A Review of the Transition to College Literature in Sociology

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Background/Context: This review focuses on the transition to college literature in sociology published since 1983 with an emphasis on revealing the contribution that sociology has made to our understanding of under-represented U.S. populations and their transition into and completion of postsecondary education.

Purpose: The review is organized around four main themes: 1) college preparation, 2) college access, 3) financing college, and 4) college completion and/or retention. Five dimensions that cut across these themes are emphasized: 1) disadvantaged or underrepresented students, 2) parents, families, and social networks of these students, 3) institutions, 4) federal, regional, state, local, or other policies, and 5) systemwide or interactive factors.

Research Design: This is an analytic essay of prior analyses. These prior analyses include but are not limited to a range of methods, such as qualitative case study and secondary analysis of national, regional, and institutional data.

Findings/Results: This review finds that while most sociological research has focused on college preparation, with disadvantaged students at the center of this work, very little research has studied college financing.

Conclusions/Recommendations: Sociological studies relevant to the transition to college continue to strive toward that end, but the field still remains underdeveloped with regard to an emphasis on how the wider societal system of stratification and opportunity interact with individuals, social groups, and educational institutions in a dynamic interplay that affects opportunities for quality educational advancement. In some respects, the prominence of the status attainment framework has limited progress in the field of sociology. Although multilevel modeling affords the opportunity to consider not just the individual, but the individ-

ual embedded in particular educational contexts and other contexts, the role of institutional and systemwide factors requires further development among sociologists of education.

INTRODUCTION

In the study of education and transitions to college, the dominant sociological contribution has been an interrogation of the relationship between social structure and educational and social mobility. Sociologists have theorized and modeled the relationship between individuals' social origins and their adult socioeconomic status, with the "status attainment" tradition as their most prominent conceptual framework. The status attainment approach focuses mainly on the effect of socioeconomic status on educational and/or occupational attainment; where socioeconomic status is often measured through parents' income, wealth, education, and/or occupation. The 1971 American Sociological Association's Presidential Address illustrates the direction that much sociological research in educational inequality would take in the decades that followed (Sewell 1971). In his address, William H. Sewell explained that, among men, socioeconomic background affects measured ability; background and ability in turn affect educational attainment; background, ability, and attainment affect occupation; and background, ability, attainment, and occupation affect earnings (Sewell 1971; Sewell and Hauser 1975). What became known as the Wisconsin Model of Status Attainment had a significant influence on the education and stratification research that followed. Since the data were based on a Wisconsin survey, the Wisconsin Model was criticized for its lack of generalizability, but it was supported when Jencks, Crouse, and Mueser (1983) tested it using national datasets.

In the tradition of this status attainment model, sociologists have expanded their analyses to consider the impact of membership in stratified social groups (e.g., middle or working class, male or female, immigrant or non-immigrant, racial/ethnic minority or white, etc.) on adult success, with K-12 schooling experiences and success and educational attainment as intervening variables. Research on college transitions, particularly among sociologists of education, modifies this model to concentrate on postsecondary educational success as the outcome of interest. In this effort, such researchers have attempted to unpack the black box of schooling experiences in order to determine how and why particular aspects contribute to various postsecondary outcomes, including two of the most commonly discussed outcomes of college access and college degree completion. Multiple dimensions of the schooling experience

have been identified, defined, and analyzed by sociologists using both quantitative and qualitative methods. Academic achievement has been a critical measure employed by quantitative researchers to predict later educational outcomes, and therefore takes center stage in our discussion of college preparation. Within this literature, individual student characteristics and family/parent characteristics are emphasized over system variables, reflecting a bias among researchers toward the status attainment framework and its use of large-scale survey data. Fundamentally, the status attainment model conceptualizes educational and occupational outcomes as individual-level processes constrained mainly by family circumstances (Bidwell 1999).

In addition to and intersecting with the examination of the role of academic achievement, the social-psychological dimensions of college success have also been considered by sociologists, mainly in an attempt to understand the role of aspirations, expectations, and college plans. A major component of the schooling experience with which sociologists are concerned is how social and cultural capital mediate the relationship between social background and college success. Although scholars concerned with these processes clearly contribute to the status attainment model by enhancing our understanding of the nature of those school experiences that either limit or facilitate mobility, many of these researchers are also intent on identifying those processes that facilitate the social reproduction of existing inequalities. Therefore, such research (particularly qualitative, critical, and interpretive studies) is often classified under the rubric of social reproduction theory and analysis, particularly due to its emphasis on the Marxist and Weberian notion of the competition between social groups for scarce rewards afforded by an economically stratified society. Within this framework, schools are a primary context in which inequalities become reproduced.

In this review, we acknowledge that the status attainment tradition and the social reproduction tradition are often used to categorize particular studies within the sociology of education (Davies 1995). However, for the purposes of this review, we will instead organize studies based on their substantive focus and the extent to which they contribute broadly to our understanding of the transition to college—a process that both represents societal opportunity for mobility through the attainment of higher education credentials and also represents societal barriers that maintain deeply rooted historical inequalities between social groups. After all, each tradition has sparked studies that explore fundamental components of broader stratification mechanisms and the role of education within the larger social structure. By considering these studies together rather than as products of separate theoretical "camps," we benefit from the interplay

of ideas and perspectives relevant to a particular aspect of the transition to college.

This article reviews the transition to college literature in sociology, which primarily includes articles appearing in sociology journals and books published by sociologists. It is important to note that this review reflects the hegemonic dominance that the status attainment model has had on the publication process in this discipline. Much of the research cited conforms to, contributes to, or elaborates on a status attainment framework. However, key studies stemming from a social reproductionist perspective that have greatly stimulated our theoretical understanding of college transitions are discussed at length, and we have attempted to recognize their contribution to the process of status attainment as well. Quite often, sociologists—particularly those who study education—find themselves in the intellectual company of researchers in other fields of study whose work engages and informs the sociological literature. Where appropriate, those authors are also included. While this review focuses on research published since 1983, a few classics published prior to 1983 are included because they were instrumental in shaping the field.

Sociologists tend to view students' transition to college broadly, including limitations in academic preparation, access to college, and barriers to the completion of a college degree. This review reflects this broad focus by including both scholarly works that deal directly with the transition to college and those that address this topic indirectly yet yield valuable insights into our understanding of the individual, institutional, and sociostructural components of the transition process. The review is structured around four main themes and five dimensions that cut across those themes. The themes are: 1) college preparation in high school and, to a limited extent, earlier grades, if postsecondary outcomes are specified, 2) college access, 3) college financing, and 4) college completion and/or retention. The dimensions are: 1) disadvantaged or underrepresented students, including ethnic or racial minorities, females, high poverty students, immigrants, first-generation college students, and students from highly urban or rural areas, 2) the parents and families of these students, including the role of parental involvement and social capital, 3) the role of secondary and postsecondary institutions, including an examination of these institutions as sites where peer cultures and other larger cultural forces are translated into the production and reproduction of cultural capital-related advantages and disadvantages, 4) the federal, regional, state, local, or other policies addressing the transition to college, and 5) the system-wide factors and the interactions between individuals, institutions, and policies. In addition, a few theoretical works that have provided valuable direction to the study of the transition to college have also been included.

During the timeframe indicated, the vast majority of sociology books and articles dealing with the transition to college were about the theme of college preparation. College access and college completion or retention account for a much smaller percent of the total, and only slightly more than a handful are about financing college. In terms of the dimensions, more than half focus on disadvantaged students themselves. Surprisingly few publications directly address either parents/families, system-wide/interactive features, or educational policy, while a substantial number of publications address the institutional dimensions of education. In sum, most of the sociology literature has focused on college preparation and access for disadvantaged students and their families, and the institutional characteristics that impede their achievement and attainment. Relatively few works have focused on financing college, policy evaluation, or system-wide features.

COLLEGE PREPARATION

College preparation refers to any factors occurring during high school that affect a student's postsecondary educational outcomes. Factors during earlier grades are included if postsecondary outcomes are specified. The sociology literature on college preparation usually focuses on academic achievement, which is sometimes measured by grades and coursework but is usually measured by standardized test scores for wider comparability. In addition, the factors associated with college preparation range from individual attributes to family, community, and institutional characteristics.

