CHAPTER 1

A MODEL OF FAMILY AND SCHOOL CAPITAL

INTRODUCTION

One of the persistent challenges confronting societies is how to reduce inequalities in the educational and occupational attainment of students from different socioeconomic, ethnic and race group backgrounds. Such inequities are typically intensified between females and males, and for students from different residential and geographic locations. It is generally agreed that if parents are involved positively in activities associated with children's learning then the school outcomes of those children are likely to be enhanced. As a result, educational practices that address inequalities in students' attainment are designed, more and more, to involve parents in the learning experiences of their children, at home and at school.

As families and households increasingly experience disruptive and often dramatic upheavals it is not always obvious, however, how teachers should respond to optimize their relationships with parents. Coleman (1993) observes that with the changing nature of societies schools now interact more than ever with particularly varied groups of families. He suggests some parents "are deeply involved and have the skills to be effective. Others are involved, but in ways that are ineffective or harmful. And still others take little time to inculcate in their children those personal traits that facilitate the school's goals" (p. 6).

While Coleman's observation highlights the present varied nature of family involvement in schooling, it has always been the case that teachers have interacted with parents expressing dissimilar levels of interest in children's learning. What is different now is that teachers are being encouraged or directed to recognize the importance of parents as partners in the education of children. It is an expectation that such partnerships will be associated with the formation of more enriched learning environments, which in turn will be related to more positive school attitudes and associated with improvements in children's academic performance.

Lareau and Shumar (1996) reflect, however, on some of the potential unintended outcomes of parent-teacher programs. They indicate that parents from different social and cultural contexts approach schools with quite diverse expectations and interpretations of what it means for them to be educationally helpful when interacting with their children. In addition, they suggest the nature and intellectual quality of parent-teacher interactions may be affected quite significantly by teachers' perceptions of parents' backgrounds. If qualitatively different family-school relationships do develop for parents from contrasting backgrounds then it is possible, perhaps likely, that a school's attempt to promote teaching partnerships might actually be associated with an increased divergence in students' learning outcomes.

If educational policies and practices that attempt to reduce inequalities in students' attainment are to be more cogent, then we need to increase our understanding of the complexity of relationships among social and cultural contexts, family and school learning environments, students' individual characteristics and school outcomes. It is the purpose of this book to examine research that has examined the intricate nature of these relationships and to move towards the development of a theory to explain family background differences in students' school-related outcomes.

TOWARDS A CONTEXT THEORY OF STUDENTS' OUTCOMES

I have labeled the conceptual framework that is developed in the book a context theory of students' outcomes, as it explores relationships between family and school capital and the educational outcomes of students from different social and cultural contexts. It is realized, of course, that relations between families and schools vary for students in different countries and that a set of propositions applicable in one international setting may not easily be generalized to another country. Such potential differences are expressed, for example, in the vintage and evocative studies of students' reactions to schooling by Willis (1977), Connell, Ashenden, Kessler, and Dowsett (1982), and MacLeod (1987).

Willis interviewed white working-class male students from an English secondary school. In the analysis one group of males is labeled the 'lads'. They interpret the economic position of working-class families as being in opposition to occupational mobility and they respond by resisting and rejecting the achievement orientation of schooling. In addition they choose to drop out of school, define masculinity in relation to manual occupations and join their relatives in low-paying factory jobs. Connell et al., in an investigation of Australian secondary school students wanted to find out why the relationship between home and school worked so much better for middle class families. They observe that their findings indicate the need to be wary about accepting the conclusions of the Willis investigation. It is suggested that there is no simple relationship between family social background and children's orientations toward schooling. Instead, Connell et al. conclude "what impresses us most are the tensions and contradictions at play, and the range of outcomes which that interplay guarantees" (p. 79).

In an analysis of secondary school males from a low income US community, MacLeod identifies two groups labeled as 'The Brothers' (mainly black students) and 'The Hallway Hangers' (predominantly white). Although the students in the two groups have similar socioeconomic backgrounds they respond differently to those conditions. The white Hallway Hangers, as did the lads in the Willis study, resist and reject the achievement ideology of schooling. In contrast the black Brothers accept the goals of schooling and continue to express high educational aspirations. MacLeod indicates that the parents of the Brothers have high expectations for their sons and monitor their schoolwork, while the parents of Hallway Hangers are not involved actively in their sons' schooling. Mehan (1992) observes that the Hallway Hangers and Brothers show that students from similar

economic circumstances respond to "structures of domination in diverse and unpredictable ways...we must first, broaden the theory of reproduction to include social agency and second, broaden the notion of social class to include cultural elements, such as ethnicity, educational histories, peer associations and family life" (p. 9).

Such investigations emphasize the need to be cautious when attempting to present a set of propositions that might be examined in different international settings. One of the purposes of developing the theoretical framework, however, is to broaden our understanding of the relationships among families, schools and educational outcomes. In addition it is hoped that the theory, or parts of it, will be tested in various national settings to examine whether the propositions are supported for students from quite diverse family backgrounds and in countries that differ in their educational systems.

FAMILY AND SCHOOL CAPITAL: THEORY CONSTRUCTION

GENERAL PERSPECTIVE

An initial and general theoretical perspective suggests that families and schools can be considered as being embedded in social and cultural contexts that affect children's eventual life chances. Such contexts may be designated as opportunity structures. Blau (1990) proposes that these structures constrain many individuals from realizing their educational and occupational choices while they expand such opportunities for others. In an extension of Blau's general proposition, Furlong, Biggart, and Cartmel (1996) claim that "while an individual's location within the class structure, as well as gender or racial inequalities, affect the life chances of all young people, irrespective of their social location, it can be argued that contexts potentially magnify or dilute the effects of individual attributes" (p. 552).

Building upon this general perspective, I examine in this chapter a number of theoretical orientations that explore associations between family and school capital and students' attainment. I have selected five conceptual approaches that supplement one another and provide a progression in our understanding of how learning environments relate to students' performance. The five approaches are (a) Bourdieu's analysis of relationships among economic and cultural capital, individuals' dispositions and academic success, (b) Coleman's analysis of associations between human and social capital and school outcomes, (c) Stanton-Salazar's network analysis of social capital, (d) Steinberg's investigation of relations among refined measures of social capital and (e) Bronfenbrenner and Ceci's model of human development that examines relations among distal and immediate settings, individuals' characteristics and educational performance. From these orientations, certain features are chosen to construct a model of family-school influences that I use in later chapters to examine relationships among measures of family and school capital and students' school-related outcomes.

SPECIFIC THEORETICAL ORIENTATIONS

Economic and Cultural Capital: Bourdieu's Orientation

In the development of a theory of the social trajectory of individuals, Bourdieu (1984, 1998) presents a two-dimensional model of social space. The overall volume of economic and cultural capital possessed by individuals or available to them defines the vertical dimension. In contrast, the horizontal dimension indicates the structure of individuals' capital and it is assessed by the relative amounts of economic and cultural capital within the total volume of their capital. While economic capital refers to financial resources and assets, cultural capital includes (a) those tastes and habits acquired by individuals as they grow up in different family and school settings, (b) cultural objects such as paintings, antiques and books accumulated by individuals or families and (c) formal educational qualifications attained by individuals (see Anheier, Gerhards, & Romo, 1995).

