

# Categorization by Organizations: Manipulation of Disability Categories in a Racially Desegregated School District<sup>1</sup>

Argun Saatcioglu and Thomas M. Skrtic  
*University of Kansas*

The authors propose and test the concept of categorical manipulation, a process in which subordinate group demands for greater access to high-status categories are met with reversals in the hierarchy of existing categories. The analysis addresses a school district's response to pressure from a racial desegregation movement to improve black access to a high-status majority-white disability category. The district complied, but it also allowed whites to migrate to a low-status majority-black category, from which blacks then were excluded. This category was enhanced with benefits desirable to whites. The original categorical hierarchy was restored during resegregation 20 years later. In categorical manipulation, subordinate groups gain greater access to high-status categories, but these categories suffer in value as dominant groups reaffiliate with previously low-status categories, which may be revised for improvements. This is different from more familiar forms of resistance to change such as symbolic compliance, ritualization, and tokenism.

Rising levels of social and economic inequality have stimulated renewed interest in organizations' role in that process (Stainback, Tomaskovic-Devey, and Skaggs 2010; Zald and Lounsbury 2010; Davis 2017). An important means by

<sup>1</sup> This study is based on work supported by the Division of Social and Economic Sciences of the National Science Foundation (grant 1154843). The authors would like to thank the *AJS* reviewers for valuable comments. They would also like to thank Roslyn A. Mickelson, Emily Rauscher, and ChangHwan Kim for comments on earlier drafts. Insights from Patricia A. Roos on categorical inequality in the workplace and related library research by Erin Ice supported the theoretical framing for the study. Direct correspondence to Argun Saatcioglu, Department of Educational Leadership and Policy Studies, University of Kansas, 1122 West Campus Road, JRP 407, Lawrence, Kansas 66045. Email: argun@ku.edu

which organizations contribute to inequality is to categorize people in ways that configure unequal distribution of resources, rewards, and opportunities (Tilly 1998). Subordinate groups such as women, racial/ethnic minorities, immigrants, and the economically disadvantaged face exclusion from high-status categories not just in employment (e.g., more prestigious or lucrative jobs; Stainback et al. 2010) but also in the organizational “activity environment” where clients, audiences, and constituencies are categorized. For instance, minorities face exclusion from high-ability tracks in schools (Oakes 2005) and favorable lending categories in banks (Ross and Yinger 2002).<sup>2</sup>

Exclusion can persist when organizations face pressure for greater subordinate group access to high-status categories. Studies of responses to such pressure typically address employment and focus on strategies that protect dominant group control over high-status jobs, such as making tokenistic gestures (Sutton and Dobbin 1996), ritualizing change (Kalev and Dobbin 2008), reinterpreting and subverting mandates (Edelman 1992), coopting adversaries (Oliver 1991), and ignoring or defying pressure for change (Zald, Morrill, and Rao 2005). We address a previously unstudied strategy, *categorical manipulation*, in which instead of protecting dominant group control over high-status categories, the organization enables dominant group affiliation with low-status categories. While subordinate groups gain greater access to high-status categories, dominant groups move down to low-status ones that become new territories of advantage. Inequality is maintained by reranking existing categories. Overlooking this is problematic, as subordinate group access to customarily high-status categories may be mistaken for equality while it preserves inequality.

In what follows, we first describe categorical manipulation, drawing initially on literatures outside of research on organizations and inequality, as the latter lacks accounts of categorical manipulation. This sets the stage for our discussion of why categorical manipulation has not been addressed in relation to organizations. We then explain how this concept extends research on organizations and inequality and address conditions under which categorical manipulation is more likely to occur. The analysis addresses manipulation of mild disability categories in schools. It focuses on a district where a racial de-

<sup>2</sup> Our notion of “activity environment” is inspired in part by the classical concept of “task environment,” which addresses external influences on organizational behavior. We use the term activity environment to highlight influences in the opposite direction, that is, organizations’—including employees’—influence on actors and groups with whom they interact. The realm of such influence is not solely outside of organizational boundaries, which is how “environment” typically is understood. It also can include internal settings where the organization interacts with clients, audiences, and constituencies, such as classrooms in schools, care units in hospitals, and shopping areas in retail stores. The notion of activity environment is critical in addressing the broad range of domains in which organizations categorize people outside of the workplace, which is only one domain of categorization, the domain that receives primary attention in research on organizations and inequality.

segregation effort demanded greater black access to a high-status majority-white category. By “high status,” we mean less stigmatizing and academically more “mainstream” than other mild disability categories. While the district complied, we examine whether this was coupled with white migration to a previously low-status majority-black category and whether this category was infused with new status and benefits in the process.

#### DESCRIBING CATEGORICAL MANIPULATION

In status competition, a *category* is a status marker signifying distinction (Bourdieu 1984; Tilly 1998).<sup>3</sup> Given its focus on the workplace, research on organizations and inequality views work roles as categories over which groups compete. In the work context, status competition is typically unidirectional, involving upward movements along the hierarchy of categories: dominant groups tend to vacate high-status jobs only to move up to new, more advantageous jobs as subordinate groups strive to catch up and emulate (Reskin and Roos 1990). Thus, categories often are conceived of as rungs on a ladder individuals (and groups) climb up in competition for advantage. Relatedly, inequality is seen as persisting by way of crafting low-status jobs for subordinate groups (Acker 1990; Wingfield and Alston 2014), devaluing any job that becomes affiliated with such groups (Bradley 1989; England 1992) and restricting subordinate group entry into jobs located higher on the ladder (Maume 1999; Ridgeway 2011). The reranking of existing categories remains out of view, a process in which rungs on the ladder itself are reordered. We refer to it as categorical manipulation. Here, subordinate groups are no longer excluded from high-status categories, but the organization facilitates downward movement of dominant groups to low-status categories that become new markers of distinction. Given its unidirectional view, the literature on organizations and inequality lacks accounts of categorical manipulation. We present three examples from broader sociological research to illustrate the process.

The first account is from Pearlman’s (2013) study of change in the American gourmet restaurant style. In the mid-20th century, French cuisine, tied

<sup>3</sup> Categories comprise not just status markers in institutional spheres such as employment and education (e.g., jobs, degrees) but also the identities of groups that compete for such markers (e.g., male/female, white/nonwhite, and affluent/poor). Since advantages of any given category can be used to attain other categories (Bourdieu 1984), identities related to race, class, and gender play a critical role in status competition as embodiments of privilege or lack thereof. Therefore, we will use such identities at times as shorthand for “dominant” and “subordinate” groups. But we do not negate the fact that these identities (and others such as native/immigrant) are also categories, which like other categories, are subject to status competition. Given the conditions, these categories also can be reframed, revalued, and even reranked by way of contentious processes in which organizational actors take part, such as the state and the media (e.g., on the formation and evolution of racial categories in the United States, see Omi and Winant [2014]).

to highly formal dining, marked elite gourmet culture. But as French cuisine was popularized in middle-class restaurants and households in postwar decades (e.g., as a result of Julia Child's TV show), elite restaurants embraced emblems of mass culture and comfort food such as hamburgers and hot dogs. Elite chefs incorporated these into their menus and upgraded them with high-end ingredients and side dishes inaccessible to the masses, gradually abandoning French cuisine as the central marker of distinction. Ramdoyal (1977) documents a similar process in the educational context of Mauritius, where private education was a marker of nonelite status before decolonization. Commoners fortunate enough to receive education did so only to a limited degree in ill-equipped, low-cost private schools, while elites, including children of colonial masters, received free and superior education in well-funded state schools inaccessible to the masses. In the postcolonial era, as state schools opened to all citizens, elites migrated to the private sector, renovating existing private schools and establishing new ones, excluding the masses in the process. Another example is provided by DeNora's (1991) study of musical patronage in early 19th-century Vienna. As the economic and organizational bases of musical sponsorship democratized, musical taste of Viennese aristocrats, who favored Italian opera styles (simple, short, aesthetic pieces performed by private house ensembles), was mimicked by the nonaristocratic rich. In response, aristocrats emphasized musical sophistication (long, complex pieces) as a key artistic feature, embodied most notably by then deceased Mozart, whose music was enjoyed in preceding years by the nonaristocratic rich. Returning Mozart to aristocratic favor and devaluing Italian styles restored "serious music" as Vienna's dominant genre, including works of Mozart's contemporaries such as Beethoven and Haydn. Aristocrats reclaimed musical authority by making serious music the centerpiece of performances hosted in aristocratic salons and then by showcasing it for the "less learned" public in various concert halls, a pattern of musical sponsorship often beyond the means of the nonaristocratic rich.

