

**School  
Engagement**

**& Students  
At Risk**

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## Overview

This investigation examines the role of *engagement* or *involvement* in school as it relates to student achievement. A model of engagement is forwarded that has a behavioral component termed *participation* and a psychological component termed *identification*. These are viewed as elements of a cycle that begins in the primary grades for most children with basic forms of participation, that is, attending school, attending to the teacher, and responding to teachers' directions, questions, and assignments. These behaviors--the focus of the present investigation--remain important throughout the school years. Under favorable circumstances, they are likely to persist, to become elaborated, and to be accompanied by a sense of belonging in school and valuing school-related outcomes, that is, identification.

On the other hand, the proposition is forwarded that if a youngster does not remain an active participant in class and in school, he/she may be at risk for school failure regardless of the risk that may be implied by status characteristics such as race/ethnicity, home language, or family income. In contrast to the latter *status risk factors*, participatory behaviors comprise a set of *behavioral risk factors* that may be more amenable to manipulation through school and home processes.

Two studies of engagement and achievement were conducted using a nationwide sample of eighth-grade students from the U.S. Department of Education's NELS:88 survey. Both studies focused on measures of participation constructed from student, parent, and teacher questionnaires. These included indicators of youngsters' attendance, participation in the classroom, as well as participation in school-relevant activities outside the regular program. Study II also included several indicators of youngsters' identification with school that were available from the data set.

Study I examined the association of participation in school and classroom activities with academic achievement in a sample of 15,737 eighth-grade students attending public schools. Students were classified according to the number of participation dimensions, out of

3, on which they were low or "inadequate." Differences among the participation groups on achievement tests were large and statistically significant, even after controlling for gender, race/ethnicity, and socioeconomic status. The absence of significant interactions confirmed that the association of these behavioral risk factors with achievement is found for four racial/ethnic groups (Asian; Hispanic; African-American; non-Hispanic White) and both sex groups alike.

Study II was an examination of the behaviors that distinguish students who are at risk, but who are successful in school subjects, from their less successful peers. The premise is tested that these groups differ in terms of their participation in school and classroom activities. A subsample of 5945 eighth graders who would be identified as at risk by virtue of race, home language, or socioeconomic status were classified as unsuccessful, passing, or successful based on reading and mathematics achievement tests. Achievement groups were distinct in terms of a variety of classroom participation behaviors, out-of-class participation, and interactions with their parents regarding school. Differences among the groups in terms of youngsters' identification with school were explored as well.

Three major conclusions were drawn from the investigation, and one recommendation for continued research. First (1) behavioral risk factors are indeed related to significant outcomes of schooling even within racial/ethnic, socioeconomic, or language groups. Engagement behaviors are more amenable to influence than traditional status indicators and should become the focus of educators and researchers. Second (2) risk behaviors have their roots in the early school years, or before. They should be identified at the earliest age possible in order to maximize the likelihood that positive school outcomes will be realized. Early and persistent efforts should be made to promote participation among youngsters who are "noninvolved" in the primary grades. Third (3) students whose achievement may be termed "marginal" exhibit behaviors much like those of successful students. It is important that their accomplishments, although not extraordinary, should be recognized in order to promote and sustain these youngsters' involvement in school.

Research is needed to identify manipulable aspects of classroom and school processes that encourage student engagement. This research should focus on the early years; it should examine factors that affect the perseverance of engagement behaviors; it should focus on the engagement or disengagement of individual students in contrast to groups. Correlational evidence is needed on the relationships of school and class features with participation and identification. Intervention studies should assess the effects of *early assessment* and *persistent reinforcement* of participation on both the short-term and long-term involvement of students at risk.



## Acknowledgments

This work was performed while the author was an American Statistical Association/National Science Foundation Fellow at the National Center for Education Statistics (NCES). The author is grateful to the staff at NCES for facilitating access to the data used in the investigation, to Maria Owings and Kristin Voelkl for assistance with the data analysis, and to Nancy Karweit, Marilyn McMillen, and Russell Rumberger for thoughtful reviews of an earlier draft of this paper. The results and interpretations in this report are those of the author alone and do not reflect findings or policies of NCES.

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## Introduction

In a broad sense, the purpose of this investigation is to increase our understanding of the nature of educational risk. It is an examination of two sets of attributes that may place a child at risk for educational difficulties; these are referred to as *status risk factors* and *behavioral risk factors*, respectively. Status risk factors are demographic and historical characteristics, often used to classify large groups of individuals, that are difficult or impossible to alter. With regard to educational outcomes, status risk factors are such easily identified characteristics as racial or ethnic origin, socioeconomic conditions of the home, or the primary language of the home. Because these background characteristics are related to a family's place of residence, children with high risk status may also be living in a neighborhood where the school does not provide adequate learning opportunities.