The social space defined by capital volume and the structure of capital is considered to establish a set of relational oppositions between individuals in different social positions. On the vertical dimension the theory suggests that industrialists and curators of large museums, for example, who have high overall capital volume are opposed to unskilled workers who are deprived of economic capital and those forms of cultural capital related to educational and occupational success. In relation to the structure of capital it is proposed that museum curators who are likely to be wealthier in cultural than in economic capital, are opposed to industrialists who are assumed to be relatively wealthier in economic than in cultural capital. That is, social spaces are structures of differences in social positions and these differences reflect variations in the kinds of capital that are important in particular educational and occupational fields. It is claimed that the closer individuals are to one another in their social positions the more they have in common in tastes, preferences, opinions, lifestyles and educational opportunities.

In discussing his own research orientations, Bourdieu proposes that for an enhanced understanding of social problems and for the enriched development of theoretical perspectives, there should be a fusion of theory construction and practical research concerns (see Bourdieu & Wacquant, 1992). I have adopted this idea of an interpenetration of theoretical and empirical analyses throughout the book as I move towards the construction of the context theory. As the first example of that fusion of analyses I examine in the following section Bourdieu's concept of social space.

Bourdieu's Concept of Social Space: An Empirical Analysis. In this analysis I examine the general proposition that early family positions can be defined by the volume of economic and cultural capital available to children and by the structure of that capital. For the investigation I examine autobiographies of authors to locate individuals in social spaces defined by their reminiscences of early family experiences. I am aware that autobiographies can describe overly romantic or dramatic representations of the past. In addition they may omit important material and reflect a rather selective recall of events and experiences. While the complete

analysis of texts includes over 100 autobiographies that describe in detail individuals' recollections of family life it is only possible to present here a particularly small sample of narratives. Despite these reservations about narrative analyses of autobiographies the investigation is presented to provide an initial portrayal of relations between the different forms of capital available to children, to explore in greater detail some of Bourdieu's concepts and to begin the interaction between conceptual and empirical analyses as I move towards the construction of a context theory of students' school outcomes.

In the textual analysis of the autobiographies, independent assessments of family economic and cultural capital were made and framed on scales ranging from modest to particularly enriched. Family economic capital is related to indications in the texts of parents' occupations and family financial assets. Cultural capital is assessed by references to children's access to books; visits to museums, galleries and the theatre; and participation in literary and artistic activities. Although these latter indicators represent a circumscribed definition of cultural capital they are used here as they are the types of experiences and activities adopted by Bourdieu and his colleagues in their research. After the framing of economic and cultural capital, the resulting overall capital volume is classified as ranging from limited to abundant.

During the analysis it became apparent that some of the authors recalled with much appreciation the support and encouragement they received from parents and other adults. Although not a formal dimension in Bourdieu's definition of social space, adult-child interactions are included in the present study and framed on scales ranging from weak to very supportive. From the larger investigation, the following narratives are selected from the autobiographies of Harry Crews, Catherine Cookson, Janet Frame, Agatha Christie and Nicholas Monsarrat, as they reveal the variations that are present in children's access to early family capital.

Harry Crews (1979) was born in Bacon County, Georgia, the son of a poor share farmer. He recounts:

> The world that circumscribed the people I come from had so little margin for error, for bad luck, that when something went wrong, it almost always brought something else down with it. (p. 40)

When he discusses his earliest literary experiences, Crews recalls how he and his young friend Willalee Bokatee devoted hours to reading Sears, Roebuck catalogues and how they created stories about the people in those catalogues. He remembers:

> Making up stories, it seems to me now, was not only a way for us to understand the way we lived but also a defense against it. It was no doubt the first step in a life devoted primarily to men and women and children who never lived anywhere but in my imagination. (p. 57)

Crews recalls with great appreciation the warm support he received from Willalee's family:

> God knows what it would have been like if it had not been for Willalee and his people. I am convinced Willalee's grandma, Auntie, made the best part of me. Auntie made me believe in a discoverable world, but that most of what we discover is an unfathomable mystery. (p. 62)

CHAPTER 2

FAMILY BACKGROUND, FAMILY STRUCTURE AND STUDENTS' OUTCOMES

INTRODUCTION

In this chapter I begin to analyze the relationships suggested by the mediation-moderation model that I presented in Chapter 1. Specifically, I examine relations involving family background, family structure and students' school outcomes. Initially, I refer to the landmark Coleman and Plowden Reports of the 1960s. They are significant examples of large-scale surveys of families that had important impacts on educational and social policies. There is no consistency, however, about how distal family background should be measured in research investigations. After examining a number of different measurement approaches I propose that family background needs to be defined by family social and cultural contexts. I then use quantitative data from one of my own investigations to show that family social and cultural contexts have differential associations with measures of children's school-related outcomes.

In Chapter 1, I proposed that between distal family background and immediate family influences there are intermediate family structures that can influence students' life chances. For this chapter I choose two of these intermediate structures: the sibling structure of families and single-parent families. Sibling structures have been one of the most explored characteristics of families while the possible impact of single-parent families on children's schooling is a major issue of current educational concern.

Throughout the review of sibling and single-parent family research I use data from my analyses of autobiographies to portray the possible complexity of relationships between family structures and children's outcomes. In addition, I use my own quantitative data to investigate associations between sibling variables and outcomes for students from different social and cultural contexts.

I provide this outline of the chapter as I want to emphasize that if we are to understand in a more meaningful manner how families and schools influence students' attainment, then there should be (a) a continual interplay between theoretical and empirical analyses and (b) where possible, qualitative and quantitative approaches should blend together such that the findings from the two orientations naturally enrich each other. From reviews of research and my own analyses I present a set of propositions about the relationships between distal family background, family structure and students' outcomes. These propositions are the initial contribution to my ongoing development of the context theory of students' outcomes. Much of the research that is presented in this chapter belongs to a

tradition known, particularly in Britain and Europe, as political-arithmetic research. In the following section I begin by presenting some exemplars of that tradition.

POLITICAL-ARITHMETIC RESEARCH

One of the longest traditions in educational research has been the investigation of relationships between family social conditions and students' school outcomes, with the intention of possible school reform. Yogev and Shapira (1981) observe that such research has often been labeled as political arithmetic and it reflects the "liberal tradition of combining harsh empirical criticism of social injustices with 'cautious optimism' in respect to their remedy" (p. 102). One of the landmark political-arithmetic investigations was the influential and controversial *Equality of Educational Opportunity*, by Coleman, Hobson, McPartland, Mood, Weinfeld, and York (1966). Spady (1976) indicates, for example, that "No other study of its kind, including the equally formidable Project Talent study has generated so much discussion, controversy, and re-examination of methodologies and data" (p. 188). From their study of some 570,000 children and 60,000 teachers from 4,000 US schools, Coleman et al. (1966) concluded "Differences in school facilities and curriculum which are the major variables by which attempts are made to improve schools, are so little related to differences in achievement levels of students that, with few exceptions, their effects fail to appear in a survey of this magnitude" (p. 316). Instead, the study revealed that family influences were much more important than school characteristics in explaining differences in children's academic achievement.