Sociological research has consistently shown that a student's socioeconomic status (SES) has a significant effect on academic achievement, which is a key indicator of academic preparation for college. SES provides an indication of an individual's or group's position within a hierarchical social structure, and it is generally represented by an index that includes parents' occupation, education, family income, and/or a composite of items in the home. Some measures also include wealth and place of residence. Generally, almost every study to date has found SES to be associated with school achievement and other outcomes. Given the prominence of SES as a factor in academic achievement as well as other elements of the transition to college, more work should be done on creating better, more nuanced measures of SES.

Individual attributes and college preparation

Individual attributes hypothesized to have an effect on achievement include gender and race and ethnicity, with more work focusing on race and ethnicity than gender. In the investigation of gender, Catsambis (1994) found that although female and male eighth and tenth graders have comparable test scores and grades, females tend to have a lower interest in math and are less confident in their math abilities. These gender differences were largest among Latinos and smallest among African-Americans. Focusing on race and ethnicity, Cooper (1990) found that the effect of socioeconomic factors on school achievement varies for Blacks, Chicanos, and Whites. It is important to point out that while sociologists focus on gender and race and ethnic differences, they generally do not believe that these differences are due to gender or race and ethnicity per se. In an attempt to explain racial differences in achievement, Jencks and Phillips (1998) attributed the Black-White test-score gap to differences in the home environment, parental education, school quality, and teachers' perceptions, expectations, and behaviors. However, they did not attribute the test-score gap to test bias (content, methodological, or prediction bias). In addition, Jencks and Phillips showed that the Black-White test-score gap has decreased over time. This finding was supported by Hedges and Nowell (1999), who also found that Black and White test scores are becoming more equal, but they appear to be approaching parity at a faster rate at the bottom of the distribution than at the top, where Blacks are highly underrepresented. A recent review of the literature in racial and ethnic differences found that racial and ethnic gaps in achievement have narrowed over the past 30 years by every measure available to social scientists (Kao and Thompson 2003). Nonetheless, race and ethnicity continue to generate much sociological research in the area of college preparation, given that many researchers believe that although the gaps have narrowed, they are far from eliminated.

Though less studied, other individual attributes hypothesized to affect academic achievement include immigrant status and bilingualism. Like gender and race and ethnicity, researchers usually do not attribute differences between immigrants and native-born children to immigrant status per se. Instead, differences in aspirations, dropout rates, grade-point averages, and test scores are attributed to socioeconomic status, home ownership, family structure, and parents' education (Schmid 2001). The low academic performance and high dropout rates of Mexican-origin students can be explained by their high rates of poverty and the tendency of high-school-aged Mexican immigrants to forego school enrollment.

Several studies suggest that Mexican-American students with US-born parents have lower educational outcomes than students with Mexicanborn parents. Suarez-Orozco and Suarez-Orozco (1995) attribute these differences to the higher achievement orientation of recent Mexican immigrants. Evidence is mixed regarding the relative importance of SES for Asian and Latino immigrants. Some studies report that it explains most of the difference, while others say it explains only a fraction of the difference in educational achievement. Sociocultural theories that highlight acculturation patterns, cultural values, and the treatment and reception of different immigrant groups in the US have emerged as a result (Gibson 1998; Ogbu 1987; Ogbu 1991; Ogbu 1992; Ogbu and Matute-Bianchi 1986; Portes and MacLeod 1996; Portes 1999; Zhou and Bankston 1998). Schmid (2001) indicates that studies regarding language proficiency are mixed, where limited English proficiency has a negative influence on academic performance but bilingualism has a positive influence. Mouw and Xie (1999) showed that, at least for Asian-American eighth graders, speaking a native language with parents has a positive effect on achievement. However, this effect appears to be temporary and is conditional on having parents who are not English proficient.

The college preparation literature in sociology also addresses the role of educational aspirations and expectations. While aspirations refer to an idealistic value orientation toward education, expectations refer to a realistic educational plan (Morgan 1996). Having made this distinction, it is important to point out that aspirations and expectations can affect each other, that there is much overlap in the literature, and that they are often studied together. Looking at trends over time, studies find that both expectations and aspirations have increased. Schneider and Stevenson (1999) compared adolescents in the 1950s and 1990s and found a considerable increase in aspirations. While in the 1950s, teens aspired to be in service and administrative jobs, in the 1990s, teens aspired to be professionals, even though many do not realize their aspirations. Expectations follow a similar trend. Comparing high school students in 1980 and 1992, Morgan (1996) found that educational expectations increased over time, but more so for Blacks than for Whites and more so for females than for males. Morgan also found that expectations increased between tenth and twelfth grades (excluding dropouts).

While the trends over time are similar, the factors that determine aspirations and expectations appear to be different. In particular, the role of socioeconomic status may be important for expectations but not for aspirations. Using a sibling model, Teachman and Paasch (1998) found that about three quarters of the variation in educational aspirations among

children lies between families but only about 40 percent of this variation (or 30% of the total variation) is explained by parental income and education, suggesting that other factors in the family environment may be more important in determining student aspirations. In contrast, Goyette and Xie (1999) found that, at least for Asian-Americans, educational expectations are principally influenced by socioeconomic and demographic factors. In addition, they found that parental expectations are strongly correlated with children's expectations. These studies suggest that socioeconomic factors may be more important for setting realistic educational plans (expectations) but less important for determining educational ideals (aspirations). This may explain why Mickelson (1990) found that Black adolescents can have poor grades but positive attitudes toward education. Mickelson referred to this as the attitude-achievement paradox, where abstract and concrete attitudes are distinguished and are not necessarily positively correlated.

Finally, the likelihood of realizing one's aspirations is similar to the likelihood of realizing one's expectations. However, these probabilities are not the same for everyone. Controlling for measured academic ability, McClelland (1990) found that high school seniors who aspire to high-status jobs are more likely to achieve their goals if they are males from upper-white-collar families. Females were less likely to fulfill their aspirations than men, especially if they got married. Like aspirations, the likelihood of realizing one's expectations also appears to be determined by SES. Alexander, Entwisle, and Bedinger (1994) studied the likelihood of obtaining expected grades and found that children who accurately recalled prior grades were more likely to obtain their expected grades. Lower-SES and minority children and parents were more likely to overestimate previous performance, which may explain their lower likelihood of attaining their goals.

Family and neighborhood attributes and college preparation

In the past, family and neighborhood attributes were not emphasized in the sociological literature as much as individual attributes, but that has changed with the availability of improved data sources that permit multilevel analyses. At the family level, characteristics that have been shown to have an important effect on academic achievement include size, structure, density, and composition. Powell and Steelman (1990), for example, found that a larger number of siblings and closely spaced siblings have a negative effect on test performance and that the sex composition of siblings affects grade-point averages but not test scores. McLanahan and Sandefur (1994) focused on family structure and found that children raised by widowed mothers do better in school than children raised by single mothers, and boys who live with divorced or separated mothers are better off than boys who live with never-married mothers. Black children in particular are more successful in school if they are born to married parents, but having a stepfather is also helpful. College preparation studies focusing on these types of family characteristics are not as common as those focusing on SES.

Community characteristics at the local and neighborhood level have also been associated with student achievement, but all of these studies are limited in that they do not adequately address the issue of selection bias, which is important because families choose where to live. In other words, the same factors that affect a student's achievement may also determine where his or her family chooses to live. With this limitation in mind, studies have shown, for example, that Black students that live in areas of high racial inequality (in terms of poverty, income, and unemployment) are more disadvantaged than those who live in areas of lower inequality (Roscigno 1999). Most recent sociology publications find that neighborhoods seem to influence youth differently by gender, SES, and race. For example, Entwisle, Alexander, and Olson (1994) found that males' gains in math achievement are more sensitive to neighborhood resources than females'. Catsambis and Beveridge (2001) found that living in a disadvantaged neighborhood is particularly detrimental to the academic achievement of students with higher SES backgrounds, and Turley (2003) found that an increase in neighborhood median income is associated with a significant increase in test scores for White children but not for Black children. Future studies of neighborhood effects should attempt to address the problem of selection bias more thoroughly in order to see if the associations described above can be attributed to neighborhoods per se.

