). The poor lack technical and social skills, and suffer from psycho-physical symptoms (Srole, 1961). The maintenance of a relative psychological equilibrium is felt to depend on the control of intrapsychic conflict, for

which purpose a system of defense is operative. There is a constant, dynamic interaction between the intrapsychic state and adaptation to external reality.

Hypotheses:

1. The poor are likely to
   have low achievement
   have low political participation
   show manifest anxiety symptoms

   have low need achievement (lack of deferred gratification)
   have low political consciousness (apathy)
   have low self-esteem

Early Socialization. Early childhood experiences in poverty environments create enduring personality formation that are inimical to effective achievement striving not only in the classroom but in all areas of life (Ausubel, 1963; Bettelheim, 1964; McClelland, 1961; Pettigrew, 1964; Bronfenbrenner, 1967).

This is in line with Erikson's (1963) theory of personality development. According to him, a well-integrated personality is one which contains the following components acquired as the result of a more or less orderly unfolding of developmental sequences: (1) the sense of basic trust which develops from early experiences of being loved and results in a basic conviction of self-worth. Life in disintegrated communities is characterized by evanescent human relations. The infant born into physically or psychologically broken home experiences instability and disruption of the environment in place of continuity; (2) the sense of autonomy which results from satisfying early experiences with self-mastery. Parents in disintegrated communities are more inconsistent, use less

reasoning and verbalization, rely less on examples of good behavior; (3) the capacity for initiative. This is a pervasive and rewarding sense of being able to initiate and carry through actions, even competitive ones, without guilt and fear; (4) the feeling of industry and the inner feeling of reward which comes from partaking successfully in the economy and technology of the larger society; (5) the sense of identity or consistency which results from a harmonious blending of roles, and value systems acquired through membership in various groups such as the family and the peer group; (6) the ability to form a genuine love relationship to experience intimacy; (7) the sense of generativity, or satisfaction which arises from guiding the next generation and, allied with this, from having pursued one's special interests during adulthood; (8) the feeling of integrity, the satisfaction with one's life as it has been lived.

II. Social Class, Parental Socialization and n Achievement

A. Achievement Motivation

Clarity is critical in motivational research, where the validity and reliability of achievement motivation constructs, their situational fragility, and their probable multi-dimensionality should caution any who would relate achievement motivation to mobility (Krumboltz, 1957; McClelland, 1958; Kahl, 1965).

In addition, any causal representation of the role of motivation in status attainment processes must specify precisely the locus of effect in the life cycle. While, for

example, achievement orientations may influence adolescents' attainments in the school system (Rosen, ; Lavin, 1965; Vroom, 1964), they may be the cause of later occupational success.

Attitudes items may reflect opinions, attitudes, values and/or motivations (Atkinson and Birch, 1970). There is also a distinction of intrinsic and extrinsic motivation (Lenski, 1964; Gurin, 1960; Douvan, 1956 Burnstein, 1963; Burnstein, at al., 1963; Kohn and Schooler, 1969). Featherman (1972) differentiates primary work orientation--attributes positive non-economic value to work context, and materialistic orientation--which emphasizes the material goals of the good life achieved through instrumental activity.

Deferred Gratification Pattern. The term "deferred gratification pattern" was introduced by Schneider and Lysgaard (1953) to designate the phenomenon of impulse-renunciation or self-imposed postponement of gratifications or satisfactions, which is a necessary component of need achievement. This concept overlaps Max Weber's concept of inner-worldly asceticism, and Freud's impulse renunciation as providing the foundation for the "acquisitive character structure" of the entrepreneur (Freud, 1925); and Parsons' "instrumental orientation" is at one point defined in terms of renunciation of immediate gratifications in favor of disciplined seeking of larger future gains (1951).

The contemporary sociological literature on the deferred

gratification pattern is found in attempts to understand social class and color differences in behavior-- Davis and Dollard (1940), Havighurst (1946), Drake and Cayton (1945), Hollingshead (1945) and Lewis (1959).

In Miller and Swanson's (1958) The Changing American Parents, they present data to show that the entrepreneurial occupational groups allow their children less immediate and complete satisfaction of basic physiological needs than do the contrasting bureaucratic groups.

Although deferred gratification was not found to be related to social class in the study of Straus (1962), each of the specific need deferment scales, except sexual deferment, was found to be significantly correlated with measure of achievement role performance and role disposition. A partial correlation analysis, holding constant social class and intelligence, showed the relation of the deferred gratification pattern scale to achievement to persist independently of these two factors.

B. Socialization of Motivation

All motives are learned (McClelland, 1952). They develop out of repeated affective experience connected with certain types of situations and types of behavior. In the case of achievement motivation, the situations should involve standards of excellence, presumably imposed on the child by the culture, or more particularly by the parents as representative of the culture, and the behavior should involve either competition with those standards of excellence or attempts to meet them

which, if successful, produce positive affect or, if unsuccessful, negative affect. Those cultures or families which stress competition with standards of excellence or which insist that the child be able to perform certain tasks well by himself should produce children with high achievement motivation.

Two distinctly different kinds of child-training practices are implicit in this theory. The first is the idea that the child is trained to do things well; the second, the notion that he is trained to perform tasks by himself. The former is called achievement training in that it stresses competition in situations involving standards of excellence; the latter is called independence training in that it involves putting the child on his own (self-reliance). There is another component of independence training--autonomy. By autonomy, we mean training and permitting the child to exercise a certain amount of freedom of action in decision making.

Differences in achievement motivation between social classes is in part a function of the differential class emphasis upon independence and achievement training; middle-class parents are more likely than lower class parents to stress self-reliance, autonomy and achievement (Rosen and D'Andrade, 1959).

Winterbottom (1958) examined the relationship between independence-mastery training and achievement motivation and found that achievement motivation is strongest among boys whose mothers expected relatively early indications of self-reliance and mastery from them.

McClelland (1955) and Rosen (1959) studied the relationship between social class, independence training andneed achievement and found that middle class parents place greater stress upon independence training than lower class parents; and that n achievement scores for middle class adolescents are higher than those for their lower class counterparts.

Bernard and D'Andrade (1959) found that social class difference in independence training, achievement training and n achievement is not statistically significant, although this was partly due to the research design. Achievement training contributes more to the development of n achievement than do independence training.

Ausubel and Ausubel (1963) found among the poor segregated Negro harsh authoritarianism of parents, who emphasize punitive forms of control and place considerable social and emotional distance between themselves and their children; early relaxation of close parental supervision, which makes the child precociously independent of adult influence but exposes him to the exaggerated socializing influence of the peer group.

School anxiety in Negro boys and girls was found to be strongly related to the mother's educational level when other home factors were controlled (Feld, 1967). Middle class mothers were observed to gratify children's affectional and security needs, to use bilateral influence techniques, to encourage and reward children for verbal efforts, and generally reinforce desirable behavior significantly more often than lower-class

mothers (Sarason, 1960; Hill and Sarason, 1966).

In crowded lower-class homes, where mothers often are away at work during the day and both parents lack intellectual sophistication, the child's early efforts at verbal and cognitive mastery are less likely to be favorably reinforced than in middle class homes, resulting in lower expectation of reward for intellectual effort (Kamii, 1965; Hess, 1965).

Hypotheses:

2. Middle-class parents are more likely than lower-class parents to

have higher achievement expectation from the child
give autonomy to the child (independence training)
have sympathetic understanding (emotional distance)

C. Self-esteem versus Achievement

Competent self. Favorable self-evaluation is accompanied by an array of knowledge, skills, habits, and abilities that are required to translate hopeful expectations and active orientations into effective behavior (Smith, 1968). Favorable self-perception are positively related to achievement behavior. Self-perception, perception of opportunity for success, achievement values form competence syndrome (Epps, 1969).

The mark of oppression. To the extent that the child believes he belongs to an intellectually inferior group, he might be expected to lack the confidence to strive for success in the classroom (Smith, 1968). Using projective tests, Hammer (1953) and Mussen (1953) found differences in amount of fantasy aggression expressed by Negro and White children. Projective

data gathered by Karon (1958) suggest that adult and adolescent Negroes, particularly in the South, tend toward extreme repression of aggressive impulses.

The assumption that the Negro American suffers debelitating effects from the psychological stresses that result frmm his caste position in American society finds wide support. Negro political mobilization is seen as inhibited by ambivalence toward self by Kenneth and Clark (1958). Silberman (1964) says that the apathy, the aimlessness, the lack of interest in education that characterize the Negro lower classes, and the crisis of identity that afflicts Negroes of all classes, stem from their sense of dependence and powerlessness--their conflict that 'Mr. Charlie' controls everything (Rose, 1948; Pettigrew, 1964).

Self-esteem and role playing. Whether the negative self-esteem of the Negro stems principally from being placed in the role of Negro, as Pettigrew (1964) emphasizes, or whether it derives principally from the negative evaluation of others that in turn leads to a development of a Negro role, as Kardiner and Ovesey suggest, the broad theoretical perspective developed by Cooley, Mead and Sullivan has been the major rationale.

Since his arrival in the United States, the Negro has been a member of a powerless minority. The powerful white majority demanded that the Negro play the Uncle Tom role, characterized by obserquiousness. At times such a role was necessary for

physical survival. But among other Negroes another truer role was manifest. Such disparate behavior creates problems resulting in confusion and identity crisis (Elkins, 1959; Dollard, 1937).

The crisis of identity and loss of self-esteem derive largely from the images of himself which the Negro receives from the White community: the self emerges through interaction with significant others. Developing self-identity and self-esteem depends not merely upon objective characteristics, but also upon the judgment of these characteristics by relevant others (Kardiner and Ovesey, 1951; Rainwater, 1966).

The interaction of caste and class factors in explaining the negative self-image presumed to be prevalent in the Negro American.

Anxiety and achievement. Black pupils in racially isolated schools have inordinately high levels of anxiety such as test anxiety, remote school concern, poor self-evaluation, somatic signs of anxiety (Feld and Lewid, 1967). These variables--anxiety, self-devaluation, and perceived parental punitiveness--were all clearly related to school achievement. The substantial linkage of school anxiety and academic failure is found by Sarason (1960) and Hill (1966).

Anomie and lower class. Anomie is inversely related to economic status. This is true whether economic status is measured by individual or neighborhood variables. This is

consistent with Srole'(1956)s findings and supports Merton's (1949) contention that differential access to economic success goals combined with a generally uniform expectation for economic success will result in anomie among those persons with the least opportunity to achieve such success.

Anomie is also related to social isolation, men who are relatively isolated having higher anomie scores on the average than men who are not so isolated (Bell, 1957).

There is an increase in the percentage of membership in formal associations the higher the status of the respondents (Wright and Hyman, 1958).

Simpson and Miller (1963) found that occupation and education are separately and cumulatively related to anomia--the lower the educational attainment, the greater was the anomia--those who were at the bottom in both occupation and education were the most anomic. Greater anomia was found among the upward mobile than among the stationary, contrary to the social failure hypothesis. The greater degree of anomia was found among people who have had the most exposure to life in lower-status groups, where the prevailing attitudes are more anomic.

Hypotheses:

3. Lower class people are likely to have low self-esteem and to show anxiety symptoms, which is related to their low level of achievement.

III. Contextual Influence

The Black children from predominantly Black school transferred to schools where the level of achievement is much higher had traumatic experience in comparing their own performance level and that of others(Katz, 1969). Katz has suggested that the introduction of a social comparison group of high ability in desegregation would have a positive effect on a child who experiences cross-racial acceptance in the classroom but may, in fact, be detrimental to the motivation of a child who experiences cross-racial rejection.

Defensive overaspiration in desired level of social comparison seems to go hand-in-hand with being in a school in which social class composition deprives him of extensive contact with children whose background represents a higher social class than his own when he is of low to moderate social status (Veroff and Peele, 1969).

Hunt and Hardt (1969) found an increase in motivation for college, interpersonal flexibility, self-esteem, internal control, future orientation, self-evluated intelligence, in two years after Black students enter college.

According to Hedegard and Brown's (1972) study, as a group Black students tended to define their primary goals in terms of vocational preparation. Second most important to this group were goals relating to identity (finding myself, getting to know myself better, testing my own ability). Among the Whites identity goals were most important.

At the end of the freshman year Black students felt that a smaller percentage of their classmates had the ability to enter the occupation they had chosen than they felt in the fall. Since responses to a similar question on relative ability without the constraint of their own occupational choice indicated little change over the year, we wonder whether the change noted above was accompanied by changes in perception of difficulty of their anticipated occupations or changes in the respondent's own occupational choices.

After a year the goals of students changed. For both Black and Whites, academic goals were now more important than identity, vocational and social goals.

Students have come to experience the university as less scholarly, less aware, and less cohesive than they had anticipated.

Black students were less satisfied than White students by their year at the university. Some of this dissatisfaction might be due to experiences of academic failure, or to feelings that they could not meet the competition for grades. Black students were more likely than Whites to regard both faculty and dormitory personnel as relatively impersonal, cold, unfriendly, not likable.

Hypothesis:

4. Students of lower-class background are likely to raise self-esteem and achievement motivation during one year of college life.

IV. Race, Social Class and Achievement Motivation

Achievement. The Whites' averages scores, according to the Coleman's report (1966), are above those of nearly all other groups in all regions. Only Orientals' average approaches those of Whites, and only in two tests, mathematics achievement and non-verbal ability, is their average above that of Whites in any region. Following the Whites in order are Orientals, Indians, Mexican Americans, Puerto Ricans and Blacks.