When privilege is challenged, it can be maintained not just by restricting access to existing high-status categories or by climbing up the hierarchy of categories but also by reranking existing categories. Without this extension, inquiry can overlook a key modality by which dominant group interests are protected. In each account above, the dominant group engages in downward movement, toward a low-status category affiliated with the subordinate group that faces reduced access to that category. Such *reaffiliation* can imprint new status on the category (Berger and Heath 2008), but this also may require *revision* to technical attributes (Halnon and Cohen 2006). Revision can involve alterations in attributes, such as upgrading American comfort food with better ingredients and side dishes or refurbishing the Mauritian private school sector with better facilities and instruction. But it also can involve reinterpretation of attributes for valuation, that is, respecifying whether an at-

tribute is relevant to category valuation or whether more of the attribute is better than less (or vice versa). Although the Viennese aristocracy continued to treat degree of sophistication as relevant to genre valuation, they emphasized high (over low) sophistication as a mark of value to reelevate Mozart's style. Reaffiliation and revision endow a category with benefits, both symbolic (prestige) and substantive (social and economic advantage), and help maintain inequality (Bourdieu 1984). In sum, categorical manipulation involves overcoming a threat to privilege by moving down to a low-status category, revaluing it, and excluding its previous members to secure the category's new benefits.

#### CATEGORICAL MANIPULATION BY ORGANIZATIONS

Downward movements are documented in research on organizations, regarding, for example, gender gaps in employment. Employers enable male movement into lower status female jobs when economic downturns limit job supply (Reskin and Roos 1990) or when female jobs become more appealing (e.g., male entry to nursing because of rising demand and rewards for nurses; Cross and Bagilhole 2002) or when masculinizing a female job improves organizational legitimacy (see Arndt and Bigelow [2005] on masculinization of female hospital administration jobs to bolster confidence in hospitals). But in none of these cases is downward movement a response to pressure for equality; it is a means of adapting to or taking advantage of changes in broader conditions to perpetuate unchallenged privilege. Categorical manipulation, by contrast, involves downward movement to rerank existing categories in response to pressure for equality. This process has not been exposed by organizational research, or in pertinent work on occupations, mainly because the *malleability* of categorical arrangements (the degree to which they are open to reranking) has not figured into problem framing in examining inequality in employment. For instance, some basic authority distinctions, such as upper versus middle management (which receive much attention in analyses of gender and racial sorting; Smith 2002) are characterized by low malleability, as reranking them (and others such as director and assistant) can untenably violate upward concentration of authority. This is why greater female and minority access to managerial ranks is often accompanied by moving the glass ceiling up within management (Padavic and Reskin 2002) rather than reranking higher and lower levels. But various other authority distinctions are more open to reranking, such as vaguely differentiated titles like vice president versus executive director or senior manager versus managing director. The politics of job titles (fake promotions and demotions and job title inflation) are a common way in which disparities are maintained (Reskin and Padavic 2006).

Malleability varies across categorical hierarchies involving differences in occupational expertise as well, hierarchies that also are central in gender and racial sorting (Tomaskovic-Devey 1993; Charles and Grusky 2005). For instance, within a given occupation, when jobs are differentiated in terms of auxiliary and principal roles (e.g., paralegal vs. lawyer), in terms of generalized and specialized (i.e., competitive) expertise (e.g., family medicine vs. neurosurgery), or in terms of demands and the problem variety inherent to different task domains (e.g., elementary vs. high school principalship), re-ranking the jobs may be difficult as it would violate valuation by complexity and related knowledge and skill (Mintzberg 1979). But jobs that are more proximal in these respects are more open to reranking. For example, these can be gendered jobs such as butler versus housekeeper, where the former is masculinized and seen as superior and rewarded more (Lethbridge 2013). But the rise of female butlers (see Ellyatt 2013) may lead to greater male entry into and revisions in housekeeping (revaluing its distinct tasks, expanding its jurisdiction). Employers can reward a “male” job over a “female” one even when the jobs involve similar complexity, knowledge, skill, and effort (Levanon, England, and Allison 2009). As for between-occupation differences (e.g., lawyer vs. accountant), reranking may be problematic unless functional, technoeconomic, or cultural bases of valuation are altered (Abbott 1988). It is difficult to devalue financial analysts in a bank, devalue web designers in an internet economy, or cast midwives as more prestigious than obstetricians in a culture that values jobs affiliated with science (Zhou 2005). But such bases of valuation do not foreclose possibilities for change in occupational rankings, and, depending on conditions, the bases of valuation themselves may be subject to change. Cases of this in relation to struggles for revaluing jobs are well documented both at the organization level (e.g., see Barley [1986] on radiologists vs. technologists in hospitals and Bechky [2003] on engineers vs. assemblers in manufacturing sites) and at the field level (e.g., see Abbott [1988] on architects vs. urban planners in the early 20th-century United States and on “faith healers” vs. medical doctors in Old Regime France). Whether differentiation is by bureaucratic authority or occupational expertise, or both, limited attention to variation in malleability of categorical arrangements in the division of labor prevents exploring categorical manipulation as a form of resistance to pressure for equality and the role that organizations play in the process.

#### ORGANIZATIONAL ACTIVITY ENVIRONMENT AS A CONTEXT OF CATEGORIZATION AND INEQUALITY

Limiting the scope of inquiry to the employment context is another factor that may impede the study of categorical manipulation, as employment is not the

only context in which organizations categorize people. Categorization also occurs in the activity environment involving clients, audiences, and constituencies. Governments categorize citizens, schools label students, hospitals categorize patients, insurers classify policy holders, the police profile civilians, record companies classify fans, and real estate agencies label home buyers. Recognizing such domains of categorization expands the conceptual and analytic utility of the concept of categorical manipulation. Thus, we address the theoretical underpinnings of categorization in the activity environment and how domains in that context vary in terms of malleability of categorical hierarchies, offering a rich array of opportunities to observe and examine categorical manipulation by organizations (our empirical analysis addresses manipulation of mild disability categories in schools).

Given their ontological status as reality constructors, organizations categorize clients, audiences, and constituencies in ways that affect cognition and identities across societal sectors (Scott 2008). This in part stems from the ability to create product and service categories and to define related needs and interests (Durand, Granqvist, and Tyllström 2017). Another element is professional expertise, as professions are “great rationalizers” that classify people by means of their work in and through organizations (DiMaggio 1988). Categorization also can mirror organizational segmentation of expertise (Mintzberg 1979). Schools, for instance, structure their expertise into regular and special education, which can be imposed on students regardless of their true needs (Skiba et al. 2008). Moreover, just as they create employment categories at the field level (Strang and Baron 1990), organizations create field-level categories about clients, audiences, and constituencies (Mohr and Duquette 1997). This is enabled by influence over ideas and resources, networks that transmit practices across organizations, tendencies for mutual mimicry, and a capacity for strategic coordination (DiMaggio and Powell 1983). All these processes tend to favor dominant groups through multiple mechanisms. A key factor is the greater presence of dominant groups in units where categorization is performed, as this work can involve homosocial reproduction (Kanter 1977; e.g., a white police officer may label a white suspect as cooperative but a black one, with similar outlook and behavior, as dangerous). Such biases also can be reproduced by others who are influenced by broader prejudices (Weick 1995; e.g., black police officers may be just as prone as white ones to prematurely assign criminality to black suspects; Lott and Moody 2016). Another factor is dominant group influence by political and economic means such as issue advocacy and financial support (Zald et al. 2005). For example, the corporate elite lobby for legal categories facilitating privileged political participation (see Winkler [2018] on the history of “corporations are people” argument). Finally, organizations may favor dominant groups out of self-interest (Perrow 2014). Hospitals, for instance, can classify patients with health insurance as higher risk than patients who have similar problems but no in-

surance, a strategy that offers advantaged patients broader services while also increasing revenue (Goodrick and Salancik 1996).