Behavioral risk factors are a set of behaviors that, if not manifested by a youngster, reduce the likelihood that successful school outcomes will be realized. In the earliest grades, these include such basic behaviors as attending school, arriving at class on time, paying attention to a teacher, and completing assigned work. These behaviors continue to be important throughout the grades. As students' autonomy increases with age, however, the set may expand to include a wider variety of activities related to both the academic and extracurricular programs of the school. The full set of behaviors may be referred to as "participation" in school. A youngster is at risk for school failure if he or she does not sustain participation in the school's academic program, at the least. In contrast to status risk factors, participation may be more easily modified by school programs, staff, and parents, to increase the likelihood that the individual will succeed in his or her school experience.

This investigation examines the relationship of both sets of risk factors to the academic achievement of eighth-grade public school students. Students' self reports and teachers' behavior ratings are incorporated into several indexes of engagement. Study I asks whether participation is related to academic achievement for a nationwide sample of youngsters, and whether this relationship 'holds up' when the effects of status characteristics

(i.e., race and SES) are controlled statistically. Study II examines the behavior of just those youngsters who are at risk for school problems by traditional status characteristics, that is, minority students attending inner-city schools, students from low-income families, and students whose primary language at home is not English. Within this group, many individuals are somewhat successful and some highly successful in terms of academic outcomes. Study II asks whether these students are distinguished from their less successful peers in the extent to which they participate or are engaged in their schools' academic programs.

Two fundamental assumptions underlie this research. The first is expressed in the preceding paragraphs: The educational risk status of a student may be described in terms of static characteristics that are difficult or impossible to alter, and also in terms of a set of behaviors that may be more amenable to influence by parents, school personnel, and school programs.

Second, involvement in learning activities or its obverse, emotional or physical withdrawal, is a developmental process that may begin in the earliest years of school. Active participation in the early grades, accompanied by some degree of academic success, serves to perpetuate continued participation throughout the school years. Under optimal conditions, engagement becomes the individual's *habitual* form of behavior.

Unfortunately, some pupils may begin the primary grades lacking the predisposition to participate in class activities. Others may find school experiences distasteful, especially if they feel "put down" or mistreated by their teachers, and may begin to retreat from participation. These youngsters are already at risk for later failure and further withdrawal from school. This perspective is reflected in Rumberger's (1987) observation that "dropping out itself might better viewed as a process of disengagement from school, perhaps for either social or academic reasons" (p. 111). Intervention is needed long before the high-school student with low grades decides that "school doesn't matter" or to leave school without graduating. Unfortunately, once this point has been reached, the grades and labels that

accompany them (e.g. "failure;" "dropout") become additional status characteristics that are more difficult to surmount.

### **Status and Behavioral Risk Factors<sup>1</sup>**

The concepts of risk status and risk factors have been used widely in medical fields prior to their relatively recent adoption into education. Health risk factors are defined in the *Final Report of the Risk Factor Update Project* (Breslow et al., 1985):

Certain events, conditions, and behaviors in the life of any individual modify the probability of occurrence of death or disease for that individual when compared to others of the same age and sex in the general population. For many of these variables, which we may collectively term "risk indicators," a predictive relationship exists between levels of the risk indicators and incidence of disease and death. (p. I-1)

If "school failure" or "dropping out" is substituted for "death" or "disease," and "risk factors" for "risk indicators" then the parallel is obvious.

Medical researchers recognize three fundamental principles associated with risk that may also be useful in examining educational process. First (1) the risk factors germane to a particular outcome comprise both status characteristics common to certain population groups as well as individual habits and behaviors. For example, with regard to cardiovascular disease, the major cause of adult mortality in the United States, Bush et al. (1991) write:

Several risk factors for cardiovascular disease (CVD) have been identified in clinical and epidemiological studies. Some of these risk factors cannot be altered, such as gender, ethnicity, family history, and aging, but others are modifiable by changes in

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<sup>1</sup>A more extensive discussion of "The Meanings of At-Risk" is given by Placier (1991).

lifestyle. These include obesity, hypertension, hypercholesterolemia, cigarette smoking, and lack of exercise. (p. 447)

Second (2) individual risk behaviors "track," that is, they have early forms that evolve into fully developed forms over time. Berenson (1986) argues for the analysis of early forms of risk (e.g., mild obesity in childhood) in spite of the difficulties posed by long-term studies: "The level of tracking is of major importance because of the potential to identify individuals at high risk at an *early age* when intervention might conceivably alter the course of disease" (p. 21; emphasis added). With regard to cardiovascular disease:

Causal factors in children are even more difficult to find than in adults. In this case we are one step further back in searching for determinants of cardiovascular risk, largely because of the lack of identifiable clinical endpoints. This should not diminish in any way the significance of understanding the determinants of cardiovascular risk as they begin...since determinants are apt to be less confounded by the complexity of disease that accumulates with time. (Berenson, 1986, p. 3)

Likewise in education it is essential that we learn to identify and understand early forms of students' disengagement from school. The longer dysfunctional behavior patterns are allowed to continue, the more difficult they will be to overcome.