Achievement motivation. When asked, "if something happened and you had to stop school, now, how would you feel?" nearly half the 12th grade students responded that they would do almost anything to stay in school. (Coleman, 1966) All groups were similar in this. Blacks and Whites were slightly higher than others, and only Puerto Rican children indicated in any number to quit school.

When asked about whether they wanted to be good students, a higher proportion of Blacks than any other group--other half --reported that they wanted to be one of the best in the class.

Blacks report also more studying outside school than any group except the Orientals. Blacks report a sharply lower frequency staying away from school because they did not want to come than do Whites, in every region of the country, matched by the Orientals.

A smaller proportion of Blacks than of Whites report wanting to go no further than high school. More Blacks report

wanting to go to technical, nursing, or business school after college. Among others, the Orientals show by far the highest aspirations toward college of any group.

The concrete plans for college--fewer Blacks have definite plans for college, but fewer have definite plans not to attend. This indicates the lesser concreteness in Black's aspiration, the greater hopes, but lesser plans.

Apart from the generally high levels for all groups, the most striking differences are the especially high level of motivation, interest, and aspirations reported by Black students. These data are difficult to reconcile with the facts of Black's lower rates of completion of school, and lower college-going rate. They appear to show at least one thing: Blacks are especially strongly oriented toward the school as a path for mobility.

Self-esteem. According to the Coleman's report (1966), Blacks and Whites show similar levels of responses to items of self-esteem. Each of the other groups shows lower self-concept than Blacks or Whites. It is puzzling to some analysts that the Black children report levels of self-esteem as high as White when there is so much in their social environment to reduce the self-esteem of a Black.

It is reasonable that self-concept should be closely related to achievement, since it represents the individual's own estimate of his ability. The relation of self-concept to achievement is, from one perspective, merely the accuracy of

his estimate of his scholastic skills, and is probably more a consequence than a cause of scholastic achievement. His interest in learning can be assumed partly deriving from family background and partly from his success in school.

The absence of a consistent relation for Blacks, which showed Blacks even more interested in learning than Whites, gives a picture of students who report high interest in academic achievement, but whose reported interest is not translated through effective action into achievement.

Parental socialization. Coleman reports (1966) that for Whites and Orientals, parental interest accounts for much more variation than it does for any other group. This is due to: either a given amount of parental interest has the same effect for all groups but there is more variation in parental interest for these two groups, or it in fact does have a greater effect for these two groups.

Either (1) Black, Mexican American, Puerto Rican, and Indian American children fail to perceive their parents' interest or lack of interest in their schooling as fully as do Whites and Orientals; or (2) the parents of these minority group children are less able to translate their interest into effective support for the child's learning than are White or Oriental American parents.

There is some evidence to support both of these possibilities. The greater unreality of Black children's aspirations was evident as pointed out earlier. This suggests

that the same lack of realism may inflate his report of his parents' interest. At the same time, Black parents do show a greater interest in their child's education and greater aspirations for his success in education than White parents of the same economic level.

Sense of control of environment. The sense of internal control has been found to be stronger in White children and adults than in Blacks, and stronger in the middle class than in the working class (Battle, 1963; Rotter, 1962; Crandall, 1965; Coleman, 1966). A child's feelings about whether his own efforts determine his external rewards clearly should affect his expectancy of success, hence his willingness to strive. His level of performance should in turn affect the rate at which the environment dispenses rewards, hence his sense of internal control. Coleman (1966) measured three types of student attitude relevant to academic motivation: interest in school work, self-concept as regards ability, sense of control of own reward. For Black students, sense of control was the most important attitude, contributing at different grades from two to several times as much to the accounted-for variance of verbal achievement as either of the others. The relation of Black's sense of control to achievement was considerably stronger than that of any family-background factor.

Blacks and other minority children show much lower sense of control of their environment than do Whites (Coleman, 1966). Except for the Whites, it is highest for the Orientals.

For Whites and Orientals, self-concept is more highly related to achievement; for all other minorities, the child's sense of control of environment is most strongly related to achievement.

For children from advantaged groups, achievement is closely related to their self-concept; what they believe about themselves. For children from disadvantaged groups, achievement is related to what they believe about their environment; whether they believe the environment will respond to reasonable efforts, or whether they believe it is instead merely random or immovable. A child from an advantaged family often has had all his needs satisfied, has lived in a responsive environment, and hence can assume that the environment will continue to be responsive if only he acts appropriately.

Antecedents of self-esteem. Coopersmith (1967) posed four antecedents of self-esteem: (1) the amount of respectful, accepting and concerned treatment that the individual receives from significant others in his life; (2) history of successes and the status and position held in society; (3) experiences are interpreted and modified in accord with the individual's values and aspirations; (4) the individual's manner of responding to devaluation.

To the degree that Blacks do not use biased White evaluators in developing a self-evaluation, the process of development of self-identity within the Black community will parallel the developmental process in the White community,

and to that degree, when social class is controlled, Blacks and Whites should not differ in levels of self-esteem. The sources of evaluation important for self-identity are individuals occupying social positions quite similar to ego (Pettigrew, 1967).

Self-evaluations stemming from one's experiences are judged as successes or failures depending on one's values and aspirations. The distinct values developed within the lower class can provide alternative criteria for success and contribute to positive self-evaluation, hence blunting middle-class definitions of failure and evaluations of such failure. Lower-class Blacks will manifest higher self-esteem than lower-class Whites, and middle-class Blacks will manifest lower self-esteem than middle-class Whites.

The system-blame reinterpretation of failure and negative evaluation should not be as likely an option for the middle-class Black. In spite of discrimination he has achieved some measure of success within the dominant value framework. Acceptance of the system-blame perspective should be more difficult since it suggests that he could not be successful if it held. Hence, lower class Blacks should exhibit higher self-esteem than lower-class Whites, but middle-class Blacks should exhibit lower self-esteem than middle-class Whites.

Family versus school. For each group, as the proportion White in the school increases, the child's sense of control of environment increases, and his self-concept decreases (Coleman, 1966). This suggests the possibility that school

integration has conflicting effects on attitudes of minority children: it increases their sense of control of the environment or their sense of opportunity, but decreases their self-concept.

For minority groups other than Blacks, control of environment is better accounted by family background factor (mother's sense of control of environment) than is self-concept. For Blacks, both are about the same; and for Whites self-concept is better accounted for than control of environment.

For both attitudes (self-concept, sense of control) and for all groups, the parental desire for the child's further education have the largest unique contribution to positive self-concept and sense of control (Coleman, 1966).

Influence of peers' n achievement. The highest achieving groups, Whites and Orientals, show generally least dependence of achievement on characteristics of fellow students (Coleman, 1966). Family background which encourages achievement reduces sensitivity to variations in schools. The school, including the student body, has less differential effect upon achievement of children from such background.

The environment provided by the student body is asymmetric in its effects, that it has its greatest effect on those from educationally deficient backgrounds.

It is those Blacks who are in the South whose achievement appear to vary most greatly with variations in the characteristics of their fellow students. Here, where the most educationally disadvantaged backgrounds are found and where achievement is

lowest, is where student body characteristics make most differences for Black achievement. It is in these more stable, less urban areas where exposure to children of different educational backgrounds and aspirations has in the past been least possible for Black children.

The higher achievement of all racial and ethnic groups in schools with greater proportions of White students is related to effects associated with the student body's educational background and aspirations. The apparent beneficial effect of a student body with a high proportion of White students comes not from racial composition per se, but from the better educational background and higher educational aspirations that are, on the average found among White students. The educational backgrounds and aspirations of fellow students appear to provide a facilitating or amplifying effect on the achievement of a student independent of his own background.

(Insert page 27)

Lower-class values. Minority group cultures have distinctive systems of values and goals that are not taken into account by the school. The lower-class Black child may acquire (Miller, 195?)
the kind of competencies--the motives, attitudes and skills--that are needed for optimal adjustment to the conditions of life that he is likely to encounter. The skills that are valued in his own culture may be intrinsically difficult and require for their mastery a good deal of effort and persistence, yet be totally ignored by the educational establishment. The low

academic motivation of the Black pupil may be a reflection of the lack of relevance of the competence goals of the school to the competence goals toward which the child has been socialized by the transmitting agents of his own culture (Inkles, 1966; Cloward, 1963; Riessman, 1962).

Hypotheses:

5. Lower-class White and Asian students are more likely than lower-class Black students to have lower self-esteem and to show anxiety.

6. Achievement motivation of peers is likely to affect the motivation of the student.

The lower-class person, without abandoning the general values of the society, develops an alternative set of values (Rodman, 1963). Without abaondoning the values placed upon success, such as high income and high educational and occupational attainment, he stretches the values so that the lesser degrees of success also become desirable. The result is that the members of the lower class, in many areas, have a wider range of values than others within the society.

(to be inserted to page 25)

Yancey (1972) rejects the commonly held view that Blacks manifest more symptoms of psychological stress and lower self-esteem than do Whites. Controlling social positions such as region of residence, sex, marital status, age, social class, work-force participation, there is no significant association found between race and low self-esteem.

According to Heiss (1972), for some traits, such as performance of family roles, the self-ratings of Blacks are at least equal to those of Whites. For other traits, such as trustworthiness, Whites rate themselves higher. It is suggested that these patterns are due to variations in (1) the significant others used, (2) the likelihood of using sub-cultural standards, and (3) the availability of a system-blame explanation(Gurin, 1969)

Lorenz (1972) found that individuals in setting their aspirations are more affected by their position in their own racial group than by the position of their racial group in the larger society.

Part II. Methodology

I. Sample

The EOP at Sacramento State College was begun in the fall of 1968 with the admission of 54 students. The total EOP enrollment was about 600 in the fall of 1970. In the fall of 1970 there were 300 Black applicants, out of whom 100 were admitted; 300 Chinese applicants with 100 admitted; 35 Asians applicants with 30 admitted; 30 Native American applicants, all 30 admitted; and 150 White applicants with 30 admitted. For the fall of 1971 there were 1200 applicants and 400 were admitted.

Due to the small number of EOP students, particularly Asian and Whites, all the cases will be used for analysis. For the non-EOP sample, matching sex, age, race (ethnicity for Asians), major field and year at college (freshmen versus transfers from Junior College ratio being three to one), 300 students were selected from several clases which are required for new students. The total sampling distribution was as follows:

	EOP students		Non-EOP students
	1970-71	1971-72	1971-72
Blacks	100	100	100
Asians	30	50	100
Whites	30	50	100

II. Data Collection

Application form. Before admission, EOP applicants must fill in certain forms and be interviewed. These application forms and the interviewers' evaluation sheets were analyzed

and comparable questions were included in the questionnaire given to non-EOP students. The interviewer's evaluation included information concerning the applicant's level of motivation, his potential for college work, his family background, his social and ethnic group awareness, and his special needs. There are several free compositions concerning: (1) What the applicant expects to receive from EOP; (2) Why he wants to come to college; (3) Three things he values most in life; (4) His thinking or life style influenced by a book, play, a film or experience; (5) A brief autobiography.

Interview and questionnaire. The interview schedule included the above state variables and took approximately an hour to administer. For economy of time, a self-administered questionnaire instead of interview was given to general education classes required for new students, out of whom the non-EOP sample was chosen to match the EOP sample. For EOP students personal interviews were conducted.

These interviews and questionnaires were given twice: in September 1971 and in June 1972 so that the effect of one year college education can be detected.

III. Variables and Indices

Out of the questions in the interview schedule, twelve variables are selected for analysis in this report. Indices for these variables are described as follows:

1. Socioeconomic Status

Hollingshead's (1957) two factor index of social position.

2. Autonomy (Schaffer, 1961) (Independence training)

(1) Parents are authoritarian and control your behavior

(2) Parents tell you what to do

(3) Parents give pressure to get good grades

(4) Parents object your participating in political activities

(5) Parents tell you whom to associate with

3. Sympathetic understanding of parents (Schaffer, 1961)

(1) Depend on parents for praise, support

(2) Father spends much time with you

(3) Mother spends much time with you

(4) Father understands your problems

(5) Mother understands your problems

(6) Feel close to father

(7) Feel close to mother

(8) Can confide in father

(9) Can confide in mother

4. Parental achievement expectation

(1) Parental educational expectation toward the child

(2) Parental occupational expectation toward the child

(3) Parental wishes

(4) Realistic views by parents

5. Need Achievement of Peers

Same as below (#9)

6. Political consciousness of peers

Same as below (#8)

7. Self-concept

Sense of adequacy, self reliance, and personal freedom in the California Personality Inventory.

8. Political consciousness

(1) Attitudes toward Viet Nam war

(2) Attitudes toward revolution to change American society

(3) Attitudes toward capitalistic economy of U.S.

(4) Sense of power in affecting governmental policies

(5) Politically left or right

(6) Attitudes toward student government's participation in politics

(7) Attitudes toward demonstration

(8) Attitudes toward student power

(9) Interest in student government

9. Need achievement

Achievement motivation in the Edward's Preferential Test

Educational and occupational aspiration

Realistic view of educational and occupational achievement

Valence of educational and occupational success

10. Achievement

School and College Ability Test (SCAT) --Verbal test only

Grade Point average

11. Political participation

(1) Active in student government

(2) Active in student organization

(3) Joining strike against Viet Nam war

(4) Joining Third World strike for ethnic study program

(5) Active in ethnic study program

(6) Active in raising student power

(7) Identify with protestors

(8) Missing classes to join strikes

(9) Following up-to-minute details of demonstration

12. Manifest anxiety

Nervous symptoms in the California Personality Inventory

Part III. Findings

I. General Correlation Analysis

A. Social Class and Achievement

As hypothesized (H_1) previously, the correlation between socioeconomic status and achievement is high both in the beginning of the freshman year (.62) and at the end of the academic year (.64).