Categorization in the activity environment can underlie patterns of inequality similar to those in employment and can occasion pressure for equality, responses to which include categorical manipulation. The activity environment comprises a broad spectrum of malleable categorical arrangements. At the low end are domains in which categories are less open to reranking, such as medicine where disease attributes and diagnostic criteria are scientifically specified, and the logic of interpreting disease attributes for valuation is biologically given (lethality, pain, and impairment; Bowker and Star 1999).<sup>4</sup> At the high end are domains such as literature and the arts where categories can be more slippery because subjective judgment and taste play a key role in group affiliation with categories (genres) and in determining category attributes and interpreting them for valuation (Bourdieu 1984). This provides organizations in the field of cultural production significant influence over categorical hierarchies. For instance, see Greenfeld (1988) on art galleries devaluing innovative styles to protect mainstream works and audiences and Knowlton (2005) on libraries creating low-status categories for works by Native Americans compared to categories for similar works by “Western” authors. The spectrum of low to high malleability in the activity environment includes many domains that offer opportunities to examine categorical manipulation. Below, we illustrate two such domains where nascent trends appear to be consistent with categorical manipulation and may therefore warrant systematic examination from this standpoint in the future. We then address conditions under which categorical manipulation is more likely. This includes a methodical parameterization of malleability to help differentiate conditions of high and low malleability.

*“New urbanites” in housing markets.*—After the 2008 housing crash, declining home prices in inner-ring suburbs made these locations more accessible to low-income urban minority buyers who took advantage of relocation grants and vouchers (Hyra 2012). Subsequently, as home prices began to stabilize, the same metro areas experienced upticks in gentrification of urban neighborhoods by white suburban buyers (Frey 2011; Goetz 2011). Hyra (2012) asserts that, while group movements in metro space are affected by several factors, there is no question that low-income residents’ movement into the suburbs is a factor in recent waves of inner-city gentrification. This is facilitated by real estate agencies that help white buyers gentrify urban locations, buyers who are dubbed the “new urbanites” (Weber 2011). Agencies’ profit motive, control of market information, and networks influence this pro-

<sup>4</sup> These factors do not eliminate bias in medical diagnosis. Rather, they limit the feasibility of reranking diseases as a particular means of discrimination and exclusion. Biased categorization of patients can be pervasive in medicine (e.g., see Hoberman 2012).



cess. Agencies also bring better financing options to gentrifying neighborhoods, which works in conjunction with other revisions such as better city services (Moskowitz 2017). In addition, gentrifying locations benefit from urban charter schools, which attract households with children (Pearman and Swain 2017). Rising home prices and taxes in gentrifying locations limit access to these places. Ultimately, affluent white's reaffiliation with and the related revision of urban spaces help them outrank suburban spaces to which low-income minority residents relocate, which are viewed by some as "slumburbs" (Capps 2015).

*"War stress" in mental health.*—Women's health activists have been advocating for greater access to the posttraumatic stress disorder (PTSD) label for women manifesting related symptoms (Linder 2004). PTSD—a combination of anxiety, stress, and depression due to a life-threatening experience—has been a predominantly male label owing to lobbying efforts of Vietnam veterans. It is less stigmatizing than anxiety, stress, or depression alone, as it denotes an external trauma outside the control of the individual, who thus is seen as a victim (Linder 2001). It also provides a wider set of services given its multifaceted nature. Although traumas for women, such as domestic violence, historically have resulted in anxiety and stress labels more often than PTSD (Becker and Lamb 1994), women with such traumas are making inroads to PTSD (Tolin and Foa 2006). For some males, this potentially tarnishes PTSD's reputation and limits access to resources for PTSD treatment (Linder 2004). Relatedly, the institutional discourse on male veterans with PTSD symptoms increasingly uses stress and anxiety labels but with revisions such as "war stress" (see Russell and Figley 2013) and "war-related anxiety" (see Toomey et al. 2007). However, this trend cannot grow, and gendered label reputations and resources cannot change, without mental health institutions who play a central role in the construction and reconstruction of disorder labels (Poland and Caplan 2004).

#### CONDITIONS FOR CATEGORICAL MANIPULATION BY ORGANIZATIONS

There are three basic conditions for categorical manipulation. These pertain to the activity environment as well as to employment. The first one is scope conditions, which are about malleability: the greater the malleability of categorical arrangements, the more feasible the manipulation. The second one is pressure conditions, denoting the push for equality. Manipulation is more likely in reaction to strong pressure for change, as weak pressure may not disrupt the status quo, regardless of malleability. And finally, constraining conditions denote obstacles to upward mobility (to climbing up the ladder of status markers), which are related to the unattainability or unavailability of new categories.

Scope Conditions (Malleability)

Malleability denotes the viability of categorical reaffiliation and revision. Reaffiliation is affected by the strength and utility of rules for matching category attributes with attributes of those who are categorized. This can be understood in terms of four factors. First, the less codified the rules, the easier the reaffiliation (Langwiler 2009). For example, limited formal criteria for classifying an activity as “athletic” (Sheehan 2013) allows sports media organizations to help NASCAR drivers relabel themselves as athletes (Martinelli 2017).<sup>5</sup> Second, the less uniform the rules, the easier the reaffiliation (Bowker and Star 1999). Despite codification, diagnostic rules for many psychiatric disorders are open to interpretation by mental health providers and also can change over time, as illustrated by trends in PTSD labeling (see also Hartung and Widiger 1998). Third, the less observable the category attributes, the easier the reaffiliation (Rosch 1978). Considering psychiatric disorders again, reaffiliation is enabled by limited observability of certain latent symptoms, which limit accuracy in diagnosis, unlike the robust observability of biological symptoms that impose greater precision (Kirk and Kutchins 1992). And fourth, category overlaps make reaffiliation easier, as persons may be matched to a category different from before on the basis of the same criteria (Ross and Murphy 1999). Some municipal governments reclassify owners of “tiny houses” (ecofriendly dwellings on wheels) as owners of “granny flats” (a small cottage typically located in the backyard of a single-family home; Kirk 2018), which provides tiny house owners with access to hip downtown “mobile home zones” and other attractive urban spaces and also increases municipal revenues. The more one or more of these factors figures into categorization, the easier it is for organizations to help groups switch categories.

Categorical revision involves alteration of categories’ technical attributes or their reinterpretation for valuation. Altering attributes (adding new attributes or dropping existing ones) is a function of the degree to which attributes can be changed on the basis of subjective judgment or taste (Mervis and Rosch 1981; Bourdieu 1984). This is facilitated by category overlaps (also noted above) and flexible category definitions. Overlaps in this sense involve shared attributes that create similarities that can be exploited to transfer unshared attributes across categories (Brownell and Caramazza 1978). In reranking advertising director and public relations manager roles, an employer may find it easy to recast distinct tasks of one job as belonging to the other and transfer them over since the two jobs are highly overlapping despite differences (e.g., although the advertising director typically has greater influence on corporate branding, this task also can be performed by the pub-

<sup>5</sup> This may be a strategy to counteract NASCAR’s declining popularity and fan base in the face of growing popularity and media coverage of previously less popular sports like soccer (see Boren 2014).

lic relations manager; see Field 2005). Such transfers are less plausible across distal jobs such as trucking and aviation. As for flexible (or loose) category definitions, they facilitate alteration by obscuring which attributes belong to a category and which do not, irrespective of overlaps (Durand and Paoella 2013). It is problematic for dermatologists to selectively drop certain symptoms of eczema or add symptoms to it (even by transferring attributes from a neighboring disease such as psoriasis) since eczema is a rigidly defined condition despite similarities with neighboring disorders (a mental disorder example is schizophrenia, overlapping with bipolar disorder). In contrast, autism, once a highly stigmatizing label given negative features such as social detachment, has been revalued by stretching its definition to include positive traits like creativity and high intellect (the “Rain Man” effect), a process in which mental health institutions played a central role (Wolff 2004).

