Appendix C

Chapter 4 of
Measuring Racial Discrimination (2004),
National Research Council,
Washington, DC,
The National Academies Press
In Chapter 3, we developed a two-part definition of racial discrimination: differential treatment on the basis of race that disadvantages a racial group and treatment on the basis of inadequately justified factors other than race that disadvantages a racial group (differential effect). We focus our discussion on discrimination against disadvantaged racial minorities. Our definition encompasses both individual behaviors and institutional practices.

To be able to measure the existence and extent of racial discrimination of a particular kind in a particular social or economic domain, it is necessary to have a theory (or concept or model) of how such discrimination might occur and what its effects might be. The theory or model, in turn, specifies the data that are needed to test the theory, appropriate methods for analyzing the data, and the assumptions that the data and analysis must satisfy in order to support a finding of discrimination. Without such a theory, analysts may conduct studies that do not have interpretable results and do not stand up to rigorous scrutiny.

The purpose of this chapter is to help researchers think through appropriate models of discrimination to guide their choice of data and analytic methods for measurement. We begin by discussing four types of discrimination and the various mechanisms that may lead to such discrimination. The first three types involve behaviors of individuals and organizations: intentional discrimination, subtle discrimination, and statistical profiling. The fourth type involves discriminatory practices embedded in an organizational culture. Next, we compare these discriminatory behaviors and institutional practices with existing legal standards defining discrimination in the courts.
(as delineated in Chapter 3). We then discuss how these discriminatory behaviors and practices might operate within the domains of education, employment, housing, criminal justice, and health. Finally, we discuss concepts of how cumulative discrimination might operate across domains and over time to produce lasting consequences for disadvantaged racial groups. This chapter is not concerned with identifying the relative importance of the various types of discrimination; rather, it is designed to present a set of conceptual possibilities that can motivate and shape appropriate research study designs.

TYPES OF DISCRIMINATION

Most people's concept of racial discrimination involves explicit, direct hostility expressed by whites toward members of a disadvantaged racial group. Yet discrimination can include more than just direct behavior (such as the denial of employment or rental opportunities); it can also be subtle and unconscious (such as nonverbal hostility in posture or tone of voice). Furthermore, discrimination against an individual may be based on overall assumptions about members of a disadvantaged racial group that are assumed to apply to that individual (i.e., statistical discrimination or profiling). Discrimination may also occur as the result of institutional procedures rather than individual behaviors.

Intentional, Explicit Discrimination

In 1954, Gordon Allport, an early leader in comprehensive social science analysis of prejudice and discrimination, articulated the sequential steps by which an individual behaves negatively toward members of another racial group: verbal antagonism, avoidance, segregation, physical attack, and extermination (Allport, 1954). Each step enables the next, as people learn by doing. In most cases, people do not get to the later steps without receiving support for their behavior in the earlier ones. In this section, we describe these forms of explicit prejudice.

Verbal antagonism includes casual racial slurs and disparaging racial comments, either in or out of the target's presence. By themselves such comments may not be regarded as serious enough to be unlawful (balanced against concerns about freedom of speech), but they constitute a clear form of hostility. Together with nonverbal expressions of antagonism, they can create a hostile environment in schools, workplaces, and neighborhoods (Essed, 1997; Feagin, 1991).

Verbal and nonverbal hostility are first steps on a continuum of interracial harm-doing. In laboratory experiments (see Chapter 6 for detailed discussion), verbal abuse and nonverbal rejection are reliable indicators of
discriminatory effects, in that they disadvantage the targets of such behavior, creating a hostile environment. They also precede and vary with more overtly damaging forms of treatment, such as denial of employment (Dovidio et al., 2002; Fiske, 1998; Talaska et al., 2003). For example, an interviewer’s initial bias on the basis of race will likely be communicated nonverbally to the interviewee by such behaviors as cutting the interview short or sitting so far away from the interviewee as to communicate immediate dislike (Darley and Fazio, 1980; Word et al., 1974). Such nonverbal hostility reliably undermines the performance of otherwise equivalent interviewees. In legal settings, verbal and nonverbal treatment are often presented as evidence of a discriminator’s biased state of mind; they may also constitute unlawful discriminatory behavior when they rise to the level of creating a hostile work environment.