The third principle (3) is the *clustering* of risk factors, that is, the occurrence in the same individual of multiple risk factors. For example, "obesity has a close relationship with blood pressure levels in children...(and) with serum lipids and lipoproteins" (Berenson, 1986, p. 21). When the latter three factors are controlled for body fatness, their interrelationships are reduced substantially. Results of this analysis

[P]roject the tremendous significance obesity may have for cardiovascular disease beginning in early life. Clustering appears to occur with increasing age of children, suggesting a greater impact of environmental factors. (Berenson, 1986, p. 21)

The clustering of educational risk factors may be inevitable for many youngsters because early educational *outcomes* become part of the cluster that is predictive of later outcomes. For example, academic performance at one grade correlates strongly with performance in subsequent grades, at least partially because learning is cumulative. But it is also the case that multiple behavior problems tend to co-occur in the same individuals. In reviewing research on behavior problems related to schooling, Finn (1989) notes, "It is a pervasive feature...that every discussion of dropping out, attendance problems, disruptive behavior, or delinquency refers to the interdependencies among them" (p. 118). And, as might be expected, all of these are associated with poor academic performance.

### **Engagement as a Behavioral Risk Factor**

Recent years have seen the implementation of many dropout prevention programs that attempt to increase students' engagement in school, whether in the academic, vocational or extracurricular and social spheres. Reflecting this emphasis, Wehlage et al.'s (1989) overview of research on dropouts uses the words "participation," "engagement" and "involvement" 216 times in a 260-page volume and presents a theory of dropout prevention in which "Educational engagement and school membership comprise the central concepts" (p. 192). In spite of this emphasis, there have been very few efforts to define and study the constructs represented by these terms formally.

Engagement in school may be viewed behaviorally--that is, whether a student participates regularly in classroom and school activities--or affectively--whether a student feels that he/she 'belongs' in the school setting and values school-relevant outcomes. The present investigation focuses primarily on the more behavioral dimension, *participation*. Nevertheless the affective component is an integral part of the process by which participation (or nonparticipation) is perpetuated and may lead ultimately to such long-term consequences as truancy, dropping out, or even juvenile delinquency. A developmental model that includes this component is described following the discussion of participation alone.



Participation may take different and more elaborated forms as a youngster progresses through the grades. Finn (1989) proposes a four-part taxonomy:

Participation in the primary grades may be little more than a youngster's acquiescing to the need to attend, be prepared, and respond to directions or questions initiated by the teacher; even this *level-one participation* may be resisted by some. As children mature, they may take more active roles, above and beyond the degree of involvement that is required. (p. 128)

Level-one participation remains essential to learning throughout the school years; the primary focus of this investigation is on level-one participation among a sample of eighth-grade youngsters.

Many students go on to display initiative-taking behavior as well:

At a second level of participation, students initiate questions and dialogue with the teacher and display enthusiasm by their expenditure of extra time in the classroom before, during, or after school, or by doing more classwork or homework than is required. For some students, this enthusiasm eventually expands into participation in subject-related clubs, community activities...and the like. (p. 128)

"Help-seeking behavior" is an important set of initiative-taking behaviors for students having academic difficulty. Once viewed as a kind of dependency that would arise from insufficient development and socialization (Beller, 1955) help seeking is seen more recently as "a mature, and even sophisticated, strategy for coping with difficult tasks...actively using available human resources to increase success" (Nelson-LeGall & Jones, 1991, p. 30). The decision to seek help in a particular situation may depend both on the youngster--for example, his or her awareness of a learning problem, and the desire to overcome it--and on the response of the helper as well as classmates on other occasions.

The opportunity for a third level of participation increases with age:

Many students participate in the social, extracurricular, and athletic aspects of school life in addition to, or at times in place of, extensive participation in academic work. (Finn, 1989, p. 128)

The fourth level of participation is only possible in some schools but has been advocated, particularly for youngsters at risk:

Participation in governance...at least as it affects the individual student. This may involve academic goal-setting and decision-making and a role in regulating the school's disciplinary system. (p. 129)

The present investigation focuses on the relationship of level-one participation with the school performance of eighth-grade students. The failure to participate in class activities, and the display of behaviors that prevent participation, are termed *nonparticipation*. Before presenting the results of the analysis, the following sections address two questions: (1) Is there existing evidence that nonparticipation is predictive of adverse outcomes, in this case school failure or dropping out? And (2) what are the mechanisms by which early forms of nonparticipation cluster and evolve into later forms that precipitate such adverse consequences?

*Is participation predictive of school performance?* Research on the association of participation with school achievement has been summarized in several recent reports (Finn 1989; Finn & Cox, 1992). In the elementary grades, such simple behaviors such as paying attention and responding to teachers' directions are closely linked with school performance (Attwell, Orpet, & Meyers, 1967; Cobb, 1972; Good & Beckerman, 1978; Lahaderne, 1968). In addition, achievement benefits are found consistently when students do more than the required work (Fincham, Hokoda, & Sanders, 1989; McKinney, Mason, Perkerson, & Clifford, 1975; Swift & Spivack, 1969). The initiative-taking behaviors include undertaking

'extra credit' assignments, using the additional resources available in the classroom (e.g., dictionary or encyclopedia), and initiating discussions with the teacher about school subjects.