As opposed to altering category attributes, reinterpreting them for valuation is a function of the degree to which attributes’ significance can be recast on the basis of subjective judgment or taste (Zuckerman 2017). Two types of reinterpretation are relevant. The first, valuation relevance, is the extent to which an attribute bears on valuation (Peter, Olsson, and Olsson 2003). Paramedics (predominantly male) often cast their ability to perform surgery (e.g., field amputations, postmortem cesarean sections) as a valuation-relevant attribute of their job relative to (predominantly female) physician’s assistants who cannot perform surgery without a doctor present (Powers 2005). Nutrition marketers classify consumers of unhealthy foods as “healthy eaters” by specifying formerly nonsalient features of unhealthy foods as valuation relevant. Once seen as harmful given its saturated fat content, butter is increasingly portrayed as healthy given its other features such as vitamins, minerals, and fatty acids, arguably linked to high energy and brain function (Bjork 2016; for an opposing view, see Zong et al. [2016]). The second type of reinterpretation concerns valuation direction: whether more or less of the attribute is better (Zuckerman 2017). Competition between life coaches and counselors is a case in point. Counselors are held in higher regard for focusing on clients’ past issues to facilitate change, akin to traditional therapy (Pater-son 2008). But coaches advocate focusing more on the future, claiming that negativity of the past can be restrictive (Grant 2003). This is similar to the Viennese aristocracy emphasizing high over low sophistication in music to revalue Mozart’s style.

Ultimately, reaffiliation and revision can be culturally contingent, as cultural facts can take on an objective character, constraining other changes within them (Abbott 1988). As noted earlier, it may be difficult to alter or reinterpret attributes of midwifery enough for it to outrank obstetrics given the greater reputation of occupations affiliated with science in Western culture. Likewise, while record companies market hip hop to affluent white teens to help grow its popularity, this seldom extends to gangsta rap, which promotes crime and is

seen by many as bad taste (Kitwana 2005). Cultural facts can affect malleability also by distorting or eclipsing natural facts (Zuckerman 2012). Limited evidence on the benefits of breast-feeding helped food manufacturers cast mothers using infant formula as wiser than breast feeders (Schuman 2003), a ranking that is increasingly reversed as evidence favoring breast-feeding grows (Chong 2015).

### Pressure Conditions

Under conditions of high malleability, strong pressure for equal access to high-status categories increases the likelihood of categorical manipulation. We differentiate between two types of pressure: contention and infiltration. Contentious pressure on organizations targets actively enforced exclusion. This typically arises by way of egalitarian movements, which, in efforts to reduce disparities, can counter related organizational practices. Organizations are less able to resist this when movements are well resourced, take advantage of mobilization opportunities, and make compelling arguments (McAdam and Scott 2005). Classic examples are the Civil Rights and women's movements. When mobilizing powers of these movements were greatest, they helped make significant progress in reducing inequality in a range of categories, such as employment, education, sports, and popular culture (Stainback and Tomaskovic-Devey 2012).

In contrast to contention, infiltration violates a distinction perpetuated less by actively enforced exclusion than by structural barriers such as income or wealth differentials, segmented social networks, disparities in cultural capital, and norms discouraging equal access to high-status categories (Parkin 2001). This is analogous to gaining greater access to a territory protected more by material, social, or cultural distance than by a guarded gate. Social movements can play a role in infiltration when they improve subordinate group capacity, emboldening entry into unguarded or weakly guarded categories. In early phases of the disability rights movement, parents of disabled school-age children, who were not considered "students" and were excluded by custom from public schools, infiltrated the student category by working with sympathetic administrators to create special classrooms in schools, without major contention with incumbent parents or state agencies (Carey 2009). Infiltration also can be caused by the exogenous weakening of structural barriers, such as the 2008 housing crash making prices in inner-ring suburbs more affordable for low-income urban minority buyers, which created market pressure on real estate agencies to pursue new profit opportunities. Finally, infiltration can be caused by cultural movements or trends not directly addressing inequality but affecting broader beliefs in ways that nonetheless level the playing field. The health food movement encourages and enables (via lower prices) mass consumers to prefer organic, genetically unmodified food, once accessible

mainly to high-income consumers (Martino 2018). This puts market pressure on grocery chains to reclassify mass consumers as healthy eaters and expand health food sections in store branches beyond those in high-income locations (Patton and Giamonna 2015; Meyersohn 2019).

Strong pressure, whether in the form of contention, infiltration, or both, reduces viability of evasion by strategies familiar in organizational sociology, such as disregarding or challenging the pressure, engaging in symbolic responses, coopting adversaries, or reinterpreting the pressure. But depending on malleability of categorical arrangements, categorical manipulation can protect dominant group interests as long as power differentials persist. Limits on the strength and utility of categorical matching rules provides organizations with discretion to enable downward movement for dominant groups, discretion that, in itself, can signal the legitimacy of matching decisions while concealing biases (Handler 1986). Discretion also can legitimize categorical revisions. The more the category attributes can be altered or reinterpreted on the basis of subjective judgment or taste, the more organizational actors can rely on their own preferences, or mediate those of dominant groups, in revising categories. Such revisions can be difficult to challenge if subordinate groups remain relationally disadvantaged. In some cases, categorical revisions may be unjudicable, as changes in judgment and taste are not always open to dispute (see Zuckerman 2012).

### Constraining Conditions

The third factor in the likelihood of categorical manipulation is the strength of constraints on upward movement along the hierarchy of categories. Manipulation is more likely when climbing up the ladder of status markers is less viable in response to strong pressure for equality from below.<sup>6</sup> This occurs in two ways. First, a new, more advantageous category may be unattainable even if available. Movement of low-income minority buyers into inner-ring suburbs may trigger urban gentrification since at least some white suburban buyers may be unable to afford homes in outer-ring suburbs and elite “exburbs.” Dominance is a relational condition relative to the position of weaker groups and, thus, may not imply unbounded agency. Second, an entirely new, more advantageous category may be unavailable and difficult to construct. Such construction implies adding a fresh element to the existing stock of knowledge, which typically requires significant resources and is prone to involving conflict over label, meaning, and attributes (Bowker and Star 1999).

<sup>6</sup> We do not argue that weak constraints on upward movement necessarily make categorical manipulation less likely, which would imply that upward movement is inherently more preferable than downward movement when both options are similarly viable. Rather, we contend that strong constraints on upward mobility make categorical manipulation the more likely alternative.

Also, differentiating a new category from existing ones can involve prolonged struggles to establish the distinction. This can be particularly problematic for organizations when categories are subject to field-level legitimation (DiMaggio 1991). Moreover, constructing a new category can be hindered by the disciplining effect of existing categories. As sense-making devices, categories become habitual and mitigate against new categories to define and understand the world (Zuckerman 2017). Not only may audiences be unwilling to abandon existing categories, but organizational actors may be unable to break from such categories in their own thinking. Financial entrepreneurs face difficulty in institutionalizing the bitcoin as a new type of currency (a form of decentralized, stateless cryptocurrency) because of resistance from state actors and the reluctance of consumers to abandon the idea of “cash” (Golumbia 2016).

Downward movement can help overcome the unattainability problem since low-status categories are likely to be more attainable. It also can help avoid the cost of constructing an entirely new category when revisions to a low-status one require less resources (Durand and Paolella 2013). In addition, revision can help avoid complete makeovers, as limited changes can help elevate a low-status category above a previously high-status one (Hannon 2002). Finally, downward movement reduces the need to differentiate the revised category from existing ones, as familiarity with the original category is a leverage in revision. Familiarity reduces resistance since it enables actors to remain in the comfort zone of existing categories (Hofstadter 1985). This is critical whether the revised category replaces its predecessor (e.g., the Mauritius elite renovating the private school sector in response to mass access to public schools) or the revised category becomes a variation of its predecessor (e.g., “war stress” as a masculinized version of “stress” as male veterans react to greater female access to the PTSD label).

#### SPECIAL EDUCATION AS A SETTING FOR CATEGORICAL MANIPULATION

Schools are organizations in which individuals are subject to some of the earliest categorizations in life, with lasting consequences. We address manipulation of mild disability categories. Such a category involves two parts: a *label* for disability type and an instructional *placement* option denoting severity. Mental retardation (MR), emotional disturbance (ED), and learning disability (LD) have been the most common labels and are the focus of our study.<sup>7</sup> LD is the least debilitating and the least stigmatizing label, as it denotes limited cognitive processing difficulties (often in reading or math), while MR and ED indicate significant and more stigmatizing intellectual and be-

<sup>7</sup> We use the label MR to mean “mild mental retardation,” which is increasingly referred to as intellectual disability (ID).

havioral problems (Sleeter 1986). Within a given label, the least severe cases are placed in regular classrooms, enjoying maximum access to the full curriculum with help from paraprofessionals (and in some cases, coteachers). Moderate cases have decreased access to the full curriculum, as they spend part of the day in resource rooms for remedial instruction from special education teachers. The most severe cases spend the entire day in self-contained classrooms receiving instruction in reduced curricula from special education teachers. The hierarchy of categories is affected both by degree of stigma related to labeling and scope of curricular coverage related to placement. Pairings of MR, ED, and LD with three placement options result in a hierarchy of nine customary categories. But since LD denotes a less significant disability, LD students have been more likely to be placed in regular classrooms than MR or ED students who usually are placed in more restrictive settings (Donovan and Cross 2002).