_Avoidance_ entails choosing the comfort of one’s own racial group (the “ingroup” in social psychological terms) over interaction with another racial group (the “outgroup”). In settings of discretionary contact—that is, in which people may choose to associate or not—members of disadvantaged racial groups may be isolated. In social situations, people may self-segregate along racial lines. In work settings, discretionary contact may force out-group members into lower-status occupations (Johnson and Stafford, 1998) or undermine the careers of those excluded from informal networks.

Becker (1971) describes a classic theory about how aversion to interracial contact—referred to as a “taste for discrimination”—can affect wages and labor markets (more complex versions of this model are provided by Black, 1995; Borjas and Bronars, 1989; and Bowlus and Eckstein, 2002). Laboratory experiments have measured avoidance by assessing people’s willingness to volunteer time together with an outgroup individual in a given setting (Talaska et al., 2003). Sociological studies have measured avoidance in discretionary social contact situations by report or observation (Pettigrew, 1998b; Pettigrew and Tropp, 2000). In legal settings, avoidance of casual contact can appear as evidence indicating hostile intent.

Avoidance may appear harmless in any given situation but, when cumulated across situations, can lead to long-term exclusion and segregation. It may be particularly problematic in situations in which social networking matters, such as employment hiring and promotion, educational opportunities, and access to health care. Avoiding another person because of race can be just as damaging as more active and direct abuse.

_Segregation_ occurs when people actively exclude members of a disadvantaged racial group from the allocation of resources and from access to institutions. The most common examples include denial of equal education, housing, employment, and health care on the basis of race. The majority of Americans (about 90 percent in most current surveys; Bobo, 2001) support laws enforcing fair and equal opportunity in these areas. But the remaining...
10 percent who do not support civil rights for all racial groups are likely to exhibit intentional, explicit discrimination by any measure. The data indicate that these hardcore discriminators view their own group as threatened by racial outgroups (Duckitt, 2001). They view that threat as both economic, in a zero-sum game, and as value based, in a contest of “traditional” values against nonconformist deviants. Moreover, even the 90 percent who report support for equal opportunity laws show less support when specific remedies are mentioned (see Chapter 8).

*Physical attacks* on racial outgroups have frequently been perpetrated by proponents of segregation (Green et al., 1999) and are correlated with other overt forms of discrimination (Schneider et al., 2000). Hate crimes are closely linked to the expression of explicit prejudice and result from perceived threats to the ingroup’s economic standing and values (Glaser et al., 2002; Green et al., 1998; for a review of research on hate crimes, see Green et al., 2001).

*Extermination* or mass killings based on racial or ethnic animus do occur. These are complex phenomena; in addition to the sorts of individual hostility and prejudice described above, they typically encompass histories of institutionalized prejudice and discrimination, difficult life conditions, strong (and prejudiced) leadership, social support for hostile acts, and socialization that accepts explicit discrimination (Allport, 1954; Newman and Erber, 2002; Staub, 1989).

Our report focuses more on the levels of discrimination most often addressed by social scientists. In most cases involving complaints about racial discrimination in the United States, explicit discrimination is expressed through verbal and nonverbal antagonism and through racial avoidance and denial of certain opportunities because of race. Racial segregation is, of course, no longer legally sanctioned in the United States, although instances of de facto segregation continue to occur.

**Subtle, Unconscious, Automatic Discrimination**

Even as a national consensus has developed that explicit racial hostility is abhorrent, people may still hold prejudicial attitudes, stemming in part from past U.S. history of overt prejudice. Although prejudicial attitudes do not necessarily result in discriminatory behavior with adverse effects, the persistence of such attitudes can result in unconscious and subtle forms of racial discrimination in place of more explicit, direct hostility. Such *subtle prejudice* is often abetted by differential media portrayals of nonwhites versus whites, as well as de facto segregation in housing, education, and occupations.

The psychological literature on subtle prejudice describes this phenom-
enon as a set of often unconscious beliefs and associations that affect the attitudes and behaviors of members of the ingroup (e.g., non-Hispanic whites) toward members of the outgroup (e.g., blacks or other disadvantaged racial groups). Members of the ingroup face an internal conflict, resulting from the disconnect between the societal rejection of racist behaviors and the societal persistence of racist attitudes (Dovidio and Gaertner, 1986; Katz and Hass, 1988; McConahay, 1986). People’s intentions may be good, but their racially biased cognitive categories and associations may persist. The result is a modern, subtle form of prejudice that goes underground so as not to conflict with antiracist norms while it continues to shape people’s cognitive, affective, and behavioral responses. Subtle forms of racism are indirect, automatic, ambiguous, and ambivalent. We discuss each of these manifestations of subtle prejudice in turn (Fiske, 1998, 2002) and then examine their implications for discriminatory behavior.

