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ABSTRACT

Race and socioeconomic class differences in children's reading performance are influenced by social and motivational factors. For example, children from poverty backgrounds are more likely to attribute success to conditions outside personal control, and thus do not experience as much pride in achievement as middle class students who have learned to associate success with ability and effort. Parents appear to play a critical role in the development of achievement motivation. Middle class parents generally foster strong achievement motivation by their high expectations of success and their involvement in the achievement-related activities of their children. They influence their children's reading performance more directly by the amount of reading materials they have in the home, encouragement they give, reading they do themselves, and time they spend reading with their children. Students' involvement in reading is also influenced by the kinds of reading materials schools provide and by teacher expectations. Among students from low socioeconomic groups, achievement is influenced negatively by peer pressure. Additional work, particularly on environmental factors, would allow researchers to go beyond the more demographic variables of race or socioeconomic status in exploring performance differences in reading. A comprehensive reference list is appended. (HOD)

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Technical Report No. 288

SOCIAL AND MOTIVATIONAL INFLUENCES ON READING

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## Social and Motivational Influences on Reading

There has been a long-standing interest in how motivational and socialization factors influence children's reading skills (Athey, 1976; Bloom, 1976; Burt, 1917; Entwisle, 1979; Ladd, 1933; Matthewson, 1976; Purkey, 1970; Resnick & Robinson, 1975; Wattenberg & Clifford, 1964). However, the research literatures addressing these topics have remained relatively fragmented. On the one hand, researchers interested in the development of achievement motivation processes generally have not explored how such processes operate in particular achievement contexts such as reading. On the other hand, reading researchers and those studying home and school socialization practices often have conceptualized motivation in rather general terms, and have not attended to specific processes or components of achievement motivation. Integrating these literatures should provide a more complete account of social and motivational influences on reading.

The purpose of the present paper is to integrate findings from these disparate research traditions and to provide suggestions for future inquiry. In addition, a particular focus of this paper is on how race and social class differences in children's reading performance are influenced by social and motivational factors. The problems of race and socioeconomic status (SES) differences in achievement have been at center stage in educational research for nearly three decades. Research has clearly demonstrated that such differences exist; black children experience more difficulty with reading than white children, and the discrepancy increases across the school years (Coleman et al.,

1966; Singer, Gerard, & Redfearn, 1975). Similarly, children from lower SES homes perform less well than children from middle-class homes (Armor, 1972; Coleman et al., 1966; St. John, 1970), and here too the difference increases over age (Coleman et al., 1966; Jencks, 1972). Like others (e.g., Entwisle, 1979; Resnick & Robinson, 1975), we believe that a social-motivational perspective can make an important contribution to understanding and overcoming such differences.

In the first section of this paper we will examine current trends in achievement motivation theory. Subsequent sections will focus on socialization research in the home and school as it relates to reading. Throughout our discussion, we will highlight research that is needed to bridge the motivation and socialization of reading literatures.

#### Achievement Motivation Theory: Current Trends

Achievement motivation has interested social and educational psychologists for several decades. While a complete review of achievement motivation theory is beyond the scope of this chapter (see Eccles & Wigfield, in press; Heckhausen, 1982, for more complete reviews), we will briefly discuss motivational processes thought to be most important for high achievement, and developmental differences in those processes.

In early theoretical views (McClelland, 1961; McClelland, Atkinson, Clark, & Lowell, 1953), the achievement motive was conceptualized as a relatively enduring personality trait. Individual differences in this trait were said to be due to different child-rearing practices, and researchers assessed how parental

practices influenced children's developing achievement motivation (e.g., Rosen & D'Andrade, 1959; Winterbottom, 1958; see more complete discussion below). Subsequent theorists (Atkinson, 1964) specified that the achievement motive is a function of expectancy and value; motivation to pursue a goal is determined by the expectancy one has of attaining that goal and the value one places on attaining it. Atkinson emphasized affective processes, especially the motive to approach success and the motive to avoid failure. Research in this tradition has concentrated mostly on how individuals differing in their motives to approach success and avoid failure differ in the risks they are willing to take in achievement situations (see Atkinson & Raynor, 1974).

More recently, there has been interest in cognitive determinants of achievement motivation. Weiner and his colleagues (Weiner, 1972, 1974, 1979; Weiner, Frieze, Kukla, Reed, Rest, & Rosenbaum, 1971) have argued that individuals' causal reasoning or attributions about achievement outcomes influence their motivation and behavior in achievement situations. Like Atkinson, Weiner views achievement motivation as a function of expectancy for success and the value one places on the outcome. However, in contrast to Atkinson he emphasizes that reasoning about causes of success and failure, rather than affective processes, determines expectancies and values. This view has gained wide acceptance as a powerful explanation for achievement motivation, and so we will consider it in more detail. We will focus on the two questions posed earlier: what are the important motivational processes, and how do they develop?

Initially, Weiner and his colleagues posited four factors that are used most often to explain achievement outcomes--ability, effort, task difficulty, and luck.<sup>1</sup> They classified these factors into two dimensions, stability and locus of control. Stability refers to whether the cause is changeable or not, and locus of control refers to whether the cause is believed to be personal (internal) or environmental (external) (see Rotter, 1954, 1966). In this classification scheme, ability is an internal, stable cause; effort an internal, unstable cause; task difficulty an external, stable cause; and luck an external, unstable cause.

The attributions people give to explain success and failure are postulated to have consequences for achievement motivation, expectations for success, achievement value, and affect, and achievement behavior. For instance, Weiner and Kukla (1970) classified subjects as high or low in achievement motivation based on their responses to an achievement motivation scale. Individuals high in achievement motivation (particularly males) were more likely to assume personal responsibility for success than were those low in achievement motivation. Individuals low in achievement motivation were more likely to believe that failure was due to lack of ability, whereas the group high in achievement motivation was more likely to believe failure was due to lack of effort. Thus, at least for males, positive achievement motivation was related to attributing success to ability and failure to lack of effort, and negative achievement motivation is related to attributing failure to lack of ability and success to luck or other variable factors (see also Covington & Omelich, 1979b,c; Ickes & Layden, 1978).

Expectations for future performance are said to be related to attributional stability (Weiner, 1979, Weiner et al., 1971). If performance on a task is attributed to stable factors, then the person will be relatively sure about his or her level of future performance on similar tasks. For example, if success on a task is attributed to ability, then expectations for future performance will be high. Similarly, if failure is attributed to a stable factor, then expectations for future success will be low. If success (or failure) is attributed to a variable factor (e.g., effort) then expectations about future success will be less certain. This description has been supported by results of several studies (Fontaine, 1974; McMahon, 1973; Valle & Frieze, 1976; Weiner, Nierenberg & Golden, 1976).