What is more important, as seen in figure 1, this hierarchy has been racialized for much of the last 50 years. White students traditionally have been overrepresented in the high-status LD1 category (“LD in regular classroom”), while blacks have been overrepresented in ED2/3 and MR2/3. Limited cases of blacks being labeled LD typically involved the low-status LD3 category, without access to the full curriculum, historically a seldom-used placement option for LD (Artiles et al. 2010). Conversely, limited instances of whites be-

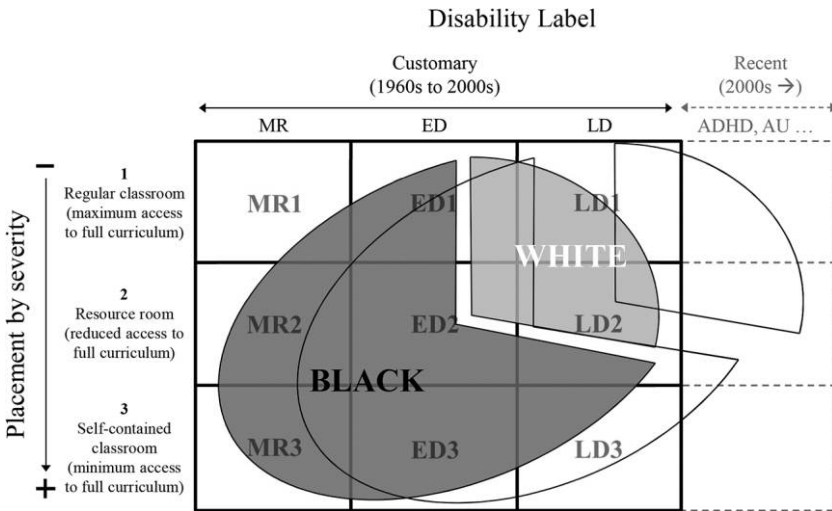


FIG. 1.—Stylized depiction of major categories and racial patterns in mild disability categorization. Sizes of the ellipses reflect the representation of racial groups in categories proportional to their share in the general population. MR = mental retardation; ED = emotional disturbance; LD = learning disability; ADHD = attention deficit/hyperactivity disorder; AU = high-functioning autism.

ing labeled MR or ED often involved diagnosis with low severity and less separation from the regular classroom, a lesser used setting for MR and ED (Skiba et al. 2008).<sup>8</sup> Also, as depicted by unshaded pieces of the oval in figure 1, while black access to the LD label is rising, this is occurring largely in the form of LD2/3 categorization, not LD1 (Skiba et al. 2006). As whites migrate to autism (AU) and attention deficit/hyperactivity disorder (ADHD), these appear to be replacing LD as new labels that are more likely to be paired with regular classroom placement. This, as Ong-Dean (2009) notes, may be forging new high-status categories less attainable by blacks, who have limited access to the full curriculum given their continuing overrepresentation in MR2/3 and ED2/3 and their rising presence in LD2/3. As recent trends unfold, much of the scholarly debate on racialization remains focused on the nine customary categories in figure 1 (see Waitoller, Artiles, and Cheney 2010). The district and the period we analyze, described below, provide a unique opportunity for examining the nine customary categories.

Critical perspectives emphasize the role of schools in perpetuating racialization in three ways. First is homosocial reproduction in which prejudices of white middle-class educators affect categorization decisions by Individualized Education Program (IEP) teams (Blanchett 2006). Second, similar prejudices may be internalized by experts such as school psychologists on IEP teams (Mehan, Hertweck, and Meihls 1986). Assessment instruments (e.g., IQ and achievement tests, behavioral rating scales) are also criticized for bias (see Waitoller et al. 2010). And third, disability categorization is open to parental influence, wherein predominantly white affluent parents advocate for high-status categories in IEP meetings (Trainor 2010). The issue of discrimination in special education has fueled pressure on schools, including movements and federal legislation (Osgood 2008). Lack of change is seen by critics as a sign of resistance by schools (e.g., Skrtic 1991; Ong-Dean 2009). But these accounts have not addressed categorical manipulation. This is a significant gap because the mild disability categorization is a highly malleable domain in which categories can be reranked in response to pressure for equality.

*Viability of reaffiliation.*—Categorization rules lack uniformity despite codification. This stems partly from the variety of cognitive, behavioral, and academic assessments. Different instruments assessing the same trait may emphasize different elements of the trait (e.g., different behaviors for the same emotional tendency) or employ different rubrics (e.g., different cut scores on

<sup>8</sup> Research on mild disabilities traces origins of racialization to the role that theories of black cognitive and cultural inferiority played in the construction of MR and ED and the practice of segregating blacks and limiting their access to the full curriculum (Mercer 1973; Lazerson 1983). LD's emergence, by contrast, is traced to the white middle-class desire in the 1960s for a label that provided support (e.g., paraprofessionals) for low-performing whites in regular classrooms, without the stigma of MR and ED (Carrier 1986), a desire triggered by rising achievement standards as a result of the space race (Sleeter 1986). This restricted blacks' access to LD, limiting them primarily to the low-status LD3 category.



tests), resulting in inconsistency in how a disability and its severity are evaluated (Reschly 1996). The procedures also can vary, even for the same assessment (e.g., accommodations for a test or consecutive chances to take the test may be provided in one situation but not in another; Thurlow et al. 2005). Moreover, interpretation of assessment outcomes is affected by subjective judgments of teachers, school psychologists, administrators, and parents on IEP teams who view outcomes in light of informal opinions (Harry and Klingner 2006). Different elements of the outcomes may receive different emphasis, and students with similar outcomes can be viewed differently if negative impressions are invoked for some and positive impressions for others (O'Reilly, Northcraft, and Sabers 1989). This can skew categorization for different students and for the same student over time. It is also why mild disabilities are referred to as "judgmental" disabilities, distinct from biological ones (e.g., visual impairment; Skiba et al. 2008). Relatedly, symptoms of mild disability categories (emotional states, cognitive aptitude) can lack direct observability and limit precision in categorization. Inability to directly observe symptoms and their severity results in unverified categorizations (Ysseldyke et al. 1983; Hosp and Reschly 2003) underlying inadvertent errors (Ysseldyke, Algozzine, and Thurlow 2000) and discrimination (Harry et al. 2002). Also, the categories overlap. Disruptive behavior, low achievement, and distractibility are viewed as signs of MR, ED, and LD since they are common to all three (Hallahan and Kauffman 1977). Finally, since distributions of assessment scores for low, medium, and high severity intersect (Kauffman and Lloyd 2017), and since subjective judgment affects how scores are viewed, students with similar severity may be categorized differently, and a student's categorization can be changed over time. These factors provide opportunities for changes in group affiliations with different categories.

*Viability of revision.*—Mild disability categories are also open to revision. As noted earlier, given its flexible definition, AU has been revalued by adding positive features to it like creativity and high intellect, which has helped elevate it over LD (Ong-Dean 2009). Relatedly, certain attributes of MR that overlap with AU are reinterpreted by affluent families more positively than before, which may improve MR's reputation (Eyal 2013). Bearman and King (2009) note that if racially nuanced biases against MR prove too engrained to transcend, MR may be recast as a disorder on the low end of the AU spectrum by diagnostic accretion and substitution. Another recent case of reinterpretation involves certain attributes of obsessive compulsive disorder such as tenacity and resilience. These are seen as valuation relevant, improving obsessive compulsive disorder's reputation, as they are critical entrepreneurial skills that a growing number of schools emphasize (Zhao 2012). As for placement options, while resource rooms and self-contained classrooms are less desirable than regular classrooms because of limited access to the full curriculum, there is little that is intrinsically inferior about such segregated spaces, as they are

valued in the context of other arrangements such as gifted programs (Roger 1993) or advanced placement tracks (Oakes 2005). It is thus plausible to equip resource rooms and self-contained classrooms with greater paraprofessional support to help special education teachers extend the scope of curricular coverage within these spaces, particularly in elementary and middle school, where curricular topics are not as advanced as in high school (see Kauffman, Bantz, and McCullough 2002; Mock and Kauffman 2005). In relation to such an alteration, other attributes of segregated spaces can be reinterpreted as beneficial, such as the absence of peers as potential sources of distraction, disruption, and competing demands on the teacher (Kauffman and Hallahan 1995). Revision of labels and instructional placement options can accompany group reaffiliations in reranking categories.