Indirect prejudice leads ingroup members to blame the outgroup—the disadvantaged racial group—for their disadvantage (Hewstone et al., 2002; Pettigrew, 1998a). The blame takes a Catch-22 form: The outgroup members should try harder and not be lazy, but at the same time they should not impose themselves where they are not wanted. Such attitudes on the part of ingroup members are a manifestation of indirect prejudice. Differences between the ingroup and outgroup (linguistic, cultural, religious, sexual) are often exaggerated, so that outgroup members are portrayed as outsiders worthy of avoidance and exclusion. Indirect prejudice can also lead to support for policies that disadvantage nonwhites.

Subtle prejudice can also be unconscious and automatic, as ingroup members unconsciously categorize outgroup members on the basis of race, gender, and age (Fiske, 1998). People’s millisecond reactions to outgroups can include primitive fear and anxiety responses in the brain (Hart et al., 2000; Phelps et al., 2000), negative stereotypic associations (Fazio and Olson, 2003), and discriminatory behavioral impulses (Bargh and Chartrand, 1999). People have been shown to respond to even subliminal exposure to outgroups in these automatic, uncontrollable ways (Dovidio et al., 1997; Greenwald and Banaji, 1995; Greenwald et al., 1998; Kawakami et al., 1998; for a review, see Fazio and Olson, 2003; for a demonstration of this effect, see https://implicit.harvard.edu/implicit/ [accessed December 5, 2003]). However, the social context in which people encounter an outgroup member can shape such instantaneous responses. Outgroup members who are familiar, subordinate, or unique do not elicit the same reactions as those who are unfamiliar, dominant, or undifferentiated (Devine, 2001; Fiske, 2002). Nevertheless, people’s default automatic reactions to outgroup members represent unconscious prejudice that may be expressed nonverbally or lead to racial avoidance, which, in turn, may create a hostile, discrimina-
tory environment. Such automatic reactions have also been shown to lead to automatic forms of stereotype-confirming behavior (Bargh et al., 1996; Chen and Bargh, 1997).

The main effect of subtle prejudice seems to be to favor the ingroup rather than to directly disadvantage the outgroup; in this sense, such prejudice is ambiguous rather than unambiguous. That is, the prejudice could indicate greater liking for the majority rather than greater disliking for the minority. As a practical matter, in a zero-sum setting, ingroup advantage often results in the same outcome as outgroup disadvantage but not always. Empirically, ingroup members spontaneously reward the ingroup, allocating discretionary resources to their own kind and thereby relatively disadvantaging the outgroup (Brewer and Brown, 1998). People spontaneously view their own ingroups (but not the outgroup) in a positive light, attributing its strengths to the essence of what makes a person part of the ingroup (genes being a major example). The outgroup’s alleged defects are used to justify these behaviors. These ambiguous allocations and attributions constitute another subtle form of discrimination.

According to theories of ambivalent prejudice (e.g., for race, Katz and Hass, 1988; for gender, Glick and Fiske, 1996), the ambivalence of subtle prejudice means that outgroups are not necessarily subjected to uniform antipathy (Fiske et al., 2002). Outgroups may be disrespected but liked in a condescending manner. Versions of the “Uncle Tom” stereotype are a racial example. At other times, outgroups may be respected but disliked. White reactions to black professionals can exemplify this behavior. Some racial outgroups elicit both disrespect and dislike. Poor people, welfare recipients, and homeless people (all erroneously perceived to be black more often than white) frequently elicit an unambiguous and hostile response.

The important point is that reactions need not be entirely negative to foster discrimination. One might, for example, fail to promote someone on the basis of race, perceiving the person to be deferential, cooperative, and nice but essentially incompetent, whereas a comparable ingroup member might receive additional training or support to develop greater competence. Conversely, one might acknowledge an outgroup member’s exceptional competence but fail to see the person as sociable and comfortable—therefore not fitting in, not “one of us”—and fail to promote the person as rapidly on that account.