Finn and Pannozzo (1992) examined two types of behavior that may detract from learning, inattentive or withdrawn behavior and disruptive behavior, respectively. The behavior of over 1000 grade-4 youngsters was rated by their teachers on a 26-item rating scale. Children who are inattentive generally sit in less visible locations in the classroom, avoid interacting with the teacher, and give inappropriate responses when called upon. In contrast, disruptive youngsters create disturbances that interfere with other youngsters' work or with the teacher's efforts to manage the classroom. Both sets of behaviors were found to be significantly associated with impaired academic achievement in all areas. While disruptive behavior is more salient and evokes stronger responses from teachers, inattentive and withdrawn youngsters had even lower achievement levels than those who were disruptive.

Several studies related youngsters' behavior to academic outcomes several years later. For example, Attwell, Orpet, and Meyers (1967) found significant correlations between ratings of youngsters' attention in kindergarten and achievement test scores in six areas in grade 5. Perry, Guidubaldi, and Kehle (1979) found that kindergarten teacher ratings of the factor "Interest-Participation versus Apathy-Withdrawal" was significantly correlated with reading and mathematics test scores in grade 3. And Fincham, Hokoda, and Sanders (1989) found that third grade teachers' reports of youngsters' "learned helplessness" behaviors were related to standardized reading and mathematics scores in grade 5. At least half of the learned helplessness items reflect the youngster's class participation, for example, "Takes little independent initiative" or "Gives up when you correct him/her or find a mistake in his/her work."

The same behaviors--responding to the requirements of class and teacher, and taking an initiative with school work--continue to be related to achievement in the junior high and high school years (Anderson, 1975; Kerr, Zigmond, Schaeffer, & Brown, 1986). Laffey

(1982) investigated involvement of a sample of urban high school sophomores with their school work. Commendably, the study included questionnaire responses from the students themselves, systematic classroom observations, cued responses from the teachers and students about their activities, and data from school and class records. Significant differences were found between basic and advanced classes on a number of measures including days absent and the teachers' ratings of students' "involvement with the class, considering both the amount of participation and the intensity or energy with which a student engaged in activities" (p. 64). Both of these variables, plus teachers' ratings of the extent to which assignments were completed and the involvement responses given on cue by the students, were significantly related to achievement test scores.

A major longitudinal study relating early school behaviors to later school and non-school outcomes was reported by Spivack and Cianci (1987). The investigators assessed youngsters' "ability to adapt" during the primary years, that is, "the child's ability to control and regulate his or her own behavior and thinking, ability to attend and work independently, and ability to comprehend and become involved in the learning process" (p. 45). The study began with a random sample of 660 inner-city children who entered kindergarten in the fall of 1968. The children's behavior was rated by their teachers in kindergarten through grades 3 on a 47-item checklist that resulted in 11 factors: classroom disturbance; impatience; disrespect-defiance; external blame; achievement anxiety; external reliance; comprehension; inattentive-withdrawn; irrelevant responsiveness; creative initiative; needs closeness. About 500 of the youngsters remained in the study in 1975 at which time data were gathered on school misconduct and delinquency. A single "conduct disturbance" score was obtained for each adolescent by combining teacher ratings of the youngster's "(1) over-emotionality and quickness to anger or upset, (2) uncooperativeness, disobedience, or disruptiveness, and (3) assaultiveness and quarrelsomeness" (p. 56).

The study revealed a consistent pattern of significant association between behavior in the early grades and all of the later outcomes. With regard to school conduct disturbance, the dominant predictors were early classroom disturbance, impatience, and disrespect-

defiance, followed by irrelevant responsiveness, external blame, and inattentive-withdrawn. The authors conclude, "Within this high-risk cohort, children of both sexes between the ages of 5 and 8 who exhibit poor control or regulation of their cognitive and behavioral patterns are especially at risk" (p. 61). The authors also examined the chronicity of early behavior patterns by isolating those youngsters who had elevated scores at both kindergarten and grade three on 3 or more factors. Chronicity was significantly related to classroom misconduct during adolescence for females but not for males, leading to the conclusion that "high risk as measured by total aberrance pattern at either point in time warrants concern in males, and that high-risk pattern at both points in time adds nothing significant predictively to such a fact" (p. 65).

Attendance is a particularly important participatory behavior throughout the school years because non-attendance prevents the youngster from being exposed to learning activities and to other efforts to promote his or her involvement. While younger children have little choice but to attend school and to sit in the classroom, as pupils progress through the grades they can choose to miss classes or, in the extreme, not show up at school at all. Absences have been found to be detrimental to academic achievement and school grades generally (deJung & Duckworth, 1986; Weitzman et al., 1985) while Lloyd (1974; 1978) found that absences as early as grade 6 were related to dropping out of school. Further, nonattendance has been found to be related both to disruptive behavior in the classroom and to juvenile delinquency (Reid, 1984; Rutter et al., 1979). These findings emphasize the powerful role that absenteeism plays in the "clustering" of risk factors in each successive school year.