The nature of the controversy surrounding the Coleman study is reflected in the concern expressed by Karabel and Halsey (1977):

> The conclusion that families rather than schools are responsible for the relative failure [in students' academic outcomes] does not necessarily follow from the data. For there may be something characteristic of *all* schools that tends to inhibit the academic achievement of poor and black children; the fact that differences between schools fail to account for such variation would be decisive only if the schools did in fact differ significantly among themselves. (p. 21)

The findings of the Coleman Report had a major impact on policies relating to compensatory education and to racial discrimination in schooling. In England, the Plowden Report had a similar influence on policies for elementary school children. The Plowden (1967) study was a particularly refined large scale survey of the environmental correlates of the school outcomes of three cohorts of children, aged 7, 8 and 11 years. As in the Coleman study, the Plowden Report indicated strong associations between family influences and children's school performance. The Report proposed that a program of positive discrimination should be implemented to make schools in the most economically deprived areas of England as good as the best in the country. As a result, an action-research framework was adopted to guide the development and evaluation of educational programs in designated 'educational priority areas'.

In a review of political-arithmetic research in education, Halsey (1994) concludes that two melancholy propositions have been supported with increasing certainty:

> 1. That class inequality is stubbornly resistant to social change when properly conceived in terms of relative rather than absolute improvements and equalization of life chances.
>
> 2. That educational reform, including reform of secondary schooling... has similarly failed to modify relative class chances though there have been significant improvements in some countries with respect to the relative chances of women and of some ethnic minorities. (p. 443)

Similarly, Goldthorpe (1996) indicates that in economically advanced countries, while the average level of educational attainment has risen substantially over the past 40 years, social class differentials in educational attainment have changed little over that time. He observes:

> If one envisages educational careers as comprising a series of transitions, or 'branching points', then, as these successively arise, children of less advantaged class origins have remained, to much the same extent, more likely than children of more advantaged origins to leave the educational system than to continue in it; or, if they do continue, to follow courses that, through the kinds of qualification to which they lead, reduce their chances of continuing further. (p. 487)

Increasingly, research that investigates relationships between social conditions and educational outcomes is adopting more sophisticated statistical approaches such as structural equation modeling, logistic regression and multilevel analyses. Blalock (1989) offers a salutary, if perhaps somewhat overstated caution, when he states "there is nowadays a recognition that mathematical modeling is a form of theorizing, but the dent that such modeling has made on the overall theoretical enterprise in sociology [and in education] is indeed small" (p. 448). He claims "Although there have been substantial increases in the number and quality of sophisticated data analysis, trends in the quality of data collection are much less evident. Perhaps data gaps are not as evident as they used to be, but they are still very substantial" (p. 449).

Such concerns about the use of more sensitive data are addressed later in my own analyses of family and school influences on students' outcomes. In this chapter, political-arithmetic studies are examined that investigate relationships involving measures of distal family background, family structure and school-related outcomes. For ease of presentation the research is grouped under the following headings (a) family socioeconomic and ethnic/race background, (b) sibling structure of families and students' outcomes and (c) children in single-parent families. In addition, a number of autobiographical narratives are presented to complement and emphasize the findings from the political-arithmetic studies.

FAMILY SOCIOECONOMIC AND ETHNIC/RACE BACKGROUND

Rumberger (1995) observes that "family background is widely recognized as the most significant important contributor to success in schools. Research has

consistently found that socioeconomic status, most commonly measured by parental education and income, is a powerful predictor of school achievement and dropout behavior" (p. 587). The nature of such relationships between social background and educational opportunities is reflected in the findings of a national investigation of student entry into Australian higher education. Williams, Long, Carpenter, and Hayden (1993) conclude:

> 1. Family background (measured by parents' occupations, parental education, and household possessions) continued to confer the advantage we have come to expect. These differences in participation came about because higher status families promote higher levels of achievement and provide higher levels of psychological support for their offspring to continue on in education.
>
> 2. Even after taking into account the advantages of family background, achievement and psychological support, an advantage persists for those from families in which parents are highly educated.
>
> 3. It helps to be rich. Year 12 graduates from the wealthiest 25 per cent of families enter higher education at rates from 20 percentage points above those from 'poor' families. However, part of the difference is due to wealth and part due to other aspects of family background related to wealth. (pp. 98-99)

Similar findings of family background differences in educational and occupational outcomes are repeated in other national settings. In an analysis in the Republic of Ireland, for example, Breen (1998) examines the relationship between class origins and the occupations of young adults, one year after they left school. The study indicates "Despite educational attainment being closely related to class origins it remains the case that social class effects on young people's market position are, for the most part, not mediated *via* education" (p. 294). Breen concludes that even if social class inequalities in educational attainment were reduced, social class differences in occupational attainment would remain (also see Breen, 2000). In the United States, Raudenbush and Kasim (1998) state that even after taking into account inequalities in schooling, gender and ethnic differences in economic outcomes remain large. In an analysis of data from the National Adult Literacy Survey, they show that social and cultural group differences in adult literacy and in occupational preference account for part of the inequalities in earnings and unemployment. The results also suggest, however, that "Even when comparisons are confined to persons of similar educational attainment, African Americans and Hispanic Americans earn less than European Americans, women earn less than men, and African Americans suffer a substantially elevated risk of unemployment" (p. 33). Raudenbush and Kasim conclude that labor market discrimination and residential segregation need to be taken into account when attempting to explain gender and minority group inequalities in employment and earnings (also see Kerckhoff, Raudenbush, & Glennie, 2001).

Even in societies that have adopted policies to eliminate class-based inequalities in educational opportunities, there continue to be significant family background differences in individuals' life chances. In an examination, for example, of the 'send-down' policy that operated in China during the Cultural Revolution, Zhou and

Hou (1999) investigate the impact of family background on the life course of students who were sent from cities to live and work in rural communities. Although the average time students stayed in rural regions was six years, the probability of students returning early to cities was related significantly to their family background. The study indicates:

> As the political tides subsided, high-rank cadres did have advantages in reducing the adverse impact of state policies by bringing their children back earlier to the cities, compared with children of other occupational groups. An early return was extremely valuable...children of cadres and professionals were especially advantaged in attending college. (p. 31)

Zhou and Hou (1999) conclude that the process of social class reproduction was only temporarily interrupted by the events of the Cultural Revolution. They suggest their findings are a further indication of the enduring significance of social stratification structures in mediating associations between state policies and individual life chances, even in dramatic political situations.