All manifestations of subtle prejudice—indirect, automatic, ambiguous, and ambivalent—constitute barriers to full equality of treatment. Subtle prejudice is much more difficult to document than more overt forms, and its effects on discriminatory behavior are more difficult to capture. However, “subtle” does not mean trivial or inconsequential; subtle prejudice can result in major adverse effects.

For example, Bargh and colleagues (1996) demonstrated how categori-
zation by race can activate stereotypes and lead to discriminatory behavior. In their study, the experimenter first showed white participants either black or white young male faces, presented at a subliminal level. The experimenter then either did or did not provoke the participant by requiring that the experiment be started over because of an apparent computer error. Compared with other participants, those who saw the black faces and were also provoked by the experimenter behaved with more hostility as revealed in a videotape of their immediate facial expressions and in their subsequent behavior, as rated by the experimenter.

Generally, an emerging pattern of results from laboratory research (see, e.g., Dovidio et al., 2002) suggests that explicit measures of prejudice (e.g., from responses to attitudinal questionnaires) predict explicit discrimination (verbal behavior), whereas implicit measures of prejudice (e.g., speed of stereotypic associations) predict subtle discrimination (such as nonverbal friendliness). In any event, the implicit measures have been shown to be statistically reliable (Cunningham et al., 2001; Kawakami and Dovidio, 2001).

Some of these laboratory findings have been generalized to the real world—for example, in contrasting subtle and explicit forms of prejudice (Pettigrew, 1998b) and in research on specific phenomena, such as ingroup favoritism (Brewer and Brown, 1998). The discussion of experimental methods in Chapter 6 elaborates on this point.

**Statistical Discrimination and Profiling**

Another process that may result in adverse discriminatory consequences for members of a disadvantaged racial group is known as statistical discrimination or profiling. In this situation, an individual or firm uses overall beliefs about a group to make decisions about an individual from that group (Arrow, 1973; Coate and Loury, 1993; Lundberg and Startz, 1983; Phelps, 1972). The perceived group characteristics are assumed to apply to the individual. Thus, if an employer believes people with criminal records will make unsatisfactory employees, believes that blacks, on average, are more likely to have criminal records compared with whites, and cannot directly verify an applicant’s criminal history, the employer may judge a black job applicant on the basis of group averages rather than solely on the basis of his or her own qualifications.

When beliefs about a group are based on racial stereotypes resulting from explicit prejudice or on some of the more subtle forms of ingroup-versus-outgroup perceptual biases, then discrimination on the basis of such beliefs is indistinguishable from the explicit prejudice discussed above. Statistical discrimination or profiling, properly defined, refers to situations of discrimination on the basis of beliefs that reflect the actual distributions of
characteristics of different groups. Even though such discrimination could be viewed as economically rational, it is illegal in such situations as hiring because it uses group characteristics to make decisions about individuals.

Why might employers or other decision makers employ statistical discrimination? There are incentives to statistically discriminate in situations in which information is limited, which is often the case. For example, graduate school applicants provide only a few pages of written information about themselves, job applicants are judged on the basis of a one-page resume or a brief interview, and airport security officers see only external appearance. In such situations, the decision maker must make assessments about a host of unknown factors, such as effort, intelligence, or intentions, based on highly limited observation.

Why is information limited in such cases? The decision maker typically views an individual’s own statements about himself or herself as untrustworthy (e.g., “I will work hard on this job” or “I am not a terrorist”) because they can be made as easily by those for whom they are not true as by those for whom they are true. Instead, decision makers look for signals that cannot easily be faked and are correlated with the attributes a decision maker is seeking. Education is a prime example. If an employer checks a job applicant’s education credentials and finds that he or she has a degree from a top-rated college and a 4.0 grade point average, that individual likely has a proven track record of intellectual ability and effort. It is difficult to “fake” this information (short of outright lying about one’s education credentials) because it really does take effort to accumulate such a record.

Only so much information can be transmitted, however, and many aspects of a person’s record and qualifications are difficult to document even if the individual should be committed to doing so truthfully. Hence, decision makers must regularly make judgments about people based on the things they do know and decide whether to invest in acquiring further information (Lundberg, 1991). In the face of incomplete information, they may factor in knowledge about differences in average group characteristics that relate to the individual characteristics being sought. The result is statistical discrimination: An individual is treated differently because of information associated with his or her racial group membership.