(Insert Table 1)

The poor mentality. With regard to the lower class syndrome, the poor mentality, the correlation matrix supports the hypotheses that lower class people show significantly different attitudes and behavior from middle class respondents. In terms of parental socialization variables, the coefficients are high between SES and parental understanding of the child (.58), and SES and achievement expectation (.49). Unlike our expectation, the association between SES and parental independence training is small (.12).

Social class origin seems to predispose students to make peer group selection. Students from higher SES are more likely to have peers with high n achievement (.50) and high political consciousness (.41).

As for the attitudes and behaviors of the students, significant correlations are found between SES and such variables as self-concept (.56), political consciousness (.30), n achievement (.44), political participation (.36), and absence of manifest anxiety (.19).

Thus, in the beginning of the freshman year, lower-class students can be portrayed as politically apathetic, difident, low achievers--low achievement, low n achievement, low parental expectation toward achievement, low n achievement among peers--with parents who do not understand them.

Achievement syndrome. In addition to the fact that high achievers are from the higher SES, they are characterized with special attributes. The correlation coefficients are high between the student's achievement and other variables such as parental understanding of the child (.42), parental achievement expectation (.39), peer's n achievement (.43), peer's political consciousness (.25), student's self-concept (.36), his political consciousness (.15), and his n achievement (.32).

B. Racial groups and achievement

EOP students are by definition from the lower class. Lower class people are by no means homogenous and racial group tends to differentiate class-related variables. When racial group and educational program (EOP versus regular) are controlled, the magnitudes of the correlations between SES and achievement change. Among the Blacks the correlation is trivial; among the Asians the correlation is much smaller (.20) than the original one before racial group is controlled; and among the Whites the correlation is negative.

Within each educational program (regular and EOP) and racial groups, correlations between achievement and other variables are small.

Some of the outstanding correlations are as follows (time 1):

Black regular students:

Parental achievement expectation -- Student's self-concept (.26)

Peer's political consciousness -- Student's n achievement(.25)

Student's political consciousness-- His n achievement (.63)

Student's political participation--His manifest anxiety (.50)

Black EOP students:

Parental independence training--Student's self-concept(-.31)

Parental understanding--Student's n achievement (.30)

Parental understanding--Student's political participation (.33)

Peer's n achievement--Student's anxiety (.35)

Peer's political consciousness--Student's self-concept (.36)

Student's achievement--His anxiety (-.33)

Student's political participation--His anxiety (-.30)

Note that among the regular students political participation is highly correlated with manifest anxiety (.50), while among the EOP students the relation is negative (-.30).

Asian regular students:

Parental autonomy--Student's n achievement (.27)

Parental understanding--Parental achievement expectation (.31)

Student's political consciousness--Student's anxiety (.33)

Student's achievement--His political participation (.33)

Student's achievement--His anxiety (-.43)

Asian EOP students:

Peer's n achievement--Student's anxiety (.37)

Student's self-concept--his achievement (.32)

For the Black and Asian EOP students, n achievement of peers is correlated with student's anxiety (.35 and .37).

White regular students:

Political participation--Manifest anxiety (.69)

White EOP students:

Parental understanding--Student's self-concept (.37)

Student's political consciousness--His n achievement (.27)

Student's political consciousness--His anxiety (.33)

For both Black and White regular students, political participation and manifest anxiety are highly correlated (.59 and .65).

II. Mean Score Comparisons

Next the mean scores for twelve variables are compared among racial groups and educational programs.

A. Time 1 (Beginning of the semester)

Hypothesis 1: Within each racial group, EOP students are likely to show lower-class mentality than regular students.
(syndrome)

Parental socialization. In general the hypothesis (H_1) is supported that parents of regular students are significantly more likely than those of EOP students to give children autonomy, to show sympathetic understanding toward the child, and to have high achievement expectation. However, there are two exceptions. Among the Blacks, parents of regular students are significantly more likely than EOP parents to exercise control over the child. Among the Asians, parents of EOP students show higher level of achievement expectation to the child than parents of

regular students.

(Insert Table 2)

Peer socialization. In the beginning of the school year it is expected that students make friends with those from the similar background. Hence it was hypothesized that regular students of middle class origin are more likely to have peers with higher n achievement and political consciousness than EOP students who come from the lower social class. The data support the hypothesis as shown in Table 2.

Student's attitudes and behavior. Among Blacks and Whites the hypothesis (H_1) is supported that regular students are significantly more likely than EOP students to have higher self-concept, greater political consciousness and higher n achievement.

Among the Asians regular students are significantly more likely than EOP students to have higher self-concept, but with regards to the degrees of political consciousness and n achievement, there is no significant difference between regular and EOP students. Asian students, in general, are likely to have low political consciousness and high n achievement.

With regards to the student behavior, the hypothesis (H_1) is supported that regular students are significantly more likely than EOP students to have attained higher achievement, to be active in political activities, and not to show manifest anxiety. One exceptional case is that Asians, in general, whether regular or EOP, show a low level of political participation.

Thus it is evident that EOP students begin the university life with significantly different patterns of background, attitudes and behavior from those of regular students.

Hypothesis 2. Within regular or EOP students there are likely to be significant differences in parental and peer socialization and student attitudes and behaviors among racial groups.

Hypothesis 2-1. Asian parents are more likely than others to exert control over the child and to expect the child high achievement.

As hypothesized (H 2-1), Asian parents are significantly more likely to exert control over the child than Black or White parents. Racial difference is greater than class difference. With regards to the achievement expectation, Asian parents of EOP students, i.e., lower class, are more likely to have higher expectation than Black or White counterparts. However, racial differences among parents of regular students are small. Black parents in middle class show just as high an achievement expectation toward the child as Asian or White parents. Social class difference is greater than racial group distinction.

Among EOP students White parents are significantly more likely than others to show higher level of sympathetic understanding of the child. Among the regular students Black parents are significantly more likely than others to show lower level of understanding. In this variable of understanding,

class difference is greater than racial difference.

Hypothesis 2-2. Asian and White students are likely to have peers with high n achievement, and Black students are likely to associate with peers with high political consciousness.

The hypothesis is supported that within EOF or regular program Asian students are more likely than Blacks or Whites to have peers with high n achievement.

Racial difference within the EOF students is greater than the racial difference among regular students. That is, among the poor, which racial group one belongs to is important but among the middle class, racial distinction has small impact upon one's behavior. As a whole, racial difference is greater than social class difference.

The hypothesis (H2-2) is supported among the regular students that Blacks are more likely than Whites or Asians to associate with peers with high political consciousness, but among the EOF students the racial distinction is insignificant.

Hypothesis 2-3. White students are more likely than others to have high self-concept and to be free from manifest anxiety; Asian students are more likely than others to have high n achievement and to have attained a high achievement; and Blacks are more likely than others to have high political consciousness and to be active in political activities.

The hypothesis regarding self-concept is not supported. Racial difference among the EOF students is small. Among the regular students Asian students are significantly more likely

than Blacks or Whites to have lower self-concept. Social class difference in self-concept is greater than racial difference. With regard to manifest anxiety, there is no significant racial difference when social class (EOP versus regular) is controlled.

The hypothesis concerning political consciousness and participation is not supported either. Racial difference is not significant among the EOP students, while among the regular students Asians are significantly lower than the Blacks and the Whites. Disregarding social class Asians are low on political consciousness and participation, while among Blacks and Whites social class difference is greater than racial difference.

The hypothesis regarding achievement is only partially supported. Among the EOP students Asians are significantly more likely to have higher n achievement than Blacks or Whites, although there is not significant racial difference with regard to achievement itself. Among the regular students Asians are significantly more likely than others to have attained higher achievement but their n achievement is not significantly higher than others.

Hypothesis 3. White and Asian EOP students are more likely than Black EOP students to suffer from low self-concept and to exhibit manifest anxiety.

The hypothesis is not supported, since the differences are not statistically significant.

B. From Time 1 to Time 2

Hypothesis 4. From time 1 (the beginning of freshman year) to time 2 (the end of the first year) EOP students have raised their scores on the scales in this study and that the rise in scores for the EOP students is greater than those for regular students.

Parental socialization. There is no statistically significant increment in the level of parental independence training from time 1 to time 2. As hypothesized, among Asians and Whites increments are significantly greater for EOP than for regular students.

Regarding parental understanding of the child, there are significant increments between time 1 and time 2 among Black and Asian parents of EOP students. Also, as hypothesized, increments are greater among parents of EOP than among those of regular students for each racial group.

Generally increments in the level of achievement expectation in two time periods are not significant, except for the parents of Black EOP students, which is also significantly greater than the increment for the regular Black students.

This means that the agent of socialization, i.e., parents, is socialized by their children. Particularly, resocialization of lower-class parents by the experience of their child's college education seems to be important. The effect of college education seems to reach not only students themselves but their parents.

Peer socialization. The change of attitudes of the peers means either the attitudinal change of the same peers or the change of peers themselves. This study cannot tell which is the case. However, n achievement among the peers of White EOP students and political consciousness among the peers of the Black EOP students increased significantly between time 1 and time 2.

Student's attitudes and behavior. With regard to self-concept the hypothesis is supported that EOP students raised self-concept significantly between time 1 and time 2, and that the increments for EOP students is significantly greater than those for regular students. However, regarding manifest anxiety, behavior partially resulting from the attitudes such as self-concept, there is no significant difference between the two time periods.

With regard to the degrees of political consciousness and participation, White and Black EOP students raised significantly between time 1 and time 2 and these increments are significantly larger than those for White and Black regular students respectively. Asian students, both EOP and regular, remained at the low level in these two time periods.

Asian students, EOP or regular, have high n achievement at time 1 and time 2, hence no significant change in time. Black and White EOP students significantly raised their n achievement from time 1 to time 2, and these increments are significantly larger than those for Black and White regular students. With regards to achievement per se, there are increments in the

hypothesized direction but their magnitudes are mostly non-significant.

In spite of all these increments the original differences between EOP and regular students at time 1 still persist at time 2, although with much smaller magnitudes. EOF students have improved themselves in self-concept, n achievement and in other areas, but within only one year they have not yet reached the level of regular students.

III. Path Analyses

A. Correlates of school achievement

Path diagram. Variables selected for this study are placed at four stages in chronological order. The first stage consists of parental SES, which is expected to affect the second stage of parental socialization of the child (sympathetic understanding and achievement expectation) and the selection of the peers in terms of their n achievement. This is in line with hypothesis 1. The third stage consists of student's attitudes (self-concept, political consciousness and n achievement), which are expected to be related to parental and peer socialization. Finally, the fourth stage is the student's school achievement as the outcome of their attitudes and socialization.

1. Black Students (Time 1)

a. Correlation matrix

Zero-order correlations among eight variables are all

significant at the .05 level. Particularly large correlations are found between SES and parental achievement expectation; SES and peer's n achievement; SES and the student's self-concept; SES and the student's political consciousness; SES and the student's n achievement; parental achievement expectation and the student's self-concept; the student's political consciousness and his n achievement.

(Insert Table 3)

b. Path coefficients

Large coefficients are found in the paths directly connecting SES and other variables. The path coefficients from SES are .44 to parental understanding; .62 to parental achievement expectation; .59 to peer's n achievement; .52 to the student's self-concept; .35 to his political consciousness; .45 to his n achievement; and .32 to his achievement.

Path coefficients between socialization and the student's attitudes are .24 from parental understanding to the student's n achievement; .23 from parental achievement expectation to the student's self-concept; and .21 to his political consciousness; and .15 from peer's n achievement to the student's political consciousness.

Path coefficients between socialization and the student's achievement are not large. They are .16 from parental achievement expectation; -.15 from parental understanding; and .12 from peer's n achievement.

(Insert Table 4)

Path coefficients from the student's attitudes and his behavior (achievement) are very small.

In short, important paths among Black students are found to be those originating from SES, and those connecting socialization variables and the student's attitudes.

c. Multiple correlation, direct and indirect effects

The multiple correlation coefficient between achievement and all other variables is .460 with the residual effect of .883. It means that 22% of the variance in Black student's achievement is explained by the seven variables.

(Insert Table 5)

Among the seven variables the effect of SES upon the student's achievement is by far the greatest (.62), whether the effect is direct (.32) or indirect (.30). Effects of socialization variables upon achievement are rather small. Parental understanding has a negative effect (-.14) upon achievement; the effect of parental achievement expectation is .18; that of peer's n achievement is .13. The effects of the student's attitudes upon his achievement are trivial.

(Insert Figure 1)

2. Asian Students (Time 1)

a. Zero-order correlation

In contrast to the case of Black students, zero-order correlation coefficients among the Asian students are in general

small. Among Black students small correlations are significant, but among Asian students small correlations are not statistically significant. Large correlations are found between SES and parental understanding (.67); SES and the student's self-concept (.43); SES and the student's achievement (.75); parental understanding and the student's self-concept (.40); parental understanding and the student's achievement (.56); political conscicusness and achievement (.42).