Weiner et al. (1971) initially linked achievement value and affect to the locus of control dimension; stronger affective reactions were said to occur when outcomes were attributed to internal factors. More recently, Weiner (1979) proposed two different sources of affect in achievement situations. First, people generally feel good about success and bad about failure with more differentiated reactions occurring depending upon the attribution made for the outcome (see Weiner, 1979). Ability attributions have the greatest impact on self-esteem and so individuals tend to feel best when they attribute success to ability, and feel worst when failure is attributed to lack of ability (see Sohn, 1977).

Finally, attributions influence subsequent achievement behavior. Attributing success to ability and failure to lack of effort means the person generally will expect to succeed, and will be

willing to try more challenging tasks. When the person fails, the failure can be overcome by trying harder, so the person will persist in the face of failure. In contrast, attributing success to a variable factor and failure to lack of ability means that the person will not expect to succeed. When the person fails, he or she will give up quickly, since extra effort will not overcome the person's perceived lack of ability.

What about race and SES differences in attributional processes? Weiner et al. (1971) hypothesized that race and SES differences in achievement could be due to differences in attributional processes. For instance, individuals from poverty backgrounds may make more external attributions for success, since they likely feel less control over their environment (see Hess, 1970). Few studies have assessed this possibility. However, some support for this hypothesis was obtained by Murray and Mednick (1975) in a study of success and failure attributions of high- and low-achievement-motivated black men and women. Murray and Mednick found that black male subjects were more likely than females to make external attributions for success.

Friend and Neale (1972) investigated social class and race differences in fifth-grade children's attributions for success and failure. White children ranked ability and effort as more important than did black children in explaining successful outcomes. All groups were equally ashamed of failure, but black children did not experience as much pride in success as white children did. Overall, however, there were few differences among the different groups in terms of their attribution patterns.

Studies to date, then, have not fully tested Weiner et al.'s hypothesis that race and SES differences in achievement could be due to attributional differences. More research is needed to assess this possibility. Additionally, given black and low-SES children's relatively poor reading achievement, the attribution model would predict that these children will have low expectations for future success in reading and negative affect toward reading. We will discuss these points more fully below.

#### Developmental Differences in Achievement Motivation

There is increasing evidence that children differ across age in how they interpret the information they receive in achievement situations, and thus differ in their achievement motivation. Parsons and Ruble (1977) found that young children maintained higher expectancies for future success after experiencing failure than did older children. Younger children were more likely to ignore the information that they were not doing well, and to naively continue to expect that they would succeed. Similarly, Nicholls (1978, 1979) demonstrated that young children overestimated their attainment in school, and did not perceive school success as related to ability. Older children more accurately estimated their attainment, and saw school success as due to ability. Nicholls (1978, 1980) also showed that five- and six-year-old children often could not judge which of a set of tasks was most difficult, or realize that difficult tasks require more ability. Young children generally are happy about success and unhappy about failure, regardless of the degree of task difficulty or the cause of the success or failure (see Veroff, 1969).

Research also indicates developmental change toward making more differentiated attributions. Nicholls (1978) found that during the early elementary school years, children did not conceptually distinguish effort and ability as separate causes of outcomes. Instead, being able also meant trying hard. Only at about age 12 or 13 were the two causes fully distinguished. Similar results were obtained by Kun (1977).

These studies indicate that children in the early grades interpret success and failure information differently than older children and adults, and also have different conceptions of ability and effort. Interestingly, in simple situations in which success and failure were quite obvious (Frieze, 1976; Karabenick & Heller, 1976), children's attributions did not differ as much across age as shown in the Nicholls (1979) and Kun (1977) studies. However, since the success and failure feedback children receive in school often is rather unclear (see Blumefeld, Pintrich, Meece, & Wessels, 1982), it seems that young children may not interpret that information accurately.

Although the development of attributions has been the focus of some attention, the antecedents of the attribution process have not been studied extensively. Weiner et al. (1971) made some general inferences about how different attribution patterns may begin. For instance, they proposed that people's judgments about their ability are a function of past success or failure on different tasks, and of the consistency of that past success or failure. However, little work has been done on how parents influence their children's attributions, expectations, and affective

reactions to success and failure. More work has been done on how teacher feedback influences these processes. In general, there is a need for more research on the socialization of achievement motivation. As we discuss the influence of different socialization agents, we will indicate how they may influence motivational processes and will suggest avenues for future inquiry.

Recently, several studies (e.g., Covington & Omelich, 1979a, Parsons, in press) have shown that attributions obtained in "real world" achievement situations have less of an influence on subsequent achievement motivation than Weiner predicted. Other variables, notably expectancies and values, had a stronger influence on subjects' task persistence and performance. These results suggest that we need to take a somewhat broader approach to the study of achievement motivation, rather than focusing nearly exclusively on attributions. Because constructs such as expectancies and values are particularly important ones to consider, we will discuss them in sections on home and school environments.

In summary, the attribution model emphasizes the role of cognition in achievement motivation. There are important developmental differences in reasoning about achievement outcomes, and other achievement-related constructs have been shown to be important predictors of achievement motivation in real-world settings. We turn next to a discussion of how the home environment influences children's acquisitions of reading skills and motivation to read.

### Home Influences on Reading

Several large-scale studies of educational achievement have demonstrated that factors in the home environment play a critical role in determining children's achievement motivation and performance in school. The best known of these studies in the United States was conducted by Coleman et al. (1966), who found that home factors outweighed school factors in determining children's achievement. Although the methodology of this study has been criticized (e.g., Dyer, 1968; Shea, 1976), the major finding has been relatively well accepted. Research in other countries also points to the importance of home influences (e.g., Davie, Butler & Goldstein, 1972; Douglas, 1964). Since parent-child interaction is the most important home influence on children's later achievement behavior in school, we will focus on how parents facilitate or constrain the development of reading skills and motivation to read by structuring the home environment and interacting with their children. We will consider studies which have assessed how parents influence children's achievement motivation, and also studies looking at how parent-child interactions relate to the acquisition of reading skills per se. Although race and SES differences in reading will be a main focus of the discussion, we hope to show that particular parental behaviors are the most important variables.