Faced with the possibility of statistical discrimination, members of disadvantaged racial groups may adopt behaviors to signal their differences from group averages. For example, nonwhite business people who want to signal their trustworthiness and belonging to the world of business may dress impeccably in expensive business suits. Nonwhite parents who want their children to get into a first-rate college may signal their middle-class background by sending their children to an expensive private school. An implication of statistical discrimination is that members of a disadvantaged racial group for whom group averages regarding qualifications are lower
than white averages may need to become better qualified than non-Hispanic whites in order to succeed (Biernat and Kobrynowicz, 1997). Thus, the practice of statistical discrimination can impose costs on members of the targeted group even when those individuals are not themselves the victims of explicitly discriminatory treatment.

Moreover, statistical discrimination may be self-perpetuating, since today’s outcomes may affect the incentives for tomorrow’s behavior (Coate and Loury, 1993; Loury, 1977; Lundberg and Startz, 1998). If admissions officers at top-ranked colleges believe, on the basis of group averages to date, that certain groups are less likely to succeed and admit few members of those groups as a result, incentives for the next generation to work hard and acquire the skills necessary to gain admittance may be lessened (see Loury, 2002:32–33, for a more extensive discussion of this example). Similarly, if black Americans are barred from top corporate jobs, the incentives for younger black men and women to pursue the educational credentials and career experience that lead to top corporate jobs may be reduced. Thus, statistical discrimination may result in an individual member of the disadvantaged group being treated in a way that does not focus on his or her own capabilities. It can affect both short-term outcomes and long-term behavior if individuals in the disadvantaged group expect such discrimination will occur.

Organizational Processes

The above three types of racial discrimination focus on individual behaviors that lead to adverse outcomes and perpetuate differences in outcomes for members of disadvantaged racial groups. These behaviors are also the focus of much of the current discrimination law. However, they do not constitute a fully adequate description of all forms of racial discrimination. As discussed in Chapter 2, the United States has a long history as a racially biased society. This history has done more than change individual cognitive responses; it has also deeply affected institutional processes. Organizations tend to reflect many of the same biases as the people who operate within them. Organizational rules sometime evolve out of past histories (including past histories of racism) that are not easily reconstructed, and such rules may appear quite neutral on the surface. But if these processes function in a way that leads to differential racial treatment or produces differential racial outcomes, the results can be discriminatory. Such an embedded institutional process—which can occur formally and informally within society—is sometimes referred to as structural discrimination (e.g., Lieberman, 1998; Sidanius and Pratto, 1999). In Chapter 11, we discuss the interactions among these processes that occur within and across domains.

One clear example of this phenomenon occurs in the arena of housing.
In the past, overt racism and explicit exclusionary laws promoted residential segregation. Even though these laws have been struck down, the process by which housing is advertised and housing choices are made may continue to perpetuate racial segregation in some instances. Thus, real estate agents may engage in subtle forms of racial steering (i.e., housing seekers being shown units in certain neighborhoods and not in others), believing that they are best serving the interests of both their white and their nonwhite clients and not intending to do racial harm. Likewise, banks and other lending institutions have a variety of apparently neutral rules regarding mortgage approvals that too often result in a higher level of loan refusals for persons in lower-income black neighborhoods than for equivalent white applicants. Research also suggests that ostensibly neutral criteria are often applied selectively. Credit history irregularities that are overlooked as atypical in the case of white mortgage applicants, for example, are often used to disqualify blacks and Latinos (Squires, 1994; Squires and O'Connor, 2001).

Another example of this sort of biased institutional process that has been debated in the courts is the operation of hiring and promotion networks within firms. Many firms hire more through word-of-mouth recommendations from their existing employees than through external advertising (Waldinger and Lichter, 2003). By itself such a practice is racially neutral, but if existing (white) employees recommend their friends and neighbors, new hires will replicate the racial patterns in the firm, systematically excluding nonwhites. Such practices do not necessarily entail intentional discrimination, but they provide a basis for legal action when the outcome is the exclusion of certain groups. Seniority systems that give preference to a long-established group of employees can produce similar racially biased effects through promotion or layoff decisions, even though the Supreme Court has ruled that seniority systems are generally not subject to challenge under Title VII on this basis.1