Fewer data are available on the relationship of higher levels of participation in the four-part taxonomy with school performance. Indeed, many students participate in the social, extracurricular, and athletic aspects of school life in addition to, or at times in place of, extensive participation in academic work. Ekstrom et al. (1986) found that dropouts had participated less in extracurricular activities than their non-dropout peers. Holland and Andre (1987), in a review of research on extracurricular participation, note that the

correlational nature of most of the research does not permit causal inferences. The authors state:

We believe that participation has effects because of what happens as a result of participation...[P]articipation may lead students to acquire new skills (organizational, planning, time-management, etc.), to develop or strengthen particular attitudes (discipline, motivation), or to receive social rewards that influence personality characteristics. (p. 447)

Holland and Andre (1987) note also that there is more participation in extracurricular activities in schools with smaller enrollments, especially among students from lower socioeconomic homes.

Formal research on the association of student decision-making with academic performance or school completion is virtually nonexistent. It is clear, however, that students who withdraw from participation in school often complain that the evaluation and reward structure of school is incompatible with their interests and abilities (Natriello, 1984) and that disciplinary procedures are unfair or ineffective (Gold and Mann, 1984; Newmann, 1981; Wehlage and Rutter, 1986).

*How does participation track and cluster?* Scholars in several disciplines have described developmental sequences in which early school experiences coalesce into a pattern of dysfunctional behavior in later grades. For example, juvenile delinquency has been explained in these terms. Bernstein and Rulo (1976) describe a cycle whereby undiagnosed learning problems, followed by embarrassment and frustration over failing grades, may lead a youngster to exhibit increasingly inappropriate and disruptive behavior. Since adult attention is more likely to focus on the behavior than the learning difficulty, the child "falls farther and farther behind and becomes more of a problem. Eventually, the child is suspended, drops out, or is thrown out of school, and the movement toward delinquency is well under way" (p. 44).

Bloom has argued more broadly that mental health develops as a child receives continual evidence of his/her adequacy through school-related success experiences. A history of good grades and positive interactions with teachers may "provide a type of immunization against mental illness for an indefinite period of time" (Bloom, 1976, p. 158). However,

At the other extreme are the bottom third of the students who have been given consistent evidence of their inadequacy...over a period of 5 to 10 years. ...We would expect such students to be infected with emotional difficulties [and to] exhibit symptoms of acute distress and alienation from the world of school and adults. (Bloom, 1976, p. 158)

Still others have written about the importance of youngsters' *bonding* with school at an early age. For example, in the Perry Preschool Project (Berrueta-Clement et al., 1984) three- and four-year-old black youngsters at risk for school failure were randomly assigned to an intensive preschool program or to a no-preschool control group. The children were followed to age 19 by which point the groups differed significantly on measures of school performance, graduation and dropout rates, employment, personal-social characteristics, and detentions and arrests by the police. The impressive findings of this study were attributed in part to "bonding" of the preschool children with school:

On the basis of these internal and external factors, social bonds develop between persons and settings in the course of human development. Strong social bonds to conventional settings, such as school, are seen as making delinquency less likely (Berrueta-Clement et al., 1984, p. 3).

The authors identify an important internal factor as "commitment to schooling" and an external factor as "student role reinforcement." Differences were found between the experimental and control groups on measures of both constructs.

The connection between bonding and behavior is a basic component of "social control theory" (see, for example, Hirschi, 1969; Liska & Reed, 1985). The underlying assumption is "that ties (...links, attachments, binds, and bonds) to conventional institutions function to control or inhibit the behavioral expression of deviant motivation" (Liska & Reed, 1985, p. 547). When these bonds are weakened, the individual is free to engage in deviant behavior. This view of student behavior has a distinctly negativistic tone--that is, it implies that youngsters would exhibit all sorts of dysfunctional behavior if they were not prevented from doing so by attachments to traditional institutions such as the family, church, or school.

These perspectives have three features in common. First (1) they all emphasize that patterns of behavior have their roots in the early school years or before. Adverse outcomes such as failing grades, dropping out, or even juvenile delinquency cannot be completely understood by examining attitudes or events in a single year, especially if it is late in the individual's school career. Second (2) they all emphasize the importance of some degree of positive reinforcement from the *institution* in perpetuating appropriate behavior. And third (3) they indicate that the developmental sequence leading to engagement or involvement on the one hand, or to disengagement or withdrawal on the other, has both behavioral and psychological components. The behavioral component may take the form of working (or not working) for good grades, participating (or not participating) in the academic and/or extracurricular parts of the school program, or channeling one's energies away from (or into) disruptive behavior. The psychological component involves positive affect for some youngsters (e.g., mental health; commitment; bonding) and negative for others (e.g., frustration and embarrassment; distress and alienation).