(Insert Table 6)

b. Path coefficients

In comparison to Black students, path coefficients in the Asian sample are relatively small.

Like Blacks, the coefficients are large for the paths originating in SES of Asian student. They are .67 to parental understanding; .17 to peer's n achievement; .29 to the student's self-concept; -.10 to his political consciousness; .65 to his achievement. Other path coefficients worth noting are .19 from parental understanding to the student's self-concept; .10 from peer's n achievement tothe student's achievement; and .10 from the student's self-concept to his achievement.

(Insert Table 7)

Note the paths from SES to parental understanding (.67); then to the student's self-concept (.19); then to his achievement (.10). Other routes from SES to achievement are via self-concept; and via peer's n achievement.

c. Multiple correlation, direct and indirect effects

The multiple correlation coefficient between achievement and other vararіables is .772, explaining 59 per cent of the variation in achievement. The residual effect is .637.

(Insert Table 8)

The effect of SES upon achievement (.75) is by far the greatest of all other independent variables, particularly its direct effect (.65) is great. Effects of other variables selected as intervening SES and achievement do not account for the relationship between SES and achievement. The explanation for the high correlation between SES and achievement among Asians has to be sought elsewhere.

(Insert Figure 2)

3. White Students (Time 1)

a. Zero-order correlation

All the zero-order correlations among eight variables for the White students are significant. Particularly large correlations are found between SES and parental understanding (.57); SES and parental achievement expectation (.65); SES and peer's n achievement (.68); SES and the student's self-concept (.70); SES and his n achievement (.64); SES and his achievement (.64); parental understanding and the student's self-concept (.56); parental achievement expectation and peer's n achievement (.59); parental achievement expectation and the student's achievement (.59); peer's n achievement and the student self-concept (.62); peer's n achievement and the student's n

achievement (.63); his n achievement and achievement (.63).

(Insert Table 9)

b. Path coefficients

Paths originating in SES have large coefficients. They are .57 to parental understanding; .65 to parental achievement expectation; .68 to peer's n achievement; .37 to the student's self-concept; .21 to his political consciousness; .30 to his n achievement; and .13 to his achievement.

(Insert Table 10)

Path coefficients between socialization variables and the student's attitudes are large. They are .24 between parental understanding and the student's self-concept; .13 between parental understanding and the student's political consciousness; .14 between parental achievement expectation and the student's political consciousness; .25 between parental achievement expectation and n achievement; .25 between peer's n achievement and the student's self-concept; .13 between peer's n achievement and the student's political consciousness; and .32 between peer's n achievement and the student's n achievement. Between the attitudes and behavior of students, path coefficients of .22 is found between n achievement and achievement.

c. Multiple correlation, direct and indirect effects

The multiple correlation coefficient between achievement and other seven variables is .75, which means that 56 per cent of the variation in achievement is explained by these independent variables. The residual effect is .661.

The effect of SES upon achievement is by far the larger (.52) than the effects of other variables. However, note that the indirect effect (.39) of SES upon achievement via intervening variables is greater than its direct effect (.13), and that the effects of socialization variables upon achievement are not extremely small.

(Insert Table 11)

(Insert Figure 3)

4. Comparison

Among the Blacks SES is the important causal factor directly explaining parental socialization, the selection of peers, the student's n achievement and achievement. Other links are relatively weak.

Among the Asians causal links among the selected variables are generally weak except those connecting SES and parental understanding, SES and the student's self-concept, ans SES and his achievement.

Among the Whites SES is the important causal origin directly explaining variation in other variables. However, the indirect effect of SES is also large. Peer's n achievement is another causal origin accounting for the student's attitudes and behavior. In this group the causal structure for the student's achievement is more tightly linked than in Blacks or Asians.

In general (1) SES has great impacts upon other variables, (2) the links between socialization and student's attitudes are strong, and (3) causal links between achievement and other variables except SES are very weak.

B. Correlates of Political Activism

Path diagram. The path diagram for this analysis is basically the same as the one presented above. The first stage consists of SES. The second stage includes parental socialization (independence training and sympathetic understanding) and peer socialization (political consciousness of peers). The third stage consists of the student's attitudes (self-concept and political consciousness) and the fourth stage is the student's behavior (political participation).

1. Black Students (Time 1)

a. Zero-order correlation

All the correlations among the selected seven variables are statistically significant. The correlation between parental autonomy (independence training) and other variables are negative. Large correlations are found between SES and peers political consciousness (.65); SES and student's self-concept (.65); SES and his political consciousness (.54); peer's political consciousness and the student's self-concept (.56).

(Insert Table 12)

b. Path coefficients

Path coefficients originating in SES are large. They are -.34 to parental autonomy; .44 to parental understanding; .65 to peer's political consciousness; .45 to the student's self-concept; .37 to his political consciousness; and .29 to his political participation.

(Insert Table 13)

It was unexpected to find a negative coefficient (-.19) for the path from parental autonomy and the student's self-concept. Path coefficients from peer's political consciousness to the student's self-concept is .20; and to his political consciousness is .17. The student's political participation is linked to his self-concept with the coefficient of .12, and to parental understanding at .15.

c. Multiple correlation, direct and indirect effects

The multiple correlation coefficient is .501, which implies that 25 per cent of the variation in student's political participation is explained by these six variables. The residual effect is .501.

The effect of the SES upon political participation (.36) is larger than those of other variables.

(Insert Table 14)

(Insert Figure 4)

2. Asian Students (Time 1)

a. Zero-order correlations

Except for the correlation (.67) between SES and parental understanding, other correlations are small, or statistically insignificant or negative.

(Insert Table 15)

b. Path coefficients

Path coefficients from SES are large. They are .46 to parental autonomy; .67 to parental understanding; .18 to peer's political consciousness; .34 to the student's self-concept;

and .32 to his political participation.

Coefficients of the path originating in socialization variables are -.12 from parental autonomy to the student's self-concept; -.14 to his political consciousness; -.21 to his political participation; .19 from parental understanding to the student's self-concept; .11 to his political consciousness; .10 from peer's political consciousness to the student's self-concept; .11 to his political consciousness, and -.12 to his political participation.

(Insert Table 16)

c. Multiple correlation, direct and indirect effects

The multiple correlation coefficient is .325, which explains only nine per cent of the variation in political participation. The residual effect is .946.

The effect of SES upon political participation (.30) is larger than the effects of other variables.

(Insert Table 17)

(Insert Figure 5)

3. White Students (Time 1)

a. Zero-order correlations

All the correlations are significant. Larger ones are found between SES and parental understanding (.57); between SES and the student's self-concept (.70); between parental understanding and the student's self-concept (.56).

(Insert Table 18)

b. Path coefficients

Path coefficients are large from S.E.S. They are .50 to parental autonomy; .43 to parental understanding; .54 to peer's political consciousness; .45 to the student's self-concept; .29 to his political consciousness; and .42 to his political participation.

(Insert Table 19)

Paths betwen socialization variables and the student's attitudes are large. They are .14 between parental autonomy and the student's self-concept; .23 between parental understanding and the student's self-concept; .12 betwen parental understanding and the student's political consciousness, and .15 betwen peer's political consciousness and the student's political consciousness.

c. Multiple correlation, direct and indirect effects

The multiple correlation coefficient is .522, which explains 25 per cent of the variation in political participation. The residual effect is .853.

The effect of SES on political consciousness is large (.50), while the effects of other variables are very small.

(Insert Table 20)

(Insert Figure 6)

C. Correlates of Manifest Anxiety

Path diagram. The first stage consists of SES. The second state includes socialization variables such as parental autonomy, understanding, achievement expectation, peer's n achievement, and political consciousness. The third stage consists of the student's attitudes: self-concept, political consciousness, n achievement. The last stage is the dependent variable, manifest anxiety.

1. Black Students (Time 1)

a. Zero-order correlation

Correlations are in general large. Manifest anxiety is negatively correlated with other variables, and so is parental autonomy. Large correlations are found betwen SES and parental achievement expectation (.62); between SES and peer's n achievement (.59); betwen SES and peer's political consciousness (.65); betwen SES and the student's self-concept (.65); betwen SES and his n achievement (.61); and between political consciousness and n achievement (.60).

(Insert Table 21)

b. Path coefficients

Path coefficients are large from SES. They are -.34 to parental autonomy; .44 to understanding; .62 to achievement expectation; .59 to peer's n achievement; .65 to political consciousness; .40 to the student's self-concept; .28 to his political consciousness; .48 to his n achievement; and -.11 to his manifest anxiety.

(Insert Table 22)

Path coefficients betwen socialization variables and the student's attitudes are large. They are -.17 from parental autonomy to the student's self-concept; .23 from parental understanding to the student's n achievement; .23 from parental achievement expectation to the student's self-concept; -.19 to his political consciousness; .19 to his n achievement; -.12 from peer's n achievement to the student's self-concept; .19 from peer's political consciousness to the student's self-concept; .14 to his political consciousness. Links between the student's attitudes and behavior are weak.

c. Multiple correlation, direct and indirect effects

The multiple correlation coefficient is .305, which explains nine per cent of the variation in manifest anxiety. The residual effect is .952.

Total effect of any one variable upon the dependent variable is not large. The effect of SES upon anxiety is -.14 and that of peer's n achievement upon the student's anxiety is .16.

(Insert Table 23)

(Insert Figure 7)

2. Asian Students (Time 1)

a. Zero-order correlations

Large correlation is found between SES and parental understanding (.67). Most other correlations are small, or statistically insignificant or negative.

(Insert Table 24)

b. Path coefficients

Path coefficients from SES are large. They are .46 to parental autonomy; .67 to parental understanding; .17 to peer's n achievement; .18 to peer's political consciousness; .26 to the student's self-concept; and -.13 to his manifest anxiety.

(Insert Table 25)

Path coefficients between socialization variables are -.12 from parental autonomy to the student's self-concept; .26 to his political consciousness; .19 from parental understanding to the student's self-concept; .12 to his political consciousness; .11 from peer's political consciousness to the student's self-concept; and -.11 to his political consciousness.

The link between the student's political consciousness and his manifest anxiety is .26.

c. Multiple correlation, direct and indirect effects

The multiple correlation coefficient is .369, which explains 16 per cent of variation in manifest anxiety. The residual effect is .963.

The effect of SES upon anxiety is -.26, and the effect of parental understanding is -.19; and that of political consciousness is .26.

Effects of other variables are weak.

(Insert Table 26)

(Insert Figure 8)

3. White Students (Time 1)

a. Zero-order correlations

Correlation coefficients are large except between manifest anxiety and other variables. Among the larger ones are between SES and parental understanding (.57); between SES and parental achievement expectation (.65); between SES and peer's n achievement(.68); between SES and the student's self-concept (.70); between SES and n achievement (.64); between parental understanding and the student's self-concept (.56); between parental achievement expectation and peer's n achievement (.59); and between peer's n achievement and the student's n achievement (.63).

(Insert Table 27)

b. Path coefficients

Path coefficients are large from SES. They are .50 to parental autonomy; .57 to parental understanding; .65 to parental achievement expectation; .68 to peer's n achievement; .54 to peer's political consciousness; .30 to the student's self-concept; .15 to his political consciousness; and .28 to his n achievement.

(Insert Table 28)

Path coefficients between socialization variables and the student's attitudes are .13 from parental autonomy to the student's self-concept; .23 from parental understanding to the student's self-concept; .12 to his political consciousness; .16 from parental achievement expectation to the student's

n achievement; .13 to his political consciousness; .11 from peer's n achievement to the student's political consciousness; .31 to his n achievement; .13 from peer's political consciousness to the student's political consciousness.

Coefficients of the paths leading to anxiety are -.24 from self-concept; -.14 from parental achievement expectation; .30 from peer's n achievement; and -.10 from his n achievement.

Note high coefficient between peer's n achievement and the student's manifest anxiety (.30). Paths through self-concept and through n achievement to anxiety are strong. Anxiety is likely to be caused by low self-esteem and low n achievement.

c. Multiple correlation, direct and indirect effects

The multiple correlation coefficient is .348, which explains 12 per cent of the variation in manifest anxiety. The residual effect is .938.

Total effect of SES upon anxiety is -.35 out of which -.33 is indirect effect. Effect of peer's n achievement upon anxiety is .21 and that of self-concept is -.24.