Institutional processes that result in consistent racial biases in terms of who is included or excluded can be difficult to disentangle. In many cases, the individuals involved in making decisions within these institutions will honestly deny any intent to discriminate. In dealing with such cases in the courts (disparate impact cases; see Chapter 3), weighing the benefits to an organization of a long-established set of procedures against the harm such procedures might induce through their differential racial outcomes is a complex and difficult process. Thus the panel does not wish to condemn any specific organizational process. In most cases, each situation needs to be

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1International Brotherhood of Teamsters v. United States, 431 U.S. 324 (1977) (the “routine application of a bona fide seniority system” is not unlawful under Title VII).
analyzed with regard to the particular history and reasonable organizational needs of a specific institution. But we do want to emphasize that facially neutral organizational processes may function in ways that can be viewed as discriminatory, particularly if differential racial outcomes are insufficiently justified by the benefits to the organization. We noted above that large and persistent racial differentials, although not direct evidence of discrimination, may provide insight on where problems are likely to exist. In this way, persistent racial differences in access to or outcomes within institutions (e.g., hiring or promotions) can be used to provide information on which processes and which institutions may deserve greater scrutiny.

**COMPARISON OF LEGAL STANDARDS WITH THE FOUR TYPES OF DISCRIMINATION**

As discussed in Chapter 3, the legal definition of discrimination includes two standards: disparate treatment discrimination, whereby an individual is treated less favorably because of race, and disparate impact discrimination, whereby treatment on the basis of nonracial factors that lack sufficiently compelling justification has an adverse impact on members of a disadvantaged racial group. The quintessential case of disparate treatment discrimination involves intentional behavior motivated by explicit racial animus. However, disparate treatment applies in other types of discrimination as well. For instance, a black cab driver who refuses to pick up blacks may be acting without racial animus but may be engaging in statistical discrimination by making probabilistic predictions about the risk of being victimized by crime, of receiving a lower tip, or of ending up in a distant neighborhood from which the prospect of receiving a return fare is small. Employers and police officers who profile job candidates or security risks can be motivated by similar beliefs or concerns, and their probabilistic assessments may be correct or completely inaccurate. In any event, as noted above, this type of statistical discrimination is considered intentional differentiation on the basis of race and falls squarely in the category of unlawful disparate treatment discrimination. In evaluating a job applicant, for example, it is unlawful to consider what the “average” black worker would be like and then to treat individual blacks in conformity with this stereotypical prediction.

In short, although vexing issues of proof complicate real-world cases, the law has clearly identified the theoretically prohibited discriminatory actions that emanate from either racial animus or the rational calculation of risk using race as a proxy. More subtle types of discrimination, however, are more difficult to deal with legally. As discussed above, there may be no conscious bias or rational calculation that prompts someone to treat whites differently from nonwhites. Such precognitive patterns of conduct have been
well documented and are in practice treated as cases of unlawful disparate treatment discrimination if they are found to generate differential treatment of blacks. Note, however, that issues of proof make it more difficult to establish these unconscious forms of discriminatory behavior, although statistical approaches are commonly used to ferret out just such unconscious bias. Indeed, the legal requirement that unlawful disparate treatment discrimination must involve intentional discrimination may result in many indirect, subtle, and ambiguous types of discrimination being overlooked. In some cases, nonetheless, an organization has been found guilty of intentional discrimination for failing to compensate for the unconscious, automatic discrimination of its employees.

**DOMAINS IN WHICH DISCRIMINATION OPERATES**

As discussed in Chapter 1, this report focuses on the measurement of discrimination in specific domains: labor markets and employment, education, housing and mortgage lending, criminal justice, and health care. The focus on these areas reflects the expertise of the members of this panel. There are a variety of other domains, such as civic participation, in which racial differences in outcomes are large, and discrimination is a valid social concern. We believe that our comments about assessing discrimination, although directed at the domains and examples with which we are most familiar, may be useful and applicable in other arenas as well. In this section, we briefly review some of the key points at which the forms of discrimination delineated above may operate within the domains on which we focus.