### Parental Influence on the Development of Achievement Motivation

Although currently there is little research on the home antecedents of particular motivational processes such as attribu-

attempt to assess home influences on the development of achievement motivation (See Parsons, Note 1, for a detailed review.) The studies assessed various hypotheses of McClelland's (1961) achievement motivation theory. A major tenet of McClelland's theory is that experiences involving independent mastery are essential to the development of achievement motivation. Several studies have assessed this hypothesis. In a retrospective interview study, Winterbottom (1958) found that mothers of eight- to ten-year-old boys high in achievement motivation (as measured by the Thematic Apperception Test) made more independence demands earlier on, were less restrictive, and were more rewarding for their children's successes.

In an observational study, Rosen and D'Andrade (1959) compared how middle- and lower-SES parents and their sons interacted on various analogue achievement tasks, ranging from block stacking and ring toss tasks to an anagrams task. Results showed that parents of nine- to 11-year-old boys who were high in need for achievement had higher performance expectations for their sons, and were generally more involved and interested in their sons' achievement-related behavior. This pattern was especially true of mothers, and held even when performance differences between children were controlled for. Middle-class parents had higher performance expectations for their children than did lower-class parents, and evaluated their sons' performance more carefully. These results suggest that parents can foster the development of achievement motivation in their children by: (a) holding high expectations and evaluating their perfor-

mance carefully; and (b) being involved in the achievement-related activities of their children (see also Katkovsky, Crandall & Preston, 1964, for evidence that parents who value intellectual competence tend to become more involved in their children's achievement activities; and Parke, 1978, for a discussion of how involvement which is contingent on children's responses seems particularly important). The results also suggest that middle-class parents are more likely to hold higher performance expectations and be more involved in achievement activities than are lower class parents. Others have conducted similar studies and obtained quite similar results (Hermans, ter Laak, & Maes, 1972; Rosen, 1959; Smith, 1969).

There is a need for research to assess the home antecedents of children's understanding of success-failure feedback and attributions. Recently, Hess, King, and Holloway (Note 2) showed that parents make attributions differently than do their children; mothers attributed their fifth-grade children's school success more to ability and failure to lack of effort, whereas the children attributed their success more to effort and failure to lack of ability. While these results are intriguing, more work is needed to answer several important questions concerning the home antecedents of children's attributions. For instance, what kinds of attributions do parents give when their children succeed or fail on reading and other achievement tasks, and how does this influence children's own interpretations of success and failure? Do parents' attributions for their children's performance change as children get older? Work addressing these questions would

increase our understanding of parental influences on achievement motivation.

### Parental Aspirations, Expectations, and Values

A related literature concerns parents' educational aspirations for their children. It would seem that parents who have confidence in their children's abilities and have high expectations for their performance would have higher educational aspirations for their children. Several studies have examined race and SES differences in parental aspirations for their children. The most common finding is that lower-SES and black parents often have educational aspirations for their children that are as high as those of middle-SES and white parents (Brook, Whiteman, Peisach, & Deutsch, 1974; Dreger & Miller, 1968; Rosen, 1959), though there are exceptions (Bell, 1965). However, black and lower-SES parents' occupational aspirations for their children are usually lower than those of white and middle-SES parents, perhaps reflecting a realistic view of the opportunity structure of society.

Further, while educational aspirations for children are high, black and lower-SES parents often do not expect their children to attain those high goals (Dreger & Miller, 1968; Resnick & Robinson, 1975) and they do not make adequate plans for their children to attain the goals (Wolff, 1966). This discrepancy between aspirations and expectations likely has a number of causes. One could be parental perceptions about schools. Hess and Shipman (1968) interviewed middle- and lower-SES black mothers about their perceptions about school and their aspirations

for their children in school. Lower-SES mothers thought that education was very important, but they viewed school as a place where they had little input or control. For instance, when asked to imagine working with a teacher, the lower-SES mothers described themselves as passive or subservient to the teacher, whereas middle-class mothers described themselves as actively involved and more equal to the teacher (see similar findings in Entwisle & Hayduk, 1978). Lower-SES mothers stressed the importance of obedience when they were asked what they would tell their children as they started school (see also Clausen & Williams, 1963). Middle-class mothers stressed the importance of positive interactions with teachers and other children. These views likely influence the kind of relationships children develop with their teachers. Given this pattern, middle-SES children likely feel more comfortable in the school environment.

Another reason for the discrepancy between aspirations and attainment could be the way lower-SES parents interact with their children in learning situations. Many studies have shown that compared to middle-SES parents, lower-SES parents use less effective teaching strategies (Bee, Van Egereth, Strissguth, Nyman & Leckie, 1969; Brophy, 1970; Hess & Shipman, 1965; Nottleman, Note 3). These studies indicate that lower-SES mothers provide their children with poorer problem-solving strategies, and they tend to "take over" for their children rather than letting them do the task (see Laosa, 1978, 1980, for work suggesting that level of parent education is an important mediating variable here). As Parsons (Note 1) suggests, taking over for their

children could be due to lower-SES parents' lack of confidence in their children's ability to do learning tasks. That lower-SES parents view the school as a distant, rather formidable institution over which they have little control, engage in less effective teaching strategies, and lack confidence in their children's ability does not bode well for their children's school performance.

It seems, then, that lower-SES parents do not provide their children with certain experiences that would help them do well in school, even though the parents value education and want their children to do well in school. This issue of parental values deserves closer scrutiny. Recall that lower-SES parents' occupational aspirations for their children were lower than those of middle-SES parents. Since a primary function of education is preparation for an occupation, perhaps low-SES children place less value on school because they, like their parents, do not set their occupational aspirations as high as middle-class children do (see Wylie, 1979). Recently, Parsons and Goff (1980) argued that achievement values have a strong impact on achievement choices. One aspect of achievement values (called utility value by Parsons and Goff) is the degree to which successfully doing a task contributes to a long-term goal. School probably has less utility value for low-SES students, because school success does not fit into their career plans (see Maehr & Nicholls, 1980, for discussion of tasks that may have greater utility value for low-SES children). Low-SES parents' lower career aspirations for their children perhaps contribute to their children's beliefs that school has less utility value for them.

In summary, parents' involvement in achievement activities, and the value they place on school success, appear to be particularly important contributors to the development of children's achievement motivation. They are also likely to give rise to race and SES differences in achievement orientation. Little work has been done on the home antecedents of attributional processes and there is a clear need for research in this area.