Similarly, Hanley and McKeever (1997) examine relationships between social class and the allocation of secondary and tertiary education places in state-socialist Hungary. Their findings show that parents in two social groups, cadre administrators and professionals, were able to use the educational system to increase the likelihood that their children would enter tertiary institutions. In addition, children of professional families were more likely to go onto higher education than were children of cadre administrators. Hanley and McKeever propose that the social class inequalities in the allocation of education were related primarily to an inequitable distribution of cultural capital, and secondarily to an inequitable distribution of social capital. In an analysis of the allocation of educational opportunities in state-socialist Czechoslovakia, Hanley (2001) concludes that "Party officials typically implemented class-based quotas during periods of rapid educational expansion...these quotas did little to alter the class composition of secondary schools and universities" (p. 39).

Investigations such as those that have been reviewed provide support for the general proposition that differences in family background have strong associations with inequalities in students' school success and in young adults' eventual educational and occupational attainment. As Sieben and de Graaf (2001) conclude in an analysis of survey data from several countries, the background of families has not lost its importance for young adults' educational attainment and occupational status. As I have suggested, there is no agreement on how family background should be assessed in such analyses. In the following section of the chapter a number of approaches to the measurement of distal family background are considered. These approaches include adopting measures of (a) childhood poverty, (b) neighborhood disadvantage and (c) social and cultural contexts.

Measures of Distal Family Background

Childhood Poverty. Quite often measures of childhood poverty are used to assess family economic disadvantage and family background. In an analysis of the

CHAPTER 3

FAMILY EDUCATIONAL CAPITAL AND STUDENTS' OUTCOMES

INTRODUCTION

The general propositions presented in Chapter 1 suggest that relationships between family contexts and students' school outcomes are mediated, in part, by more immediate family educational capital. That is, if we understand the nature of students' family learning environments we can explain, to a large extent, differences in the educational outcomes of students from diverse social and cultural contexts. The potential impact that supportive family learning environments may have on students' school success is suggested in the following claims by Coleman (1991) and Wang, Haertel, and Walberg (1993). Coleman states:

> Research shows conclusively that parents' involvement in their children's education confers great benefits both intellectual and emotional, on their children. Thus, a major issue facing education today is this: How to improve educational outcomes for children in the face of contradictions in family functioning, when strong families are so important for children's learning? (p. 1)

Similarly, Wang et al. (1993) observe:

> In contrast to distal variables, which are more removed from students' day-to-day lives, the home is central to students' daily experience. Consequently, the home functions as the most salient out-of-school context for student learning, amplifying or diminishing the school's effect on school learning. (p. 278)

It is not clear, however, which family characteristics are the most important for students' school success, or to what extent relationships between parent-child interactions and school outcomes are independent of family background. In a large-scale analysis of US students, Roscigno and Ainsworth-Darnell (1999) conclude that "Further research on cultural capital and [family] educational resources is warranted... the mediating effects of cultural-educational resources on racial and class achievement outcomes are not as strong as one might expect. It may be that their conceptualization is too vague for a clear and systematic application to education-specific processes and outcomes" (p. 173).

In this chapter I review research that examines associations between refined measures of immediate family capital and students' school-related outcomes. Typically, quantitative investigations have investigated either parents' descriptions of family influences or children's perceptions of family experiences. These two orientations can be related to an early theory of personality proposed by Murray (1938) in which he suggested that learning environments can be assessed by their alpha and beta press. I begin this chapter by exploring research that has measured the alpha press or the parents' descriptions of family influences. In particular, I present the work of Bloom and of Rosen to identify a set of potentially alterable

family variables that can be combined to form an understanding of a family's learning environment. I use some of the family variables suggested by Bloom and Rosen to define family educational capital in analyses I present of relationships between family background, family educational capital and school outcomes.

If our understanding of family influences is to advance we need to examine measures of children's perceptions, or the beta press, of family experiences. There are suggestions that school outcomes are related more strongly to children's perceptions of parental behavior than to what parents actually do in the home. Later in the chapter, I use measures of both the alpha and beta press of families to investigate relationships between family contexts and adolescents' aspirations.

From the analyses of my own data I suggest a set of propositions about relationships among family background, more immediate family educational capital and students' educational outcomes. These propositions are restricted, however, as they are generated from investigations of Australian students. I examine the representative nature of the propositions by reviewing related research from various international settings. From these international studies and from my own investigations, I present a set of refined general propositions regarding the impact of family educational capital on students' school outcomes.

The research that is reviewed and presented in this chapter is categorized under the general headings (a) the press of family environments, (b) family capital and adolescents aspirations: a test of the mediation-moderation model and (c) family capital and school outcomes: international settings.

THE PRESS OF FAMILY ENVIRONMENTS

In the development of an early theory of personality, Murray (1938) suggests that if the behavior of individuals is to be understood then it is necessary to devise a method of analysis that "will lead to satisfactory dynamical formulations of external environments" (p. 16). Murray proposes that an environment might be classified by the kinds of benefits and harms it provides. If the environment has a potentially beneficial effect then individuals typically approach the environment and attempt to interact with it. In contrast, if the environment has a potentially harmful effect, Murray claims that individuals attempt to prevent its occurrence by avoiding the environment or by defending themselves against it. The directional tendency implied in the framework is designated as the press of the environment. A distinction is made between an environment's alpha press "which is the press that actually exists, as far as scientific discovery can determine it" and the beta press "which is the subject's own interpretation of the phenomena that is perceived" (p. 122). In the following section, three sets of investigations are examined that represent attempts to measure the 'alpha press' of family educational capital. These

are Bloom's subenvironment model, Rosen's family achievement syndrome and my own analyses from the Adelaide study.

The Alpha Press of Family Environments

Bloom's Subenvironment Model

It was not until Bloom (1964) and a number of his students examined the environmental correlates of children's affective and cognitive outcomes that a 'School' of research emerged to assess the alpha press of family environments. Bloom defines environments as the conditions, forces and external stimuli that impinge on individuals. It is proposed that these forces, which may be physical or social as well as intellectual, provide a network that surrounds, engulfs and plays on the individual. As Bloom (1964, p. 187) suggests "such a view of the environment reduces it for analytical purposes to those aspects of the environment which are related to a particular characteristic or set of characteristics." That is, the total context surrounding an individual may be defined as being composed of a number of subenvironments. If the development of a particular characteristic is to be understood then it becomes necessary to identify that subenvironment of press variables which is potentially related to the characteristic.

In the initial subenvironment studies, Dave (1963) and Wolf (1964) examined relations between the educational capital of families in Illinois and measures of 11-year-olds' academic achievement and intelligence, respectively. Dave defined the family learning environment by six press variables, labeled as achievement press, language models, academic guidance, activeness of the family, intellectuality in the home and work habits in the family. In Wolf's study, the educational capital of the home was described by three process variables that were labeled as press for achievement, press for language development and provisions for general learning. The press variables in each study were assessed using a semi-structured parent interview schedule. When combined into predictor sets the press variables had large significant associations with arithmetic problem solving, reading, word knowledge performance and intelligence test scores.