Table 4-1 shows how discrimination might operate across the five domains of labor markets, education, housing, criminal justice, and health care at three broadly defined points. The first point is discrimination in access to the institutions within a domain; examples are racial differentials in hiring in the labor market, racial steering in housing, financial aid for schooling, arrest rates or policing activity within communities, and access to certain medical institutions or procedures. The second point is discrimination while functioning within a domain; examples are racial differentials in wages, mortgage loan pricing, placement into special education programs, assignment of pro bono legal counsel, and quality of health care. Closely related is discrimination in movement or while progressing within a domain from one activity to another; examples are racial differentials in job promotions, home resale value, grade promotion in schools, sentencing or parole rates, and medical referrals or follow-up health care. Of course, such discrimination often follows discriminatory behavior at an earlier point in time. Finally, the table lists possible actors within each domain who may discriminate on the basis of race. These actors include employers, customers, and coworkers in the labor market; teachers, administrators, and students.
TABLE 4-1 A Map of the Potential Points of Discrimination Within Five Domains

<table>
<thead>
<tr>
<th>Source Points for Discrimination</th>
<th>Labor Markets</th>
<th>Education</th>
<th>Housing/ Mortgage Lending</th>
<th>Criminal Justice</th>
<th>Health Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to institutions or procedures</td>
<td>• Hiring</td>
<td>• Acceptance</td>
<td>• Steering</td>
<td>• Policing behaviors</td>
<td>• Access to care</td>
</tr>
<tr>
<td></td>
<td>• Interviewing</td>
<td>—Into college</td>
<td>• Mortgage redlining</td>
<td>• Arrests</td>
<td>• Insurance</td>
</tr>
<tr>
<td></td>
<td>• Unemployment</td>
<td>—Into special education programs</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>• Financial aid</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>While functioning within a domain</td>
<td>• Wages</td>
<td>• Track placement</td>
<td>• Loan pricing</td>
<td>• Police treatment</td>
<td>• Quality of care</td>
</tr>
<tr>
<td></td>
<td>• Evaluation</td>
<td>• Ability grouping</td>
<td></td>
<td>• Quality of legal representation</td>
<td></td>
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<tr>
<td></td>
<td>• Work environment</td>
<td>• Grades and evaluations</td>
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<td></td>
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<td></td>
<td></td>
<td>• Learning environment</td>
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<td></td>
<td></td>
<td>• Per-pupil expenditure</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>• Special education placement</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Movement through a domain</td>
<td>• Promotion</td>
<td>• Promotion and graduation</td>
<td>• Resale value</td>
<td>• Parole</td>
<td>• Referrals</td>
</tr>
<tr>
<td></td>
<td>• Layoffs</td>
<td>• Retention</td>
<td>• Wealth accumulation</td>
<td>• Sentencing</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Rehiring</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Key actors</td>
<td>• Employers</td>
<td>• Teachers</td>
<td>• Landlords</td>
<td>• Police</td>
<td>• Health care workers</td>
</tr>
<tr>
<td></td>
<td>• Customers</td>
<td>• Administrators</td>
<td>• Sellers</td>
<td>• Prosecutors</td>
<td>• Administrators</td>
</tr>
<tr>
<td></td>
<td>• Coworkers</td>
<td>• Fellow students</td>
<td>• Lenders</td>
<td>• Judges</td>
<td>• Inspectors</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>• Neighbors</td>
<td>• Juries</td>
<td>• Insurance companies</td>
</tr>
</tbody>
</table>

NOTE: We provide a selected bibliography of research on discrimination within the domains listed above at the end of this report.
in schools; landlords, sellers, lenders, and neighbors in housing; police
officers, judges, and juries in criminal justice; and health care professionals,
insurance companies, and administrators in the health care system.

At any of the points shown in the table, one might observe direct ad-
verse behavior or aversion to contact with racial minorities, unconscious or
subtle biases, statistical discrimination, or institutional processes that result
in adverse outcomes. The remainder of this report addresses the methods
that are used to investigate possibly discriminatory behavior within the vari-
ous cells of this matrix.

We do not attempt to provide a comprehensive review of the literature
on racial discrimination within each of the categories and domains listed in
Table 4-1. Several extensive articles and reports review the literature within
specific domains. We provide a selected bibliography of major papers from
the theoretical and empirical literature at the end of this report. This bibili-
ography includes research that demonstrates the methods used to assess
discrimination within particular domains. Although in Part II of our report
we do not discuss specific methods applied in each domain in turn, we do
examine the broad approaches used to measure the types of discrimination
outlined above. We also discuss where alternative approaches may be imple-
mented more easily within one domain than another. In some cases, we
suggest that specific methods should be applied in domains where they have
not yet been used.