### The Home Reading Environment

The studies reviewed in the previous sections show how parents can influence their children's achievement motivation by the ways in which they become involved in their children's achievement activities. Turning to the acquisition of reading skills, more specifically, how do parents become involved to help their children? One way is by providing appropriate reading materials in the home. Research indicates a positive relationship between the number of books in the home and children's reading ability (Sheldon & Carillo, 1952; Lamme & Olmsted, Note 4). Durkin (1966) interviewed mothers whose children learned to read during the preschool years. The mothers frequently referred to the availability of reading materials in the home as an important factor in their children's early acquisition of reading skills.

The influence of material availability likely is mediated by the ways in which parents become involved with those materials. For instance, the extent to which parents model reading activity, read to their children, and otherwise encourage their children to read, should influence whether children become good readers.

Ransbury (1973) provided anecdotal evidence from interviews with

children that their parents' attitudes towards reading were an important influence on their own reading attitudes. Several studies have shown that parental involvement in reading to their children and parental provision of reading materials predicts later reading ability (e.g., Bing, 1963; Brezinski, 1964; Dix, Note 5). There is at least one exception to this general finding (Briggs & Elkind, 1977); however, even this study indicated that parents of early readers provided them with more reading materials and took them to the library more. Thus, research points to the importance of having reading-related materials in the home as well as having parents being involved with their children in reading-related activities.

This kind of involvement should have a number of positive influences. From a cognitive perspective, parents who read to their children are increasing their children's reading-relevant skills. From a social-motivational perspective, this involvement communicates that reading is a pleasurable activity, and one that provides children with an opportunity to interact positively with their parents. This sort of pleasurable interaction should motivate children to read more. There is a need for research to test how the cognitive and social benefits associated with parental involvement interact to aid children's acquisition of reading skills.

It is apparent that there are social class differences in children's home reading environments. Briggs and Elkind (1977) noted that parents of early readers were more likely to be in the middle and upper classes than the lower class, and a similar finding was reported by Sutton (1964). Miller (1969) interviewed

mothers about children's pre-reading experiences. In comparison to lower-class mothers, middle-class mothers reported that their children had been read to more, and had more contact with books and other reading-related materials in the home. These kinds of experiences likely provide middle-class children with more positive attitudes towards reading.

Although social class is an important factor, it appears that the home reading environment is actually a better predictor of children's attitudes toward reading than social class membership, per se. For instance, Hansen (1969) measured four aspects of the home reading environment--availability of reading materials in the home, amount of reading done with children, amount of reading guidance and encouragement, and the extent to which parents served as models by engaging in reading. This composite process measure correlated more highly with fourth-grade children's reading attitudes than did a measure of parent SES. Similar findings were reported by Krus and Ruben (Note 6). These findings have important implications for intervention programs. By encouraging reading and by reading to children, it should be possible for low-SES parents to help their children acquire positive attitudes towards reading and improve their reading skills. Indeed, intervention programs which have focused on getting low-SES parents involved in their children's education have been successful in improving children's academic performance (see Chilman, 1973; and Horowitz & Paden, 1973 for reviews).<sup>2</sup>

There are some limitations of this work that need to be addressed. The first is the use of SES as a descriptive measure.

Recall Hansen's (1969) results that particular aspects of the home reading environment were a better predictor of reading attitudes than was a more general SES measure. A growing set of findings supports the point that particular environmental measures correlate more strongly with children's academic performance than do SES measures (e.g., Bradley, Caldwell & Elardo, 1977; Elardo, Bradley, & Caldwell, 1977; Marjoribanks, 1976; Walberg & Marjoribanks, 1973; Wolff, 1966). The implication here is that a better understanding of why SES differences in achievement exist can only be obtained by looking at particular parent-child interactions in the home. From Bradley et al.'s (1977) work, some of the important factors include the responsiveness of the parent, the kinds of discipline techniques used, the organization of the physical environment, parental involvement, and provision of appropriate play materials. Most of the studies listed above have looked at how such environmental factors relate to performance on tests of general ability. There is a need to conduct such studies with specific reading-related skills as the dependent measures, in order to extend Hansen's (1969) work.

A second limitation is that studies on parent involvement with reading have conceptualized reading in global terms rather than examining component subskills. Certain practices in the home might help children acquire particular skills such as learning the alphabet, whereas other factors may influence processes such as children's reading comprehension. For instance, Hess, Holloway, Price, and Dickson (Note 8) classified reading into a number of component skills, such as attention, decoding, and

knowledge of vocabulary. They also distinguished different kinds of features of the home that influence the acquisition of reading skills, such as parent-child verbal interaction, parental values associated with reading, and availability of reading materials. Hess et al. argued that these different environmental variables likely influence the various component reading skills in specifiable ways.

Hess et al. examined how some of these environmental variables influenced children's ability to decode letters. The environmental variables selected for study were availability of materials related to recognizing letters, verbal eliciting techniques of the mother, and parental emphasis on achievement. Results indicated that parents whose children were good letter decoders had more materials available and tended to make their children respond verbally to a greater extent. Parental "press" for achievement was found to be quite important as well, even more so than some of the particular environmental features. For example, parents who stressed the importance of achievement but provided fewer relevant materials had children who were better decoders than parents low in "press" but who provided more materials. This work could be extended to assess other dependent measures in order to obtain a better understanding of how specific environmental variables influence particular reading skills.

Another limitation of the work on the home reading environment is that the primary focus has been on how mothers influence their children's interest in reading. Fathers' potential influence

has either been neglected, or in some cases fathers have been characterized as having little influence (see Durkin, 1966).

However, other evidence suggests that fathers do have an important influence, especially on their sons' cognitive development.

Radin's work (Radin, 1972, 1973; Radin & Epstein, 1975, Note 9)

indicates that paternal nurturance relates to preschool boys' test score performance. Mutimer, Laughlin, and Powell (1966) found

that boys aged eight to twelve who read well preferred to be with their fathers. Gruenebaum, Hurwitz, Prentice, and Sperry (1962)

found that elementary-school boys of average intelligence, but one to two years below the achievement test score norm for their age, tended to have poor relationships with their fathers.

Some evidence suggests that father absence contributes greatly to the academic problems of low-SES children. Biller

(1974) has reviewed the many studies which show that father-

absent-lower-class black children score much lower on intelligence tests than father-present lower-class black children. Middle-class

father-absent children are not as adversely affected, especially in the verbal skill areas (Carlsmith, 1964; Lessing, Zagorian &

Nelson, 1970). Generally, then, this research shows how the achievement of lower-class, father-absent children is adversely

affected. Research is needed on how fathers influence children's acquisition of particular reading skills, since previous studies

have primarily examined general achievement measures.

