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Family Influences on the Achievement of Economically Disadvantaged Students: Implications for Gifted Identification and Programming

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ABSTRACT

Historically, the study of family influences on the achievement of economically disadvantaged youth has focused on status variables. A moderate, positive correlation has been found between socioeconomic status and children's academic achievement. However, status variables have been criticized for oversimplifying a complex problem. In their stead, family process variables have been studied. Family processes, such as support of education and aspirations for children's academic attainment, have been shown to influence positively the achievement of children. Studies continue to be done from both a status and a process point of view. More recent studies of status have focused on family structure variables. These studies have shown a correlation between single parentings and low academic achievement. However, the presence of extended family members has been shown to overcome this problem in many instances. Further, some researchers have shown that the relationship of single parenthood with academic achievement is mediated through processes in the family that support academic achievement.

In lieu of studying status and process variables, more recent studies have begun to investigate the impact of contexts on family processes that affect academic achievement. In this context research, it is recognized that families do not operate in isolation to influence achievement, but that communities and schools also have importance. Schools can be particularly helpful when they teach in ways that are congruent to the culture of the family and find ways of involving the family in the school culture.

Studies of these same issues within the field of gifted education have followed the same path as the general achievement research. Status variables have been found to correlate directly with the performance of students on measures used to identify them as gifted. More recently, researchers have begun to look at the influence of context on the family processes that affect which students are identified for gifted programs and influence how they are served. Studies of context reveal that gifted students exist and are nurtured within economically disadvantaged families, but point to the need to focus on individual expressions of giftedness within cultural contexts when making decisions about the

placement and programming. As indicated here, advances have been made in understanding the relationships among families, academic achievement, and gifted education. However, a general lack of studies focusing on these issues makes apparent the need for further research of this type.

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EXECUTIVE SUMMARY

The family has long been acknowledged as a primary socializing agent for children. However, understanding the impact of the family on achievement has not always been clear. This paper focuses on the roles of the family and home environment in the achievement of students from economically disadvantaged (ED) populations within the various ethnic groups represented in the United States. Further, it explores the implications of family and home influence on achievement for the identification of, and programming for, gifted children among these populations.

The need to focus on ED students is important given the pervasive inability of gifted programs to find and serve gifted students within ED communities. The assumption is made that if we understand to a greater degree the characteristics of gifted students from culturally different groups and the contexts in which these characteristics are developed and exhibited, we will be better able to identify gifted students.

Theoretical Perspectives on the Study of Families

Historically, two theoretical perspectives have guided much of the research on families and achievement: (a) families as static systems and (b) families as dynamic systems. Recently a third perspective, families as interactive systems, has emerged. Each of these perspectives is briefly described here.

Families as Static Systems

Within the perspective of families as static systems, general demographic or sociological variables are studied. These variables are used to classify or characterize families and typically include attributes such as ethnicity, socioeconomic status, and family structure. From this perspective, the assumption must be made that status variables serve as proxy measures for the home environment; that is, families that fall within a

certain status category function in similar ways in general. Status variables are used because they are convenient and stable, if indirect, measures of the home environment. In the past, the research that has been conducted from this perspective has centered on what is lacking in the home environment and how this relates to failure to achieve. This has been termed a cultural deficit, deprivation, or disadvantagement ideology.

Families as Dynamic Systems

The investigation of families as dynamic systems occurs through the use of process variables, which include behavioral and attitudinal aspects of the family environment. Behavioral variables include parental roles, parenting styles, and family communications. Examples of attitudinal variables are achievement orientation, parental aspirations for the child, and attitude toward the schools. An assumption underlying this perspective is that measurement of family processes is a more direct assessment of home environment than measurement of status variable. Some process studies continue to operate from a deficit ideology, probing how negative attitudes and behaviors are associated with school failure. They are based on the assumption that socializing experiences of homes and communities do not prepare ED students to attain the knowledge, skills, and attitudes essential for academic success that are acquired by middle-class children (Bloom, Davis, & Hess, 1965). As an alternative to the cultural deficit model, other theorists have begun to operate from a cultural difference view. Where, in deficit models, researchers see members of low-income groups as suffering from deviant or underdeveloped family structures and process; in the cultural difference model, researchers note the coherent, structured, and distinct cultures and strengths of low-income and minority students (Baratz & Baratz, 1970).

Families as Interactive Systems

Those who take the perspective of families as interactive systems study the family in its ecological environment. The role of the family in the larger sociocultural context is acknowledged to influence children's cognitive development and school achievement. These studies then focus on the interactions between the family and various social institutions. It is assumed in this perspective that families are not omnipotent in their influence on children, but their influences are mediated by other social variables; that environments are not best analyzed as linear variables, but in terms of systems. Growing out of studies of the cultural differences orientation, cultural ecological studies broaden intracultural and intercultural research to focus on more factors and issues concerned with how children achieve. Children are seen as having skills, strengths, and values developed in the cultural context in which their families live.

Impact of Families on the Academic Achievement of ED Children

The three theoretical perspectives (i.e., families as static, dynamic, or interactive systems) provide a background for a review of recent literature on achievement of students from ED populations. For the purposes of this paper, only research published

since 1980 has been reviewed. This time period was selected because all three theoretical perspectives had been advanced by this time and could potentially have influenced the thinking of those doing the research. Following the discussion of the recent research on families, the implications for identification and programming of gifted students will be presented.

Socioeconomic Status

Socioeconomic status (SES) has continued to be among the most studied variables when examining the issue of academic achievement among ED populations. Although there have been numerous investigations relating SES, family environment, and children's academic achievement, the implications of the research remain unclear. White (1982) conducted a meta-analysis of almost 200 studies on the relation between SES and academic achievement. Results indicated that SES and academic achievement were only weakly correlated (r=.22). Slaughter and Epps (1987) also reported that the relationship of SES to ability and achievement test performance was usually weak but positive and statistically significant. White (1982) raised the question of whether SES was the most appropriate variable for most of the applications for which it had been used. If it was not, serious questions needed to be raised about the conclusions drawn from past research that may have used the concept of SES indiscriminately. He suggested that using family income or occupation of the head of the house as separate variables rather than a general SES index would do much to clarify the results of future research and facilitate comparative analysis of data.

Family Structure

Several studies have investigated a second status variable, family structure. Two aspects of structure have been studied in particular: (a) single parenthood, and (b) extended families. Scott-Jones (1984) has suggested that, rather than continuing to ask whether differences in performance on cognitive and achievement measures exist between traditional and less traditional family structures, it might be more productive to ask about the ways in which single-parenting, in interaction with other variables, is related to cognitive development and school achievement of children. It seemed likely that a complex interaction among several variables might mediate the relationship between any family configuration and academic achievement. Few studies appear to have addressed this issue. An additional dimension to the single-family debate has been whether or not extended family members are involved. Slaughter and Epps (1987) reported that parents were better informal educators to their children when they were supported by extended family members. Scott-Jones (1987) found that Black children across all achievement levels were part of an extended family-kinship network. This kinship network seemed to function as an extremely important support system for poor and working-class Black families, and kinship networks occurred at a higher rate for Blacks than for Whites across all economic levels.

The work of Nock (1988) on the hierarchical structures of families explained the role of the extended family in academic achievement. He noted that children from

single-parent families often were part of a reciprocal dependency with the single parent. The single parent would look to the children for emotional support, which in turn threatened the authority relationship between parent and child. The presence of a grandparent, however, gave the parent another adult with whom to share child-care responsibilities. The authority structure was then maintained, and the children continued to learn to operate in the hierarchical structure of the home. This learning then extended to the school, which also functioned hierarchically.