### EXAMINING CATEGORICAL MANIPULATION

#### A Contentious Movement for Equality

Our analysis focuses on a racial desegregation movement in the 1970s in an urban district serving about 100,000 students at the time. We refer to it as Midcity School District (MSD), which integrated its schools in the 1970s and resegregated them in the 1990s. Contention originated in the 1960s when turmoil occurred in the city over race relations. Local Civil Rights groups sued MSD for discrimination but lost the legal battle and settled for promises of better resources for blacks. As inequities persisted, activists reasserted demands in the early 1970s. When MSD refused, activists joined forces with the National Association for Advancement of Colored People, suing MSD and demanding all out integration. Racial divisions became manifest with town hall meetings, demonstrations, and violence. MSD was found guilty of discrimination. The remedial order, issued a few years later, had a jolting effect, forcing rapid reversals in entrenched discriminatory practices. It included busing of up to 45% of students, racial integration of teachers, funding equity across buildings, and curricular initiatives to narrow achievement gaps. Most importantly for our analysis, because of concurrent pressure from advocates of equity in special education, the remedial order addressed mild disability categorization. Desegregation was seen as a means to address racialization of customary categories in figure 1. As in many other districts, the majority of blacks identified as mildly disabled in MSD had been categorized as MR2/3 or ED2/3. A smaller share, labeled LD, were categorized as LD3 without access to the full curriculum. The court demanded reduction in possible bias and improvement in representation of blacks in LD1, which had a negligible number of blacks.

Unlike in regular education in which the court specified racial percentage ranges for school buildings, similar ranges could not be dictated for mild dis-

ability categories, as disability labels and instructional placement options are not prespecifiable for students. The court could go only as far as requiring a “notable increase” in the proportion of blacks in LD1. While it was untenable to prespecify racial percentages for mild disability categories, it also was untenable for one category to be nearly all white in a biracial district of 100,000 students, even though the exact scope of ideal change had to be left open. Inspection of racial patterns in LD1 was included in desegregation monitoring. Legal oversight, normative pressure from local equity advocates and black leaders, and heightened expectations in the broader African-American community limited chances for evasion by means of tokenism and other forms of symbolic compliance. But mild disability categories were open to manipulation.

#### Constraints on Upward Movement in Categorization

Categorical manipulation was a viable possibility also because of constraints on positing new disability categories to which whites could migrate. In terms of labels, disability types are field-level designations professionally elaborated and legitimated over long periods, mitigating against new creations (Richardson 1999). Labels also have legal underpinnings, as they are subject to regulation and are aligned with various certification requirements in education. Thus, new label construction is tied to slow-paced changes in field-level knowledge, conventions, and regulation, which prohibit ad hoc innovations. As for instructional placement options, the regular classroom, the resource room, and the self-contained classroom exhaust basic possibilities. The underlying notions of disability severity may be recalibrated to redistribute students across existing placement options. Or the options may be modified in various ways, as addressed above. But a student’s disability will have to be diagnosed as either least severe, moderately severe, or highly severe, implying the regular classroom, resource room, or self-contained classroom. These constraints limited the chances for whites in MSD to move up to a new category in response to greater black access to LD1, making categorical manipulation a plausible option to perpetuate inequality.

#### Data Sources

*Student records.*—The court oversaw MSD’s student information system starting two years before desegregation. The records contain detailed information, including disability category, for about 305,000 first through twelfth grade white and black students for two decades.<sup>9</sup> Before desegregation, en-

<sup>9</sup> Latinos and Asians are excluded from the study. The proportion of Latinos in MSD increased from less than 3% to about 6% in the time frame of the study. Asians comprised

rollment was about 100,000 (37% white), which declined to about 71,000 (21% white) by the time resegregation started. There are nearly 1.5 million yearly student records starting two years before desegregation and ending 20 years later with MSD's "unitary" (legally nondiscriminating) status. About 145,000 yearly records are for special education students (10%–15% of yearly enrollment). As seen in table 1, the disability indicator is composed of the nine customary mild disability categories in figure 1 and three other categories indicating combinations of any biological disability and three placement options. Family structure and poverty status are social class controls potentially related to disability. To account for community conditions (another class control), we geocoded yearly residential addresses, determined census tracts, and incorporated yearly crime and vital life statistics for the tracts obtained from a local research center. These statistics address neighborhood instability (Jargowsky 1997). Measures for achievement include grade point average (GPA) and national percentile ranks for math and reading scores on the Comprehensive Test of Basic Skills (CTBS). Student records included a yearly code specifying whether the student was newly enrolled, continuing in MSD, withdrew from MSD, dropped out, or graduated. We developed school racial composition measures based on student assignments to buildings.

*Resource data.*—To examine resource allocation, we address per pupil "excess cost" for categories dominated by whites. Excess cost is the difference of the cost of educating a student in a category from the cost of educating a nondisabled student (Chambers, Kidron, and Spain 2004). It reflects expenditures for staff and services. Excess cost data were provided by MSD officials. These data help examine whether any categorical changes for whites were accompanied by reallocation of funds for improvements.

*Qualitative data.*—We conducted 102 interviews, 88 of which were completed in a three-year window after MSD was declared unitary. The rest, including follow-ups with respondents in the original group of 88, were conducted in later years. Interviewees included 50 parents (28 white, 22 black), 23 teachers (13 white, 10 black), 2 school psychologists (both white), the president of MSD's Learning Disabilities Association (LDA; white), 4 senior district leaders (3 white, 1 black), 16 midlevel administrators (11 white, 5 black), and 6 Civil Rights figures (all black).<sup>10</sup> Parents were recruited by stratified random sampling based on educational program (regular vs. special education, including disability category), race, and time at MSD (early,

---

an even smaller share of enrollment. MSD's desegregation was directed specifically at alleviating inequities for African-Americans.

<sup>10</sup> Senior leaders included two ex-superintendents and two ex-board members. Ten of the midlevel administrators were school principals in various years in MSD; the remaining six held various positions at the central district office. And, Civil Rights leaders included three attorneys involved in the court case and three locally prominent activists.

TABLE 1  
DESCRIPTION OF DATA USED FOR QUANTITATIVE ANALYSIS

	Description
Student information:	
Race . . . . .	1 = black (0 = white; Hispanic, Asian, and other groups are excluded)
Gender . . . . .	1 = male
Poverty status . . . . .	1 = eligible for free or reduced-price lunch (FRLN)
Disability category . . . . .	Nine customary mild disability categories as seen in fig. 1 and any biological disability coupled with one of three placement options, resulting in a total of 12 categories
Family structure . . . . .	1 = single-parent household
Residential address . . . . .	Geocodable street address and ZIP code
Grade level . . . . .	Grade 1–12 (kindergartners were excluded from desegregation)
Test scores . . . . .	Nationally norm-referenced percentile rank for grade 1–12 math and reading scores on Comprehensive Test of Basic Skills (CTBS) administered by MSD each fall (A percentile rank indicates the percentage of students whose scores are lower. MSD was instructed to start testing soon after it was found guilty of racial discrimination, but this was before the actual desegregation policy, which was not implemented until after the remedial order was issued.)
GPA . . . . .	Grade point average: .00–4.00
Yearly transaction code . . . . .	1 = newly enrolled; 2 = remained enrolled; 3 = withdrew (transferred to another district in or out of state or to a private school in or out of state); 4 = dropped out; 5 = graduated
Neighborhood instability:	
Mean crime and vital life statistics for the student's residential census tract	Grand average of tract population percentages for (1) victims of auto theft, rape, robbery, and assault; (2) residents involved in drug violations (possession and sale); (3) crime-related deaths (e.g., homicide); (4) residents receiving welfare assistance or food stamps; and (5) low weight births and very low birth weights
School measure:	
Racial composition . . . . .	Percentage black and percentage white based on student assignments to school buildings specified in individual records

NOTE.—The neighborhood instability measure was generated by geocoding yearly residential addresses, determining the appropriate census tract for each address, and merging yearly mean crime and vital life statistics for the census tracts obtained from a local research center.

middle, late years of desegregation). Eighteen white and eight black parents had children labeled LD in various years. All other interviewees were selected on the basis of social or institutional position and time spent in MSD. Interviews were about 50 minutes, focusing on respondents' own experiences and their accounts of others' experiences. We also searched for stakeholder state-

ments in periodic desegregation implementation reports and in the leading local newspaper (citations are not provided to protect district anonymity).<sup>11</sup> We use qualitative data to complement and, when possible, contextualize insights from quantitative data.