Most of the subenvironment studies in the 'Bloom School' have examined the family correlates of cognitive measures. In contrast, Weiss (1974) identified two sets of press variables in an investigation of relationships between family capital and measures of 11-year-olds' achievement motivation and self-esteem. The press variables for academic motivation were generation of standards of excellence and expectations, independence training and parental approval; while for self-esteem they were parental acceptance, evaluation of the child and opportunities for self-enhancement. Generally, the press variables had moderate relationships with the affective characteristics. Weiss (1974) concludes:

> these results support the thesis that a sub-set of the total environment can be identified and measured for individual personality characteristics. However, the results were dependent on the criterion used. Unlike the studies of cognitive characteristics, it is

> more difficult to establish the validity of criterion instruments for personality characteristics. (p. 147)

The analyses of Bloom's subenvironment model suggest that when family educational capital is defined by proximal social-psychological dimensions, it is possible to measure potentially alterable variables that combine to have medium to large associations with children's learning outcomes. Bloom (1980) claims:

> If we are convinced that a good education is necessary for all who live in modern society, then we must search for the alterable variables which can make a difference in the learning of children. Our basic research task is to understand further how such alterable variables can be altered and their consequent effect on students, teachers and learning. (p. 16)

In a review of the subenvironment research, Kellaghan, Sloane, Alvarez, and Bloom (1993) identify five family measures that may be considered to be significant alterable variables. They are designated as work habits of the family (i.e., preference for educational activities over other activities), academic guidance and support (parents' guidance on school matters and the provision of facilities in the home for school learning), stimulation to explore and discuss ideas and events (opportunities in the home to explore ideas, events and the wider social context; and the use of games, hobbies and other imagination provoking activities), the language environment of homes and parents' academic aspirations.

Kellaghan et al. (1993) conclude:

> The socioeconomic level or cultural background of a family need not determine how well a child does at school. Parents from a variety of cultural backgrounds and with different levels of education, income, or occupational status can and do provide stimulating home environments that support and encourage the learning of their children. It is what parents do in the home rather than their status that is important. (p. 145)

Similarly, Redding (1999, p. 5) suggests "with reasonable certainty we can state that poverty may statistically predict lower school performance, yet families that provide a stimulating, language-rich, supportive environment defy the odds of socio-economic circumstance." It is such claims about the independent nature of the relationships between distal family background, family educational capital and students' school outcomes that are examined throughout this chapter.

In general, analyses that have adopted Bloom's subenvironment model have identified a set of alpha press variables that tend to have medium to large associations with cognitive measures and to be related more modestly to affective characteristics. One of the strengths of these investigations is that they use parent interviews to assess family capital, thus limiting the difficulty of interpreting relationships that may be biased when students provide information on both family predictor and outcome measures. Such bias might be more of a problem in studies that examine affective rather than cognitive outcomes. A restriction of the subenvironment research has been the relatively small sample sizes of families used in the analyses. The Bloom subenvironment research has, however, identified a significant set of family educational capital variables. Some of these variables also form part of Rosen's family achievement syndrome.

Rosen's Family Achievement Syndrome

In one of the most significant attempts to construct a social-psychological framework for the study of family educational capital, Rosen (e.g., 1956, 1959, 1961, 1962, 1973) developed the concept of the family achievement syndrome. He proposes that achievement-oriented families may be characterized by variations in the interrelated components of achievement training, independence training, achievement-value orientations and educational-occupational aspirations. Rosen suggests that achievement training and independence training act together to generate achievement motivation, which provides children with the psychological impetus to excel in situations involving standards of excellence. Strong achievement motivation tends to develop "when parents set high goals for their children to attain, when they indicate a high evaluation of their competence to do a task well, and impose standards of excellence upon problem-solving tasks. This complex of socialization practices has been called achievement training" (Rosen, 1961, p. 574). During independence training parents "seek to teach their children to do things on their own (self-reliance) in a situation where they enjoy relative freedom from parental control (autonomy)" (Rosen, 1962, p. 612). That is, while achievement training aims at getting children to do things well, independence training attempts to teach children to do things on their own.

Achievement-value orientations are defined as "meaningful and affectively charged modes of organizing behavior-principles that guide human conduct. They establish criteria which influence the individual's preferences and goals" (Rosen, 1959, p. 55). Rosen proposes that the learning of achievement-oriented values can be quite independent of the acquisition of the achievement motive. While value orientations are probably acquired when verbal communications in families are quite complex, it is considered that achievement motivation is generated from parent-child interactions early in the child's life when many of the interactions are emotional and non-verbal. Within the achievement syndrome, therefore, achievement values help to shape children's behavior so that achievement motivation can be translated into successful school-related outcomes.

Rosen states, however, that although achievement motivation and value orientations affect students' outcomes by influencing their need to excel and their willingness to plan and work hard, they "do not determine the areas in which such excellence and effort takes place" (Rosen, 1959, p. 57). Unless parents express high educational and occupational aspirations, Rosen proposes that the other family influences will not necessarily be associated with academic success in school.

In studies of social mobility, Rosen examines the achievement orientations of families from French Canadian, Greek, Jewish, African American, Southern Italian and Anglo-American groups. The analyses indicate that parents from these groups place different emphases on the dimensions of the achievement syndrome and that ethnic group variations in mobility can be explained, in part, by group differences in family-achievement orientations. Rosen's family syndrome provides a significant framework to examine ethnic group differences in the socialization practices of parents who are also from different social-status contexts.

CHAPTER 4

SCHOOL STRUCTURES AND STUDENTS' OUTCOMES

INTRODUCTION

In the family-school model in Chapter 1, I proposed that relationships between distal family background and students' school outcomes are mediated, in part, by school structures and that the associations between these structures and outcomes vary for students from different backgrounds. Bourdieu (1998, p. 22) claims, for example, that "the school, once thought of introducing a form of meritocracy by privileging individual aptitudes over heredity privileges, actually tends to establish, through the hidden linkage between scholastic and cultural heritage, a veritable social nobility."

In this chapter I expand the analysis of the theoretical model and review research that has investigated school structures and examined relationships between different structural forms and students' school outcomes. Parents in many industrialized countries are increasingly choosing various forms of non-government supported schools for their children's education. I begin the chapter by considering some general findings about the characteristics of schools in different sectors and, in particular, examine a conceptual orientation which proposes that schools might be defined as being either norm-enforcing or horizon-expanding. At a less general structural level than school sector, schools differ in their social and academic organization. I explore theoretical and empirical analyses that consider, for example, the potential impact on students' outcomes: if schools are more bureaucratic than collegial; if teachers are organized so that their relationships are individualized rather than collaborative; and whether schools respond in a meaningful manner, or at a surface level to major reform initiatives.

As researchers have examined the organization of schools there is a major associated question that has been asked: What are the characteristics of an effective school? In the second section of the chapter I review some of the contributions to school-effectiveness research. One of the major issues of such investigations has been how to assess the effect that different schools have on the outcomes of students from diverse family backgrounds. In general, school-effectiveness research has adopted large-scale survey approaches to the analysis of schools. I use autobiographical data to make the point that we need complementary qualitative investigations of schools to enhance our understanding of how students and teachers interpret the effectiveness of their schools.