Parenting Roles and Styles

The issue of hierarchical structure in the family raises the question of parental roles and styles in parenting. Studies that deal with parental roles focus primarily on the interaction with the child in the family setting. A second set of research centers on the communications in the family that deal with educational support. Slaughter and Epps (1987) found that beliefs concerning when children were allowed to enter into adult conversations were an important feature of the home environment of young lower-income Black children in a southern community. Children between the ages of birth and 3 years received much affective attention from adults, but children between ages 3 and 5 were relatively ignored. Child-adult conversation increased after first grade, but the emphasis was on the business of the day rather than on personal, affective perspectives. The implications of this research are that parental communication patterns influence the language abilities of the children, and, therefore, influence the children's academic achievement.

In research on direct family support of education, Scott-Jones (1987) suggested that some behaviors that might have been characterized as parental support of educational achievement may, in fact, have hindered the intellectual and academic development of children. In a study comparing family processes of high and low achieving first graders within a group of economically disadvantaged Blacks, she observed mothers teaching their first graders in the home setting. A greater amount of structured teaching occurred in the homes of low achieving students than in the homes of high achievers. High achievers watched more television and engaged in more play activities than low achievers. Mothers of high achievers most often provided help in response to their children's requests or comments rather than directing their activities. Teaching and school-related activities were integrated into the flow of pleasant, play activities and were neither formal nor intentional. Mothers of low achievers, on the other hand, more often directed learning tasks and maintained long periods of teaching and school-related activities. These parents appeared formal and intentional but often lacked the instructional skills needed to help their children.

Family Environment

Studies of family environment have analyzed mainly the psychological atmosphere of the home as it influences student achievement. Recent research has increasingly focused on identifying the variables of the family climate that contribute to the strong academic performance of children from minority backgrounds.

Some of these studies have used general measures of home environment as the basis for their findings (e.g., Dolan, 1983). On the other hand Valencia, Henderson, and Rankin (1985) examined the relative contributions of a variety of family background and climate variables to cognitive performance. These authors found that variables reflecting learning opportunities provided by parents were the best predictors of cognitive performance. Status variables such as SES, family size, and parental education proved to be much less powerful predictors.

Home environment has also been studied through investigations of parental aspirations for the child. For instance, Stevenson, Chen, and Uttal (1990) found that minority families held higher expectations and were more positive about education than White families. Minority mothers believed more strongly than White mothers in homework, competency testing, and longer school days as means of improving education.

The fate of aspirations in the face of continued obstacles was illustrated in the work of Buriel and Cardoza (1988). They offered a cultural integration and ghettoization hypothesis to explain differences in academic advancement. According to the cultural integration hypothesis, first- and second-generation students were most likely to be exposed to the positive effects of immigrant Mexican-American culture with its emphasis on the value of education and high aspirations for success in overcoming obstacles. If the first generation was successful, the next generation was able to build upon the gains of the first, thus leading to cultural integration. The ghettoization hypothesis referred to the increasing sense of hopelessness in third-generation students whose families had not achieved economic mobility. While Spanish language effects on achievement were noted in this study, it was clear that minority status alone did not account for differences in school success and failure. What appeared to be the operating variable was the students' perceptions of themselves, their families, communities, and ethnic groups, as well as the value of their personal investment in education. These attitudes seem to have been passed on to them from the previous generations.

Families in Context

According to Bronfenbrenner (1986), existing theory and research have made apparent the importance of connections between families and other settings with regard to the growth of a child. One important setting with which connections must be studied is the schools. However, as Bronfenbrenner has pointed out, research on the connections between the schools and families has been overrepresented by studies of family influence on the child's school performance, with achievement in school being the criterion. Examinations of how schools affect home environments and parent-child interactions are totally lacking. However, more recent studies of school-home discontinuity are beginning to recognize the joint influences of the school and home on each other in cultural context (Ogbu, 1981, 1987).

As an example, regarding the role of ethnicity and family, Slaughter and Epps (1987) reported findings that described Black children as being socialized to assume postures of persistence and assertiveness in relation to problem solving. When these

traits were displayed in the classroom, they were rejected by teachers as inappropriate. By the middle-school years the cumulative impact of these rejections transformed many children's achievement efforts into learned helplessness. Middle-schoolers began, therefore, to gravitate toward their peer culture, for there they could better demonstrate their competence and maintain their self-respect.

The discontinuity between school and home was used by Calabrese (1990) to explain the significantly higher alienation minority parents felt toward the schools than did White parents. He stated that minority parents' sense of alienation should not be attributed to environmental causes, but should be understood in light of school culture and the parents' perception of that culture. He then explained that the minority parents, though interested in their children's education, felt that they were unwelcome and that they were treated more with confrontation than with respect.

Gifted Level Achievement and Families of ED Students

In addition to the general research cited briefly in the preceding discussion, research has begun to emerge in the field of gifted education about the families of ED students. Despite the fact that the identification of students from economically disadvantaged backgrounds as gifted has been problematic to the field for some time, research on the possible impact of families has been a relatively recent phenomenon. At least one study has used a status approach by comparing parent ratings of achievement to determine differences between two-parent and one-parent families (Gelbrich & Hare, 1989). Their findings indicated a negative influence from single parenthood. In contrast, a study by Prom-Jackson, Johnson, and Wallace (1987) indicated that the development of academically talented students in low-income situations occurred under a variety of home environmental conditions. The educational levels of the parents varied widely. Students came from small, large, and average sized families, and from both single-parent and two-parent households.

Other studies have taken a more complex view by investigating family processes and contexts. In a longitudinal study of 825 first graders, Pallas, Entwisle, Alexander, and Cadigan (1987) concluded that background and family variables had a negligible impact upon those children who did extremely well. They suggested that families may exercise less influence over patterns of exceptional growth than they do over a child's progress in the more typical range.

An important study that investigated the impact of family context upon individual achievement was conducted by Van Tassel-Baska (1989). Institutional influences that emerged from this research included a family value system of education and work, the importance of the extended family in single parent homes, and the school as provider of educational opportunities. Van Tassel-Baska also identified important interpersonal influences on these gifted students, including a parent, usually the mother, as a monitor of student progress; a grandmother as a stabilizing and nurturing influence; and teachers who acknowledged and encouraged ability. Attitudes internal to the student were also

recognized as important, including motivation to achieve, feelings of self-competence and independence, and mechanisms for coping with school demands. Two negative influences internal to the child were also identified; the continuing struggle the students were having in dealing with the divorces of their parents and a tendency to procrastinate.

Implications for Gifted Identification and Programming for ED Students

Upon review of these studies, one implication that is apparent is that there are academically competent students within ED populations. In many of these studies, students who were succeeding in school were identified and described. While academic achievement does not necessarily indicate giftedness per se, it provides evidence of positive characteristics that may demonstrate that potential gifted-level ability is present and recognizable among ED students. From the gifted identification perspective, this means teachers must acknowledge that potentially gifted students exist in all populations. For programming, they must focus on the strengths of students and plan curriculum around these strengths, rather than concentrating on academic deficiencies.

A second implication for gifted educators is recognition of the strengths within family structures among the economically disadvantaged. The presence of poverty or a single parent family structure does not, in and of itself, concede lack of interest or support for the educational achievement of children. Extended family structures and high educational aspirations and expectations may be part of the families' environments. Where families are obviously interested in their children's education, family members could be used as sources of information on their children during the assessment phase of a gifted identification process. Parents should be invited to provide assessment information about their children in a way that informs curriculum planning. During the curriculum planning stages, parents can also be involved in developing and supporting curriculum plans for their children.

A third implication relates to the way assessment information about children is interpreted. Where there is discontinuity between the culture of the school and of the home, caution needs to be exercised in the way a child's behaviors are evaluated for purposes of identification. What may be viewed as nonfacilitative behavior in the school setting may be highly appropriate in the home. Schools can respond to the home culture by including elements from that culture in the school setting. A second solution is to prepare parents to assist students actively in understanding the cultural values of the school. As students understand these values, they are more likely to translate the behaviors of school personnel in meaningful, non-threatening ways and to conform to school expectations. Because of the minimal scholastic expectation often associated with the second solution (i.e., getting a high school diploma), it would be important for gifted educators to focus on the first solution suggested (i.e., including elements of the family culture in the school setting).