Additionally, there is a need to investigate how children's

behavior influences their parents' behavior. Socialization is not a unidirectional process of parents shaping their children's behav-

ior; children also have a strong impact on how their parents treat them (Bell, 1968). This bidirectionality of the socialization process has not been investigated in the areas reviewed here. It seems plausible that children who show more interest in reading cause their parents to become more involved in reading activities with them.

Finally, researchers need to integrate the two research traditions we have been reviewing. Presumably the way parents involve themselves in their children's reading activities influences

children's motivation to learn to read. Few, if any, studies have assessed how (or whether) parents make attributions for their children's reading performance, the kinds of expectations they have for their children's performance, or their perceptions of their children's reading ability. While some work has begun to look at more specific features of the environment and how those features influence reading, motivational variables have not yet been included in this work. Studies assessing such variables would increase our understanding of how parental involvement influences reading. Further, such work would provide important field tests concerning the role of motivational processes in children's acquisition of reading skills.

In summary, studies of parental involvement suggest that parents greatly influence children's achievement orientation and acquisition of reading skills. Some of the evidence indicates that particular factors in the home are better predictors of children's reading attitudes than general measures of SES. Nonetheless, higher-SES parents are more likely to be involved in the kinds of

activities that promote skills and interest in and positive feelings about reading. Middle-class children are more likely to come to school with the idea that reading is an important activity, they are more likely to be familiar with reading-related materials, and they have been exposed to parental teaching styles that foster school-relevant cognitive skills and motivational styles.

### School Influences on Reading

In this section we will examine how motivational and social factors in the school situation influence children's reading skills. Although home factors influence race and SES differences in school attitudes and performance, the school environment certainly is important as well. For instance, studies have shown that there are few differences in self-concept of ability between SES groups early in the school years, but low-SES children's self-concepts of ability decline more quickly than those of their middle-class peers (Bridgeman & Shipman, 1978; Eshel & Kleih, 1981). These results suggest that factors in the school environment are contributing to low-SES children's lower self-concepts of ability. In conceptualizing social and motivational influences in school, of particular importance would seem to be children's attitudes toward reading, the teacher-student relationship, the reading materials used in classrooms, and peer influences on achievement. We will discuss how these affect race and SES differences in reading performance, and also how they affect achievement motivation processes.

### Children's Attitude Toward Reading

Numerous studies have assessed the relationship between children's reading attitudes and reading performance (see Alexander & Filler, 1976, for a review). Not surprisingly, the results generally show that good readers have more positive attitudes toward reading than poor readers (Askov & Fischbach, 1973; Groff, 1962; Hake, 1969; Kenneday & Halinski, 1978; Shepps & Shepps, 1971; Zimmerman & Allebrand, 1965). Still, the relationships found in most studies are modest, ranging from correlations of .27 to .4. Further, the correlational design of these studies does not allow for any causal assessment of the obtained relationships.

Since black and low-SES children tend to be poorer readers, the results just summarized would suggest that they should be more negative in their attitudes to reading and school. Research assessing this suggestion has produced mixed results. Some studies have shown that lower-SES children do indeed have less positive attitudes toward school than middle- and upper-SES children (Coster, 1958; Yee, 1968), whereas others have not found a relationship (Neale & Proshok, 1967; Heimberger, Note 10). These discrepant results could be due to different measuring techniques, to social desirability demands, or to the different ages of the children in the different studies.

Generally, results of these studies are rather disappointing. What is needed are more sophisticated correlational designs that allow causal inferences to be drawn with more confidence. It would also be more fruitful to investigate specific dimensions of

reading attitudes and motivation to read, rather than simply examining the global "attitude towards reading" construct. Some recent work on children's attitudes toward mathematics could serve as an exemplar for future work on children's reading attitudes. Parsons, Adler and Kaczala (1982; see also Parsons, Adler, Futterman, Goff, Kaczala, Meece, & Midgley, 1983) conducted a longitudinal investigation of elementary, junior high, and high school students' attitudes, self-concepts of ability, values, expectations for, and planned participation in mathematics courses. Additionally, they obtained children's perceptions of their parents' beliefs concerning these variables, as well as parents' own beliefs about their children. This study thus goes far beyond assessing a global "attitudes toward math"; instead, variables of theoretical and practical interest were assessed. Parsons et al. identified three clusters of variables which predicted students' plans to enroll in math courses, and showed how parents have different notions about boys' and girls' math ability (because the study dealt with math, a detailed results summary is not presented here). Similar studies of parents' and children's reading attitudes would greatly improve upon previous studies, and perhaps help clarify the results of previous research.

#### The Teacher-Student Relationship

The way teachers interact with their students exerts a significant influence on students' achievement in reading and motivation to achieve. Although a comprehensive review of the teacher-student interaction literature is beyond the scope of this paper, two aspects are particularly relevant to our focus here.

teacher expectations and the influence teachers have on motivational processes.

Teacher expectations. There is a large literature on the topic of teacher expectations for their students' performance (see Brophy & Good, 1974; Cooper, 1979; and Dusek, 1975, for reviews). In general, research indicates that teachers' perceptions of and expectations about their students are affected by student race and social class (see Brophy & Good, 1974). For instance, Yee (1968) found that teachers expressed more positive attitudes toward middle-class students and Datta, Schaeffer, and Davis (1968) found that teachers described white students more favorably than black students. Cooper, Baron and Lowe (1975) found that teacher trainees, when describing hypothetical middle- and lower-SES students, said the middle-SES students would have higher grades and that their successes would be due more to factors such as their ability and effort. Goodwin and Sanders (Note 11) found that for first-grade pupils, teachers believe that student social class is the most important factor for predicting school success.

What is unclear from these studies is whether teachers are accurate in their perceptions of individual students even though they may hold general negative expectations concerning the academic potential of black and low-SES students. West and Anderson (1976) highlight this point in their review of the teacher expectancy literature. It is quite possible that teachers' expectations are often an outcome or consequences of the child's performance rather than the cause of that performance. Indeed,

results of studies reviewed by West and Anderson (1976) can often be accounted for in terms of student behavior causing teacher expectancy rather than vice-versa. When teachers and students interact together for a period of time, teachers use the information obtained to form expectancies for students rather than letting initial attitudes determine student behavior. When teacher expectancy appears to cause certain student behaviors, it is usually in situations in which students and teachers have little time to interact and get to know one another (Brophy & Good, 1974; West & Anderson, 1976).