Social capital is prominently featured in sociological discussions of the influence of family and community on achievement and related outcomes. Social capital refers to "relations among persons that facilitate action"—in this case, action that prepares a student for college (Coleman 1988, p. S100). In the 1950s, Coleman (1961) studied adolescent social networks and found that adolescence is a transitional period during which family ties become less important and friendship ties become more important. In particular, he noted that social networks have an important impact on how adolescents view themselves, how they perform in school, and what they want to do after high school. The work that followed Coleman's conceptualization of social capital often applied it to particular ethnic groups. For example, Valenzuela and Dornbusch (1994) showed that among Mexican-American adolescents, family

relations have a positive effect on academic achievement, contradicting earlier work where familism was viewed as a hindrance for educational mobility among Mexican-Americans. Stanton-Salazar and Dornbusch (1995) also investigated Mexican-American high school students and found that bilinguals, despite their lower socioeconomic status, have special advantages in using information networks in acquiring school personnel and other adult support for school success and social mobility. Similarly, White and Glick (2000) found that familial social capital helps explain why immigrants who arrive as adolescents are more likely to finish high school than immigrants who arrive as children or those who are born in the US (though they are no more likely to pursue postsecondary education than their US-born counterparts).

Carbonaro (1998) did not focus on a particular ethnic group, but he applied Coleman's concept of intergenerational closure (referring to parents who know their children's friends' parents) and showed that closure is positively associated with achievement in math (but not in other subjects), and that students with more closure are less likely to drop out of high school. McNeal (1999; 2001) distinguished among three dimensions of social capital: parent-child, parent-parent, and parent-school involvement. He found that parent-child discussion was the only measure that both improves achievement and reduces truancy and dropout. Startlingly, he also found that parental involvement had no benefit for lower SES students and weaker effects for minorities and students from single-parent households. He proposes that future research should explore whether the cause of these differences lies in the qualitative nature of the involvement or in a more negative and defensive reaction to the involvement among school personnel. Additionally, qualitative studies that delve into the interior of family life have uncovered some dynamics about how behaviors, attitudes, and patterns of family life within the home transmit advantages to middle-class children outside the home, including school advantages (Lareau 2002). In Lareau's study, middle-class parents make a concerted effort to foster children's talents through organized leisure activities and parent-child communication that prioritizes extensive reasoning, while working-class and poor parents focus on providing favorable conditions in the home but leave leisure activities less structured for the children to engage in themselves. These parents also use directives rather than reasoning. Middle-class children, therefore, gain an emerging sense of entitlement from their family life which can have long-term consequences. In interacting with representatives of formal institutions, middle-class parents and children were able to negotiate more valuable outcomes than their working-class and poor counterparts. Such findings have clear implications for managing students' opportunities for academic achievement and the eventual transition to college.

Institutions and college preparation

High school institutional characteristics such as tracking, school type (or sector), size, composition, and level of racial integration may play an important role in student achievement. In fact, many researchers believe that curricular track and the number of math courses taken are the most significant factors in explaining achievement differences (Persell 2000). Since the 1980s, ability grouping has generally replaced formal tracking as a standard practice, but many studies have shown that students in higher ability groups experience superior instruction, pedagogy, and academic climate as well as greater achievement than those in lower ability groups, who are disproportionately Black and Latino (Catsambis 1994; Hallinan 1991; Kubitschek and Hallinan 1996; Oakes 1985). Hallinan (1996) also found that students' assignment to low-ability groups often prevented them from subsequently enrolling in more advanced high school courses that would have been more beneficial in preparing them for college. The above authors also found that, over time, low-ability group placement negatively affected Black and Latino students by widening the gap between the grades and achievement test scores of White and minority students. Similarly, Braddock and Dawkins (1993) found that students' educational aspirations and attainments were depressed by ability grouping, particularly in the middle grades.

Even after detracking reforms, inequalities persist, albeit in more covert forms. Lucas (1999) documents that students are now more likely to be allocated into specific courses based on their subject-specific measured abilities. As a result, de facto tracking persists in that lower-class students remain less likely to be enrolled in a college-prep curriculum, particularly in socioeconomically diverse schools, and math achievement scores seem to affect placement in English as well as math classes. The field of sociology has been instrumental in advancing our understanding of the sociocultural, political, and ideological reasons for why schools' formal and de facto "track" structures have been difficult to dismantle. These reasons include parents' and educators' resistance to structural reforms that challenge the legitimacy of prevailing notions of intelligence and ability (Oakes, Wells, Jones, and Datnow 1997; Wells and Serna 1996).

To date, research on tracking and school-sector effects have overlapped considerably even though tracking varies by school sector. In public

schools, tracking tends to reinforce preexisting inequalities in achievement more so than in Catholic schools (Gamoran and Mare 1989). In fact, Coleman and Hoffer (1987) find that when family and academic background are held constant, Catholic high school students take more math, foreign language, and English courses. Several other studies have found that Catholic school students achieve at higher levels, and tracking and achievement are less dependent on family background and prior achievement than it is for students in public schools. This difference is mainly attributed to Catholic schools' tracking structure, greater academic demands for all students, a cohesive, orderly and communal climate, and the smaller variation in math courses offered by Catholic schools (Gamoran 1992; Lee and Bryk 1988; Lee and Bryk 1989). Of course, studies of Catholic schools cannot fully account for the likelihood that the types of students who attend Catholic schools are systematically different from those who attend other types of schools. This problem is the same as the selection bias problem in the neighborhood effects research mentioned earlier.

It is important to note that teachers, parents, and institutional barriers play a large role in decisions about ability grouping or track placement. Ferguson (1995) demonstrates that teachers tend to provide less support for Black students, and they tend to underestimate their potential. In their study of six racially mixed schools, Yonezewa, Wells, and Serna (2002) found that Black and Latino lower-grouped students faced hidden institutional barriers to information, resistance from counselors, teachers, and sometimes even parents, and felt unwelcome when they considered or attempted to move upward in their high school's curriculum hierarchy. Their findings are consistent with Lucas' (1999) claim that children of middle-class parents remain more likely to take college preparatory classes compared to lower-class children with similar aspirations and prior achievement because they lack the information necessary to successfully choose a college-prep sequence, or they lack awareness of the long-term implications of such choices.

The important effect of schools on student achievement is perhaps most evident when students move from one school to another. This was demonstrated in a study of mobility by Swanson and Schneider (1999), which found that while moving to a new home can have positive effects on achievement, moving to a new school is particularly beneficial since many students change schools in an attempt to acquire access to better opportunities or a more appropriate fit. Despite short-term negative effects, changing schools can have long-term positive effects if it takes place early in high school, as opposed to late in high school.

Some of the most unique sociological contributions address the socio-

cultural realm of education, and has the potential to greatly inform the achievement findings noted above through their attention to the ways in which schools, as institutions, interact with the larger cultural realm to potentially reinforce existing inequalities. The classic work of Bourdieu and Passeron (1977) explains the theory of cultural capital, which attempts to identify the connection between social privilege and academic success by viewing schools as a context within which the cultural signals of the elite are more highly valued. According to Bourdieu and Passeron, cultural capital derives from one's habitus, which is a set of lasting, internalized dispositions—a personality of sorts—developed from the culmination of past experiences. A habitus is a cumulative framework of subjective perceptions, preferences, and appropriate actions common to members of the same social group and from which individuals draw on to interpret their surroundings and function in their day-to-day social interactions. Since schools are more responsive to the cultural orientations of the dominant or elite class, these orientations become both rewarded and required within educational contexts to achieve particular outcomes, such as high achievement or high aspirations. According to this theory, students of lower socioeconomic status are disadvantaged in the competition for academic rewards because their habitus does not align with the arbitrary and institutionalized high-status cultural signals required for success in school.

Dimaggio (1982) used Bourdieu's concept of cultural capital to show that a composite measure of cultural capital (consisting of attitudes, activities, and information) has a significant effect on high school grades, even after controlling for family background and measured ability. Dimaggio also found that the returns to cultural capital for women are greatest for those from high-status families and least for those from lowstatus families; whereas for men, the positive returns are restricted to students from low-and middle-status families. In contrast to Dimaggio's focus on highbrow and middlebrow attitudes, activities, and information, Farkas, Sheehan, Grobe, and Shuan (1990) focused on the informal (gatekeeping) standards by which teachers reward more general skills, habits, and styles. They found that their model explains almost all of the differences in coursework mastery and course grades by gender, ethnicity, and poverty status. Similarly, Roscigno and Ainsworth-Darnell (1999) found that Black and low-SES students tend to receive fewer returns to cultural capital. They suggest that this discrepancy is due to school and classroom-based processes tied to teachers' evaluations of students' efforts and systematic relegation associated with tracking. Kingston (2001) addresses the limits of the concept of cultural capital theory for understanding school success. His theoretical interrogation reveals the questionable translation of Bourdieu's definition to the US context where acquaintance with "high culture" may not be as relevant. At the same time, he points out that when defined too broadly, the concept can lose its usefulness.