A fourth implication is primarily directed at those who do research in gifted education. Investigations of families of gifted students from ED populations has begun only recently. The focus of research on giftedness among the economically disadvantaged has focused on identification processes and instrumentation, with consideration of the general context for interpreting data. The recent inclusion of research on the impacts of more specific environments, such as the family, is welcome and needed.

Conclusion

One of the most important societal influences on a child's life is education. Although schools cannot immediately change the economic and social conditions in which many ED children find themselves, they can change their responses to these children and their families. This fact implies the need for an educational approach that values both the learner and his or her culture. However, each cultural context would require a systematic study to identify the critical elements and features of the culture to which educational systems should respond. For gifted education, this means moving beyond research that describes environments, processes, and their impacts with researchers as the primary audience. Educators must also comprehend this information to use it effectively when making decisions about placement and programming for individual students. Further, educators need to understand how they, themselves, can study the culture of the community they serve and use that information for the benefit of the potentially gifted students in their schools. Systems and tools for practitioner-conducted research need to be developed and disseminated in gifted education so that professional educators can generate knowledge about the contexts in which families function. This in turn will help educators better attend to the educational needs of their students.

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Table of Contents

ABSTRACT v

EXECUTIVE SUMMARY vii

Introduction 1

Theoretical Perspectives on the Study of Families 3
- Families as Static Systems 3
- Families as Dynamic Systems 4
- Families as Interactive Systems 5

Impact of Families on the Academic Achievement of ED Children 6
- Family Influences on Achievement Among ED Populations 6
  - Status Variables 6
    - Socioeconomic Status 6
    - Family Structure 7
  - Process Variables 9
    - Parenting Roles and Styles 9
    - Family Environment 11
  - Families in Context 13
- Gifted Level Achievement and Families of ED Students 15

Summary 16

Implications for Gifted Identification and Programming for ED Students 14

Conclusion 20

References 23

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Introduction

The family has long been acknowledged as a primary socializing agent for children. However, understanding the impact of the family on achievement has not always been clear, particularly as this relates to academic achievement. The lack of clarity results from differing views of which variables are important to study, how the variables that have been studied operate to influence achievement, and how strong the influence of the family is (Henderson, 1981; Marjoribanks, 1979; Stryker & Serpe, 1983; Wood, Chapin, & Hannah, 1988).

An additional dimension of the problem for social scientists has been the examination of the issue of academic achievement of students from economically disadvantaged (ED) populations. A major thrust of this research has been investigations of the influences of the family and home environment on children's achievement in the schools. While other social institutions, such as the schools themselves, religious organizations, and business and industry, are also recognized as important influences in the lives of children, the importance of the family cannot be denied.

For gifted education, the need to focus on ED students is pressing, given the pervasive inability of gifted programs to find and serve gifted students from this population. An assumption is made that if we understand to a greater degree the characteristics of gifted students from these groups and the contexts in which these characteristics are developed and exhibited, we will be better able to identify and serve gifted ED students.

As an initial step in developing understanding of the characteristics of gifted students from ED populations, the primary purpose of this paper is to summarize the recent research done from three competing perspectives on how families influence scholastic achievement of children from ED populations. The three perspectives involve different beliefs in what variables are most appropriate to study; some give priority to family status variables, some investigate family process variables; and others look at context variables. As will be seen, the three perspectives can lead to markedly different

views about the characteristics of ED children and their families and about what is needed to serve them in the school setting.

Much of the work on family influences on academic achievement is unfamiliar to many scholars in gifted education. It is hoped that, in this brief exposure, the readers will raise questions in their own minds about the kinds of studies done as they relate to gifted education. This highlights the secondary purpose of this paper, which is to explore the implications of the research on family and home influence on achievement for the identification and programming for gifted children from ED populations.

In this discussion, every effort has been made to include relevant literature on each of the minority subgroups in this country, as well as for low Socioeconomic status (SES) White families. However, an imbalance will be evident because the overwhelming focus of the literature has been on African American families and making comparisons with White middle class American families. Only recently have there been increased efforts to focus on other minority groups such as Hispanics, Asian Americans, and Native Americans. In addition, only recently have family studies begun to move away from a paradigm of comparison with the majority White population to a paradigm that focuses more on the dynamics within specific ethnic and cultural minority groups in America. Further, while much of the research on ED populations is conducted among minority groups, researchers have attempted recently to determine which differences can be ascribed to ethnicity and which to poverty. Because minority groups are overrepresented in ED populations (based on their proportion in the general population), it is likely that these groups will appear with greater frequency in studies of the influence of economic disadvantagement. This does not imply, however, that effects of disadvantagement on achievement can be attributed to ethnicity, and many researchers have been careful in interpreting effects that may confound ethnicity with economic disadvantagement. The reader should exercise similar caution.

The final section of this paper will focus on implications for future research and practice for gifted education. It is hoped that the results of this review will help establish a need for basic and applied research to facilitate a better understanding of the role that minority families can play in encouraging and supporting the development of the gifts of their children. It is further hoped that new examinations into the contexts of development of gifts will yield information that helps the field of gifted education more effectively identify students from ED populations for school-based services. Thus this paper is intended to serve as a foundation for developing research and practice in identifying and serving gifted students from ED populations based on knowledge of families of ED children. It is not intended that specific suggestions for identification procedures or programming will be made in this document, but that they will emerge from the research that includes knowledge of families within ED populations.

Theoretical Perspectives on the Study of Families

Historically, two theoretical perspectives have guided much of the research on families and achievement: (a) families as static systems and (b) families as dynamic systems. Recently a third perspective, families as interactive systems, has emerged. Each of these perspectives is briefly summarized here. To place these three perspectives in historical context, reference is made to seminal studies done in each one.

Families as Static Systems

Within the perspective of families as static systems, general demographic or sociological variables are studied. These variables are used to classify or characterize families and typically include attributes such as ethnicity, socioeconomic status, which refers to some combination of family income, educational levels, and parental occupations; and family size and constellation (e.g., extended, nuclear, single parent, blended). From this perspective, the assumption must be made that status variables serve as proxy measures for the home environment; that is, families that fall within a certain status category in general function in very similar ways. Status variables are used because they are convenient and stable, if indirect, measures of the home environment. Data for analysis are available through inspections of census information and school records.

The seminal work from this perspective was that of Warner, Meeker, and Eells (1949). They investigated the socioeconomic stratification of American society and established relationships among a number of status attainment indices. This work essentially resulted in standardized criteria for studying families from a status perspective. It should be kept in mind that these studies emerged when much of American society (e.g., transportation, military, education, commerce) was organized around racial status.

In the past, the research that has been conducted from this perspective has centered on what is lacking in the home environment and how this relates to the failure to achieve. This has been termed a cultural deficit, deprivation, or disadvantage ideology and is best exemplified by the report entitled The Negro Family: The Case for National Action (Moynihan, 1965) produced under the sponsorship of the U.S. Department of Labor. This report argued that conditions in Black communities (particularly the deterioration of the Black family) made it all but impossible for the majority of Black Americans to take advantage of the new civil rights legislation passed during the Johnson administration. Based on the evidence provided (e.g., fertility rates, unemployment rates, preponderance of single parent households in Black communities), it was concluded that the deterioration of Black society was due to both lack of opportunity and cultural deprivation. The implication of this report was that the poor school performance of African American children could be attributed to inadequate segregated schools, the failure of the home to prepare children for school, and low motivation to achieve on the part of young people discouraged about the possibilities of finding a job after graduation (Gans, 1967).

The effects of cultural deprivation were felt to be only partly reversible. In a discussion of the effects of cultural deprivation on learning patterns (Ausubel, 1966), educators were advised to understand that current and future rates of intellectual development would always be conditioned or limited by existing developmental deficits that tended to become cumulative. A child with an existing deficit in growth incurred from past deprivation was less able to profit developmentally from new and more advanced levels of environmental stimulation.