(Insert Table 29)

(Insert Figure 9)

Table 1

Correlation Matrix
(Time 1)

	1	2	3	4	5	6	7	8	9	10	11	12
S.E.S	1	.12	.58	.49	.50	.41	.56	.30	.44	.62	.36	-.19
Autonomy	2		.07	-.17	-.14	.16	.14	.12	-.12	.05	.14	.04
Understanding	3			.32	.33	.27	.40	.20	.31	.42	.23	-.18
Achievement expectation	4				.55	.20	.29	.19	.48	.39	.20	-.11
Peer--n achievement	5					.15	.25	.12	.46	.43	.16	-.03
Peer--political consciousness	6						.49	.38	.14	.25	.35	-.11
Student: Self-concept	7							.39	.24	.36	.36	-.18
Student: Political consciousness	8								.27	.15	.31	-.03
Student: n achievement	9									.32	.21	-.10
Student: Achievement	10										.27	-.27
Student: Political participation	11											.13
Student: Manifest anxiety	12											

Table 2a

Mean scores at time 1

	Black		Asian		White	
N:	EOP 100	Regular 100	EOP 80	Regular 100	EOP 80	Regular 100
SES	1.72	4.96	2.14	5.63	2.16	5.82
Autonomy	6.76	5.39	2.96	4.65	4.58	6.38
Understanding	3.51	5.75	3.68	6.66	4.25	6.80
Ach. expectation	2.96	5.71	6.51	6.02	3.53	6.47
Peer--n ach.	2.77	5.40	5.92	6.57	3.08	6.06
Peer--polit. cons.	3.15	5.96	2.84	3.31	3.29	5.44
Self-concept	3.06	6.09	2.63	4.18	2.90	6.28
Political cons.	3.25	5.55	3.06	2.89	2.73	5.02
N achievement	2.60	5.24	5.63	5.64	2.58	5.38
Achievement	2.70	4.66	2.87	6.19	2.59	5.59
Political action	2.83	4.77	2.51	2.72	2.44	4.48
Anxiety	4.67	3.68	4.61	3.80	4.68	3.95

$p < .01$ (if difference in scores $>$ .65 by t-test)

$p < .05$ (if difference in scores $>$ .50 by t-test)

Table 2b

Increments in mean scores from
time 1 time 2

	Black		Asian		White	
N:	EOP 100	Regular 100	EOP 80	Regular 100	EOP 80	Regular 100
SES	.11	.13	.10	.08	.08	.05
Autonomy	.02	.07	.43	.14	.15	.0
Understanding	.58	.11	.61	.03	.30	.04
Ach. expectation	1.24	.05	.04	.07	.11	.0
Peer--n ach.	.10	.06	.0	.0	.98	.0
Peer--polit. cons.	1.84	.17	.0	.05	.46	.12
Self-concept	1.74	.16	.78	.27	.91	.10
Political cons.	1.66	.13	.08	.12	.43	.03
N achievement	1.58	.14	.11	.15	.49	.16
Achievement	.23	.18	.43	.12	.23	.15
Political action	1.07	.20	.11	.15	.96	.20
Anxiety	.11	.05	.23	.04	.0	.02

Table 3

Correlation Matrix of
Achievement related variables
(Black students — Time 1)

	1	2	3	4	5	6	7	8		
SES	1	.44	.62	.59	.65	.54	.61	.45		
Understanding	2		.44	.38	.33	.33	.49	.21		
achievement expectation	3			.50	.57	.48	.49	.38		
Peer — n achievement	4				.36	.39	.36	.29		
Self-concept	5					.46	.47	.35		
Political consciousness	6						.60	.27		
n achievement	7							.27		
achievement	8									

Table 4
Path coefficients of achievement related variables
(Black students – Time 1)

Path into X_2	P_{21}						
	.44						
Path into X_3	P_{31}						
	.62						
Path into X_4	P_{41}						
	.59						
Path into X_5	P_{51}	P_{52}	P_{53}	P_{54}			
	.52	.01	.23	.10			
Path into X_6	P_{61}	P_{62}	P_{63}	P_{64}			
	.35	.07	.21	.15			
Path into X_7	P_{71}	P_{72}	P_{73}	P_{74}			
	.45	.24	.07	−.07			
Path into X_8	P_{81}	P_{82}	P_{83}	P_{84}	P_{85}	P_{86}	P_{87}
	.32	−.15	.16	.12	.06	.01	.03

Multiple Correlation

$R_{2.1}$	$R_{3.1}$	$R_{4.1}$	$R_{5.1234}$	$R_{6.1234}$	$R_{7.1234}$	$R_{8.1234567}$
.444	.622	.593	.687	.575	.662	.469

Residual Effects

W_2	W_3	W_4	W_5	W_6	W_7	W_8
.896	.783	.805	.727	.818	.750	.883

Table 5

Effects upon achievement
(Black students)

Variables	Direct effect	Indirect effect	Total effect
1 → 8	.32	.30	.62
2 → 8	−.15	.01	−.14
3 → 8	.16	.02	.18
4 → 8	.12	.01	.13
5 → 8	.06	0	.06
6 → 8	.01	0	.01
7 → 8	.03	0	.03

Table 6
Correlation matrix of
achievement related variables
(Asian students — Time 1)

	1	2	3	4	5	6	7	8
SES	1	.67	−.05	.17	.43	−.05	−.02	.75
Understanding	2		.03	.16	.40	−.01	.02	.56
Achievement expectation	3			.15	−.04	−.04	.07	00
Peer — n achievement	4				.13	−.06	−.01	.13
Self-concept	5					−.00	.01	.42
Political consciousness	6						.05	−.01
n achievement	7							−.04
Achievement	8							

Table 7
Path coefficients of achievement related variables
(Asian students — Time 1)

Path into X_2	P_{21}						
	.67						
Path into X_3	P_{31}						
	.05						
Path into X_4	P_{41}						
	.17						
Path into X_5	P_{51}	P_{52}	P_{53}	P_{54}			
	.29	.19	−.04	.06			
Path into X_6	P_{61}	P_{62}	P_{63}	P_{64}			
	−.10	.09	−.04	−.06			
Path into X_7	P_{71}	P_{72}	P_{73}	P_{74}			
	.03	−.00	.08	−.03			
Path into X_8	P_{81}	P_{82}	P_{83}	P_{84}	P_{85}	P_{86}	P_{87}
	.65	.06	.02	.10	.10	−.04	−.05

Multiple Correlation

$R_{2\cdot1}$	$R_{3\cdot1}$	$R_{4\cdot1}$	$R_{5.1234}$	$R_{6.1234}$	$R_{7.1234}$	$R_{8.1234567}$
.674	.046	.165	.460	.103	.080	.772

Residual Effects

W_2	W_3	W_4	W_5	W_6	W_7	W_8
.739	.999	.986	.888	.995	.997	.637

Table 8

Effects upon achievement
(Asian students)

Variables	Direct effect	Indirect effect	Total effect
1 → 8	.65	.10	.75
2 → 8	.06	.02	.08
3 → 8	.02	−.00	.02
4 → 8	.10	−.01	.09
5 → 8	.10	0	.10
6 → 8	−.04	0	−.04
7 → 8	−.05	0	−.05

Table 9
Correlation matrix of achievement related variables
(White students — Time 1)

	1	2	3	4	5	6	7	8
SES	1	.57	.65	.68	.70	.46	.64	.64
Understanding	2		.39	.41	.56	.35	.41	.46
Achievement expectation	3			.59	.51	.40	.55	.59
Peer — n achievement	4				.62	.40	.63	.65
Self — concept	5					.39	.52	.51
Political consciousness	6						.50	.41
n achievement	7							.63
Achievement	8							

(1)

Table 10
Path coefficients of achievement related variables
(White students — Time)

Path into X_2	P_{21}						
	.57						
Path into X_3	P_{31}						
	.65						
Path into X_4	P_{41}						
	.68						
Path into X_5	P_{51}	P_{52}	P_{53}	P_{54}			
	.37	.24	.03	.25			
Path into X_6	P_{61}	P_{62}	P_{63}	P_{64}			
	.21	.13	.14	.13			
Path into X_7	P_{71}	P_{72}	P_{73}	P_{74}			
	.30	.05	.15	.32			
Path into X_8	P_{81}	P_{82}	P_{83}	P_{84}	P_{85}	P_{86}	P_{87}
	.13	.17	.18	.19	−.06	.03	.22

Multiple Correlation

$R_{2\cdot1}$	$R_{3\cdot1}$	$R_{4\cdot1}$	$R_{5.1234}$	$R_{6.1234}$	$R_{7.1234}$	$R_{8.1234567}$
.567	.646	.681	.754	.496	.704	750

Residual Effects

W_2	W_3	W_4	W_5	W_6	W_7	W_8
.824	.763	.732	.657	.868	.710	.661

Table 11

Effects upon achievement
(White students)

Variables	Direct effect	Indirect effect	Total effect
1 → 8	.13	.39	.52
2 → 8	.17	.00	.17
3 → 8	.18	.04	.22
4 → 8	.19	.06	.25
5 → 8	−.06	0	−.06
6 → 8	.03	0	.03
7 → 8	.22	0	.22

Table 12
Correlation matrix of
political activism variables
(Black students — Time 1)

	1	2	3	4	5	6	7
SES 1		-.34	.44	.65	.65	.54	.46
Autonomy 2			-.28	-.30	-.41	-.25	-.20
Understanding 3				.37	.33	.33	.34
Peer — political consciousness 4					.56	.46	.33
Self-concept 5						.46	.39
Political consciousness 6							.32
Political participation 7							

Table 13
Path coefficients of political activism variables
(Black students — Time 1)

Path into X_2	P_{21}					
	-.34					
Path into X_3	P_{31}					
	.44					
Path into X_4	P_{41}					
	.65					
Path into X_5	P_{51}	P_{52}	P_{53}	P_{54}		
	.45	-.19	.01	.20		
Path into X_6	P_{61}	P_{62}	P_{63}	P_{64}		
	.37	-.05	.09	.17		
Path into X_7	P_{71}	P_{72}	P_{73}	P_{74}	P_{75}	P_{76}
	.29	.01	.15	-.01	.12	.07

Multiple Correlation

$R_{2.1}$	$R_{3.1}$	$R_{4.1}$	$R_{5.1234}$	$R_{6.1234}$	$R_{7.1234\text{-}56}$
.342	.443	.652	.697	.565	.501

Residual Effects

W_2	W_3	W_4	W_5	W_6	W_7
.940	.897	.758	.717	.825	.865

Table 14

Effects upon political activism
(Black students)

Variables	Direct effect	Indirect effect	Total effect
1 → 7	.29	.17	.36
2 → 7	.01	−.03	−02
3 → 7	.15	.01	.16
4 → 7	−01	.04	.03
5 → 7	.12	0	.12
6 → 7	.07	0	.07

Table 15
Correlation matrix of political activism variables
(Asian students – Time 1)

	1	2	3	4	5	6	7
SES	1	.46	.67	.18	.43	−.05	.21
Autonomy	2		.38	.11	.12	−.13	−.01
Understanding	3			.22	.40	.01	.13
Peer – political consciousness	4				.19	−.10	−.08
Self – concept	5					−.00	.04
Political consciousness	6						−.12
Political participation	7						

Table 16
Path coefficients of political activism variables
(Asian students – Time 1)

Path into X_2	P_{21}					
	.46					
Path into X_3	P_{31}					
	.67					
Path into X_4	P_{41}					
	.18					
Path into X_5	P_{51}	P_{52}	P_{53}	P_{54}		
	-.34	-.12	.19	.10		
Path into X_6	P_{61}	P_{62}	P_{63}	P_{64}		
	-.04	-.14	.11	.11		
Path into X_7	P_{71}	P_{72}	P_{73}	P_{74}	P_{75}	P_{76}
	.32	-.21	.05	-.12	-.07	-.14

Multiple Correlation

$R_{2.1}$	$R_{3.1}$	$R_{4.1}$	$R_{5.1234}$	$R_{6.1234}$	$R_{7.1234=6}$
.460	.674	.176	.477	.178	.325

Residual Effects

W_2	W_3	W_4	W_5	W_6	W_7
.888	.739	.984	.879	.984	.946

Table 17

Effects upon political activism
(Asian students)

Variables	Direct effect	Indirect effect	Total effect
1 → 7	.32	—.02	.30
2 → 7	—.21	.01	—.20
3 → 7	.05	—.03	.02
4 → 7	—.12	—.02	—.14
5 → 7	—.07	0	—.07
6 → 7	—.14	0	—.14

Table 18
Correlation matrix of
political activism variables
(White students – Time 1)

	1	2	3	4	5	6	7
SES	1	.50	.57	.54	.70	.46	.51
Autonomy	2		.33	.33	.47	.27	.32
Understanding	3			.35	.56	.35	.30
Peer–political consciousness	4				.45	.36	.35
Self–concept	5					.39	.34
Political consciousness	6						.28
Political participation	7						

Table 19
Path coefficients of political activism variables
(White students — Time 1)

Path into X_2	P_{21}					
	.50					
Path into X_3	P_{31}					
	.43					
Path into X_4	P_{41}					
	.54					
Path into X_5	P_{51}	P_{52}	P_{53}	P_{54}		
	.45	.14	.23	.08		
Path into X_6	P_{61}	P_{62}	P_{63}	P_{64}		
	.29	.04	.12	.15		
Path into X_7	P_{71}	P_{72}	P_{73}	P_{74}	P_{75}	P_{76}
	.42	.09	.01	.10	−.07	.05

Multiple Correlation

$R_{2.1}$	$R_{3.1}$	$R_{4.1}$	$R_{5.1234}$	$R_{6.1234}$	$R_{7.1234\text{-}56}$
.502	.567	.537	.742	.489	.522

Residual Effects

W_2	W_3	W_4	W_5	W_6	W_7
.86	.824	.844	.670	.872	.853

Table 20

Effects upon political activism
(White students)

Variables	Direct effect	Indirect effect	Total effect
1 → 7	.42	.08	.50
2 → 7	.09	—.01	.08
3 → 7	.01	—.01	.00
4 → 7	.10	—.00	.10
5 → 7	—.07	0	—.07
6 → 7	.05	0	.05

Table 21
Correlation matrix of
manifest anxiety variables
(Black students — Time 1)