That withdrawal behavior has its origins prior to the last years of school is confirmed by Popp (1991) in interviews with 34 adult high school dropouts. Thirty-one of the respondents reported that they had not been actively involved in academics or extracurricular activities since the late elementary or middle school grades and that the sense of alienation from school continued through young adulthood.



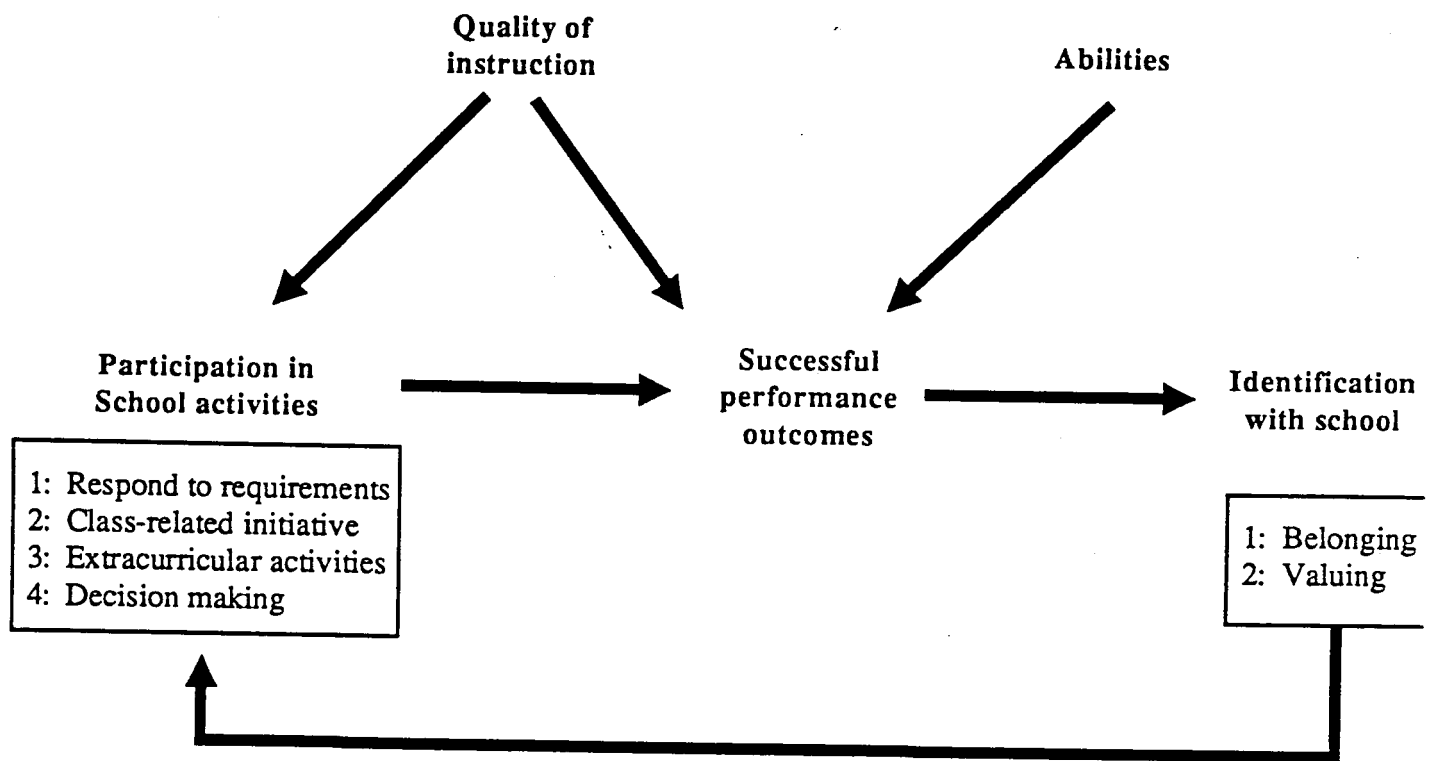


Figure 1. Participation-Identification Model

*A model of student engagement.* The three features described in the preceding section have been incorporated into the participation-identification model of school engagement (Finn, 1989). According to this formulation engagement (or, synonymously, involvement) in school has two primary components (see Figure 1).

The first is the extent to which the youngster participates in school and classroom activities in any of the ways described in earlier sections of this paper. Participation in the classroom is fundamental because young children who may not have developed strong emotional ties or aversions to school may still be willing participants. For most, their participation in classroom activities is encouraged by parents, teachers, and the instructional activities themselves. The present investigation is based on a sample of eighth graders instead of young children and focuses on indicators of basic forms of participation as reported by the students and by their teachers.

The second component is termed *identification*. Identification occurs (a) when students internalize the feeling that they "belong" in school--both that they are a conspicuous part of the school environment and that school is an important part of their own experience--and (b) when they value success in school-related accomplishments. Wehlage et al. (1989) give a prominent role to a similar construct, "school membership," in their theory of dropout prevention.