Families as Dynamic Systems

An advance in the study of families and achievement occurred when scholars began research of variables other than status ones. This perspective focuses on families as dynamic systems. The investigation of families as dynamic systems occurs through the use of process variables, which include behavioral and attitudinal aspects of the family environment. Behavioral variables include parental roles, parenting styles, and family communications. Examples of attitudinal variables are achievement orientation, parental aspirations for the child, and attitude toward the schools. An assumption underlying this perspective is that the examination of family processes is a more direct measure of home environment than status variables.

Early work within this perspective was done by Bloom (1964) and his colleagues (Dave, 1963; Wolfe, 1964) at the University of Chicago. They were able to develop theoretical and empirical bases for the measurement of process variables. Their measures were then used to investigate the association between home environment and achievement.

While a move to process studies was considered an advance, some process studies continued to operate from a deficit ideology, probing how negative attitudes and behaviors were associated with school failure (Whiteman, Brown, & Deutsch, 1965). The belief was that socializing experiences of homes and communities did not prepare ED students to attain the knowledge, skills, and attitudes essential for academic success that were acquired by middle-class children. The root of the problem was in homes that did not transmit the cultural patterns necessary for the types of learning characteristic of the schools and the larger society (Bloom, Davis, & Hess, 1965). Integral to this view was the assertion that culturally deprived families had values and attitudes that perpetuated the cycle of poverty. For example, Banfield (1970) argued that Blacks had little impulse control and could not discipline themselves to sacrifice today for the future. This lack of future orientation was assumed to influence Black children's success in school, as well. An alternative analysis of the same perceived characteristic, however, focused instead on the realities of life as the causal agent (Liebow, 1967). The school was often thought of as the only agency that could remedy the effects of cultural deprivation. Compensatory and other remedial education programs developed during the sixties reflected the impact of this theory.

As an alternative to the cultural deficit model, other theorists began to operate from a cultural difference view. Most notably, Baratz and Baratz (1970) charged that the

cultural deficit models regard members of low-income groups, particularly if they are also members of non-mainstream ethnic groups, as pathological in their family processes (i.e., processes within the family are viewed as sick, deviant, or underdeveloped). Baratz and Baratz proposed a cultural difference theory that viewed the cultures of low-income and minority students as coherent, structured, and distinct. From this point of view, children from different cultures were not deprived; they were different in ways that often exhibited strengths that were valued in the cultural context in which they were developed. Within the cultural difference perspective in the field of education, cultural characteristics lists and a focus on learning style and language differences were prevalent themes in research, writings, and practice (Bernal, 1974; Hilliard, 1976; Ramírez & Casteñeda, 1974; Witkin, 1967). This body of research was often associated with implementation of programs for specific ethnic groups within existing educational programs.

Families as Interactive Systems

A final movement in better understanding family influences on academic achievement occurred with a shift to seeing families as interactive systems. Those who take the perspective of families as interactive systems study the family in its ecological environment. The role of the family in the larger sociocultural context is acknowledged to influence children's cognitive development and school achievement. These studies then focus on the interactions between the family and various social institutions. It is assumed in this perspective that families are not omnipotent in their influence on children, but their influences are mediated by other social variables; that environments are not best analyzed as linear variables, but in terms of systems.

Seminal work in this areas has been done by Bronfenbrenner (1979). He acknowledged the remarkable potential of human beings to be constructive given a compatible environment, and believed that looking at people in isolation from their environment led to gross underestimation of their abilities.

In other ecological work, the standards of any one culture as the norm were rejected, and instead the focus was on the cultural context of development. Growing out of studies from the cultural differences mode, cultural ecological studies broadened intracultural and intercultural study to focus on more factors and issues concerned with how children achieve. Children were seen as having skills, strengths, and values developed in the cultural context in which their families lived, but these were seen as possibly irrelevant or maladaptive in the schools, an institution founded on principles of mainstream White culture. Thus, students from culturally different backgrounds were devalued as learners in a system that rewarded cultural assimilation at the expense of cultural pluralism (Gallimore, Boggs, & Jordan, 1974).

Each change in theoretical perspective seemed to represent an advance in the way families were studied. The movement from status variables to ecological variables represented a recognition of the complexity of the problems of understanding family influences on academic achievement. Yet, a preference for one perspective over the other has not been found in the recent research. For a variety of reasons (e.g., relative

ease of data collection from status perspective, political pressures, biases of funding sources), all three perspectives have remained influential, as will be seen in the following section.

Impact of Families on the Academic Achievement of ED Children

The three theoretical perspectives discussed in the previous section provide a background for a review of recent literature on achievement of students from ED populations. For the purposes of this paper, research reported since 1980 has been reviewed. The review is limited to this time period because all three theoretical perspectives had been advanced by this time and could potentially have influenced the thinking of those doing the research.

The three theoretical perspectives are expressed in the research primarily through the variables studied by those who hold to the respective theories. Thus, those who see families as static systems study status variables. Those who believe families are dynamic systems study process variables. Finally, those who accept families as interactive systems study context variables.

Family Influences on Achievement Among ED Populations

Status Variables

Socioeconomic Status

Socioeconomic status (SES) has continued to be among the most studied variables when examining the issue of academic achievement among ED populations. This occurs, of course, because SES is the defining variable for the population. That is, a family is not considered ED unless it can be classified as having a low SES.

An example of recent research is the work of White (1982) who conducted a meta-analysis of almost 200 studies on the relation between SES and academic achievement. Results indicated that SES was only weakly correlated (r=.22) with academic achievement. In a later analysis, Slaughter and Epps (1987) also reported that the relationship of SES to ability and achievement test performance was usually weak, although positive and statistically significant.

In contrast, Rumberger (1983), using a different criterion for academic achievement, found lower social class to be a powerful predictor of dropping out of school. This finding was extended in a study by Karraker (1992), using National Opinion Research Center data on 4,573 high school female seniors, in which SES (measured through ethnicity, family income, and mother's education) was found to be a significant predictor of a female's desire to continue schooling past high school. Interestingly, among low SES females, Blacks were more likely to plan on a college education than were Whites.

Patterson, Kupersmidt, and Vaden (1990) recently published results of a study of 868 Black and White elementary school children in which income level and ethnicity were found to be the best predictors of academic achievement, with African Americans and children from low income homes receiving lower achievement test scores. However, even more recently, Wang (1993), in a study of 154 second graders, found no significant differences in achievement test scores or grades as a function of SES or ethnicity. SES, however, did affect scores on metacognitive functioning, with children from higher SES levels receiving higher scores. Wang postulated that differing experiences in higher SES homes with relation to support for school work may be an influential factor in explaining the higher level of metacognitive functioning.

As can be seen from the studies just cited, although there have been many investigations relating SES, family environment, and children's academic achievement, the implications of the research remain unclear given the differences in findings of SES as a predictor of achievement. As a critique of studies of SES and academic achievement, White (1982) raised the question of whether SES (as operationalized by the various indicators that have been employed to measure it) is the most appropriate variable for most of the research applications for which it had been used. Part of the problem has been the wide range of variables used as indicators of SES, such as family income, father's occupation, or parents' education. According to Bond (1981), more than a quarter of the variance in any particular study can be explained by the type of SES measure used. Of the 143 studies identified for inclusion in White's meta-analysis, over 70 different variables were used as indicators of SES. He suggested that using family income or occupation of the head of the house rather than an aggregated index of SES would do much to clarify the results of future research and facilitate comparative analysis of data. However, he also suggested that although income was the highest single correlate of academic achievement, it may only be an indirect measure of home atmosphere. In other words, studying differences in achievement among various levels of SES (however it may be defined) may yield significant differences. These significant findings do not, however, tell how or why these differences occur. If solutions to identified problems are to be found, the how and why are the principal questions of interest. Other authors have drawn similar conclusions about studying the effects of SES on achievement (Iverson & Walber, 1982; Mercy & Steelman, 1982; Valencia, Henderson, & Rankin, 1985).