Recent work using qualitative methods attempts to address the conceptual subtleties of Bourdieu's original theory. These studies tend to explore the details and inner workings of the social, cultural, and institutional contexts within which students of diverse backgrounds engage in the educational process. Particular attention has been given to the ways in which the structural, cultural, and organizational elements of schooling create educational environments in which some students are privileged while others face disadvantages, thereby reproducing existing social inequalities. Lamont and Lareau (1988) contend that lack of access to such cultural capital results in the social and cultural exclusion of lower-income and minority students, while the dominant social groups benefit from their greater access to those social class-linked resources that are easily transformed into cultural capital in the school setting. For example, Lareau (1987; 1989) observed the differences in how workingclass and middle-class parents participated in their children's schooling and theorized that these class-based differences can be viewed as a form of cultural capital. Both groups of parents valued their children's educational progress, but the working-class families did not define the homeschool relationship as one of interdependence, and therefore, their behaviors were not congruent with the teachers' expectations. Lareau and Horvat (1999) studied a school that created moments of exclusion for Black students and parents due to the Black parents' diversion from the White-dominant, culturally-legitimate standards of a calm, deferential, and socio-emotionally affirming style of parent-teacher interaction. Whiteness, in this setting, is a hidden resource that facilitates compliance with the standards, and White parents are also advantaged in that they are spared the suspicious lens of historical racial discrimination that can hinder such compliance for Black parents. Each of these studies illuminates the process through which these cultural advantages translate directly into educational advantages for students, thus providing key insights into potential mechanisms that result in unequal student achievement, which is a key predictor of college enrollment and success. This work is particularly valuable given the inconsistent findings regarding the effects of parental involvement on school success.

A related line of inquiry in the college-preparation literature deals with the complex intersection of school context and social capital. While most research treats social capital as an individual asset, some more theoretical qualitative studies offer unique and compelling analyses of the ways in

which the broader US high-school context is structured to limit the achievement of working-class Latino adolescents. Valenzuela (1999) describes the "subtractive" quality of schooling in which the social capital of US-born Mexican students is eroded as they ambivalently fall prey to the ideological perspectives of a high-school social context that devalues their culture and language. Consequently, they become alienated, resistant, and disempowered. Similar to Yonezawa, Wells, and Serna's (2002) description of uneven access to informal school, community, and neighborhood information networks, Stanton-Salazar (2001) uses a more theoretically complex network-analytic approach to examine how Mexicanorigin students are disadvantaged by a system of school rewards that requires the negotiation and management of multiple personal networks. He described a school context similar to the structural features of middle-class networks, resulting in a more effective strategic educational experience among middle-class students from the dominant culture, who are socialized and empowered to manipulate these networks in order to obtain needed information, guidance, and support within the school.

While the concept of social capital has received much attention in the sociology of education literature, it is not without criticism. In fact, Portes (2000) raised the possibility that much of the alleged benefits of social capital are spurious after controlling for other factors. Future work should attempt to address the complicated issue of causality. The concept of social capital is therefore increasing not only in popularity but also in controversy regarding its exact meaning and actual effects. This debate would benefit from a revisiting of the differences between Coleman's approach to social capital and Bourdieu's initial conceptualization. Coleman (1988) is strictly concerned with the function of social capital, which is to facilitate certain actions. In so doing, he chooses to provide a very vague definition that merely identifies it as an aspect of or a process embedded within social structures. Bourdieu (1986), on the other hand, emphasizes the institutionalized nature of social capital and the fact that social networks are deliberately cultivated so that the resources that accrue from participation in these social relationships can be accessed.

Further theoretical development of the concepts of social and cultural capital and their relevance to real-world educational settings and wider social contexts is surely dependent on more nuanced qualitative studies in which researchers can observe the actual process through which particular cultural and social resources become translated within particular educational contexts. Such studies complement traditional status attainment research and inform the practice of operationalizing potentially outdated, too broadly conceived, or culturally irrelevant measures of these forms of capital.

Another source of controversy in sociologists' understanding of the social and cultural mechanisms behind Black students' aspirations and lower achievement is Ogbu's (1991; 1995) theory of "oppositional culture." Ogbu's work suggests that Black peers disparage Black students who conform to the attitudes, values, and behaviors that raise achievement. Fordham and Ogbu (1986) explain that high-achieving Black students are sanctioned by their peers for "acting White" because school achievement is defined as being in the domain of White students. This theory is founded on the assumption that Blacks perceive barriers to occupational opportunity and limited returns to education. Critics of this model cite evidence of higher occupational and educational expectations among Blacks and Latinos relative to Whites of similar SES (Ainsworth-Darnell and Downey 1998; Cheng and Starks 2002; Kao and Tienda 1995; Qian and Blair 1999; Solorzano 1991). Ainsworth-Darnell and Downey (1998) point out that this theory was developed from ethnographic studies of Black students, which cannot determine whether the norms against academic achievement are more prevalent among Blacks. These authors find patterns that contradict the oppositional culture model, such as the finding that African-Americans who are viewed as good students are more likely to be popular than their White counterparts. In addition, Goldsmith (2004) challenges the primacy of a negative peer influence by revealing that Black and Latino students have higher aspirations and positive attitudes toward school in minority-segregated schools, compared to similar students in predominantly White schools. However, support for Ogbu's theory is found in more recent work. For example, Farkas, Lleras, and Maczuga (2002) show that minority-segregated schools reduce pro-school attitudes due to the increased chastising experienced by students with such attitudes, which is in direct opposition to Goldsmith's findings. But other work points out that Ogbu's theory cannot account for within-group variations (O'Connor 2001). Thus, the oppositional culture debate continues. The fact that it represents one of the most contentious debates within the field reflects the kind of tension generated by status-attainment approaches, which tend to focus on the individual as the cause of differential outcomes rather than on the institutional conditions within schools that might be facilitating particular behaviors and perceptions among individuals of marginalized social groups.

COLLEGE ACCESS

As many of the sociological studies of college preparation suggest, the factors associated with high academic achievement do not guarantee a successful transition to college. Other factors play an important role in determining who has access to a college education. While the college-preparation literature focuses on factors occurring during high school or earlier grades, the literature on college access focuses on factors affecting the process of applying and enrolling to college(s), as well as the types of college(s) to which students enroll. The sociology literature predominantly focuses on factors such as socioeconomic status, family structure, gender, race and ethnicity, aspirations, and expectations, but it also addresses how institutional factors shape college access. One sociologist, Aaron Pallas (1993), considers current shifts in the timing and sequencing of schooling in the life course and the relevance of these transformations to our framing of issues of college access, particularly for adults beyond the usual college-going age.

Individual characteristics and college access

Much of the work that followed the Wisconsin Model focused on access to college, especially on differences by race and ethnicity, gender, and socioeconomic status. In general, sociologists find that differences exist, but the extent of these differences and how much they have changed over time is debated. Alexander, Pallas, and Holupka (1987) found that while socioeconomic differences in college enrollment persist, women attend college at higher rates than men, and Blacks and Hispanics attend at higher rates than Whites, after controlling for academic resources. In a review of the literature, Baker and Velez (1996) also found that college enrollments for women and minorities increased significantly, but that these rates slowed down in the 1980s. They also found that, relative to academic ability, socioeconomic advantage is declining in importance. This contradicts earlier data that showed that socioeconomic differences have persisted. In terms of gender, Jacobs (1996) also found that women have increased access to higher education. However, Jacobs warns that women do not do well in terms of returns to schooling, so we should not conclude that equal or better access to college yields equal or better results after college. Another caveat is that the effect of income on college enrollment varies by race, class, gender, and cognitive skills (Beattie 2002). Beattie found that in states where income returns to schooling are low, Whites are less likely to enroll in college but Blacks are less affected by differences in the level of returns. Other groups that are less affected by differences in the level of returns to education include women, those with a high-SES background, and those with high cognitive skills.