The participation-identification model describes a developmental sequence that begins with classroom participation in the primary grades. Most youngsters begin school willing to respond to the teacher and to participate in learning activities. As long as early participation is accompanied by some rewards for success, a sense of comfort or "belonging" can develop and become internalized. The influence of performance rewards plus the increased identification with school serve to perpetuate youngsters' active participation in the classroom and the school environment generally.

Unfortunately for some this cycle is either *not initiated* or is *curtailed* before participation becomes the usual mode of behavior. Some youngsters may begin school predisposed to nonparticipation. They are inattentive and avoid the teacher's attention or engage in disruptive behavior as an alternative to constructive class work. If this pattern continues over the years, low or failing grades and emotional disengagement, rather than identification, may follow. The youngster may exhibit an increasing number of inappropriate or defiant behaviors, making it still less likely that he or she will ever become "involved."

Others may be discouraged by dysfunctional interactions with their teachers or with the larger school environment. In class, teachers' lower expectations for minority pupils or for those whose achievement is initially low may cause them to provide fewer interactions with these youngsters and fewer opportunities for performance to increase (Baron, Tom, & Cooper, 1985; Kagan, 1990).

There is also an extensive literature about school practices that, if not accommodating to the needs of high-risk students, can alienate those having academic or behavioral difficulties. School regulations and disciplinary practices have come under scrutiny in particular. On the one hand, the effective schools research indicates clearly that an orderly school environment are important to both student engagement and learning (Purkey & Smith, 1983). At the same time, it is also important that disciplinary policies be seen as fair and effective (Bryk & Thum, 1989; Wehlage & Rutter, 1986) and school rules as flexible and able to accommodate to the needs of particular students (Gold & Mann, 1984; Miller, Leinhardt, & Zigmond, 1988; Richardson, Casanova, Placier, & Guilfoyle, 1989). Wehlage, Smith, and Lipman (1992) summarized the results of three years of the "New Futures Initiative" to improve the life chances of youngsters at risk through school restructuring. The authors conclude that, in spite of administrators and teachers' best intentions, few meaningful changes occurred that would affect student membership. The restructured schools were still characterized by "highly punitive discipline policies, an overemphasis on control, and frequent adversarial relations between students and teachers" (Wehlage, Smith, & Lipman, 1992, p. 85). If youngsters perceive that their teachers are disinterested or

hostile and that school practices are putative and alienating, then continuous participation in curricular activities--not to mention identification with school--cannot reasonably be expected to occur.

The present investigation examines the relationship of engagement with academic achievement in a large cross-sectional sample of eighth-grade pupils, and addresses the specific question "do these behaviors explain why some high-risk students are more successful than others?" In spite of the obvious importance of a youngster's emotional engagement in school, few measures of school membership and little research on the topic have emerged.<sup>2</sup> A notable exception is the work of Goodenow (1992; in press) who developed and validated a self-report measure of school membership appropriate for adolescents. Among her findings, Goodenow (in press) reported that school membership was significantly related to teachers' reports of the youngsters "effort" in English classes, that is, classroom participation. In contrast, valuing school-relevant outcomes has been shown to be related both to school engagement and academic performance (Eccles, 1983; Pintrich & DeGroot, 1990).

While this analysis focuses on basic forms of student participation in class, three indicators of identification were also obtained from the data base. Two of these reflect the student's sense of "belonging" (perceived warmth and supportiveness of the school staff; students' views of how they are perceived by fellow students) and one reflects the extent to which the student values school-related achievements (perceived usefulness of school subjects in later life). The number of times students have changed schools is considered as a mediating variable since a high degree of school mobility may preclude the youngster identifying with school even under the best of conditions.

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<sup>2</sup>There has been a good deal of research on "alienation" which is perhaps the obverse of school membership. According to Seeman (1975) the essential components of alienation are powerlessness, meaninglessness, normlessness, self-estrangement, social isolation, and cultural estrangement. These concepts are all viewed in the negative and thus give little direction to those who may wish to promote desirable behavior.

## What Psychological Processes Motivate Nonparticipation?

The research examined in the preceding sections of this paper shows that disengagement from school may have its roots in the primary grades or earlier. The participation-identification model describes a sequence of events through which early forms of nonparticipation are maintained through the years and may become elaborated into more severe forms such as truancy or dropping out. *Whether or not these events transpire*, an individual's behavior in later grades may be the consequence of a deeply embedded set of needs and beliefs that continue to evoke nonproductive work habits.

Nonparticipatory behaviors can be described as (a) failing to take advantage of constructive strategies for learning, or else (b) engaging in negative behaviors that impede learning. These classes of behavior have been studied extensively in the form of learned helplessness and self-handicapping, respectively.