Family Structure

Several studies have investigated a second status variable, family structure. Two aspects of structure have been studied in particular: (a) single parenthood, and (b) extended families.

In research designed to assess the effects of father absence on educational achievement and intellectual development of 6 to 11 year olds, Svanum, Bringle, and McLaughlin (1982) studied a nationally representative sample of 5,593 father-present and 616 father-absent children. Using WISC and WRAT scores as response variables, they found significantly depressed performance for father-absent White children, but not for father-absent Black children. Similarly, Edwards (1987) found no apparent relationship between achievement and family configuration (single vs. dual parenting) in his study.

However, a more recent study by Thompson, Alexander, and Entwisle (1988) indicated that the absence of the father from the home negatively affected teacher grades and standardized test scores. However, the presence of another adult in the home, such as an aunt or grandmother, could dampen this effect.

Again, the findings are somewhat contradictory. Scott-Jones (1984) has suggested that, rather than continuing to ask whether differences in performance on cognitive and achievement measures exist between traditional and less traditional family structures, it might be more productive to ask about the ways in which single-parenting, in interaction with other variables, is related to cognitive development and school achievement of children. It seemed likely that a complex interaction among several variables might mediate the relationship between any family configuration and academic achievement. Few studies appear to have addressed this issue.

One exception was a study by Milne, Myers, Rosenthal, and Ginsburg (1986). Their study, using two national databases, investigated the achievement of children in relation to the number of parents in the home. They correlated achievement and number of parents in the home directly, but also measured the influence of the number of parents indirectly through a number of mediating variables that could be grouped in the general categories of family environment and activities. They found significant differences in which scores on reading and math achievement were higher for two-parent families than for one-parent families. Using ethnicity as a variable, they found the effect size was greater for Blacks than for Whites, that is, it appeared to be more important, as far as academic achievement was concerned, for a Black child to be from a two-parent home than for a White child. However, this effect was mediated through other variables (e.g., mother's employment status and family income) for both races. Milne et al. also noted that information about the ages of students when parents separated or the length of time spent by students in single-parent families was not available for this research. It was their belief that these variables may also be important.

An additional dimension to the single-parent family debate has been whether or not extended family members are involved. Slaughter and Epps (1987) reported that parents were better informal educators to their children when they were supported by extended family members. Edwards (1987), in a study of 21 academically successful African American high school seniors, found that an extended network of relatives interested in the students' progress helped them to achieve. Scott-Jones (1987) found that Black children across all achievement levels were part of an extended family-kinship network. This kinship network seemed to function as an extremely important support system for poor and working-class African American families, and occurred at a higher rate for African Americans as compared to Whites across all economic levels.

In an extensive study, from an initial group of 1,391 first-grade children, Pearson, Hunter, Ensminger, and Kellan (1990) selected 138 households that had a grandmother in residence. Six different types of family structures were analyzed. It was found that grandmothers who resided in the home and served as surrogates (e.g., when one of the parents was absent) were more involved with parenting behaviors, including encouraging

achievement, than grandmothers in other family types. This corroborated findings by Lee (1985) that extended family members, especially grandmothers, were highly important in the lives of rural Black students perceived as successful by their teachers.

The work of Nock (1988) on the hierarchical structures of families helped to explain the role of the extended family members in academic achievement. He noted that children from single-parent families often were part of a reciprocal dependency relationship with the single parent. The single parent would look to the children for emotional support, which in turn threatened the authority relationship between parent and child. The presence of a grandparent, however, gave the parent another adult with whom to share child-care responsibilities. The authority structure was then maintained, and the children continued to learn to operate in the hierarchical structure of the home. This learning then extended to the school, which also functioned hierarchically.

In sum, the question of influences of status variables on academic achievement has been answered only partially by the current literature. Socioeconomic status is obviously related to some degree to what students achieve in school. Ethnicity may also be related, but appears to be mediated through SES level. A single-parent family structure also appears to be influential on scholastic achievement, though the influence may be differential based on the ethnicity of the family and is probably mediated through variables associated with SES level. Further, it seems that extended family members, especially grandmothers are key to the academic success of ED students. In addition to being guarded, these findings may also be of limited use because they do not uncover how differences in achievement occur, only that such differences exist.

Process Variables

Many scholars believe that process variables—behavioral and attitudinal aspects of the family environment—are more direct measures of the home environment. Two process variables will be discussed in this review: parenting roles and styles, and family environment.

<u>Parenting Roles and Styles</u>

The issue of hierarchical structure in the family, as discussed in the review of Nock's (1988) work, raises the question of parent roles and styles in parenting. Studies that deal with parental roles focus primarily on the interaction with the child in the family setting. A second set of research centers on the communications in the family that deal with educational support.

An ethnographic study by Heath (1983) looked at language patterns in two neighboring working-class communities, one African American and one White. She found that, while Black children from lower SES homes were quite verbal, norms governing when and how they spoke were different from middle-class norms. While middle class families tended to provide elaborate descriptions and reasons for events and behaviors, lower-SES parents tended to give imperatives, often without providing reasons for those imperatives. Heath noted that low SES children did not expect adults to ask

them questions. Further, adults in the low SES environment infrequently asked questions of children, such as to name or describe objects, if the adults already knew the answer. In addition, a child questioning parents in a lower SES home was considered to be misbehaving.

Slaughter and Epps (1987) found that beliefs about when children were allowed to enter into adult conversations were an important feature of the home environment of young lower-income Black children in a southern community. Children between the ages of birth and 3 years received much affective attention from adults, but children ages 3 to 5 were relatively ignored. Child-adult conversation increased after first grade, but the emphasis was on the business of the day rather than on personal or affective topics.

Over a five year period, Philips (1983) gathered data on the communication strategies of Native American children on the Warm Springs Indian Reservation in Oregon. She observed the social interaction skills of these students in their native social setting as well as in a reservation school and a public school. Certain aspects of the Warm Springs interaction were characterized as emphasizing cooperative activity and egalitarian relationships. The subjects appeared to exert little direct interactional control over one another. This was true of parent-child interactions and of the children's interactions with other adults. Parental authority was dispersed across an extended network, as Warm Springs Indian students were accustomed to being raised by a number of individuals. Grandparents, uncles and aunts, older siblings, and cousins were among those who played an active role in the upbringing of the children. The implications of the research on communication patterns in the family (examined directly or indirectly, depending upon the specific study) are that parental communication patterns influence language abilities of the children, and therefore affect the children's academic achievement in schools, which traditionally relies on a highly verbal orientation.

Other research has found that the style of parent-child communication can affect school performance and achievement. For instance, Portes, Dunham, and Williams (1986), in their factor analytic study of 54 adolescents from Black and White families, reported that low SES Black parents were more likely to employ a strict disciplinary style in the home. This correlated to lower achievement on a language subtest of a standardized achievement test. Further work on the relationship between a controlling style of parenting and school achievement was done by Scott-Jones (1987) who suggested that some behaviors that might have been characterized as parental support of educational achievement may, in fact, have hindered the intellectual and academic development of children. In a study comparing family processes of high and low achieving first graders within a group of economically disadvantaged Blacks, she observed mothers teaching their first graders in the home setting. A greater amount of teaching occurred in the homes of low achieving students than in the homes of high achievers. High achievers watched more television and engaged in more play activities than low achievers. Mothers of high achievers most often provided help as a result of their children's requests or comments rather than directing their activities. Teaching and school-related activities were integrated into the flow of pleasant play activities and were neither formal nor intentional. Mothers of low achievers, on the other hand, most often

directed learning tasks and maintained long periods of teaching and school-related activities. These parents appeared formal and intentional, but often lacked the instructional skills needed to help their children.