Several studies suggest that for disadvantaged students, high aspirations do not necessarily lead to better outcomes. An ethnographic study of a low-income neighborhood by MacLeod (1987) contrasted the low aspirations of a White gang (Hallway Hangers) to the high aspirations of a group of Black young men (the Brothers). Because the Brothers worked hard, got good grades, took college prep courses, and aspired to be professionals, MacLeod expected them to be successful. However, eight years later, MacLeod discovered that both the Hangers and the Brothers had experienced very limited success in the job market and the Brothers had not attended college as planned. MacLeod concluded that the gap between aspirations and outcomes appears to be wider for Blacks than for Whites. This pattern was confirmed by Hauser and Anderson (1991), who showed that while college aspirations increased for both Blacks and Whites between 1976 and 1986, the chances of entering college declined for Blacks. Hanson (1994) found that those with a low socioeconomic status are more likely to have educational expectations that are lower than their aspirations, more likely to experience a decline in their expectations over time, and less likely to realize their expectations. Similarly, Crockett and Crouter (1995) showed that those with a lower SES are less likely to enroll in postsecondary institutions, even if they have high aspirations. All these studies show that high aspirations are not sufficient for increasing the likelihood that disadvantaged students enroll in college.

Nevertheless, sociologists who focus on status attainment have long been interested in the development of college aspirations, the effect of student aspirations and expectations on college enrollment, and to a lesser extent, the achievement of those aspirations. The most popular model of students' college choice is a three-stage model including the predisposition, search, and choice phases of this process (Hossler and Gallagher 1987). In the predisposition stage, students develop post-high school educational and occupational plans, usually by the eighth or ninth grade. In the search stage, students consider and evaluate potential college options, and then they choose and apply to a specific college or colleges in the choice stage. Parental support and encouragement is the strongest predictor of postsecondary aspirations, followed by good grades (Falsey and Haynes 1984; Hearn 1984; Hossler and Stage 1992; Stage and Hossler 1989).

However, as Hossler, Schmit and Vesper (1999) point out, status-attainment research has not focused on the qualitative details of the college decision-making process, and such attention is especially vital for understanding the processes that affect Black males, since prior research is uncertain about the factors that influence the educational aspirations of these students. These authors further highlight the confusion and instability of students' college considerations during their sophomore and

junior years, when teachers, counselors, and college marketing and recruitment are prominent. However, they find parental support and encouragement to be the most important factor in determining college enrollment. Furthermore, Morgan (2004) advocates for more nuanced development of theoretical models of how expectations are formed in light of beliefs about existing opportunities, constraints, and probabilities of success. Such models, he argues, would lead to more effective data collection and analysis that could better consider both structural dynamics and socialized beliefs as mechanisms of status attainment.

While most studies focus on general college enrollment, some have investigated the types of colleges in which students enroll. The college destination literature suggests that there are significant differences by socioeconomic status. An early study by Hearn (1984) found that higher SES freshmen of 1975 attended schools having superior intellectual and material resources. In a later study, Hearn (1991) also found a similar pattern among the high school class of 1980. Focusing on those who entered college between 1966 and 1978, Monkturner (1995) found that students from a lower socioeconomic background were more likely to enroll in a community college than a four-year institution, and community college entrants were less likely to get a bachelor's degree than those entering a four-year college. Karen (2002) replicated Hearn's 1991 study and found that, even after restricting his sample to college-goers and controlling for measured ability, social background factors still mattered for the college destinations of the high school class of 1992. Comparing the high school classes of 1980 and 1992, Karen showed that the effect of father's education and parental income on college selectivity increased, while the effect of mother's education decreased. Plank and Jordan (2001) added the concept of talent loss, which refers to the proportion of qualified students who do not enroll in a particular type of college or who do not enroll at all. Their data reveal a talent loss of 50 percent within the lowest SES quartile. In other words, among students in the top 20 percent of achievement, 50 percent of those in the lowest SES quartile did not enroll in a four-year college within two years of high school completion (compared to only 13% of those in the highest SES quartile). They attribute a large part of the effect of socioeconomic status on enrollment at a four-year institution to social capital in the form of information, guidance, and preparatory actions.

Institutional factors and college access

Some sociological studies have investigated the role of secondary institutional factors on college access and enrollment. Wells and Crain (1994)

review research on the long-term effects of school desegregation. Drawing on Braddock (Braddock 1980), they find that Blacks in desegregated schools were more likely than those in segregated schools to have occupational expectations that were more in line with their educational aspirations and background, which suggests that desegregated settings provide increased access to information and networks useful in shaping postsecondary plans. However, Black students from desegregated schools were more likely to enroll in a two-year rather than a four-year college.

McDonough (1997) situates college decision-making within the school context and studies it as a phenomenon embedded in institutions rather than merely the choice of an aggregate of individuals. She applies Bourdieu's cultural capital concept to reveal the important influence that the organizational context of the high school can exert on a student's college plans (in concert with wider cultures and patterns of class socialization). She challenges the notion that students' college expectations and choices are an individual-level phenomenon and describes how high schools frame and enable students' aspirations by presenting a particular view of the college opportunity structure. Social reproduction ensues if the school's view does not differ from lower SES students' own view, the class-based habitus, or perceptions of their own status, ability, and sense of entitlement about where they fit within the college hierarchy. She suggests that schools can improve existing patterns of college enrollment by exposing disadvantaged students to an alternate organizational habitus, one that provides students and their parents with a normative structure and culture that resembles the habitus that is often experienced by higher SES students both at home and in the school setting.

Persell and Cookson's (1985) study of the relationship between prep schools and colleges provides an excellent description of how preferential access to elite colleges is maintained and enhanced by the relationship-building activities of the high school counselors of elite boarding schools. The face-to-face interactions, close social relationships, extensive information exchange, and bartering (negotiation) between the school advisors and Ivy League admissions officers give the graduates of these prep schools a distinct advantage in the admissions process. Overall, private high school graduates are much more likely to attend four-year, private, and highly selective colleges, even when family income, parents' expectations, high school curriculum, grades, and achievement scores are taken into account (Coleman and Hoffer 1987; Persell, Cookson, and Catsambis 1992).

System-wide factors, postsecondary institutions, and college access

Attention to the institution of schooling within the wider socio-cultural context and set of institutional arrangements has been an important contribution of sociological research. Karen (1991) adds a political and organizational dimension to our understanding of the college admissions process by moving beyond standard structural-functionalist or classreproduction frameworks that discuss college access as either a sorting of talent or a struggle between individuals or class groups striving for status attainment. In his study of who gets into Harvard, he considers the influence of cultural capital on application and selection patterns within the larger occupational structure. He also reveals that such gatekeeping processes need to be understood in light of the larger organizational and political contexts that shape how applicants with particular ascribed characteristics, in addition to academic merit, are favored in admissions decisions. He finds that legacy applicants, non-Asian minorities, athletes, and working-class males experience an advantage that can be understood to be the result of both political mobilization and changes in resource dependency. By viewing Harvard as an organization situated within an organizational field, Karen explains how competition from other elite colleges, the demands of corporations and graduate or professional schools, alums, foundations, and the requirements of the federal government all work in concert to pressure the institution to respond to applicant characteristics other than academic achievement.

Several key researchers have illuminated our understanding of the expansion of higher education and its relationship to college access. Bastedo and Gumport (2003) describe how student opportunities within higher education are stratified due to policies that encourage mission differentiation between and within post-secondary institutions. For example, they find that state systems of public higher education have enacted policies that expand access as a whole, but they channel under-prepared students into community college remedial programs while expanding the resources available to well-prepared students in the form of honors programs. The very low or open admissions policies of community colleges and for-profit colleges have made these institutions a major means of access in the past several decades, especially among racial minorities, lowincome, lower-achieving, part-time, commuting, and adult students. Community colleges grew exponentially in the 1960s and 70s, and they now account for about 25 percent of all colleges and 40 percent of all college students, serving as a major entryway into college for poor students, particularly students of color (Dougherty 1994). However, surprisingly few sociologists (with notable exceptions) have focused on these institutions and their students.