## FINDINGS

To protect district anonymity, we conceal the actual year of initial desegregation and specify it here as 1975. Since student records start two years before desegregation, 1973–75 is presented as the segregation period, 1975–90 as the desegregation period, and 1990–95 as the resegregation period.

### Compliance with the Court Order

#### *What were categorization patterns for blacks?*

Figure 2A shows the share of LD1 among blacks (*dashed line*). In 1973, only 0.8% were LD1, about 496 of 62,000 at the time (see parenthetical content below 1973). In 1978, the share of LD1 among blacks doubled to 1.6%, and it doubled again to 3.5% by 1981. In the same period, the share of LD3 among blacks declined from 1.5% to 0.4% (*solid line*). LD2 share also declined, from 1% to 0.3% (*dotted line*). Importantly, as seen in figure 2B, the percentage of blacks labeled ED or MR decreased from 1973 to 1981, driven by a decline in black MRs/EDs in resource rooms (*dotted line*). In 1981, the total proportion of black MRs and EDs, for all placements combined, was 3.5%, less than the total proportion of blacks labeled LD (4.2%). Thus, compliance with the court order was not tokenistic, although it is difficult to know whether it needed to be higher. In resegregation, LD1 share among blacks dropped to 0.9% by 1993, resembling its pre-desegregation level. This was coupled with a rising share of LD3 among blacks and an increase in black MRs/EDs in resource rooms.

### Categorical Reaffiliation

#### *Was there downward movement by whites to a low-status category?*

Compliance did not mean equality. Figures 2C and 2D show categorical patterns for whites. In 1973, 3.8% of whites were LD1, 1.1% were LD2, and

<sup>11</sup> Copies of implementation reports were obtained from attorneys involved in MSD's desegregation. Searchable newspaper content was available at the local public library, which published a news index for reports and editorials in multiple local newspapers. Date, page, and section information in the index enabled us to obtain newspaper content from microfilm for early years of desegregation and from the LexisNexis digital news archive for later years.

0.1% (about 35 of them) were LD3. As blacks made inroads to LD1, white predominance shifted from LD1 to LD3, a customarily low-status, majority-black category that ordinarily does not provide access to the full curriculum. In 1978, 4.3% of whites were LD3, compared to 2% in LD1 and 0.4% in LD2. By 1981, the share of LD3 among whites peaked at 4.6%. White reaffiliation with LD3 reversed with resegregation in 1990, as whites migrated back to LD1 (fig. 2C). Categorical assignments appear to have been restored to pre-desegregation patterns when pressure for equality ended, a likely indication that manipulation did occur during desegregation.

*Was white migration out of LD1 and back during policy shifts related to migration in and out of MSD?*

It is possible for category percentages for groups to change because of changes in district composition. A large number of poorer whites (implying a higher risk of LD3) may have enrolled in MSD in the early years of desegregation or less poor ones may have left in the same period, or both, resulting in an increase of white share in LD3 and decrease in LD1. And the reverse may have happened in the transition to resegregation. It is thus important to examine whether changes in white categorization involved students already in MSD.

This is addressed in table 2. For the transition from segregation to desegregation, the table shows what percentage of white LD1s in a given year (rows) remained in LD1 in subsequent years or switched to LD2 or LD3 (columns). For the transition from desegregation to resegregation, the table shows the percentage of white LD3s in a given year who remained in LD3 in subsequent years and the percentage who switched to LD1 or LD2. For example, although 82% of white LD1s in 1974 remained in LD1 in 1975 (the first year of desegregation), 60% of them migrated to LD3 in 1976. Most remained in LD3 in 1977 because 51% of white LD3s in 1977 were those who were LD1 in 1974. In the next row, a similar migration is observed, as 66% of white LD1s in 1975 migrated to LD3 in 1976 and 53% of them remained there in 1977. Much of the direct migration from LD1 to LD3 stopped by 1977, as 84% of white LD1s in 1976 remained in LD1 in 1977. But this 84% pertains to a reduced share of all whites in MSD because, in 1977, only about 2% of whites were left in LD1, a percentage that persisted in 1978 and through the 1980s (see fig. 2C).

As for resegregation, among white LD3s in 1989 (the year before resegregation), 79% migrated back to LD1 in 1990. Most remained LD1 in 1991 (72%) and 1992 (65%). The back migration slowed by 1991, as many white LD3s from 1990 remained LD3 in 1991 (83%) and 1992 (74%). Here again, these large percentages pertain to a reduced share of whites since, as seen in figure 2C, only 0.8% of all whites were LD3 by 1990 (see the same percent-

## Categorization by Organizations

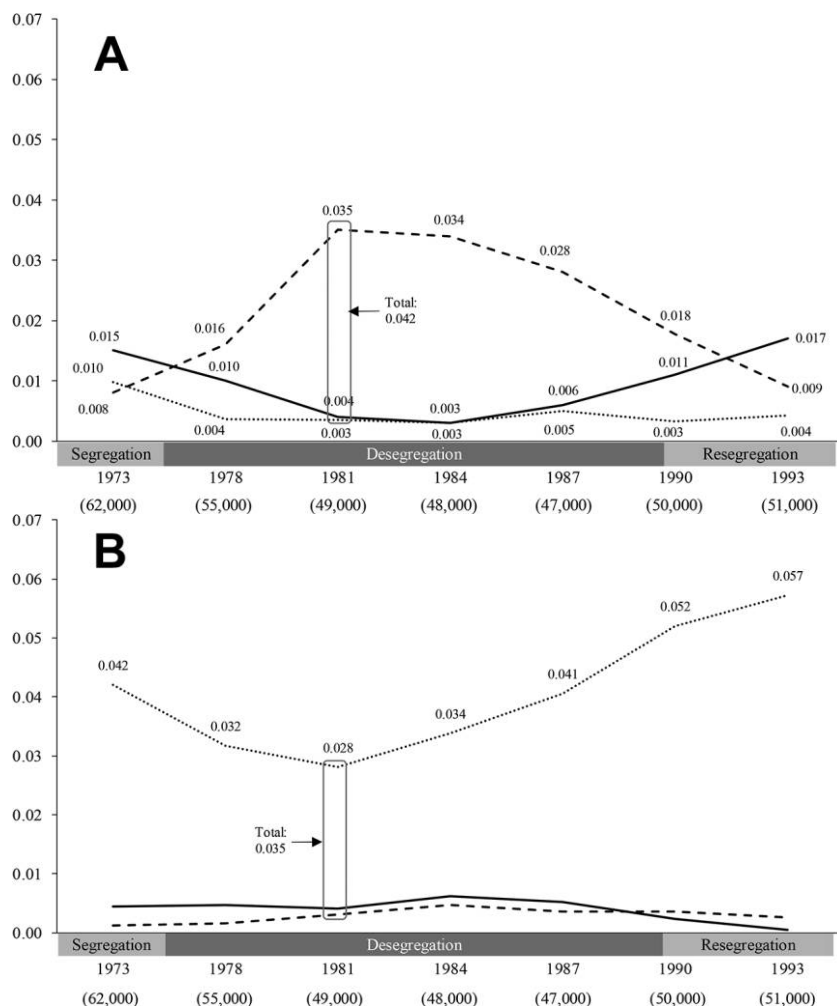


FIG. 2.—Racial percentages for mild disability categories for selected years. Rounded-up total enrollment numbers for black and white students are in parentheses below the years. Actual years are hidden to protect MSD's anonymity. A, blacks, LD; B, blacks, MR + ED; C, whites, LD; D, whites, MR + ED.

age for 1993). This indicates that white migration out of LD1 and back during policy shifts was not strongly related to white migration in and out of the district during those shifts. It involved primarily the reassignment of whites already in MSD. The administrative logistics of these reassignments are important to consider. For instance, the 60% of white LD1s in 1974 who switched to LD3 by 1976 involved 674 students or 0.07% of total MSD en-