On the other hand, in Clark's (1983) extensive qualitative study of 12 high school students living in low-income Chicago communities, a pattern of high parent involvement was found. The parents of high achieving students expected to play a major role in the child's schooling, had explicit achievement-centered rules and norms, established themselves as the dominant authority in the home, frequently engaged in deliberate achievement activities, and enforced the rules of the home. These practices were not found in the homes of low achieving students.

Another 1983 study by Watson, Brown, and Swick found that an active parenting style with regard to educational tasks (e.g., reading to a child) resulted in higher achievement for the first graders in 211 homes they studied than did a passive parenting style (e.g., encouraging a child to read). Further, in a qualitative study of 26 low income Puerto Rican families living in Pennsylvania, Diaz-Soto (1988) found that high achieving children came from homes where supervision and organization of activities were present and where parents and children interacted with one another actively. These findings echoed those of Lee (1985) that rural Black students named as successful by their classroom teachers were members of families in which a variety of activities were shared, family rules were enforced, and education was given high importance.

The findings about the influence of parenting roles and styles on academic achievement of ED students appears mixed at this point. One set of studies seems to indicate that too much parental control can have a negative effect on achievement. Other studies, however, report that high levels of parental involvement with the child positively affects academic achievement. It may be that attitudinal variables in family environment may be important in explaining these divergent findings.

Family Environment

Studies of family environment have analyzed mainly the psychological atmosphere of the home to understand its influence on student achievement, although physical environment indicators have also been included at times. Recent research has increasingly focused on identifying the variables in the family climate that contribute to the strong academic performance of children from minority and ED backgrounds.

Some of these studies have used general measures of home environment as the basis for their findings. For example, Dolan (1983) formulated an instrument that assessed parent knowledge and interest in school activities, parent support of academic activities, quality of interaction between parent and child, and parent belief that schooling can make a better future for the child. Results from this instrument were correlated with standardized achievement measures. Dolan found that scores on the general measure of home environment correlated directly with school achievement.

On the other hand, Valencia, Henderson, and Rankin (1985) examined the relative contributions of a variety of family background and climate variables to the cognitive performance of 140 low SES Mexican-American preschool children. The Henderson Environmental Learning Process Scale (HELPS) (Henderson, Bergan, & Hurt, 1972) was used to assess specific experiences provided for children, patterns of interaction among family members, and attitudinal and dispositional factors characterizing the family environment. These authors found that variables reflecting learning opportunities provided by parents were the best predictors of cognitive performance. Status variables such as SES, family size, and parental education proved to be much less powerful predictors.

Home environment has also been studied through investigations of parental aspirations for the child. For instance, Stevenson, Chen, and Uttal (1990) studied 3,000 Black, White, and Hispanic elementary school students and found that minority families held higher expectations and were more positive about education than White families. Minority mothers believed more strongly than White mothers in homework, competency testing, and longer school days as means of improving education.

In a study of parental variables that affect achievement, Diaz-Soto (1988) investigated 15 high achieving and 11 low achieving fifth and sixth graders of Puerto Rican descent. He found that parents of high achievers (a) had higher aspirations for their children, (b) had higher aspirations for themselves, (c) were concerned about the use of language (bilingualism) in the home, (d) had knowledge of their children's educational progress, (e) reinforced their children's aspirations, and (f) participated in educational activities with their children.

In an ethnographic study, Goldenberg (1987) investigated parents' aspirations for children's academic achievement among Hispanic families in Southern California. He noted that the parents' aspirations (i.e., hopes for the future) were not always the same as their expectations (i.e., what they thought would really happen). Aspirations were generally higher than expectations, but the parents valued educational achievement highly and believed it came only through persistent individual effort. A similar discrepancy between aspirations and expectations was found among poor Black families in case studies conducted by Willie (1985).

Because Mexican-Americans, mainland Puerto Ricans, Americans of Cuban descent, Americans of South American origin, and recent immigrants from Central America are distinct populations, generalizations of the findings for Hispanic populations to patterns of success and failure are difficult. However, Suarez-Orozco (1987) studied several immigrant groups in an effort to understand the motivational dynamics of the home environment that seemed to explain differences in student performance. The most consistent finding was that many students acknowledged that their parents had sacrificed in order to bring them to this country so they could be educated. Belief in the value of a good education as the key to status mobility was expressed frequently by the children of each minority group. They felt that their efforts to succeed in school were the means through which they could repay their parents for their sacrifices. Those who were most

successful considered economic and societal obstacles as temporary inconveniences to be overcome with hard work and persistence.

The fate of aspirations in the face of continued obstacles was illustrated in the work of Buriel and Cardoza (1988). These authors studied the following variables in three generations of Mexican American high school seniors: (a) students' achievement aspirations, (b) mothers' achievement aspirations for their children, (c) Spanish language background and (d) SES. They found that student aspirations had the strongest relationship to achievement for all three generations. A surprising finding was the existence of a time-inverted relationship between language proficiency and academic achievement, that is, as families stayed in the United States and the children became more proficient in English, a drop in academic achievement occurred. Although one might argue that language barriers continued to persist and, therefore, severely limited students' academic progress, the authors offered a cultural integration and ghettoization hypothesis to explain differences in academic advancement. According to the cultural integration hypothesis, first- and second-generation students were most likely to be exposed to the positive effects of immigrant Mexican American culture with its emphasis on the value of education and high aspirations for success in overcoming obstacles. If the first generation was successful, the next generation was able to build upon the gains of the first, thus leading to cultural integration. The ghettoization hypothesis referred to the increasing sense of hopelessness in third-generation students whose families had not achieved economic mobility. While Spanish language effects on achievement were noted in this study, it was clear that minority status alone did not account for differences in school success and failure. What appeared to be the operating variable was the students' perceptions of themselves, their families, communities, and ethnic groups, as well as the value of their personal investment in education. These attitudes seem to have been passed on to them from the previous generations.

Taken together, these studies of process variables seem to indicate that the communication of high educational aspirations from parents to children is important in the educational achievement of children from ED populations. When this communication is coupled with active involvement by the parents in the academic life of the child, the influence on achievement is likely to be very positive. However, it also appears that continued experience with socioeconomic barriers can dampen the positive influences of the family environment. Thus, researchers must also consider the influence of society as a whole on the family as they attempt to discover how families influence academic achievement.

Families in Context

According to Bronfenbrenner (1986), existing theory and research have made the importance of connections between families and other settings apparent for the growth of the child. One important connection that must be studied is that between families and schools. However, as Bronfenbrenner has pointed out, research about the connections between schools and families has been overrepresented by studies of family influence on the child's school performance, with achievement in school being the criterion.

Examinations of how schools affect home environments and parent-child interactions are totally lacking. This trend is apparent in the studies reviewed in the preceding sections.

However, more recent studies of school-home discontinuity are beginning to recognize the joint influences of the school and home on each other in cultural context (Ogbu, 1981, 1987). For example, discontinuities between home and school cultures were documented in studies of native Hawaiian students, where their lowered achievement was attributed to the failure of the schools to build upon native cultural characteristics and processes when teaching these students (Jordan, 1985; Weisner, Gallimore, & Jordan, 1988).

In an earlier study, Laosa (1982) posited a model to explain the success of Mexican American children. The model emphasized the importance of continuity between home and school cultures. He found that teaching strategies in the home that reflected the problem-solving approaches required in an academic setting improved the child's academic performance. Specifically, he found that teaching strategies of praise and inquiry were directly related to levels of maternal schooling while strategies of modeling and physical control were inversely related. The general model assumed that children of more highly schooled parents learned to master in their homes the form and dynamics of the teaching and learning processes that occurred in the classroom, and that this led to school success.

Regarding the role of ethnicity and family, Slaughter and Epps (1987) reported findings that described Black children as being socialized to assume postures of persistence and assertiveness in relation to problem solving. When these traits were displayed in the classroom they were rejected by teachers as inappropriate. By the middle-school years the cumulative impact of these rejections transformed many children's achievement efforts into learned helplessness. Middle-schoolers began, therefore, to gravitate toward their peer culture, for there they could better demonstrate their competence and maintain their self-respect.