Specifically, inspired by Clark's (1960) classic idea that community colleges perform the function of "cooling-out" students' bachelor's degree aspirations, Brint and Karabel (1989) challenged the view of community colleges as institutions that democratized higher education by allowing access to those formerly excluded from postsecondary education. They posited an institutionally-based argument in which early community college leaders pushed for the transformation of the curriculum toward and vocational emphasis in an effort to ensure the legitimacy and survival of an institution that was structurally located at the bottom of the higher education hierarchy and therefore could not compete with the higher status four-year colleges and universities. As a result, community colleges diverted would-be four-year college students toward two-year degrees intended to prepare them for technical and semi-professional occupations rather than transfer to a four-year college. Dougherty (1994) expands this institutional framework by analyzing the interests and actions of the state and government officials in prioritizing occupational programs in community colleges at the expense of students pursuing transfer goals. Given their often weak academic preparation, these students suffer from obstacles that persist due to the institution's inability to successfully perform its contradictory and often competing functions.

More recent work builds on this policy-oriented perspective and notes community colleges' increased focus on workforce preparation, particularly in the form of short-term certificate and contract-training programs (Dougherty and Bakia 2000). Shaw and Rab (2003) question this shift and the additional pressures for accountability that face today's community colleges. Their insightful comparative case study reveals the barriers to college access among low-income populations that are created when federal policies encourage community colleges to respond to the needs of the business community as their primary "customer." Jacobs and Winslow (2003) and Mazzeo, Rab, and Eachus (2003) analyze the ways in which ideologies and welfare-reform policies have decreased college access and enrollment among recipients of public aid.

The City University of New York (CUNY) is another good example of the expansion of college access, since it existed as an open-admissions institution from 1970 to the late 1990s. Lavin and Hyllegard (1996) conducted a case study of the City University of New York (CUNY) and documented the tremendous positive effect of their open-admissions policy on Black, Hispanic, and White enrollment and degree attainment. However, weaker academic preparation and higher likelihoods of working full-time and enrolling in vocationally oriented junior college programs diminished the attainments of minority students relative to Whites. In addition, changes that increased the difficulty of admissions, made dismissal based on GPA easier, and instituted tuition resulted in reduced enrollments in the senior colleges, especially among minority students. Ultimately, these changes and the addition of tuition increases, assessment testing, and mandatory placement in remedial classes narrowed opportunities for baccalaureate access and success in the CUNY system, particularly for minority students (Lavin 2000).

Policy and college access

Affirmative action policies have been instrumental in shaping the patterns of college access. Allen, Teranishi, Dinwiddie, and Gonzalez (2000) attribute increasing college enrollment and degree attainment among Blacks and Latinos to the effectiveness of affirmative action policies, but they warn that recent anti-affirmative action policies are impeding that progress. As Karabel (1999) notes, the incorporation of substantial numbers of Black and Latino students at the University of California's medical and law schools occurred only after the adoption of strong affirmative action policies in the late 1960s. The passage of Proposition 209 in the mid-1990s, which made the consideration of race in public education illegal, sharply decreased Black and Latino enrollment. The effect of the legislation was more extreme at law schools and not quite as extreme at medical schools, where admissions criteria are more holistic and less driven by standardized test scores and GPA, as is the case with law schools. Despite efforts to redefine merit and devise a more flexible admissions process, Black and Latino professional school enrollments remain as low as they were in the late 1960s. Tienda, Leicht, Sullivan, Maltese, and Lloyd (2003) studied the impact of Texas' elimination of affirmative action on enrollment at the state's flagship universities. Texas attempted to diversify the college student body through the "top ten percent" legislation (H.B. 588), which guarantees admission to any public Texas college to students in the top 10 percent of their high school. However, Tienda et al. concluded that this legislation will not diversify the most selective universities in the state. Tienda and Niu (2004) also question the soundness of a supposed "race neutral" policy that capitalizes on the extreme racial segregation of Texas high schools.

Raw average state SAT scores have been used to support policies calling for reduced educational funding and vouchers, particularly since several states that spend the least on education fall near the top of SAT rankings. The assumed link between these averages and educational quality has unfortunately led to policies that have decreased college access for the disadvantaged, such as discouraging poorer performing students from taking the test and shifting money from "wasteful" public schools. However, as Powell and Steelman (1996) show, this crude measure is highly dependent on the participation rate and various other characteristics of the students who take the test in each state, including parental education and racial composition. State averages tend to be high in states where the proportion of students taking the test is low, since those students tend to be higher-achieving on average. Once adjustments are made for the student-participation rate and the class rank of the test-taking population, SAT performance is positively and strongly correlated with expenditures, especially during the middle-school years. Crouse and Trusheim (1988) expose myths that prevent the general public from realizing that the SAT is unnecessary to evaluate achievement and predict college success. They claim that high school GPA, class rank, AP scores, and school quality are sufficient measures. The authors expose the ways in which the ETS and the College Board have defended their product at the expense of the public interest, especially at the expense of Black students and economically disadvantaged students, whose chances of admission at a good college are reduced—sometimes by more than half—when the SAT is used in admissions decisions. They also find that the SAT fails to predict freshman grades or college graduation rates any better than the high school record.

The life course and college access

Some authors have considered broad institutional lenses in their explanations of large shifts in college access over time and among various postsecondary institutions. Pallas (1993) reminds us that the transition to college is integrally related to the life course and the transition to adulthood, which is itself embedded within socially normative patterns circumscribed by institutionally arranged opportunity structures. In the US, differentiation in the timing and sequence of life course events has increased over time among young adults, with only a small fraction now following the orderly sequence of leaving full-time schooling, entering the labor force, leaving home, and getting married. Educational careers are now more diverse, with many students interrupting their schooling and attending college part-time (Pallas 1993), resulting in an increase in the proportion of "adult" college students beyond the traditional age of 18-24, who now constitute nearly 40 percent of all postsecondary enrollments (Choy 2002). These adult students often balance multiple work, family, and student roles, and the linkages among the social institutions of education, family, and the economy structure individuals' college pursuits. Furthermore, cross-national comparisons reveal that cultural norms and beliefs about the proper relationship between individuals and institutions, in any societal context, are instrumental in shaping decisions about how and when to engage in postsecondary schooling from adolescence through adulthood (Pallas 1993).

FINANCING COLLEGE

The sociology literature on the financing of college has predominantly focused on the effects of family structure on the availability of resources for individuals considering college enrollment. Much of this literature is based on a rational choice model, where children and their families make decisions about college attendance based on the level of resources available to them (Breen and Goldthorpe 1997).

Family and college financing

For example, a large family size is negatively associated with the amount of parental contributions toward college costs, which is attributed to resource dilution (Steelman and Powell 1989). Steelman and Powell found that latter-born children have somewhat of a financial advantage over earlier-born children, perhaps due to the increased financial stability of older parents. Downey (1995) tested the resource dilution theory and found additional support for Steelman and Powell's findings and also reported some nonlinearities and interaction effects. For example, he found interactions between sibship size and some parental resources, indicating that some parental resources have less value as sibship size increases. In another study, Downey (1995) showed that children in stephouseholds receive a lower level of economic, interpersonal, and cultural resources than children in biological households, perhaps due to stepparents diverting resources to a previous family. In addition to sibship size and ordinal position, the spacing of children also affects the availability of resources for college (Powell and Steelman 1995). Powell and Steelman found a strong negative effect of closely spaced children on the amount of parental economic investments. But not all effects of family structure fit neatly into a rational choice model. Powell and Steelman (1989), for example, found that an increase in the number of brothers had a more negative effect on the amount of financial support from parents than the number of sisters. In addition, Steelman and Powell (1991) found that parents tend to provide more financial support for their children if they previously received support from their own parents.

Other factors affecting the financing of college, which have been studied less than family structure, are familial and extra-familial resources. When researchers study family resources, they usually focus on income. However, Conley (2001) noted that a large portion of family resources are neglected when wealth is not considered. He showed that, net of income, parental wealth (measured as net worth) is a strong predictor of college enrollment and may also affect college completion. Shapiro (2004) also offers an insightful in-depth study of how wealth accumulation and utilization perpetuate an opportunity structure that contributes to massive racial wealth inequality that worsens racial inequality more generally. He includes payment of college and college expenses as a crucial form of inheritance that is much more prevalent among White families than Black families. In terms of extra-familial resources, Hofferth, Boisjoly, and Duncan (1998) found that help from parents' friends, in the form of time or money, has a significant effect on the college attendance of high-income but not low-income children. Interestingly, they found that help from parents' relatives had no effect on children's schooling. Hofferth et al. explained that while most people have access to help from family, access to help from friends seems to indicate a higher level of investment in children. Parents, parents' friends, and parents' relatives are of course not the only sources of financial assistance for college. Students themselves also contribute toward the cost of college. Although their contributions are usually somewhat limited, some research indicates that there are some positive effects associated with this activity. Marsh (1991), for example, found that working during high school to save money for college increased the likelihood of attending college. However, it is important to note that Marsh also found that if working during high school is not for the purpose of saving money for college, it was negatively associated with postsecondary outcomes, suggesting that work per se is not what is benefiting the student.