	1	2	3	4	5	6	7	8	9	10
SES	1	-.34	.44	.62	.59	.65	.65	.54	.61	-.21
Autonomy	2		-.28	-.35	-.25	-.30	-.41	-.25	-.25	.19
Understanding	3			.44	.38	.37	.33	.33	.49	-.17
achievement expectation	4				.50	.50	.57	.48	.49	-.18
Peer — n achievement	5					.48	.36	.39	.36	-.05
Peer — political consciousness	6						.56	.46	.39	-.21
Self-concept	7							.46	.47	-.21
Political consciousness	8								.60	-.10
n achievement	9									-.17
Manifest anxiety	10									

Table 22
Path coefficients of
manifest anxiety variables
(Black students — Time 1)

Path into X_2	P_{21}								
	−.34								
Path into X_3	P_{31}								
	.44								
Path into X_4	P_{41}								
	.62								
Path into X_5	P_{51}								
	.59								
Path into X_6	P_{61}								
	.65								
Path into X_7	P_{71}	P_{72}	P_{73}	P_{74}	P_{75}	P_{76}			
	.40	−.17	−.02	.23	−.12	.19			
Path into X_8	P_{81}	P_{82}	P_{83}	P_{84}	P_{85}	P_{86}			
	.28	−.03	.06	.19	04	.14			
Path into X_9	P_{91}	P_{92}	P_{93}	P_{94}	P_{95}	P_{96}			
	.48	.01	.26	.13	−.06	−.05			
Path into X_{10}	$P_{10.1}$	$P_{10.2}$	$P_{10.3}$	$P_{10.4}$	$P_{10.5}$	$P_{10.6}$	$P_{10.7}$	$P_{10.8}$	$P_{10.9}$
	−.11	−.11	−.07	−.04	.15	−.13	−.05	.09	.05

Multiple Correlation

$R_{2.1}$	$R_{3.1}$	$R_{4.1}$	$R_{5.1}$	$R_{6.1}$	$R_{7.12-6}$	$R_{8.12-6}$	$R_{9.12-6}$	$R_{10.12-9}$
.341	.443	.622	.592	.652	.720	.584	.663	.305

Residual Effects

W_2	W_3	W_4	W_5	W_6	W_7	W_8	W_9	W_{10}
.940	.897	.783	.806	.758	.694	.812	.749	.952

Table 23

Effects upon anxiety
(Black students)

Variables	Direct effect	Indirect effect	Total effect
1 → 10	−.11	−.03	−.14
2 → 10	.11	.01	.12
3 → 10	−.07	.02	−.05
4 → 10	−.04	.01	−.03
5 → 10	.15	.01	.16
6 → 10	−.13	.00	−.13
7 → 10	−.05	0	−.05
8 → 10	.09	0	.09
9 → 10	.05	0	.05

Table 24
Correlation matrix of
manifest anxiety variables
(Asian students – Time 1)

	1	2	3	4	5	6	7	8	9	10
SES	1	.46	.67	−.05	.17	.18	.43	−.01	.02	−.24
Autonomy	2		.38	.09	.16	.11	.12	−.13	.08	−.13
Understanding	3			.03	.16	.22	.40	.01	.02	−.23
Achievement expectation	4				.15	.05	−.04	−.04	.08	.05
Peer – n achievement	5					−.01	.13	−.06	−.01	−.02
Peer – political consciousness	6						.19	−.10	.07	.00
Self-concept	7							−.00	.01	−.13
Political consciousness	8								.05	.25
n achievement	9									.03
Manifest anxiety	10									

(3)

Table 25
Path coefficients of manifest anxiety variables
(Asian students — Time 1)

Path into X_2	P_{21}								
	.46								
Path into X_3	P_{31}								
	.67								
Path into X_4	P_{41}								
	−.05								
Path into X_5	P_{51}								
	.17								
Path into X_6	P_{61}								
	.18								
Path into X_7	P_{71}	P_{72}	P_{73}	P_{74}	P_{75}	P_{76}			
	.26	−.12	.19	−.03	.07	.11			
Path into X_8	P_{81}	P_{82}	P_{83}	P_{84}	P_{85}	P_{86}			
	−.05	−.13	.12	−.02	−.05	−.11			
Path into X_9	P_{91}	P_{92}	P_{93}	P_{94}	P_{95}	P_{96}			
	−.01	.08	−.02	.07	−.03	.06			
Path into X_{10}	$P_{10.1}$	$P_{10.2}$	$P_{10.3}$	$P_{10.4}$	$P_{10.5}$	$P_{10.6}$	$P_{10.7}$	$P_{10.8}$	$P_{10.9}$
	−.13	−.00	−.16	.04	.04	.09	−.03	.26	.01

Multiple Correlation

$R_{2.1}$	$R_{3.1}$	$R_{4.1}$	$R_{5.1}$	$R_{6.1}$	$R_{7.12\cdots6}$	$R_{8.12\cdots6}$	$R_{9.12\cdots6}$	$R_{10\,12\cdots9}$
.460	.674	.046	.165	.176	.482	.187	.124	.369

Residual Effects

W_2	W_3	W_4	W_5	W_6	W_7	W_8	W_9	W_{10}
.888	.739	.999	.986	984	.876	.982	.992	.963

Table 26

Effects upon anxiety
(Asian students)

Variables	Direct effect	Indirect effect	Total effect
1 → 10	−.13	−.13	−.26
2 → 10	−.00	−.03	−.03
3 → 10	−.16	−.03	−.19
4 → 10	.04	−.00	.04
5 → 10	.04	−.02	.03
6 → 10	.09	−.03	.06
7 → 10	−.03	0	−.03
8 → 10	.26	0	.26
9 → 10	.01	0	.01

Table 27

Correlation matrix of manifest anxiety variables (White students – Time 1)

	1	2	3	4	5	6	7	8	9	10
SES	1	.50	.57	.65	.68	.54	.70	.46	.64	−.16
Autonomy	2		.33	.36	.40	.33	.47	.27	.39	.02
Understanding	3			.39	.41	.35	.56	.35	.41	−.19
Achievement expectation	4				.59	.43	.51	.40	.55	−.17
Peer — n achievement	5					.44	.62	.40	.63	−.02
Peer — political consciousness	6						.45	.36	.38	−.13
Self-concept	7							.39	.52	−.21
Political consciousness	8								.50	−.14
n achievement	9									−.14
Manifest anxiety	10									

(3)

Table 28
Path coefficients of
manifest anxiety variables
(White students — Time 1)

Path into X_2	P_{21}								
	.50								
Path into X_3	P_{31}								
	.57								
Path into X_4	P_{41}								
	.65								
Path into X_5	P_{51}								
	.68								
Path into X_6	P_{61}								
	.54								
Path into X_7	P_{71}	P_{72}	P_{73}	P_{74}	P_{75}	P_{76}			
	.30	.13	.23	.02	.24	.05			
Path into X_8	P_{81}	P_{82}	P_{83}	P_{84}	P_{85}	P_{86}			
	.15	.03	.12	.13	.11	.13			
Path into X_9	P_{91}	P_{92}	P_{93}	P_{94}	P_{95}	P_{96}			
	.28	.06	.05	.16	.31	.00			
Path into X_{10}	$P_{10.1}$	$P_{10.2}$	$P_{10.3}$	$P_{10.4}$	$P_{10.5}$	$P_{10.6}$	$P_{10.7}$	$P_{10.8}$	$P_{10.9}$
	.03	.18	.08	.14	.30	.04	.24	.05	.10

Multiple Correlation

$R_{2.1}$	$R_{3.1}$	$R_{4.1}$	$R_{5.1}$	$R_{6.1}$	$R_{7.12\cdots6}$	$R_{8.12\cdots6}$	$R_{9.12\cdots6}$	$R_{10.12\cdots9}$
.502	.567	.646	.688	.537	.762	.508	.706	.348

Residual Effects

W_2	W_3	W_4	W_5	W_6	W_7	W_8	W_9	W_{10}
.865	.824	.764	.726	.844	.648	.861	.708	.938

Table 29

Effects upon anxiety
(White students)

Variables	Direct effect	Indirect effect	Total effect
1 → 10	−.03	−.32	−.35
2 → 10	.18	−.04	.14
3 → 10	−.08	−.07	−.15
4 → 10	−.14	−.03	−.17
5 → 10	.30	−.09	.21
6 → 10	−.04	−.02	−.06
7 → 10	−.24	0	−.24
8 → 10	−.05	0	−.05
9 → 10	−.10	0	−.10

Figure 1
Path diagram leading to achievement
(Black students – Time 1)

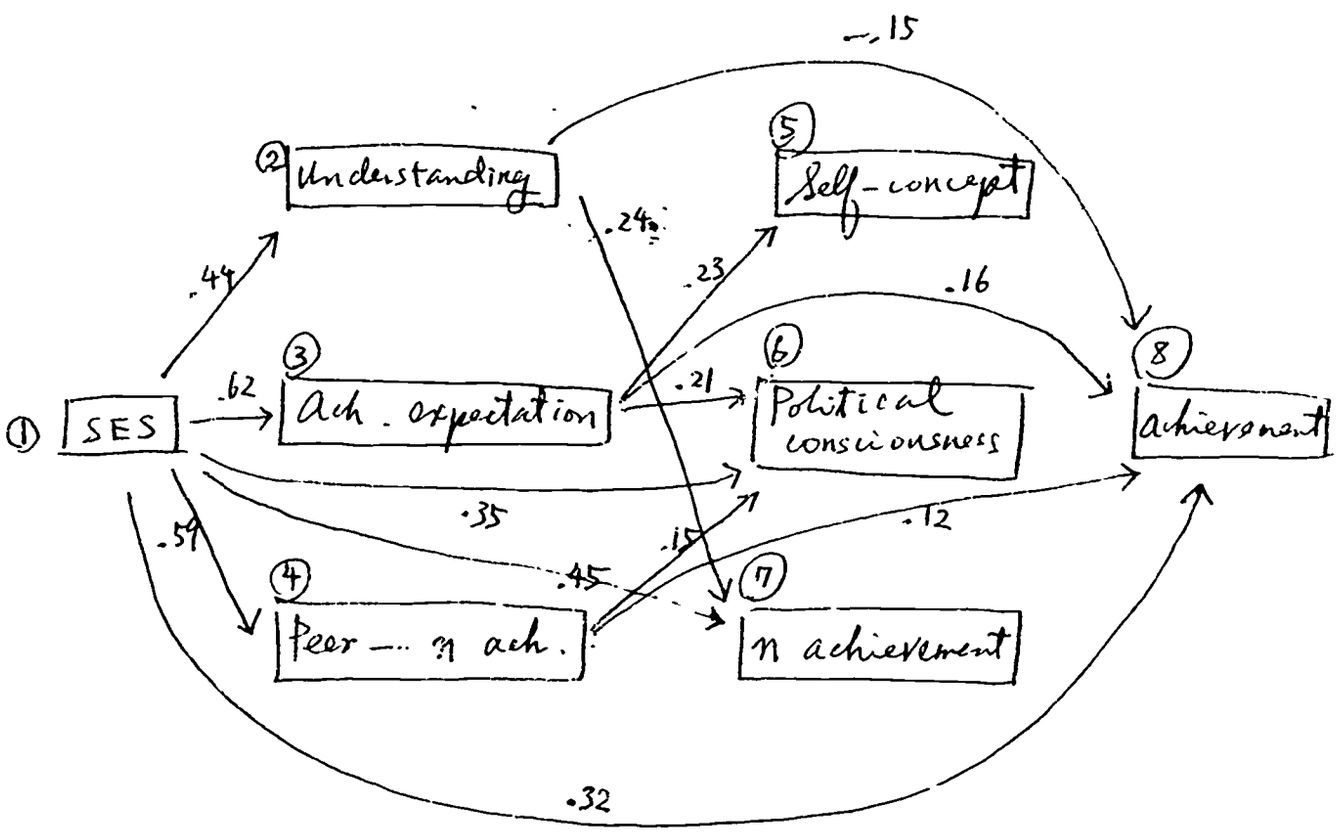


Figure 2
Path diagram leading to achievement
(Asian students – Time 1)