The discontinuity between school and home was used by Calabrese (1990) to explain the significantly higher alienation of minority parents from the schools. He stated that minority parents' sense of alienation should not be attributed to environmental causes, but should be understood in light of school culture and the parents' perception of the culture. He then explained that the minority parents, though interested in their children's education, felt they were unwelcome and were treated more with confrontation than with respect in schools.

In contrast, an ethnological study of home and school influences on the Spanish reading achievement of low-income Hispanic first graders by Goldenberg (1987) investigated the extent of home-school cooperation in remediating reading problems. He found that when parents were advised of problems and were included in formulating plans as to how they could help, substantial progress was made by their children. Goldenberg argued that this progress was possible because the parents held compatible views with the school about the importance of educational achievement. Emphasizing

this congruency between the home and the school, he concluded that parents and educators can create an environment that facilitates academic success.

Similarly, an ethnographic investigation of Mexican American families in Colorado by Delgado-Gaitan (1988) examined the conflicts between schools and families. Students who dropped out of school and who stayed in school were found to have similar school experiences. What differed was the amount of support they received to help reinterpret the day-to-day conflicts at the school. Parents of students who stayed assisted them in placing problems in perspective, in looking at the problems more objectively, and in conforming to the school's value structure. This created a higher congruency between the family's values and the school's values; a specific value in this case being that finishing school was worthwhile.

The value of the student as a human being was not reinforced through this process. For instance, Delgado-Gaitan (1988) noted that all parents and students complained about the attitudes of school personnel toward individual students. The establishment of programs that considered the diversity of the student population as a means to reduce potential conflict was not a high priority for the school personnel. A low level priority for such programs can have a negative effect on achievement, for, as Commins (1992) indicated, "parents are far more willing to risk bridging distances between themselves and their children's schools if they see the school as supporting their children's social and cultural identity" (p. 45).

Gifted Level Achievement and Families of ED Students

Despite the fact that the identification of gifted students from economically disadvantaged backgrounds has been problematic to the field for some time, research on the possible impact of families has been a relatively recent phenomenon. At least one study has used a status approach by comparing parent ratings of achievement to determine differences between two-parent and one-parent families (Gelbrich & Hare, 1989). These researchers found a negative influence for single parenthood, with children from one-parent families more likely to be rated as lower in achievement than their peers from two-parent families.

Other studies have taken a more complex view by investigating family processes and contexts. In a longitudinal study of 825 first graders, Pallas, Entwisle, Alexander, and Cadigan (1987) examined variables of personality, self-image, academic satisfaction and performance, and family background variables (i.e., parents' education, parents' estimate of child's ability, expectations, story reading, and attributions) to ascertain their effects on first year gains of academically talented first graders. The authors concluded that background or family variables had a negligible impact upon those children who did extremely well. They suggested that families may exercise less influence over patterns of exceptional growth than they do over a child's progress in the more typical range.

An important study by Prom-Jackson, Johnson, and Wallace (1987) was focused on the way in which parent configuration interrelated with other environmental variables

to influence academic performance. Prom-Jackson et al. conducted a retrospective study of a sample of high achieving young minorities students (i.e., African American, Hispanic, Native American, and Asian American) from low-income backgrounds who had been identified as academically talented during their elementary school years. The results of this study indicated that the development of academically talented students in low-income situations occurred under a variety of home environmental conditions. The educational levels of the parents varied widely. Students came from small, large, and average sized families, and from both single-parent and two-parent households. Interestingly, Prom-Jackson et al. found that children of single-parent households tended to have higher levels of achievement than others in the sample. The importance of an educational supporter role emerged as participants 18 to 33 years of age retrospectively reported perceiving their parents, especially their mothers, as being very supportive of their interests and abilities and helping them to establish a strong sense of self.

Another important study that investigated the impact of the family in context upon individual achievement was conducted by Van Tassel-Baska (1989). Her research included case studies of fifteen middle school gifted students from economically disadvantaged backgrounds. Through questionnaires and multiple interviews, key influences on the lives of these students were identified. Institutional influences that emerged from this research included a family value system of education and work, the importance of the extended family in single parent homes, and the school as provider of educational opportunities. Van Tassel-Baska also identified important interpersonal influences on these gifted students. These included a parent, usually the mother, as a monitor of student progress; a grandmother as a stabilizing and nurturing influence; and teachers who acknowledged and encouraged ability. The students in these case studies also indicated that their peers played a strong supportive role in their academic achievement. In addition to the interpersonal influences, attitudes internal to the student were also recognized as important. These were motivation to achieve, feelings of self-competence and independence, and mechanisms for coping with school demands (e.g., planning and organization of study). Two negative influences internal to the child were also identified. These included the continuing struggle the students were having in dealing with the divorces of their parents and a tendency to procrastinate.

Summary

In both the general literature and the literature specifically about families of gifted students, there remains an inclination to study the issue of family influences on student achievement from a status perspective. The status variables studied (e.g., SES, family structure) yield significant differences indicating that low SES or single parent families achieve less academically. Given the failure of these studies to explore the dynamics of the situations in which these findings occur, the only solutions that can readily be suggested are that we should raise the SES of the poor and introduce single parents to potential partners. Such suggestions are, of course, silly and simplistic. Nonetheless, the discovery of differences on these status variables alerts us to areas for more complex research from which viable solutions may emerge.

More recently the research on family influences on achievement has become more complex and has yielded richer information. More complex quantitative studies, with multiple status, process, and context variables, have shown the interrelationships of a number of factors in influencing student achievement. A number of ethnographic and other qualitative studies have identified patterns of interaction within the home and among community institutions that have helped to understand more fully how and why achievement problems and successes occur. Potential implications from these finding are presented in the next section.

Implications for Gifted Identification and Programming for ED Students

The results of the research studies on economically disadvantaged families and school achievement lead to at least four implications for gifted education. These implications are important both for practitioners and for researchers in gifted education.

Upon review of these studies, one apparent implication is that there are academically competent students within ED populations. In many of these studies, students who were succeeding in school were able to be identified and described. While academic achievement does not necessarily indicate giftedness per se, it provides evidence of positive characteristics that may demonstrate that potential gifted-level ability among ED students is present and recognizable.

This holds not only for ED populations, but for the ethnic populations, such as African Americans, Hispanics, and Native Americans, that are overrepresented among the economically disadvantaged (Ogbu, 1981). This points to one of the troubling aspects of research on families from culturally different backgrounds—the potential confound between class differences and differences owing to ethnicity. For example, in much of the research, when class is held constant in statistical analyses, performance differences among ethnic groups become nearly non-existent (Rumberger, 1983; Wang, 1993). However, other researchers continue to report differences among ethnic groups even when SES is statistically controlled (Karraker, 1992; Patterson, Kupersmidt, & Vaden, 1990; Portes, Dunham, & Williams, 1986).

Bond (1981) attributes these differences in findings to the lack of clarity in definitions of SES. Different variables are used from study to study. The differences in concepts surrounding the analysis of class have led Bond to propose that class is in fact an emergent property, not a fixed entity that operates autonomously or determines history. He further states that correlations between class and educational achievement fail to explain their causes and thus are of limited usefulness in situations in which change is desired. In application to gifted education this means that if educators desire change in the arena of gifted identification and programming for ED students, they must carefully scrutinize, as Bond suggests, their notions of class and educational achievement. From the identification perspective, they must acknowledge that potentially gifted students exist in all populations. For programming, they must focus on the strengths of

students and plan curriculum around those strengths, rather than concentrating on academic deficiencies. This does not mean that existing deficiencies should be ignored, merely that they should not be the primary basis upon which educational planning is done.