Another source of funding for college is, of course, the government. Much research in economics and education has documented the decreasing value of government financial aid, but that is beyond the scope of this sociology review. However, a few sociologists have investigated what parents think of government involvement in terms of financing their children's college education. Steelman and Powell (1993) compared White and minority parents' opinions about whether the responsibility for funding college should fall on the government, parents, or students. Although minority parents were slightly more likely to support government involvement than White parents, they were also more likely to place the financial burden on themselves. Controlling for background characteristics, Steelman and Powell found that minority parents are just as likely, or possibly even more likely, to save money for their children's college education than White parents.

Policy relevant to financing college

In general, public financial support for higher education has declined. Lucas (1996) found that the 1980s policy shift reversed (increased) the effect of social background on education, suggesting that the earlier trend toward a declining effect was not a result of selective attrition of the disadvantaged but rather a result of a declining dependence on parents. He suggests that when students depend less on their parents for financing their education, social background plays a weaker role in determining their educational attainment.

Over the past two decades, college financial aid has shifted primarily from grants to loans. Price (2004) presents data indicating that, due to this over-reliance on student loans, higher rates of participation in higher education do not translate into the closing of gaps in attainment between gender, race, ethnic, and income groups. In fact, he finds that Black, Latino, and lower-income students are more likely to adjust their college choices and less likely to graduate from more prestigious colleges and universities due to price and potential indebtedness.

COLLEGE COMPLETION/RETENTION

After preparing, applying, enrolling, and financing college, the final step in the educational attainment process is of course staying for the duration and graduating from college. Without completing a degree, many of the benefits of college are forfeited. Therefore, sociologists have studied a variety of individual, family, institutional, and system-wide factors that affect a person's likelihood of completing college.

Individual attributes and college completion

Academic success, cultural capital, and work experience all play an important role in determining a student's chances of completing college, but their effects are not as straightforward as might be expected. Temple and Polk (1986), for example, studied young men between the ages of 16 and 31 and found that while early academic success did not guarantee later success, early academic failure strongly predicted subsequent failure. In addition to prior academic success, knowledge of and participation in high culture activities also helps increase the likelihood of com-

pleting college. Dimaggio and Mohr (1985) explored the effects of having an interest in attending symphony concerts, experience performing on stage outside of school settings, attendance at arts events, and reading literature. They found that participation in these activities significantly increased the likelihood of completing college. Further study of cultural capital indicates that parental cultural capital is also important. Kalmijn and Kraaykamp (1996) found that parental cultural capital has a significant effect on years of schooling completed by children, and they showed that parental cultural capital has increased across birth cohorts (1900–1960) and that it has increased faster among Blacks than among Whites. While academic success and cultural capital increase the likelihood of completing college, working during high school does not. Carr, Wright, and Brody (1996) found that those who worked during high school are not only less likely to attend college, but also less likely to complete four or more years of college.

Other individual attributes that have been shown to have an effect on college completion include race/ethnicity, immigrant status, age, and parenthood. In terms of race and ethnicity, Massey, Charles, Lundy, and Fischer (2003) document findings from a survey of a representative sample of Asian, Latino, Black, and White freshmen at 28 selective colleges and universities. They discuss the traits and characteristics that members of different racial groups possess when they arrive on campus and the effect that such differences in background might have on their subsequent academic progress and postsecondary outcomes. They show that Black and Latino students do not enter college disadvantaged by a lack of self-esteem, but they are adversely affected by racist stereotypes of intellectual inferiority, a finding that supports Claude Steele's (1997) notion of stereotype threat. Although academic preparation is the strongest predictor of college performance, differences in academic preparation are themselves largely a matter of socioeconomic disadvantage and racial segregation prior to college enrollment. Feagin, Vera, and Imani (1996) interviewed 36 high-achieving Black students at a predominantly White state university and their parents. Their findings suggest that African-Americans face serious dilemmas and major struggles not generally faced by White Americans in their experiences with intentional and unintentional racism, negative interactions, and unwelcoming social climates, all of which the authors speculate to have serious implications for the disproportionate rates of college dropout among African-American students. Willie (1996) reports similar findings among those in her qualitative sample who were alums of a predominantly White university. These experiences stood in sharp contrast to those former African-American students who were alums of a historically Black university.

Warren (1996) found that Mexican-Americans complete fewer years of schooling than non-Hispanic Whites. While part of this discrepancy is attributed to differences in family background, English-language ability, and migration history, Mexican-Americans are still at a disadvantage when these factors are taken into account. Several reviews have summarized the vast amount of research investigating the effects of race and ethnicity on educational attainment. Hallinan (2001), for example, reviewed possible explanations of racial inequality in education, including biological differences, family and cultural influences, and social stratification, school, and organizational processes. She explains that while biological determinism has periodically reemerged, this argument has largely been suppressed. Similarly, cultural explanations have been challenged repeatedly. In contrast, concern about the structure of Black families has not diminished since the Civil Rights era, and social stratification, school, and organizational processes continue to receive a considerable amount of attention. Kao and Thompson's (2003) review of the literature points out that although racial and ethnic gaps in educational attainment have narrowed during the previous 30 years, substantial gaps remain between Blacks, Hispanics, and Native Americans and Whites and Asian-Americans. Based on past trends in educational inequality, Gamoran (2001) predicts that racial inequality in education will decline over the next 100 years.

Another factor affecting college completion, which is sometimes related to race and ethnicity, is immigrant status. Rong and Grant (1992) showed that, among Asian-Americans, educational attainment increases sharply between immigrants and their children, but levels off thereafter. Among Hispanics, educational attainment improves with each successive generation in the US; and among non-Hispanic Whites, educational attainment is highest among the children of immigrants. Using different data, Zsembik and Llanes (1996) also found that immigrant generational status affects college completion. Focusing on Mexican-Americans, they found a pattern similar to that found by Rong and Grant, in which educational attainment peaks in the second generation and levels off or declines thereafter.

Two other individual-level attributes that may affect college completion, but that have not been studied extensively, are age and parenthood. Jacobs and King (2002) showed that although women over 25 are less likely to complete college, this negative effect is explained by an increased likelihood of being enrolled part-time and of having many competing demands. One particularly important demand is of course parenthood. Marini (1984) found that while educational attainment delays entry into parenthood, entry into parenthood also has an effect on

subsequent educational attainment. Marini showed that entry into parenthood prior to the completion of an educational program decreases the likelihood of completion (entry into marriage has a similar but smaller effect). Teachman and Polonko (1988) also showed that marriage and parenthood affect education, but they pointed out that marriage is more detrimental to the education of women than of men.

Family and college completion

In addition to individual-level attributes, family-level characteristics also play an important role in the student's likelihood of completing college. Departing from earlier work that analyzed the effects of parents' highest education on children's highest education, Mare (1981) considered the effect of parental schooling and income on each of a series of particular transitions—elementary school to middle school, middle school to high school, high school to first year of college, first year of college to college completion, and college completion to grad school. In other words, he took into account both the variance in the schooling distribution and the association between socioeconomic background and grade progression. This change in methodology was important because it showed that earlier work, which suggested that the effects of parents' SES were decreasing across cohorts, was misleading. Rather, Mare revealed a trend in which the association between socioeconomic background and grade progression increased across cohorts. However, this trend was concealed by the fact that the variance in the schooling distribution was simultaneously decreasing, making the effect of socioeconomic background appear to be stable. While Mare's model added an important methodological nuance, socioeconomic status remained at the center of research on educational transitions. Sociologists continue to use Mare's model in the educational transitions literature (Breen and Jonsson 2000; Breen and Jonsson 2005; Lucas 2001).