Still, teachers could be guilty of a more subtle form of bias, even if their perceptions are data-based. It is an educator's task to go beyond the data given; that is, to expect that a child's behavior can be transformed with appropriate instruction and structuring of the educational environment. The teacher who does not hold this view is failing to construe education as a process that can significantly influence children's development. In this sense, the teacher is failing to decenter from the observable data of the child's present behavior to the possibility of future growth. Thus, it is the teacher's expectations for children's teachability that ultimately is at issue, not just whether teachers perceive children's current behavior in a negative light. Paladry (1969) conducted a study which has some relevance to this point. He compared first-grade reading achievement scores of two different groups of teachers. One group of teachers thought that boys and girls had an equal chance to learn to read. The other group believed that girls learn to read more easily.

Reading achievement scores for the students did not differ in September. However, by May, the group of students whose teachers believed girls learned to read more easily showed significant sex differences favoring girls. There were no sex differences in reading achievement in the other group. This study suggests how teachers' beliefs in children's educability influences children's achievement.

A major limitation of much of the work on teacher expectations discussed above is the failure to assess how such expectations are translated into behavior. Results of studies in which teacher behaviors have been observed indicate that teachers treat students differently for whom they have high versus low expectations; for instance, students whom teachers expect to do well get more praise, are called on to answer questions more, receive more classroom privileges, and are allowed more time to answer questions, (see Brophy & Good, 1970; Good & Brophy, 1977; Good, Cooper & Blakely, 1980; Parson, Kaczala, & Meece, 1982; Weinstein, 1976). Students, too, are aware of differences in teacher treatment of high- and low-achieving children (Weinstein & Middlestadt, 1979).

Since teachers have lower expectations for black and low-SES children, these same behavioral differences in teacher treatment may apply to them, though this contention has not received a direct test. Rubovits and Maehr (1973) found that teacher trainees criticized and ignored black students more than white students, especially when the black students were described as bright. However, this study was done in a laboratory rather

than a classroom setting, and with teacher trainees rather than teachers. Rist (1970), in an observational study, found that teachers grouped kindergarten students based on their SES level, and proceeded to treat the higher-SES children much more favorably. A two-year-follow-up observation showed that the groupings of children were still relatively intact in second grade. Results of this study have to be viewed with some caution, since the classroom observations were informal in nature, and done in only one school. There is a need to assess further whether teacher expectations about different racial and SES groups are translated into specific behaviors that affect how children learn to read.

#### Teacher influences on children's achievement motivation.

Results of the work just discussed show that teacher expectations are sometimes translated into behavior that influences children's learning. Differential praise and criticism by teachers likely influences children's motivation to achieve. Recall Weiner et al.'s (1971) claim that the kinds of attributions one makes about achievement outcomes depend on the consistency of the successes or failures one experiences. One theme running through the literature is that black and lower-SES children feel less control over their environment and experience more failures in both home and school environments. In an interesting series of experiments, Dweck has investigated the consequences of repeated failure experiences on children's achievement motivation and behavior. Dweck's concern is with learned helplessness, which is the perception that failure cannot be overcome. As Dweck and Goetz

(1978) define it, "learned helplessness in achievement situations exists when an individual perceives the termination of failure to be independent of his responses" (Dweck & Goetz, 1978, p. 157).

Dweck and Repucci (1973) conducted an initial investigation of helplessness with fourth- through sixth-grade children.

Children worked on soluble and insoluble problems given by two different experimenters. After several trials with each kind of problem, the experimenter giving insoluble problems began to administer soluble ones. Many children were unable to solve these problems, even though they had received quite similar problems from the other experimenter in earlier trials. These children were showing helplessness in response to initial failure.

Using Crandall, Katkovsky, and Crandall's (1965) Intellectual Achievement Responsibility scale, Dweck and Repucci assessed children's attributions for success and failure. Those children who persisted, even though they were failing, emphasized motivational factors like effort as determining the failure outcomes.

Those who did not persist emphasized more uncontrollable factors such as ability, or external factors like task difficulty. Hence, these children believed failure was hard to overcome. Finally, girls were more likely than boys to attribute failure to lack of ability.

Butkowsky and Willows (1980) assessed whether poor readers could be characterized as learned helpless about failures on a reading-related task. Good, average and poor reading fifth-grade children were given soluble and insoluble anagrams. In comparison to good and average readers, poor readers had lower initial

expectancies for success, attributed success to external factors and failure to internal factors (especially to lack of ability), and persisted less under failure. Following failure, poor readers' expectations for future success had a greater negative shift than those of the other groups. Thus this study shows that poor readers do exhibit learned helplessness in the face of failure.

There is a need to assess race and SES differences in learned helplessness. It is likely that black and low-SES children experience more criticism in school (e.g., Brophy & Good, 1974; Rubovits & Maehr, 1973), yet it hasn't been determined whether this criticism is directed primarily towards ability or to other aspects of performance. Since these children generally experience more failure in school than their white and middle-class peers, they may be more likely to attribute failure to lack of ability (see Katz, 1967), and thus show helplessness in response to failure. Several observational studies have assessed whether teacher feedback patterns influence children's tendency to exhibit helplessness in response to failure (Blumenfeld, Hamilton, Bossert, Wessels, & Meece, 1982; Dweck, Davidson, Nelson, Enna, 1978; Parsons et al., 1982; see also Fennema, in press, and Parsons, in press, for discussions of whether there are indeed sex differences in learned helplessness). It would be useful to do similar observational research focusing on teacher feedback patterns to black and low-SES children.

What can be done about the problem of learned helplessness?

Dweck (1975) showed that training learned helpless children to attribute failure to lack of effort helped them overcome helplessness.

ness--the children were more likely to persist when later faced with failure. In contrast, simply providing helpless children with success experiences was not enough to overcome helplessness; when they faced failure again, their performance deteriorated. These results indicate that changing children's attributions about their performance improved their subsequent performance. Similar results have been reported by Andrews and Debus (1978).

On the other hand, attribution re-training may sometimes be insufficient, particularly when children lack skills. Schunk (1981), based on Bandura's (1977a) self-efficacy theory, trained slow-learning students in an attempt to improve their math performance. Children received one of two training programs, or were in a control group. One training program was a modeling program in which children observed an adult do math problems, verbalizing his or her strategy. Children then practiced some problems and received feedback. The other program involved practice on math problems; when children had difficulty, they were told where to look for help in a training manual. Half the children in each training group also received attribution re-training; when they succeeded or failed on some of the practice problems given in training, the experimenter attributed the outcome to effort. Although both training conditions improved children's persistence, accuracy (the modeling condition was especially effective here), and perceived efficacy, there were no differences between the children who received attribution re-training and those who did not in either training group. Thus attribution re-training may not always be the most effective way to improve

children's performance (see also Chapin & Dyck, 1976, and Fowler & Peterson, 1981). This may be particularly true for children who lack critical basic academic skills.