A second implication for gifted educators is recognition of the strengths within family structures among the economically disadvantaged. The presence of poverty or a single parent family structure does not, in and of itself, necessarily coincide with lack of interest or support for the educational achievement of children. Extended family structures and high educational aspirations and expectations may be part of these families' environments. Where families are obviously interested in their children's education, family members could be used as sources of information about their children during the assessment phase of a gifted identification process. The kinds of information gathered from family members should inform the curriculum planning process. Schools could obtain information from extended family members such as grandmothers, as well as from parents. During the curriculum planning stages, parents can be involved in developing and supporting curriculum plans for their students.

If parental involvement is to occur, however, it may need to be done in a manner that does not have the convenience of the schools as its highest priority. Single parents who work full time are not always available during the day. Efforts by the schools to work with employers to arrange non-punitive release time or to arrange times around the parents' schedules may be needed. Provision of transportation to the school or a visit to the home may be necessary. It should be made clear to parents that the purpose of a home visit would not be to assess the home environment, but to discuss together what the family and the school can do to help children achieve to the level of their capacities.

The content of discussions also needs to be considered. This is particularly true for those parents who feel some alienation from the schools (Calabrese, 1990). The content of discussion with parents needs to focus on the positive aspects of their children's school experiences. This should not be particularly difficult when the discussion is about a child's potential identification as gifted. Children’s particular patterns of strengths and weaknesses can be pointed out to parents, with an emphasis on the strengths. Parents can be invited to share their input on what opportunities need to be made available to the children to develop their talents, especially where families may not be able to provide such opportunities.

A third implication relates to the way assessment information about children is interpreted. Where there is discontinuity between the culture of the school and of the home, caution needs to be exercised in the way a child's behaviors are evaluated for purposes of identification as gifted. What may be viewed as nonfacilitative behavior in the school setting may be highly appropriate in the home. Two potential solutions to this concern are possible. First, the school can respond to the home culture by including elements from that culture in the school setting (Commins, 1992). This opens the door for additional active support from the family and helps teachers to be sensitive to the contexts for the behaviors they have assessed. This could be done through means as

simple as celebrating traditional holidays of the community's culture in the school setting (Vazquez-Nuttal, Avila-Vivas, & Morales-Barreto, 1984). This, however, would tend to be only a supplemental inclusion of the culture. Boateng (1990) has stated that inclusion of the home culture needs to be pervasive. Boateng suggested that school environment should reflect the diversity present in the school in its displays, invited speakers, and curricular content, on a consistent basis. Weisner, Gallimore, and Jordan (1988) have suggested that patterns of grouping, interaction, and problem-solving may vary from culture to culture in a way that should be adapted to school practice. For grouping, they illustrated this by noting how Native Hawaiian students preferred large, mixed-sex groups, whereas Navajo children preferred small, same-sex groups. Such cultural differences can be learned by observing children in a variety of activity settings such as in play groups or child care.

A second solution to the problem of discontinuity between home and school culture, emanating from the work of Delgado-Gaitan (1988), is to prepare parents to assist students actively in understanding the cultural values of the school. Commins (1992) has stated that, given the discomfort and reluctance of ED families to participate in the schools, it is the schools responsibility to initiate the contact. As parents assist students in understanding school values, students are more likely to translate the behaviors of school personnel in meaningful, non-threatening ways and to conform to teacher expectations. This second solution is not as satisfying, of course, because it is based, according to Delgado-Gaitan, on ignoring the value of the person as a human being and on emphasizing the importance of gaining a high school diploma. Because of the minimal expectations associated with the second solution, it would be important for gifted educators to focus primarily on the first solution suggested, including elements of the family culture in the school setting.

A fourth implication is primarily directed at those who do research in gifted education. Investigations of families of gifted students from economically disadvantaged populations have begun only recently. The focus of research on giftedness among the economically disadvantaged has been on identification processes and instrumentation, with consideration of the general school context for interpreting data. The recent inclusion of research on the impacts of more specific environments, such as the family, is welcome and needed. This can be done in at least three ways according to a guide for organizing research about the family suggested by Bronfenbrenner (1986).

First, Bronfenbrenner (1986) points out that research based on status variables alone is restrictive. He cautions that, even though the use of these variables is comparatively simple at both a conceptual and operational level, they can be used without much thought. He does not, however, reject their use, but believes they may provide a practical framework for mapping the surface of a new domain of inquiry. Given that exploration of families of gifted students from ED populations is relatively new terrain in the field, perhaps descriptive analyses related to family income, parental educational levels, occupations, extended family structures, and single parenting will provide information that can be valuable in generating more complex questions.

Bronfenbrenner (1986) recognizes a second type of research about families in context, a process-context model. This type of research assesses the impact of external environments on particular family environments. He recommends studies of three types of external environments: (a) those in which children spend time, such as the school; (b) those in which the parents spend time, but which the children seldom enter, such as the parents' workplace; and (c) those in which neither the parents nor children spend time, but which affect their lives through their policy-making powers, such as state education agencies. For gifted education research, this would mean studying how changes in identification and programming regulations would affect families. How would the use of parent data in an identification system affect the family? How could these data be gathered without taking an inordinate amount of family time? If the schools want to involve family members in decision-making about gifted programming, who would participate? How would the extended family structure be used? How would time be provided for family members to be involved? What arrangements would need to be made with employers so parents would have time to meet? How would this time commitment affect family income? What knowledge and skills would family members need to have to be full participants in planning and decision-making about their children's educational placements and programs? Obviously, there is much for researchers to explore when looking at how gifted identification and programming impact the family.

Bronfenbrenner (1986) explains that the process-context model operates on the assumption that the impact of an external environment on the family is the same regardless of the particular characteristics of individual family members. Stating that this is a major advance over the status model, he nonetheless suggests a third and preferred model for studying the family in context: person-process-context. This type of research focuses on the systematically differing influences on individuals of the impact of external environments on family processes. This would seem to be an area that could be especially useful in studying the identification of gifted students from among ED populations. One might study, for example, how students from different families display the characteristics of giftedness associated with a particular definition, depending on the level of acculturation of the family. The influence of specific policies related to gifted education could be studied for different kinds of students; for example, students from families that actively support education, but are highly socialized in a community culture that is discontinuous from the school culture. The impact of various programming options on students from the marginal families that adopt neither the community culture nor the school culture could also be studied. The potential questions are, of course, numerous. The designs, according to Bronfenbrenner, need to be complex with respect to analysis of individual characteristics, family processes, and environmental systems.

Conclusion

It is clear that we really do not know enough about the nature of complex interactions among the array of individual and cultural differences and societal factors that either promote or hinder the development of giftedness in ED children. Future research should focus on those aspects of children's lives that help to make the difference

between academic success and failure. More research is needed that describes the family experiences of children from different social and economic positions in society and from different ethnic groups. New research is needed that does not trivialize family processes by reducing them to research categories for strictly quantitative modes of analysis. Research must move away from normative conceptions of families and seek, instead, to describe the unique contributions of families of children who transcend the label "at risk"; such children should be recognized as children "at promise." A most important concern must be understanding the processes by which families and individuals are able to function effectively in circumstances that are different from the mainstream White norms.

One of the most important societal influences on a child's life is education. Although schools cannot immediately change the economic and social conditions in which many economically disadvantaged children find themselves, they can change their responses to these children and their families. This fact implies the need for an educational approach that values both the learner and his or her culture. A cultural interface approach has been recommended for working with all minority students (Trueba, 1988). However, each cultural context would require a systematic study to identify the critical elements and features of the culture to which educational systems should respond. For gifted education, this means moving beyond research that describes environments, processes, and their impacts with other researchers as the primary audience. Educators must also be made aware of this information to use it effectively when making decisions about identification, placement, and programming for individual students. Further, educators need to understand how they, themselves, can study the culture of the community they serve and use that information for the benefit of the potentially gifted students in their schools. Systems and tools for practitioner-conducted research need to be developed and disseminated in gifted education so that professional educators can generate knowledge about the contexts in which families function. This in turn will help the educators better attend to the educational needs of their students.

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