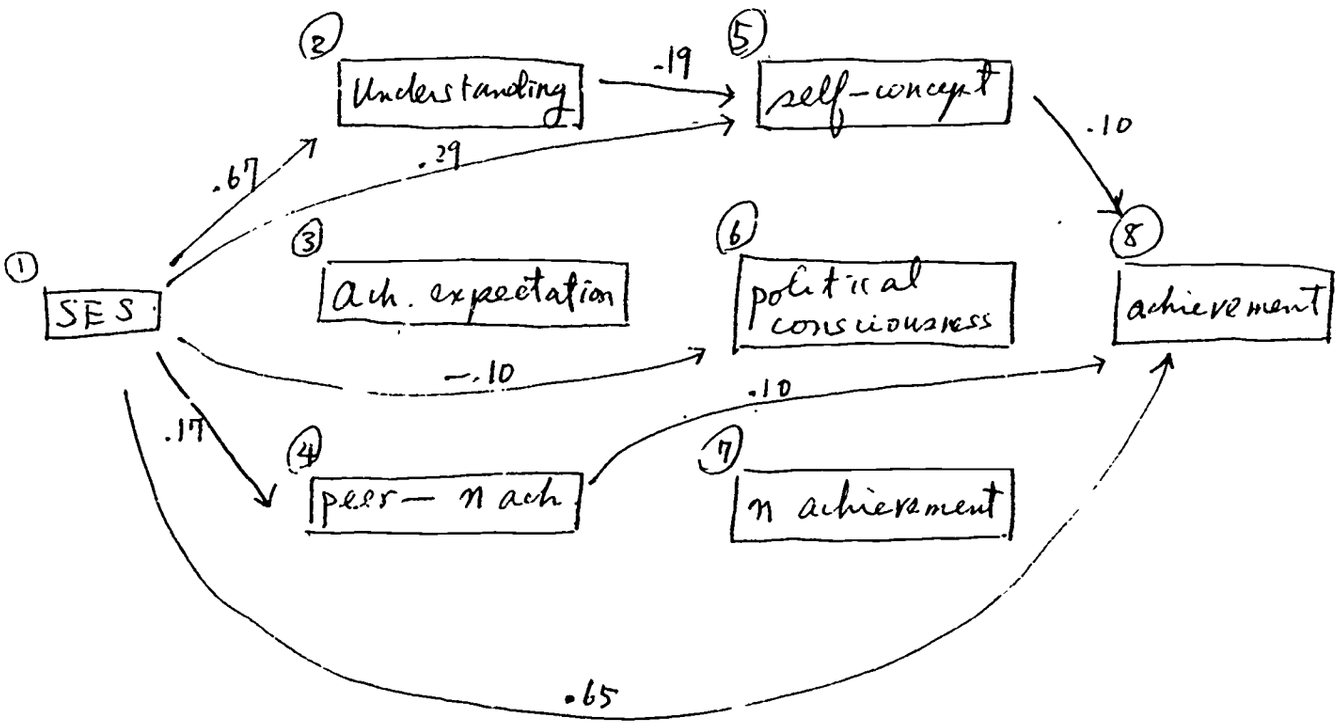


Figure 3
Path diagram leading to achievement
(white students — Time 1)

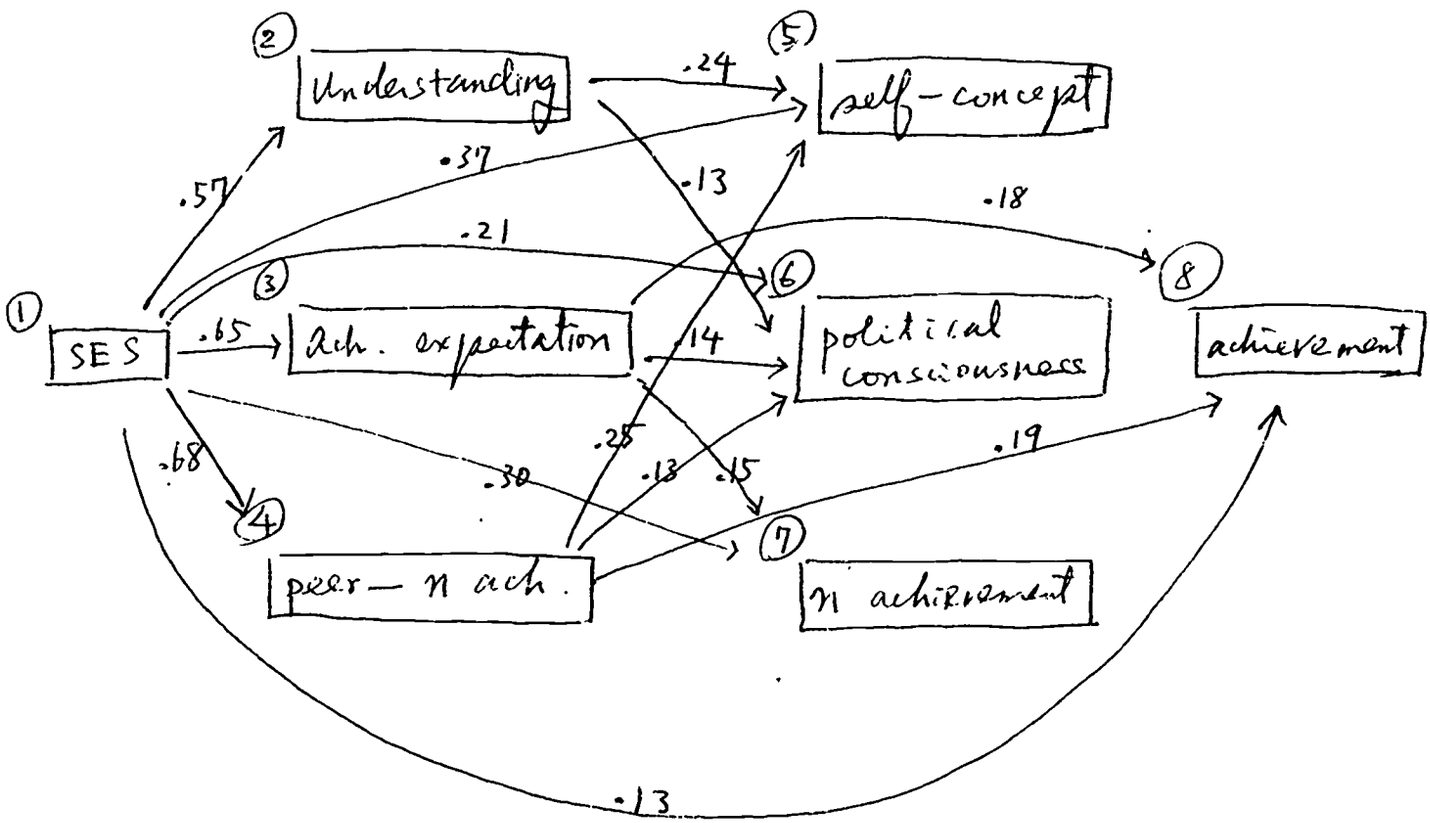


Figure 4

Path diagram leading to political activism

(Black students — Time 1)

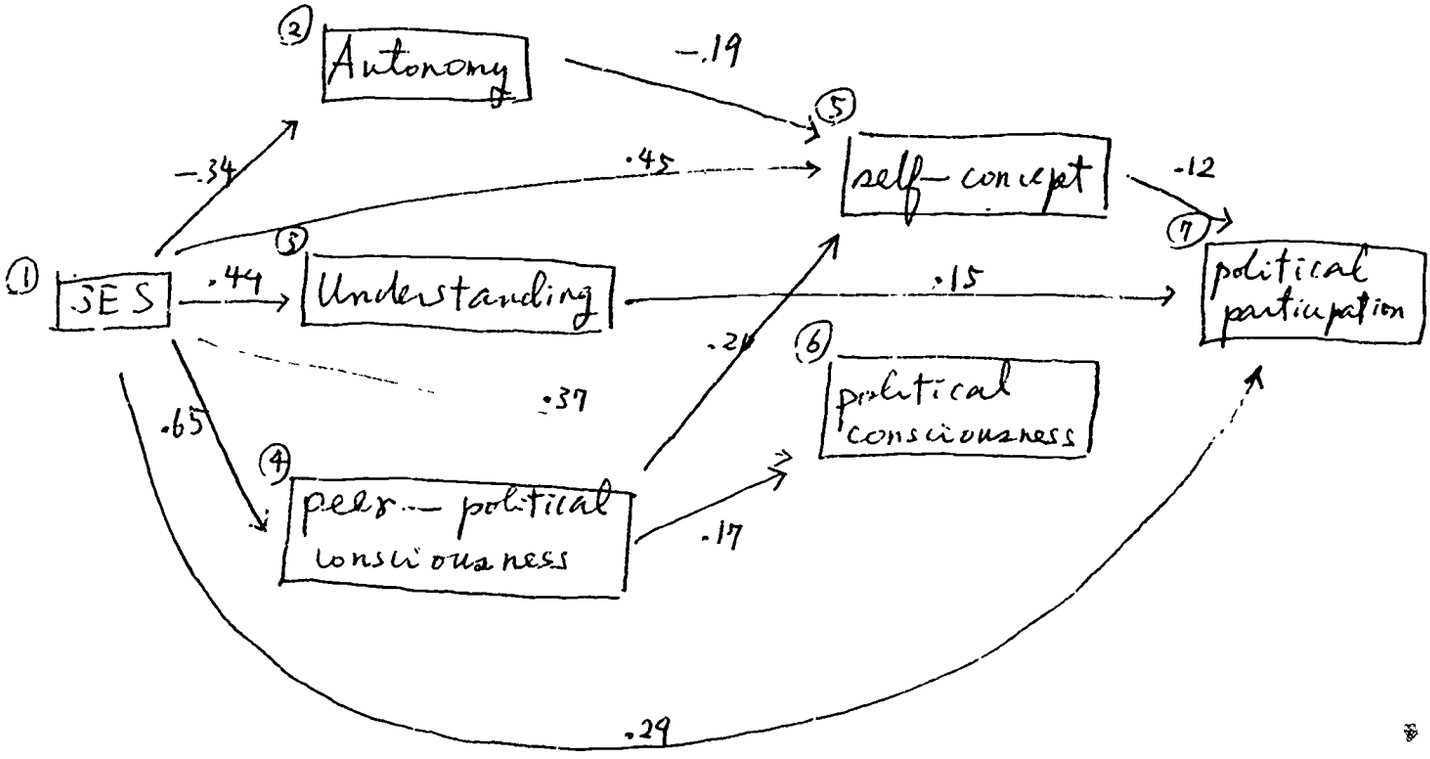


Figure 5
Path diagram leading to political activism
(Asian students — Time 1)

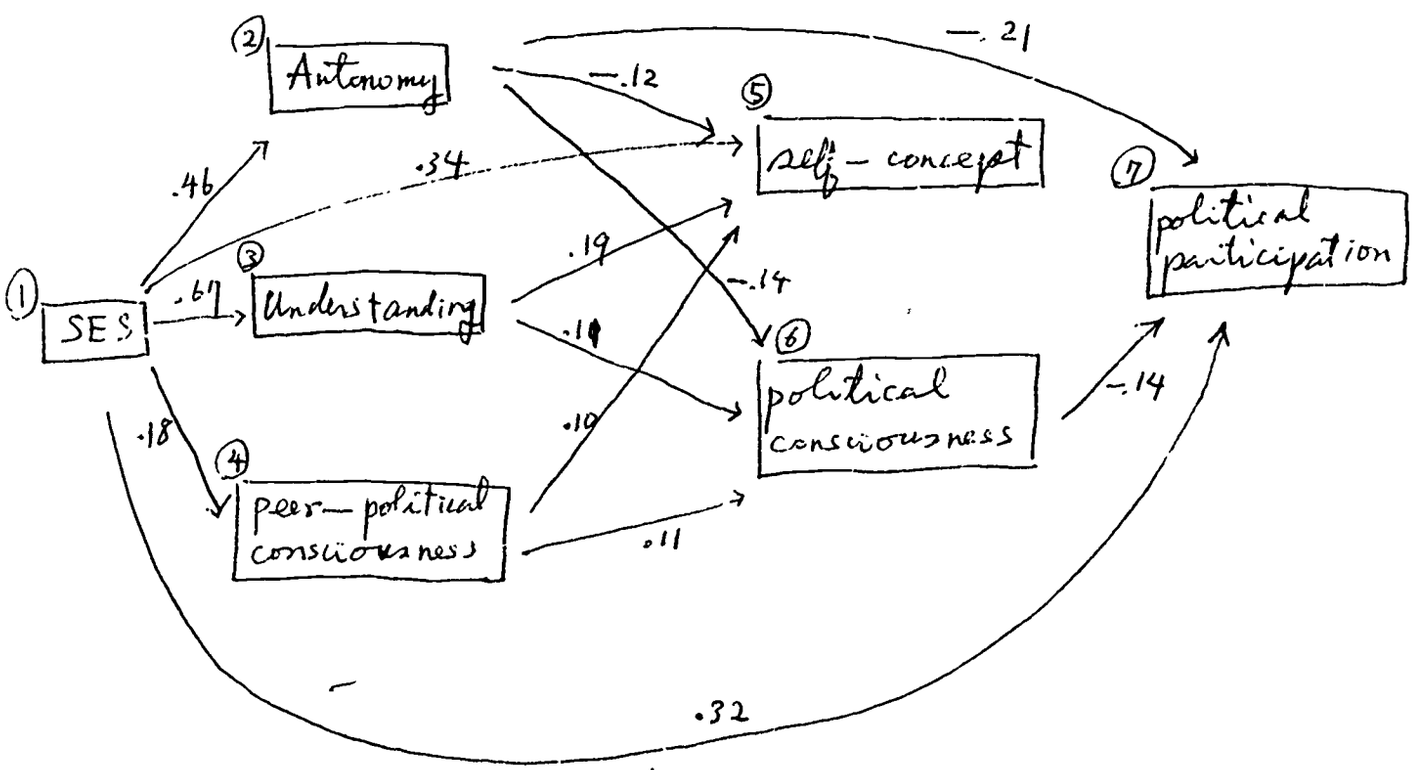


Figure 6
Path diagram leading to political activism
(White students — Time 1)