*Learned helplessness* can result when a person discovers repeatedly that the outcomes of a situation are not within his/her control (see Abramson, Seligman, & Teasdale, 1978; Kofta & Sedek, 1989). The feelings of frustration and helplessness that ensue may generalize to other situations in which effort could possibly promote success:

It is perceived incompetency along with certainty about such perceptions that causes the anxiety, despair, and pessimism about future success that characterize the learned helplessness phenomenon. (Covington & Omelich, 1985, p. 448)

The individual is truly helpless in the initial situations, comes to perceive himself/herself as not possessing whatever strategies are needed to achieve future positive outcomes, and fails to exert even minimal effort in other similar situations. He/she has "learned" that there is no point in trying and engages in "failure-accepting behavior."

The initial experiences set the stage for all that follows. A basic assumption behind the concept of learned helplessness is that individuals behave in a manner that will provide them with a "sense of predictability and control over their environment" (Fiske & Taylor, 1984, p. 100). When individuals discover that they do not have control over a situation they may respond in a number of ways including "reactance," that is, attempts to regain control, and feelings of helplessness. If the expectation of control in the initial situations was weak or if loss-of-control experiences occur repeatedly, then learned helplessness is a more likely outcome.

Maier and Seligman (1976) contend that learned helplessness creates three deficits. One is the lack of *motivation* to make further attempts to succeed in similar situations; this deficit may be manifested as disengagement from class and school activities. The *cognitive* deficit occurs because these individuals fail to practice and learn strategies that could help them succeed in the future. The *emotional* deficit is the feeling of depression that accompanies powerlessness and which may accentuate disengagement still further. An individual's self-esteem may also be affected by the feeling of powerlessness, but not necessarily so if one is able to invoke other mechanisms in defense of his/her self-view.

That the initial conditions for learned helplessness can occur readily among high-risk children in school is obvious. If a youngster arrives at school without the prerequisite readiness skills, if primary teachers are not able to match instruction to the starting levels of the less-prepared pupils, or if lower grades are awarded to students whose temperament is displeasing or to minorities regardless of their desire to achieve, then failure may be inevitable and perceived to be beyond one's control. Younger children often believe that success comes from effort (Nicholls, 1978, 1979, 1989) but if effort is applied inappropriately or if it is just not rewarded, it will not produce the expected outcome. This pattern, repeated often enough, can only lead to a feeling of powerlessness. The youngster may experience both emotional and physical withdrawal and stop "trying" even when productive learning strategies are available.

In contrast to learned helplessness, *self-handicapping* in the face of uncertainty about success "involves creating obstacles to one's own performance for the sake of attributional benefits" (Tice & Baumeister, 1990, p. 447). Confronted with many early failures and doubt about future success, "they reason that if they cannot avoid failure, at least they can avoid the implication of failure--that they lack the ability--by not trying or by creating excuses for why their efforts were futile" (Covington & Omelich, 1985, p. 447), that is, they exhibit "failure-avoiding behavior."

Self-handicapping individuals engage in behaviors that are detrimental to achievement, for example, procrastination, giving inappropriate priority to non-school activities, and exhibiting disruptive behavior to draw time and attention away from academic tasks. These activities become "excuses." If the youngster succeeds at the tasks that follow, both the perception of high ability and his/her self-esteem are maintained and even strengthened. If the youngster fails, self-esteem can still be maintained because the causes of failure are obscured and attributed to factors other than ability.

The basic premise underlying the concept of self-handicapping is that individuals seek to protect their sense of self-worth (Tesser, 1988; Tice & Baumeister, 1990). At about nine years of age, youngsters begin to attribute performance differences to "ability" rather than effort (Nicholls, 1978, 1979, 1989). Thus, self-handicapping behavior safeguards self-esteem by allowing the individual to maintain the perception that he/she has the ability to do the required work. The perception of control may also be maintained because "The perception of ability is a precondition to a sense of one's own control...One does not attribute [control] ...to the self for an action one believes one cannot do" (Fiske & Taylor, 1984, p. 103). Unfortunately, the "excuses" substitute for more productive expenditures of energy and represent the individual's failure to assume responsibility for his/her own performance.

*Sequelae.* The consequences of failing to use positive learning strategies or of engaging in behaviors that detract from learning are much the same. *Both result in the*

*further reduction of constructive effort applied to academic tasks.* Both increase the likelihood of further school failure which may have been the very same condition that produced these behaviors in the first place. Both increase the likelihood that the youngster will disengage from school and classes over subsequent years. And both may be exhibited by the same individuals. For example, well-intended primary-grade children who experience failure may employ strategies to preserve a positive self-view in the middle years but eventually give in to despair and dysfunctional behavior in later grades.

Failing to use positive learning strategies and engaging in behaviors that detract both have their roots lie in early school experience. We are reminded again that this is when they may be most amenable to change, before a history of failing grades is accumulated, before youngsters comes to believe that only ability will produce success and that they don't have what it takes, and before nonparticipation becomes habitual. Among the eighth-grade students in the present investigation, this critical period is already in the past.