A potential problem with attribution re-training is that if children continue to fail even after the re-training, they may eventually conclude that they lack ability. Covington and Beery (1976) and Covington and Omelich (1979b,c), as well as Kukla (1972, 1978), discuss how the degree of effort expended in a situation is an important indicator of one's ability. Attribution re-training teaches children to try harder; if children continue to do poorly even after this training they may be forced to conclude that they lack ability. Trying hard is therefore risky in potential failure situations. Given that black and low-SES children more often lack specific academic skills, training programs such as Schunk's may be more successful than attribution re-training programs in improving these children's performance and persistence.

Finally, the developmental issues discussed earlier should be considered here. Since young children are not very accurate at judging their abilities, and do not make success-failure attributions with adult logic (Nicholls, 1978; Parsons & Ruble, 1977), failure experiences in the early elementary school years may not influence as strongly children's perceptions of their ability. In support of this, Rholes, Blackwell, Jordan, and Walters (1980) demonstrated that children younger than ten or eleven (the age of children in most of Dweck's work) did not demonstrate learned helplessness in response to failure feedback. Also, Entwisle and

Hayduk (1978) found that working-class children in the first grade who were receiving poor grades in school were very inaccurate in predicting the relationship between their work and their grades, and continued to think that they would do well in school. Thus, even children who have had many failure experiences early on could become better achievers if they are given tasks at which they can succeed, and learn to attribute failure to nonability factors. With Resnick and Robinson (1975), we would suggest that it is vitally important for children to experience as much success as possible during reading instruction, especially those children who are struggling with reading.

Learned helpless children have often been found to be highly anxious (see Dweck, 1975; Hill, 1980). Studies investigating the relationship between children's anxiety and their school performance have found that the correlation between test anxiety and achievement test performance increased across the elementary-school years (see Dusek, 1980; Hill, 1972, 1977, 1980; Hill & Sarason, 1966). This negative relationship is particularly strong on measures of reading achievement, perhaps because of the more independent and comprehension-oriented nature of reading instruction in the later elementary years. Studies have also shown that black and low-SES children tend to be more anxious than their white and middle class peers (Willig, Harnisch, Hill & Maehr, in press; Fyans, Note 12).

Teachers may contribute to student anxiety through their interactions with students; for instance, through excessive criticism. Since black and low-SES children appear to be more

anxious about school than other children, they especially may need more praise and less criticism in order to do well. In support of this point, Brophy and Evertson (1976) reported that most successful teachers of low-SES children motivate them with praise and encouragement (see also Brophy, 1981). Brophy and Evertson contend that lower-SES children can begin to overcome their alienation from school when the school atmosphere is a warm and friendly one. It is important that lower-SES children begin participating, and encouragement helps accomplish this. Similarly, Cooper (1977) showed that when teachers stop criticizing children, those children who were criticized frequently begin to interact more positively with the teachers. The use of encouragement may allow low-SES children to participate in school without feeling threatened, and thus negative anxiety dynamics may be avoided.

How exactly does anxiety interfere with learning and task performance? Many theorists (e.g., Dusek, 1980; Geen, 1980; Sarason, 1972, 1975; Wine, 1971, 1980) believe that anxious persons (both children and adults) divide their attention between the tasks they are doing and their own self-preoccupation with how well they are doing, whereas low-anxious persons tend to stay focused more on the task. Research with children supports this view; studies show that high-anxious children have more difficulty focusing on task-relevant information (Dusek, Kermis, & Mergler, 1975; Dusek, Mergler & Kermis, 1976; Nottelman & Hill, 1977). Perhaps teaching children to focus more on the task at hand would help them improve their performance. Wigfield

(Note 13) showed that children achieved better prose recall in a condition where instructions emphasized concentrating on the task than in a condition which described the task as a test of ability. However, the specially designed set of task-focus instructions were not especially beneficial to high-anxious children, as would be expected from the studies just reviewed.

Recently, much has been written about how important "academic engaged time" and attentiveness are to learning (see Bloom, 1976; Brophy, 1979; Jenkins, & Jenkins, 1981; Rosenshine & Berliner, 1978; Rosenshine, Note 14). For instance, Bloom (1976) reviewed studies showing that attentiveness relates positively to school achievement, with correlations ranging from .4 to .5. Other studies have shown that inattention to reading instruction is a good predictor of low reading achievement (Camp & Zimet, 1975; Lambert & Nicoll, 1977; Soli & Devine, 1976). The research on anxiety suggests that some children's problems in attending in school could be due to their anxiety, and thus it is important to reduce anxiety in the classroom in order that high-anxious children can better maintain their attentiveness in the classroom. Hill (1980) provides many suggestions for how schools can be restructured to reduce evaluative pressure and anxiety in testing situations; perhaps similar things could be done to reduce anxiety in classroom learning situations. Direct attentional training could be one way to deal with this problem. A series of studies by Cobb and Hops (Cobb & Hops, 1973; Hops & Cobb, 1974; Walker & Hops, 1976) has shown that training attention skills in first-grade children improved their reading performance, and that this

program was as effective as a direct instructional reading program in improving children's reading.

### Reading Materials

Students' involvement in reading is undoubtedly influenced by the kinds of reading materials schools provide. Uninteresting reading primers would cause special problems for children having little prior exposure to reading materials in the home. Research by Asher (1979) assessed whether children's interest in the material they are given relates to race differences in reading comprehension (for complete reviews of this work, including a discussion of methodological issues, see Asher, 1977; 1980). Fifth-grade children's interests were assessed by showing photographic slides representing different topics. About a week later, children received, from a different experimenter, reading passages, three of which corresponded to the child's three highest-rated topics, and three corresponding to the child's three lowest-rated topics. Results indicated that white children comprehended the passages better than black children and that black and white children better comprehended the high-interest than the low-interest material. The performance gap between black and white children's performance was the same on both kinds of materials. Post-reading preference ratings indicated that both black and white children strongly preferred the high- to the low-interest material.

In an earlier study, Asher and Markell (1974) found that boys did as well as girls on high-interest material even though boys did worse than girls on low-interest material. A parallel

finding was hoped for with respect to race differences. Still, it is encouraging that the interest level of the material did have an effect for black children. The passages used in this study were obtained from the Britannica Junior Encyclopedia (1970), a source with rather dry style of prose. Perhaps stronger results would occur with different types of text. Since black children have greater reading problems than white children, providing personally interesting materials may keep them engaged in reading, even if those materials don't immediately lessen the gap in reading achievement. Indeed, Daniels (1971) has provided anecdotal evidence that a steady diet of high-interest material can greatly improve black children's reading performance.