While parental income and education are often used to measure family background, parents' occupation and educational resources are also used. Teachman (1987) used educational resources in the home such as having a place to study, or having reference books, newspapers, a dictionary, or an encyclopedia. He showed that having these types of educational resources in the home during high school had a significant impact on women's but not men's educational attainment. Kalmijn (1994) investigated the effect of father's and mother's occupation on children's college graduation for nine three-year birth cohorts (from pre-1925 to 1960–1963). Although there was much fluctuation from year to year, Kalmijn found that the effect of father's occupation generally decreased

over time, while the effect of mother's occupation generally increased, such that the maternal effect caught up with the paternal effect. Another study that looked at trends over time found that the effects of family background characteristics on educational attainment declined for Black and White men born between 1907 and 1946 (Kuo and Hauser 1995). Biblarz and Raftery (1999) also found that the effects of family background characteristics on educational attainment have declined, but only from the 1960s to the 1980s (they show no further decline since then). Furthermore, they found that children from single-father families and stepfamilies tended to have the lowest educational attainment, followed by single-mother families, and that two-biological-parent families have the highest attainment.

In addition to the studies mentioned earlier that focus on the effect of siblings on the financing of college, other sociological studies have investigated the effect of siblings on the likelihood of completing college. Blake (1985), for example, found that a demographic shift in the population from larger to smaller families has lessened the effect of father's education on son's education and has therefore had a positive effect on the educational attainment of children. However, Mare and Chen (1986) showed that these results inaccurately attribute differences in mean educational attainment to an interaction between father's education and sibship size. They conclude that the effect of father's education and sibship size have actually stayed about the same over time. More recent analyses confirm that although smaller sibships have a higher educational attainment, the effects of family background on schooling are about the same regardless of the sibship's size or gender composition (Kuo and Hauser 1997).

Institutional factors and college completion

Institutional factors at both the secondary and post-secondary level also influence the likelihood of completing college. Unfortunately, few researchers in the field have analyzed a representative sample of high school students longitudinally to determine the factors that influence bachelor's degree completion. However, using data from High School and Beyond, Rosenbaum (1999) reported that roughly half of high-school seniors who planned to complete their bachelor's degrees did not complete it within 10 years, and the main predictor of non-completion was low high-school achievement, quantified by high-school grades.

Tinto (1993) developed a widely used model of student attrition in which students' interaction with their postsecondary institution is a central component and the concepts of social and academic integration are

the mechanisms of persistence. Tinto applied Durkheim's Theory of Suicide to college attrition and formulated a theory centered on the concepts of social and intellectual congruence. Such congruence involves a cultural and normative fit between the student and the values, social rules, and academic quality of the college community. The result is a sense of belonging and membership in the relevant culture or subcultures. This congruence, or integration, into the academic and social system of the college reinforces students' commitment to the institution and to their educational goals. Just as suicide sometimes results from the disruption of the normal social and intellectual bonds which tie individuals to each other, dropping out of school results from a lack of fit with the normative culture or cultures within the college. Isolation or various types of incongruence between a student and the intellectual and social communities within the college will hinder a student's commitment and lead to eventual withdrawal. Integration, according to Tinto, occurs along academic as well as social dimensions, but his framework emphasizes social integration over academic integration.

Sociologists have shown that the type of postsecondary institution can have an important impact on a student's chances of completing college. In particular, two-year colleges are associated with lower educational attainment. Brint and Karabel (1989) point out that while junior colleges opened up new opportunities for some students, they also diverted other students away from four-year colleges (mostly students from lower socioeconomic backgrounds). A study by Lee and Frank (1990) showed that, four years after graduating from high school, only a quarter of those who enrolled in a community college had transferred to a four-year college, suggesting that attending a community college decreases a student's chances of completing a four-year degree. Similarly, Dougherty (1992; 1994) reports findings from several studies that reveal a sizeable gap of 11 to 19 percent in baccalaureate attainment between community college entrants and comparable four-year college students. Only a handful of sociologists have attempted to identify the institutional mechanisms that lie at the root of this discrepancy. Dougherty suggests that community colleges present an institutional hindrance to those with bachelor's degree aspirations for several reasons, including fewer opportunities for social integration, difficulties obtaining financial aid, and loss of credits for those that manage to transfer to four-year institutions. He explains that peer cultures in community colleges discourage academic work and that faculty have low expectations and tend to concentrate on only a few promising students while largely giving up on the rest. The extent to which the institutional disadvantages of community college attendance result from pre- or post-transfer processes has largely been ignored by

sociologists, but Lee, Mackie-Lewis, and Marks (1993) find that the few community college students who manage to transfer are no less likely to complete a baccalaureate degree than students who began at a four-year college. This finding, coupled with the reality of very low community college transfer rates, suggests that the disadvantage stems from the community college experience and not to student-level factors.

However, Rosenbaum (2001) explains that part of the reason that some students are not finishing college is that high school counselors view community colleges as providing a second chance for all students, regardless of past effort and achievement. They operate according to a "college-for-all" norm that encourages nearly all students to attend college despite their level of effort, achievement, and preparation, and this leads to unrealistic educational plans for students who are unprepared for college. In partial contradiction to the community college studies noted above Deil-Amen and Rosenbaum (2002) find this college-for-all philosophy continuing into the community college setting, where remedial students are encouraged toward their bachelor's degree goals, yet remain uninformed of the gravity of their lack of academic preparation and unaware of their low likelihood of completion. Rather than a diversion toward a lower alternative, such as a two-year degree in a more vocationally-oriented major, most of these students leave college with no degree at all. In general, remedial education at the postsecondary level has broad and far-reaching implications for our understanding of college access and completion, yet it is an understudied topic that deserves greater consideration. Deil-Amen and Rosenbaum (2003) also analyze the differences between community colleges and for-profit and nonprofit occupationally-oriented colleges and suggest that the minimized bureaucratic hurdles, focused organizational priorities, structured programs, proactive and extensive financial aid counseling, academic advising, and job placement assistance at the occupational colleges can serve as a useful model to enhance retention among similar low-income students at community colleges.

Finally, another type of post-secondary institution that can have a significant impact on completion is the historically Black college or university (HBCU). This type of institution is also understudied, but Allen (1992) found that Blacks who attended HBCUs reported better academic performance, greater social involvement, and higher occupational aspirations than those who attended predominantly White colleges and universities. This study contributes to our understanding of the informal social-psychological context of institutions for Black students' college success, but more work is needed in this area, given the high college dropout rate among Blacks.

CONCLUSION

This sociology literature review demonstrates that many individual, family, institutional, and system-wide factors simultaneously affect a person's ability to prepare, apply, enroll, finance, and graduate from college. However, the sociology literature is not evenly distributed across these themes. Most research has focused on college preparation, and much of the research within this theme investigates disadvantaged students. Individual attributes of disadvantaged students and their families, as well as the role of institutional organization and cultural context in putting specific students at a disadvantage, are at the center of most sociological research in college preparation, access, retention, and completion. The only area in which disadvantaged students are not the explicit focus of attention is in college finance. Here, family size, structure, and composition are emphasized.

With so much research focusing on the above areas, it is not surprising that other areas are virtually neglected by sociologists. The least researched theme in sociology is the financing of college, and within this area, the role of policy and evaluation, and system-wide factors are rarely studied. The only dimension of financing college that has been studied at length by sociologists is the role of families, but if we were to remove two prolific coauthors (Lala Steelman and Brian Powell), this area would also be lacking. Institutions, policies, and system-wide factors are the least studied across themes, with the exception of institutions in college preparation. Policy analyses, in particular, are not common in the sociology of education literature. Sociologists have done little to address the dynamics involved in efforts to construct P-16 policies that conceive of education as one large interconnected system of institutions of differing levels.

Over a decade ago, Coleman (1994) wrote that sociological research must shift the focus from the individual to the larger social system. Sociological studies relevant to the transition to college continue to strive toward that end, but the field still remains underdeveloped with regard to an emphasis on how the wider societal system of stratification and opportunity interact with individuals, social groups, and educational institutions in a dynamic interplay that affects opportunities for quality educational advancement. In some respects, the prominence of the status attainment framework has limited progress in the field of sociology. Although multi-level modeling affords the opportunity to consider not just the individual, but the individual embedded in particular educational contexts and other contexts, the role of institutional and systemwide factors requires further development among sociologists of education. As Davies (1995) points out, critical theories, including those that espouse social reproduction perspectives, are not incompatible with more mainstream approaches like status attainment. A synthesis of these approaches can be seen in many of the works cited in this paper that are concerned primarily with how and why disadvantaged students continue to be disadvantaged in their preparation for, access to, and success in college. Advances in our sociological understanding of institutional factors and system-wide dynamics are well under way in the field.

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