Perhaps the most studied and controversial characteristic of a school's structure is the form of ability grouping that is adopted. In the final section of the chapter, I

present findings from analyses that have examined relations involving family background, ability grouping and students' outcomes. A number of the latter investigations demonstrate the intricate nature of the associations between family and school capital and students' attainment.

In general, the studies that are examined in this chapter support an underlying premise of the mediation-moderation model that the interactions between families and schools need to be explored if we are to understand family background differences in students' outcomes. The investigations that I present are classified into the following overlapping categories (a) the organization of schools, (b) school-effectiveness research and (c) instructional structure: ability grouping.

THE ORGANIZATION OF SCHOOLS

At a general level of analysis, school structures may be defined by distal characteristics that are often considered to be associated with differences in students' educational outcomes. These features include, for example, whether students attend government or non-government administered schools and the nature of the social and academic organization of schools. Such distal influences, in relation to students' performances are examined in this first section of the chapter.

School Sectors

A question asked increasingly by parents is: What benefits do children obtain by attending either government or non-government schools? An example of the passion associated with the question is reflected in the experience of a student from an economically deprived area of England, who in 2000 was not accepted by Oxford University to study Medicine (Miller, 2000). It is reported that the record of the student's entrance interview stated that while she was outstandingly intelligent, she lacked in confidence as did many other state school pupils. The Chancellor of the Exchequer complained that the rejection of such an able student was an absolute scandal and she was "the victim of an interview system that is more reminiscent of the old boy network and the old school tie than genuine justice in our society" (Ward, White, & Smithers, 2000). Although universities and independent schools suggest that the reporting was ill-informed, the individual experience relates to the larger concern about the imbalance in the proportion of students from independent schools who are admitted to England's (and other country's) elite universities, in relation to the numbers from state schools.

An example of research that has examined school-sector differences in students' outcomes is provided by analyses in the United States of the possible benefits of attending a Catholic rather than a state (public) school. In an investigation using data from the High School and Beyond study, Bryk, Lee, and Holland (1993) conclude that in relation to state schools, Catholic schools achieve relatively higher levels of student learning. Furthermore, it is suggested that in Catholic high schools, successful learning is more equitably distributed for students from different race and

social-status backgrounds and that students express higher levels of engagement with schooling.

Bryk et al. (1993) observe that Catholic high schools often work better than other schools, not because they have more qualified teachers or more academically-oriented students but because they are voluntary communities. They suggest that in such communities, social relations are "characterized by trust, that constitute a form of 'social capital'" (p. 314). As a result, it is proposed that Catholic high schools may, in general, be defined as bridging institutions with two major dimensions. First, an orientation "toward children and their families that is grounded in an appreciation of the worth of each person without regard for outward appearance, customs or manners" (p. 316). That is, these schools convey to students and parents that they are concerned greatly about security, personal well-being and engagement with schooling. Second, a clear recognition by schools that while they are concerned about the social and moral well-being of students, they must also educate their students so they are comfortable with, and able to operate in, a competitive market-oriented society.

The organizational capital of effective Catholic high schools is defined by Bryk et al. (1993) as being characterized by (a) a delimited curriculum core which includes the elements of an appropriate humanistic education, associated with a limited number of electives, (b) a communal organization that is expressed by the collegiality of teachers, the large number of school activities involving students and teachers and by a set of shared beliefs about what students learn, (c) a decentralized system of governance that allows most decisions to be made at the individual school level and (d) an inspirational ideology characterized by caring and social justice and which affects the direction of school policies.

In a further analysis of the relationship between school-sector type and students' outcomes, Lee, Chow-Hoy, Burkam, Geverdt, and Smerdon (1998) examine whether attending Catholic, non-Catholic private, or state (public) schools is related to students' course taking in mathematics. The study explores the questions "Do private schools have independent effects on students' pursuit of high-level course work, beyond the types of students they attract? If so, are there differences between how Catholic and independent schools affect their students in this regard?" (p. 315). Using hierarchical linear modeling to examine data from the High School Effectiveness study, Lee et al. (1998) investigate the implications for students if schools adopt either a differentiated or a constrained curriculum orientation. The differentiated approach accepts that different curricula should be offered to students with varying abilities and school attitudes. In contrast, the constrained-curriculum orientation reflects an educational ideology that all students should pursue a common set of academic goals and share similar academic experiences.

The findings from the study show that after taking into account family background differences and earlier mathematics performance, students who attend private rather than state schools enroll in more advanced mathematics courses. In addition, after controlling for student selection variations among schools, Lee et al. (1998) conclude "both types of private schools are following the constrained curriculum model and that the Catholic schools are using this model without a

particularly selective clientele. We wonder why this curriculum model – with obvious benefits to all students – is not more widespread" (p. 329).

It should not be assumed, of course, that schools in any one sector are characterized by uniform qualities and equality of student outcomes. In an analysis involving Australian Catholic schools, Mok and Flynn (1997) examined relationships between students' perceptions of the quality of school life and Year 12 academic achievement. The findings, from multilevel analyses, show considerable differences in students' achievement among the schools and that perceived school quality had a significant impact on achievement, over and above measures of students' characteristics and family background. In addition, when school effects were examined, students in high social-status Catholic schools outperformed by a large amount, students from medium and low social-status Catholic schools. Furthermore, females and males in high status single-sex schools had higher Year 12 achievement scores than did students in any other Catholic school setting.

Norm-Enforcing or Horizon-Expanding Schools

The often controversial nature of findings from investigations about the potential benefits of attending state or non-government schools is reflected in a study by Morgan and Sorensen (1999a) and by responses to their study (Carbonaro, 1999; Hallinan & Kubitschek, 1999). Morgan and Sorensen (1999a) examine whether social capital generated by social closure among parents in school communities accounts for any of the apparent academic advantage gained by US students attending Catholic, rather than state, schools.

For the analysis, schools are defined as either norm enforcing or horizon expanding. While norm-enforcing schools are characterized by strong bonds among students, teachers and parents, their distinguishing feature is considered to be the strong relationships that develop among parents. It is proposed that Catholic schools are particularly effective norm-enforcing schools "as they can appropriate as social capital all of the social bonds maintained in a more encompassing functional community, the church" (p. 663). In contrast, it is suggested that parents who send children to horizon-expanding schools devote less time to the development of interpersonal relations with the parents of their children's friends. Instead, these parents devote more time in investing in social capital outside the immediate school environment.

The investigation examines gains in mathematics achievement between the 10 th and 12 th grades, for students from Catholic and state schools who were sampled in the NELS data collection. In the analysis, two questions are explored: "Is social capital, in the form of social closure, associated with increased learning in mathematics? Can social closure explain a substantial portion of the Catholic school effect on learning?" (p. 662). The findings of the study show that social closure among parents failed to explain any substantial portion of the Catholic school effect on learning. Moreover, in the state sector, the social capital associated with horizon-expanding, rather than with norm-enforcing, schools had stronger associations with students' learning in mathematics.