MOVING FROM EPISODIC TO DYNAMIC DEFINITIONS
OF DISCRIMINATION:
THE ROLE OF CUMULATIVE DISADVANTAGE

Much of the discussion of the presence of discrimination and the effects
of antidiscrimination policies assumes discrimination is a phenomenon that
occurs at a specific point in time within a particular domain. For instance,
discrimination can occur in entry-level hiring in the labor market or in loan
applications in mortgage lending. But this episodic view of discrimination
occurring may be inadequate. Here we explore the idea, noted in Chapter 3,
that discrimination should be seen as a dynamic process that functions over
time in several different ways.

First, the effects of discrimination may cumulate across generations and
through history. For instance, impoverishment in previous generations can
prevent the accumulation of wealth in future generations. Similarly, learned
behavior and expectations about opportunities and life possibilities can
shape the behaviors and preferences of future generations for members of
different racial groups.

Second, effects of discrimination may cumulate over time through the
course of an individual’s life across different domains. Outcomes in labor
markets, education, housing, criminal justice, and health care all interact with each other; discrimination in any one domain can limit opportunities and cumulatively worsen life chances in another. For instance, children who are less healthy and more impoverished may do worse in school, and in turn, poor education may affect labor market opportunities. The possibility that the effects of discrimination cumulate over an individual’s lifetime is rarely discussed in the literature on the measurement of discrimination. Yet even small initial disadvantages, experienced at key points in an individual’s life, could well have long-term cumulative effects.

Third, effects of discrimination may cumulate over time through the course of an individual’s life sequentially within any one domain. Again, small levels of discrimination at multiple points in a process may result in large cumulative disadvantage. For instance, children who do not learn basic educational skills in elementary school because of discrimination may face future discrimination in the way they are tracked or the way their test scores are interpreted in secondary school. Small effects of discrimination in job search (e.g., application or interviewing stages), job retention, job promotion, and wage setting may result in large differences in labor market outcomes when these effects cumulate over time, even if no further discrimination occurs.

There are many instances in which the application of neutral rules harms a member of a disadvantaged racial group because of discrimination at some other time or place in the social system. However, there is presently no case law that addresses these broad social effects; the law frequently will not deem the challenged conduct to be unlawful if it merely transmits, rather than expands, the extent of racial discrimination. Similarly, the law does not hold any agents or institutions responsible for problems outside their legitimate purview. Discrimination occurring in other domains or in society generally need not be remedied; hence, cumulative discrimination is not a legal issue. An employer who needs highly educated workers can hire them as he or she finds them, even if doing so means that only a small percentage of black or Hispanic workers will be hired because prior discrimination in educational opportunities limited the number of members of these groups with the requisite skills.

Whether cumulative discrimination is important across generations, across a lifetime in different domains, and over time within a specific domain are empirical questions. However, these questions have not been addressed to any great extent by empirical social scientists. In Chapter 11, we return to the issue of the importance of developing methods focused not just on measuring discriminatory behavior at a particular point in time in a specific process but also on understanding the cumulative and dynamic effects of discrimination over time and across processes.
SUMMARY

Discrimination manifests itself in multiple ways that range in form from overt and intentional to subtle and ambiguous, as well as from personal to institutional, whether through statistical discrimination and profiling or organizational processes. Discrimination also operates differently in different domains and may cumulate over time within and across domains. Regardless of which form it takes, discrimination can create barriers to equal treatment and opportunity and can have adverse effects on various outcomes. Clear theories about how discriminatory behavior may occur are important in order to develop models that help identify and measure discrimination’s effects.

Although discrimination is sometimes still practiced openly, it has become increasingly socially undesirable to do so. Consequently, such discrimination as exists today is more likely to take more subtle and complex forms. Subtler forms of discrimination can occur spontaneously and ambiguously and go undetected, particularly at the institutional level. Although legal standards address specific forms of unlawful intentional or statistical discrimination, subtler forms are more difficult to address within the law. Thus, shifts in kinds of discriminatory behavior have implications for the measurement of discrimination. As we discuss in the next chapter, some types of discrimination may be more difficult to identify and may require collecting new and different data and the further development of new methods of analysis.
Appendix D

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