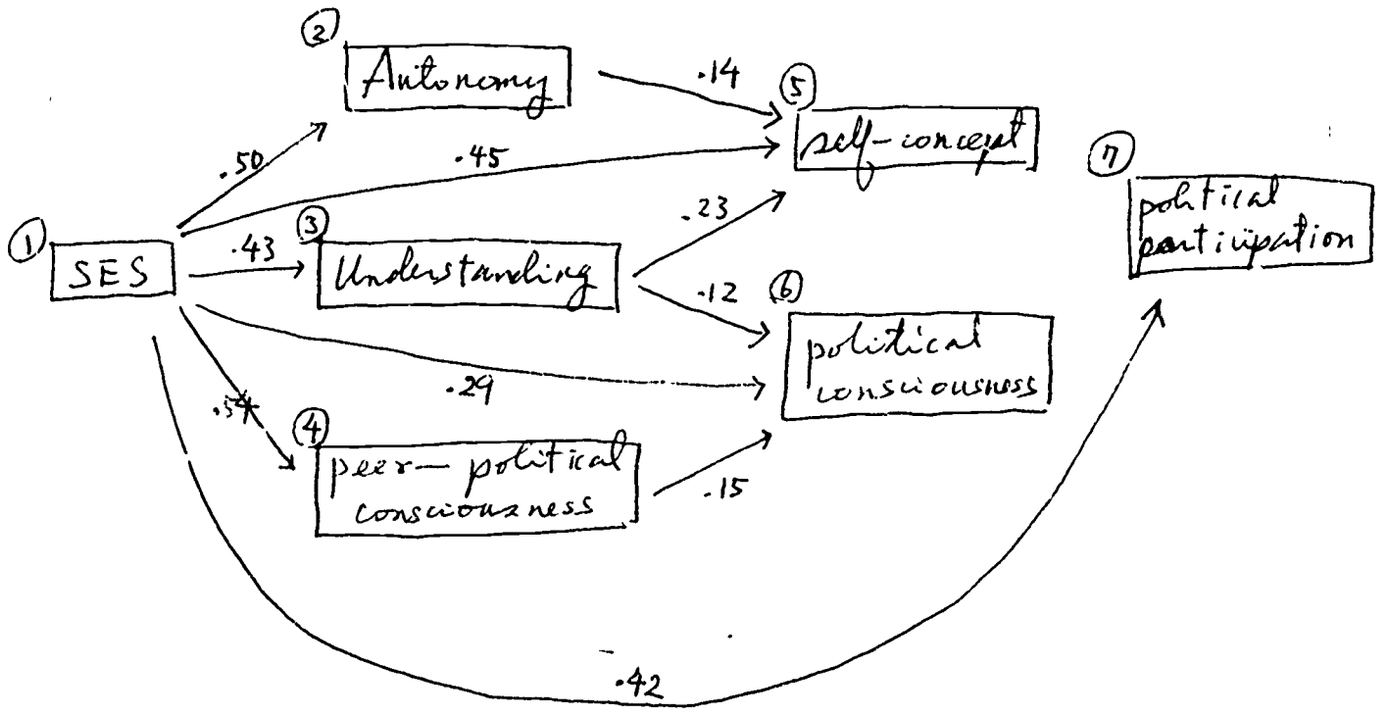


Figure 7
Path diagram leading to manifest anxiety
(Black students — Time 1)

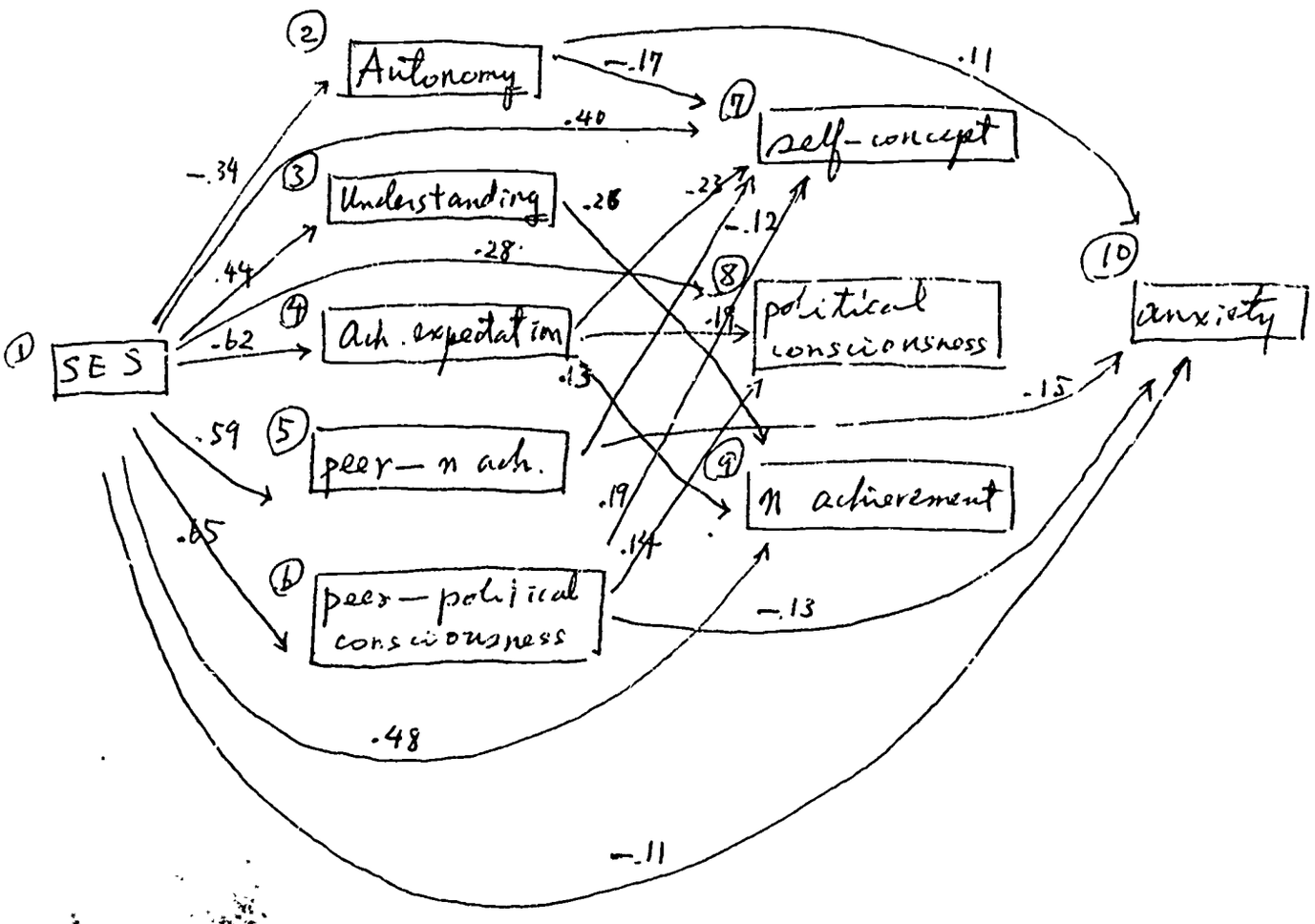


Figure 8
Path diagram leading to manifest anxiety
(Asian students — Time 1)

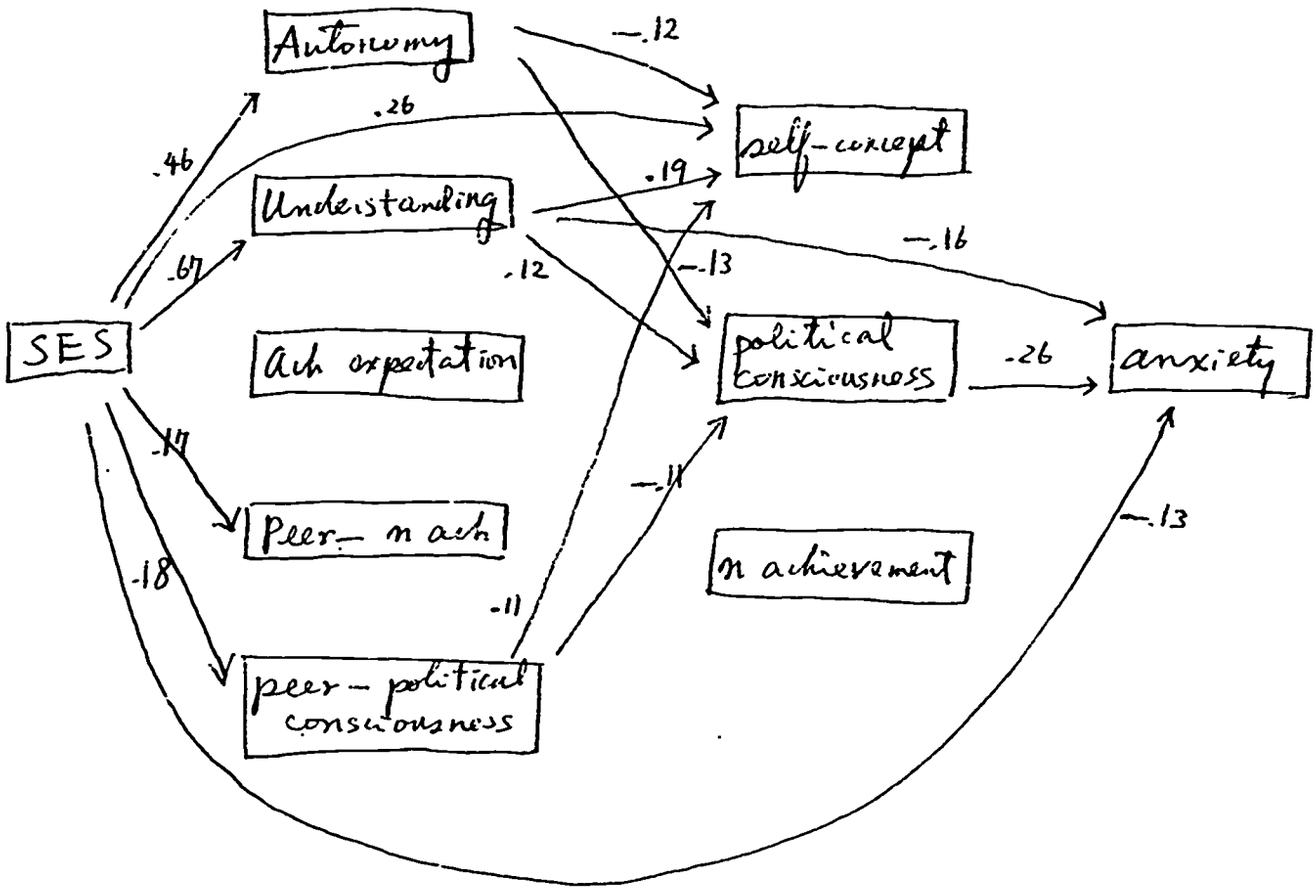
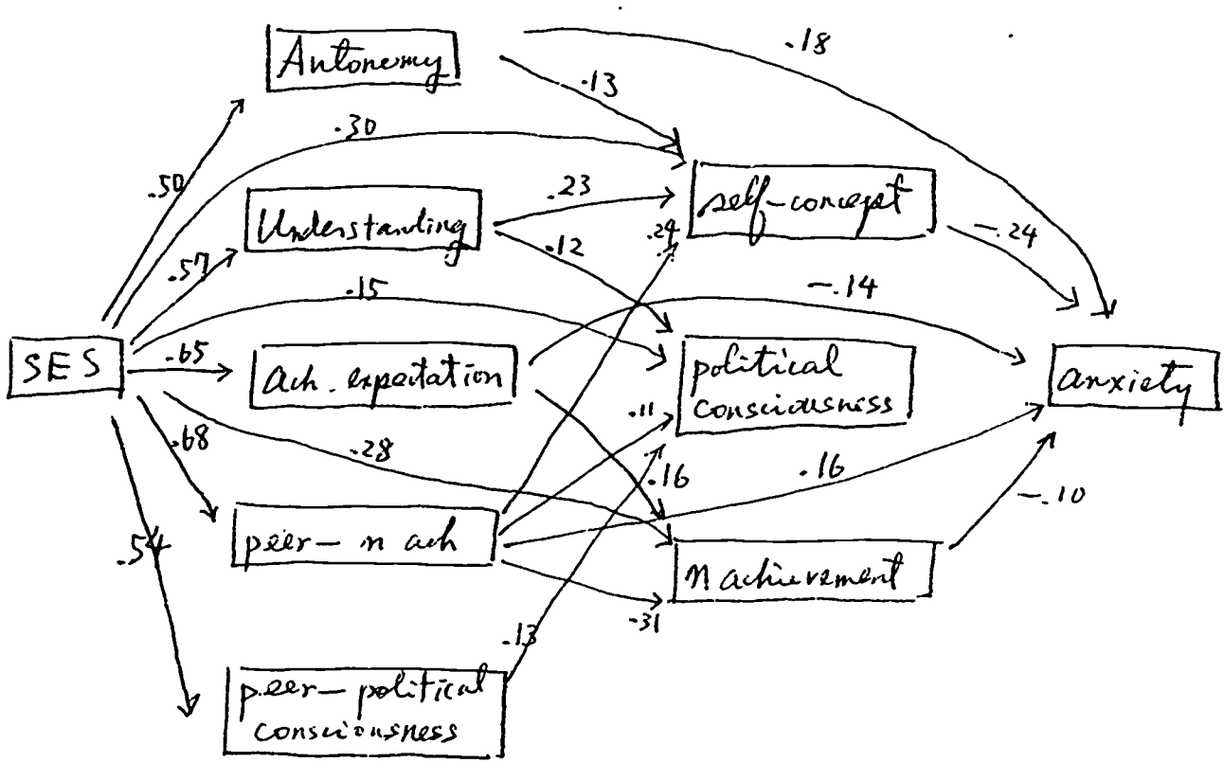


Figure 9
Path diagram leading to manifest anxiety
(White students — Time 1)



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