Morgan and Sorensen (1999a) conclude that the most likely explanation of the Catholic school effect on learning is that students in Catholic schools are more often placed in college preparatory courses with more challenging curriculum offerings. They indicate "Our findings support this explanation, as our mathematics course-taking model demonstrates that 60 percent of the baseline Catholic school effect can be accounted for by covariates that measure differential course-taking patterns" (p. 675).

In a follow-up study, Carbonaro (1999) is critical of the Morgan and Sorensen investigation. He suggests, it is impossible to distinguish between horizon-expanding and norm-enforcing schools using the NELS data. As a result, Carbonaro claims that the conclusion which suggests the benefits of horizon-expanding schools outweigh those of norm-enforcing schools is not supported by the analysis. His own investigation of the data shows that 'friends in school' is the only social capital measure to be associated with mathematics performance. Carbonaro (1999) indicates some of the potential limitations of large-scale quantitative family-school capital research when he observes:

> Although the NELS data have some limited information about the *size* of parent-child-friend-parent networks, it has no information on *how parents use those connections*. The question remains, what do we learn from information about the former when we have no information on the latter. ...To resolve these ambiguities, future researchers must collect data on how parents in closed networks interact with one another, and also gather information on parents' values. (p. 685)

In a further critical comment of the Morgan and Sorensen study, Hallinan and Kubitschek (1999) suggest that the differentiation between norm-enforcing and horizon-expanding schools is ambiguous and confusing. They observe:

> If the sole basis for the definition of these terms is the density of internal and external parental networks, one should find schools that are both norm-enforcing and horizon-expanding and schools that fit neither description. One should find schools in which most of the internal parental networks support academic achievement, schools in which most of the internal parental networks work in opposition to achievement, and schools in which networks have mixed effects. (p. 688)

In addition, Hallinan and Kubitschek argue that the social capital measures in the original study are inadequate to capture the complexity of parents' social closure in school communities. They suggest that because of the methodological and measurement limitations of the initial investigation, it isn't possible to determine whether social closure among parents is related to the Catholic school effect on students' learning. In a response to the criticisms of their research, Morgan and Sorensen (1999b) indicate:

> With a careful analysis of the best available data, the well-studied Catholic-school effect on mathematics achievement cannot be explained away by any specification of network closure variables. Our secondary conclusion is more controversial...horizon-expanding high schools foster more learning than do norm-enforcing high schools. (p. 700)

Although the debate about norm-enforcing and horizon-expanding schools is inconclusive, it does raise theoretical and methodological issues about the investigation of relationships between distal organizational structures and students' outcomes. The research indicates the need to define and measure more clearly the

CHAPTER 5

SCHOOL CAPITAL AND OUTCOMES

INTRODUCTION

What are the experiences in schools that influence a child's life chances? After having examined the structural characteristics of schools I now turn to explore children's perceptions of their schools to provide a more complete answer to the question. The impact that a teacher may have on a child's eventual career is reflected in a reminiscence by the writer Jean Rhys. She grew up in Dominica and recalls:

> I thought of poetry as an examination subject. The way we were taught in our literature class didn't alter this opinion. Parse and analyse the following. Point out the grammatical mistakes in the following. (p. 58) Then, like a bolt from the blue, came Mother Sacred Heart, a new nun from England who took the literature class. She had a very beautiful voice and read aloud to us. She introduced us to Shelley and I soon stopped thinking of Shakespeare and company as examination subjects. I was able to make my own discoveries, even my own enthusiasms. [She] may have been an unruly nun but she was certainly a splendid teacher. I date all my love of words, especially beautiful words, to her lessons. (Rhys, 1979, p. 60)

Joe Gormley, former President of the National Union of Miners in England has different memories of his school. In the final year of elementary school he was chosen to study for the special examination associated with entry to the local grammar school. He remembers:

> There were about ten of us working for that exam, and every morning they looked at our homework. This particular day, most of the others had got their homework wrong, and I don't know what got into the headmaster, that day, but he caned the lot of us, even though mine was right. I thought, 'There's no future in this.' So on my way home that night, I walked down to the bottom of the market place, where there was a stream. I stood on the bank and took all my books and I threw them into that brook. The following day I told the headmaster what I'd done, and he looked at me and said: 'Well that's it, you'll always be a navvy.' Then he caned me again. I was eleven, and nobody passed the exam that year. But, when it was over, the headmaster said to me, 'Gormley, you'd have walked it.' (Gormley, 1982, p. 10)

Although there may be significant and even dramatic events that influence students' life chances, it is proposed in this book that relationships between family background and school outcomes are mediated, in part, by students' perceptions of the overall impressions of school experiences. In addition, it is suggested that relationships between these total experiences or school educational capital and outcomes are moderated for students from different family contexts.

In this chapter research is examined that investigates relationships between school educational capital, individuals' characteristics and school outcomes for

students with different family experiences. The research is categorized under the general headings (a) the Baltimore study, (b) perceptions of school educational capital and (c) school educational capital: a test of the family–school model.

THE BALTIMORE STUDY

One of the most interesting and sustained set of investigations that has examined relationships among family background, school capital and students' outcomes has used data from the Beginning School Study. Initially, the sample included 790 six year olds, selected from 20 randomly chosen schools in Baltimore, Maryland, with the children beginning first grade in 1982. The students, their parents and teachers have been involved in the longitudinal study many times over the ensuing years. From an analysis of the first graders, Alexander, Entwisle, and Thompson (1987) indicate how important teachers can be in shaping children's early school lives. They observe:

> Teachers' own social origins exercise a strong influence on how they react to the status attributes of their students. In particular, low-status and minority pupils experience their greatest difficulties in the classrooms of high-status teachers. They are evaluated by their teachers as less mature, their teachers hold lower performance expectations for them, and their teachers score exceptionally low on perceived school-climate measures. Moreover, year-end marks and standardized-test scores of such pupils apparently are depressed by these indicators of pupil-teacher social distance and teacher disaffection. (p. 655)

In one of the follow-up analyses, Entwisle and Hayduk (1988) demonstrate that the quality of family and school capital available to children in early school years is associated with reading and mathematics achievement during middle high school years. They conclude:

> If children's early social experiences have such long-lasting effects, much of the 'home background' influence measured in models of educational attainment in the secondary school may actually represent influences that were exerted much earlier in the schooling process. And long-lasting early 'teacher effects' may identify 'school effects' that have yet to be clearly identified. (p. 158)

In an attempt to disentangle the effects of family and school capital on children's early achievement, Entwisle and Alexander (1992) use the Baltimore data to examine relationships between winter and summer learning and mathematics performance. Winter learning refers to learning that takes place when school is in session and when children divide their time between home and school. As a result, it is proposed that such learning reflects family and school influences. In contrast, given that most children are on school vacation during the summer, learning which takes place during that time is considered to represent mainly family, or neighborhood, influences. Entwisle and Alexander compare children's gains in mathematics achievement over the summer with gains during the winter.