An important question still to be answered is why children better understand high-interest material. One explanation is that interesting material better maintains the reader's attention; that is, the reader is more motivated when presented with high-interest materials. Another explanation is that readers have more knowledge about topics they are interested in, and thus can more easily understand passages about those topics. Research is needed to evaluate these alternatives. Another issue for future research is whether the effects associated with topic interest would be obtained with younger children. Nearly all research on topic interest has been conducted with older elementary-school children, and it would be instructive to do similar work with younger children. Such studies would more clearly indicate how topic interest influences early reading. Furthermore, studies of the long-term effects of a steady diet of high-interest material on

children's reading skills and continuing motivation to read (see Maehr, 1976) are clearly needed.

In concluding this section, it is important to stress that the phrase "high-interest material" describes an interaction between the reader and the material. Material that is fascinating for one child may be dull for another; hence in both research and instruction individualized assessment of children's interests and individualized assignments of material should be done. A related point is that children's interests in topics change, and thus there is a need to monitor interests over the school year. Accurate monitoring of children's interests and the provision of reading materials that children are interested in should increase the amount of time children spend reading.

#### Peer Influences on Achievement

Children's school performance is influenced by peers as well as teachers and text. Indeed, a salient feature of school is the presence of a large number of age mates. As children enter school, they begin to compare themselves with others to evaluate their own behaviors and attitudes (Campbell, 1964; Ruble, Boggiano, Feldman, & Loebel, 1980; Ruble, Feldman, & Boggiano, 1976; Veroff, 1969). They also come to conform to peer group standards (Berends, 1950), and this tendency seems to increase through the elementary-school years (Constanzo & Shaw, 1966; McDonnell, 1963).

Because peer group influences can be powerful, a child wishing to be accepted may choose not to work as hard in school if the peer group does not value achievement. Coleman's (1960,

1961) research has demonstrated the contribution of the peer group to patterns of achievement. In schools where students valued achievement highly, there was a closer relationship between academic excellence and intelligence than in schools where achievement was less valued. Similarly, studies of educational aspiration have shown that children's and adolescents' aspirations are quite similar to those of their peers, especially valued peers. (Haller & Butterworth, 1960; Kardel & Lesser, 1969; McDill & Coleman, 1965; Simpson, 1962).

Because peers influence the extent to which children value academic achievement, it is of concern that low-SES children do not seem to value academic-related activities to the extent middle-class children do (Coster, 1959; Pope, 1953). Other evidence indicates that low-SES children tend to be more conforming (see Hess, 1970), and that the peer group may be especially prominent in forming low-SES children's values. For instance, Psthas (1957) found that low-SES parents showed less concern and exercised less control over their children's activities outside the home. One implication of this finding is that more low-SES children may be influenced to do poorly in school in order to gain acceptance from peers.

One's social status within the peer group also plays a role. Researchers interested in the correlates of popularity have found that children who are intelligent tend to be more popular, and that slow learning children tend to be less popular (Campbell, 1964; Green, Forehand, Beck, & Vosk, 1980; Hartup, 1970; Porterfield & Schlicting, 1961). Children from low-SES

backgrounds also are less likely to be popular (Hartup, 1970; Hess, 1970). Thus low-SES children who are low achievers are likely to be among the least accepted children in the classroom. In response to this, these children may form their own groups, with one characteristic of the group being that little value is placed on achieving in school. McMichael (1980) has provided evidence of this dynamic; boys who were both poor readers and lacked social skills tended to be accepted only by other boys with similar academic and social problems. As McMichael suggests, such groups of children likely become more and more alienated from school.

It appears, then, that the peer group exerts a negative influence on low-SES children's achievement and that strategies are needed for involving low-SES children more in the school situation. One strategy may be to enlist children in the educational process by having them serve as peer tutors. Peer tutoring can be quite effective in improving other children's academic performance (e.g., Jenkins, Mayhall, Peschka & Jenkins, 1974) and both the tutor and the learner make academic and social gains as a result of the tutoring experience (Feldman, Devin-Sheehan, & Allen, 1976). These gains occur in both reading and mathematics, and with children from different SES and racial groups (see Allen, 1976). Thus, involving low-SES children in tutoring programs could increase the value they place on reading and other academic skills. Care should be taken when designing peer tutoring programs, however. In a review of studies on peer tutoring, Hartup (in press) concluded that to be successful,

tutoring programs should use tutors who are several years older than tutees, the tutors should be trained and supervised closely, and intervention should be implemented for a relatively long time.

### Conclusions

Specific suggestions for future research have been made throughout this paper. In concluding, we will make several general points concerning future research efforts. Central to this paper is the belief that research on achievement motivation and socialization influences on reading should become more closely integrated. Researchers interested in attributional processes need to look more closely at the antecedents of these processes in the home and school, to learn how and when children and parents make attributions in naturally-occurring situations related to reading. Such research would provide important field tests of the validity of attribution theory. Similarly, researchers interested in how socialization agents influence reading achievement should attend more to processes postulated by achievement motivation theorists to mediate achievement behavior. The work of Parsons and her colleagues on mathematics is a good example of such an approach; similar work needs to be done in reading. This sort of research would further understanding in both areas and help bridge the gap.

Inquiry is also needed into how particular features of the home and school environments influence the development of reading skills. Research like that of Hess, Elardo, and their colleagues on the home environment is an important first step, as is that of Brophy, Weinstein and others on the school environment.

From such research it will be possible to identify particular features of each environment which may be especially beneficial to children's acquisition of reading skills. Work on particular environmental features would allow researchers to go beyond the more general demographic variables of race or SES in explaining performance differences in reading.

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## Footnotes

<sup>1</sup>Weiner (1979) has added some additional causal factors to his model. These are not central to the points we will make about Weiner's view, and thus we will not discuss them here.

<sup>2</sup>One of the beneficial side effects of greater parental involvement in reading-related activities with children is that as a result of such involvement parents likely control things in the home that if left uncontrolled might have a negative influence on the acquisition of reading skills. An example is excessive television viewing. Several studies (e.g., Robinson, 1971; Stein & Friedrich, 1975; and Schramm, Note 7) have shown that high rates of television viewing have a negative influence on the development of reading skills.