The results indicate:

> The seasonal patterning of scores emphasizes the point that home disadvantages are compensated for in winter because, when school is in session, poor children and better-off children perform at almost the same level. Schools seem to be doing a better job than they have been given credit for. It is mainly when school is not in session that consistent losses occur for poorer children. (p. 82)

Entwisle and Alexander conclude, very optimistically, that:

> If, as we have shown, schools are able to make up to some extent for the dearth of socialization resources in economically disadvantaged households, 'the school' is truly an institution that equalizes opportunity early in the game and perhaps over a longer period. Contrary to the idea that ' schools make no difference,' then, our data indicate that schools are most beneficial for those who need them most. (p. 83)

In a review of research that examines the impact of the summer vacation on achievement test scores, Cooper, Nye, Charlton, Lindsay, and Greathouse (1996) conclude that the effect is more detrimental for mathematics than for reading and most serious for mathematics computation and spelling. They suggest that the summer break negatively affects the mathematics skills of students from different social-status groups by about the same amount, whereas the impact on reading is greatest for students from lower social-status families. It is proposed that summer school programs might best be directed at mathematics learning if they are targeted for all students, or at reading if the purpose is to reduce social inequalities in academic outcomes.

The longitudinal nature of the Baltimore study has allowed analyses of relationships between early school experiences and later school outcomes. Using logistic regression models, Alexander, Entwisle, and Horsey (1997) examine the effects of children's perceptions of school satisfaction, their locus of control and teachers' assessment of children's engagement with school in the first grade on dropout behavior by the end of secondary school. The results show that the first graders' engagement with schooling and perceptions of early school experiences, along with parents' expectations and practices were all related to the odds of dropping out of school, independently of family social status. Alexander et al. (1997) suggest that their findings relate to investigations adopting a life-course perspective on development. That is, the study supports the orientation that "To some extent, individuals direct their own development (the idea of personal agency); development occurs in a social matrix and is shaped by experiences in the major institutional settings that individuals pass through over the life course" (p. 98).

Entwisle, Alexander, and Olson (2000) develop the life-course perspective further to examine predictors of the Baltimore adolescents' early work histories. In their sample, slightly more than half of the 13 and 14 year olds worked during the school year, while employment rates rose to 70 percent for adolescents over 15 years old. The results indicate that for most adolescents work and school activities reinforced each other. Entwisle et al. (2000) propose that "Students whose school patterns were less than optimal also tended to have work patterns that were less than

optimal, that is, we observed a general alienation or disenchantment from both" (p. 290). In addition, the study suggests that eventual employment opportunities for economically disadvantaged urban youth might be enhanced if they accumulate job experiences during their early years in high school. It is concluded, that the school prospects of poor-performing students are not likely to be improved by policies that reduce adolescents' involvement in employment after school hours. Instead, the results suggest that the major "causal process linking youth work to poor school performance is that poor-performing students lose interest in school and are more willing to spend long hours on the job" (p. 293). Entwisle et al. (2000) claim that rather than reducing work experience, incentives related to employment during school might be adopted to help strengthen students' attachment to school.

Perhaps a general summary of the Baltimore study is provided by Alexander et al. (1997) when they state:

> We are not saying that what happened in first grade necessarily seals children's fates, but prospects for "reengagement" later are not good when children are plagued early in their school years by self-doubt, are alienated from things academic, are average for their grades, are relegated to remedial courses, are prone to "problem" behaviors, are labeled troublemakers, and have academic skills that are far lower than the standard at which the curriculum is keyed. Sadly, this "profile" holds for far too many urban youths. (p. 98)

The Baltimore study is a fine example of longitudinal research that examines relationships among family background, family and school capital, and students' outcomes that include first grade achievement, dropping out of school and early employment experiences. In particular, the investigations have provided an ongoing portrayal of the associations between the very beginnings of school and eventual educational attainment. The researchers suggest, however, that many of the intermediate influences on students' achievement and behaviors need to be investigated. They claim that in such analyses more sensitive measures of school experiences should be adopted. In the following section, research is presented that has used refined measures to assess students' perceptions of the educational capital of schools.

PERCEPTIONS OF SCHOOL EDUCATIONAL CAPITAL

Perceptual Measures of Classrooms and Schools

In this analysis of perceptions of school capital, research is examined that has adopted refined schedules to assess students' and teachers' experiences of schooling. Such measures have been used in many countries to provide an assessment of how students and teachers perceive their classroom and school learning environments. I present the findings of a number of these international investigations to give an indication of the wide-ranging approach of the analyses. If perceptual measures are to be valuable in helping to design more effective learning settings then it is likely

that their most important contribution will come from studies that examine relationships between school educational capital and students' outcomes. A number of such investigations are considered and they tend to show that students' perceptions of their classroom and school experiences have small to medium associations with student outcome measures.

Students' Perceptions of Schools

Fraser (1991) suggests that in relation to direct classroom observation methods the strengths of the perceptual approach include:

> First, paper-and-perceptual measures are more economical than classroom observation techniques which involve the expense of trained outside observers. Second, perceptual measures are based on students' experiences over many lessons, while observational data usually are restricted to a very small number of lessons. Third, perceptual measures involve the pooled judgements of all students in a class, whereas observation techniques typically involve only a single observer. Fourth, students' perceptions, because they are the determinants of student behavior more so than the real situation, can be more important than observed behaviors. Fifth, perceptual measures of classroom environment typically have been found to account for considerably more variance in student learning outcomes than have directly observed variables. (p. 64)

In a review of scales designed to assess perceptions of classroom environments, Fraser (1998) observes that there are few areas of educational research that have available such a rich set of robust and validated measures. He demonstrates the use that has been made of measures such as the *Learning Environment Inventory* (Walberg, 1991), *Classroom Environment Scale* (Moos, 1991), *Individualised Classroom Environment Questionnaire* (Fraser, 1990), *My Class Inventory* (Goh,Young, & Fraser, 1995) and the *Constructivist Learning Environment Survey* (Taylor, Fraser, & Fisher, 1997). Fraser (1998) suggests that such scales are continually being revised with changes to items and response formats. In addition, he observes that it is valuable to distinguish between the idiosyncratic or 'private' beta press of each person's classroom environment and the 'consensual' beta press that students or teachers share about a classroom, especially when subgroup differences in learning environments are being examined.

In an analysis of classroom learning environments in 96 US urban schools, for example, Waxman and Huang (1998) modified the *Classroom Environment Scale* and *The Instructional Learning Environment Questionnaire* (Knight & Waxman, 1990), to produce personal or private forms of the scales. Also, the instruments were altered to examine students' perceptions of their interactions with teachers and other students in mathematics and reading classes, rather than obtaining their overall impression of the school. Generally, the study shows that students in middle schools were not as satisfied, were less involved and received less support from teachers, than students in elementary and high schools. In addition, females perceived classrooms to be more positive than did males. Waxman and Huang (1998) suggest that while many students in urban schools are confronted by hostile environments and the likelihood of academic underachievement, teachers and administrators should concentrate on constructing positive classroom learning environments. They