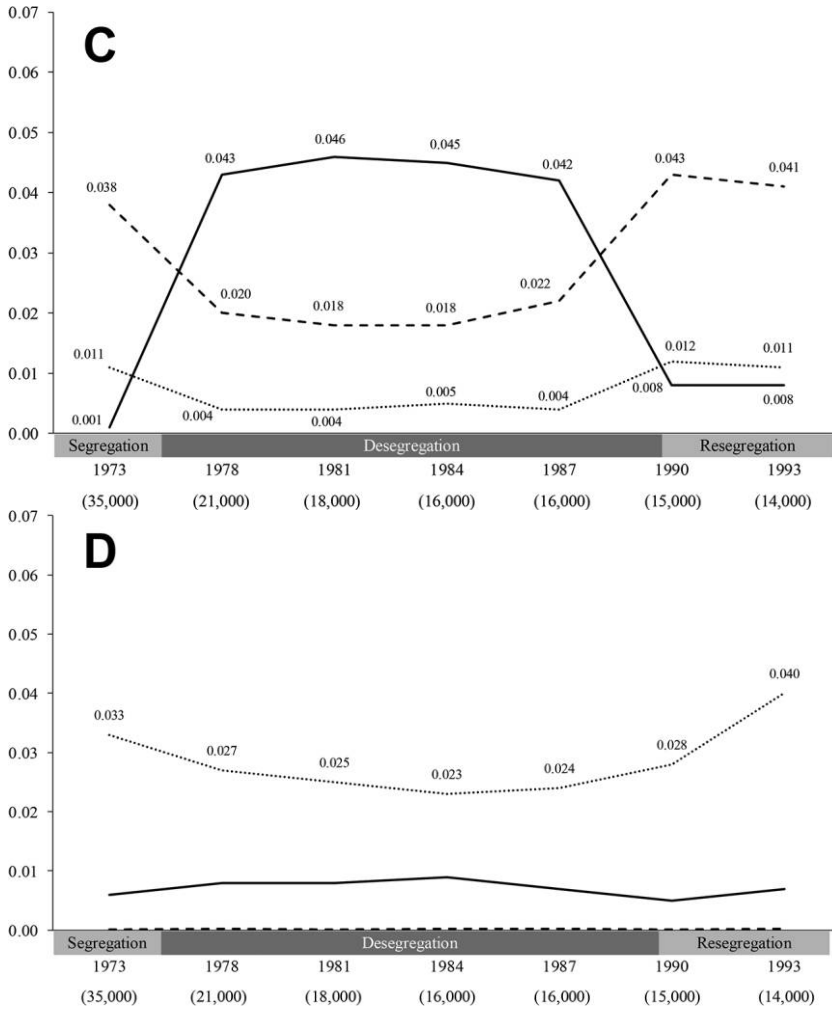


FIG. 2.—(Continued)

rollment.<sup>12</sup> Likewise, the 79% of white LD3s who switched to LD1 from 1989 to 1990 involved 521 students, 0.08% of total enrollment.<sup>13</sup> Reassigning

<sup>12</sup> There were about 34,000 whites in MSD in 1974, 3.3% of whom, or 1,122, were LD1. Since, as seen in table 2, 60% of these migrated to LD3 by 1976, the migration involved 674 whites (1,122 × 0.60). Given the total enrollment of 89,000 for 1976 (28,000 whites and 61,000 blacks), the 674 whites comprised 0.07% of MSD (674/89,000).

<sup>13</sup> There were about 15,000 whites in MSD in 1989, 4.4% of whom, or 660, were LD3. Since, as seen in table 2, 79% of these migrated to LD1 by 1990, the migration involved

Categorization by Organizations

TABLE 2  
MIGRATION PATTERNS FOR WHITE LD STUDENTS DURING POLICY SHIFTS

	LD1	LD2	LD3	LD1	LD2	LD3	LD1	LD2	LD3
	1975*			1976			1977		
From segregation to desegregation:									
LD1:									
1974 . . . . .	.82	.06	.04	.24	.02	.60	.21	.02	.51
1975 . . . . .				.23	.01	.66	.21	.01	.53
1976 . . . . .							.84	.04	.06
	1990†			1991			1992		
From desegregation to resegregation:									
LD3:									
1989 . . . . .	.79	.02	.11	.72	.03	.11	.65	.02	.09
1990 . . . . .				.07	.02	.83	.03	.02	.74
1991 . . . . .							.06	.01	.85

NOTE.—All numbers are percentages based on cross-tabulation of raw counts from individual student records. Critical percentages are shown with frames around them. Row percentages for LD1, LD2, and LD3 row within panels do not add up to one because of attrition (e.g., withdrawals from MSD and graduations).

\* First year of desegregation.

† First year of resegregation.

such small shares of students was not only administratively feasible but achievable under the federal Individuals with Disabilities Education Act.

*Did white presence in LD3 vary by grade level?*

LD3 implies instruction in a reduced curriculum by a special education teacher in a self-contained classroom for the entire day. Thus, migration to LD3 can be detrimental unless instruction is modified to replicate the full curriculum. We present evidence on such modification below in relation to categorical revision. Here, given our focus on reaffiliation, we address whether migration to LD3 was affected by the need for curricular modification to LD3. It is feasible to cover the full curriculum in self-contained classrooms in elementary and middle school, but not in high school, which would reduce whites' interest in LD3 in high school. Constraints on modification stem from the rising complexity of topics across grade levels. Special education teachers in self-contained classrooms typically can switch from reduced to full curricula in elementary and middle school with greater paraprofessional support, since topics are not as advanced as in high school (e.g., a sev-

521 whites (660 × 0.79). Given the total enrollment of 65,000 in 1990 (15,000 whites and 50,000 blacks), the 521 whites comprised only 0.08% of MSD (521/65,000).

enth grade special education teacher who covers math topics like balanced equations can extend instruction to include proportions and probability covered in regular classrooms; Montague and Jitendra 2006).<sup>14</sup> Such extensions are less likely in high school, as topics require significant specialization (e.g., high school special education teachers are qualified in a narrow range of topics in math relative to the scope of algebra or calculus taught in regular classrooms, regardless of the extent of paraprofessional support).<sup>15</sup> And since assigning regular classroom teachers to self-contained classrooms is impermissible, it is problematic to deliver the full curriculum in such classrooms in high school. This places an inherent limit on malleability in reranking LD1 and LD3 categories, an issue stressed by multiple interviewees in our sample. One of them addressed it from a uniquely relevant vantage point. She was a member of the local LDA in early years of desegregation, and later became its president. LDA is an organization that, as we explain below, played a pivotal role in coordination of parental efforts for white migration to LD3. In her account: “[White LD] parents were getting their kids into special ed [self-contained] classrooms. . . . But it wasn’t going to happen past seventh or eighth grade [because] instruction wouldn’t be the same . . . you just can’t cover the material the same way no matter what. . . . Many [white] kids went back to the [regular] classroom after middle school. Some parents left [MSD] when their child reached high school. Some used the time [when their child was] in middle school to look for places to move in other districts.”

Figure 3 shows grade distributions in LD3 and LD1 by race (overall category percentages in racial groups and related raw numbers are below years). As seen in figure 3A, during desegregation (1978–87), when LD3 was white dominated, only about 7% of white LD3s were in high school. In the same years, figure 3B shows that 86% or more of white LD1s were in high school. Importantly, black LD1s (fig. 3D) were more evenly distributed across grade level than whites in desegregation years, indicating that the LD1 category was racially shared in high school. A separate analysis showed that, in any given year between 1977 and 1990, over 90% of white LD3s in eighth grade switched to LD1 in ninth grade. Thus, limits on malleability—in this case, the difficulty of modifying the LD3 category at the high school level—resulted in a more balanced racial presence in LD1 in high school. As for black LD3s (fig. 3C), they, like black LD1s, were rather evenly distributed across grade

<sup>14</sup> See also Brownell, Hirsch, and Seo (2004) on certification requirements for special education teachers involving a wide range of expertise across elementary and middle school grades.

<sup>15</sup> Examples of other curricular topics in high school that are subject to markedly narrower coverage in self-contained classrooms than in regular classrooms include science, English language arts, economics, business, and technology (see Wehman and Kregel 2003).

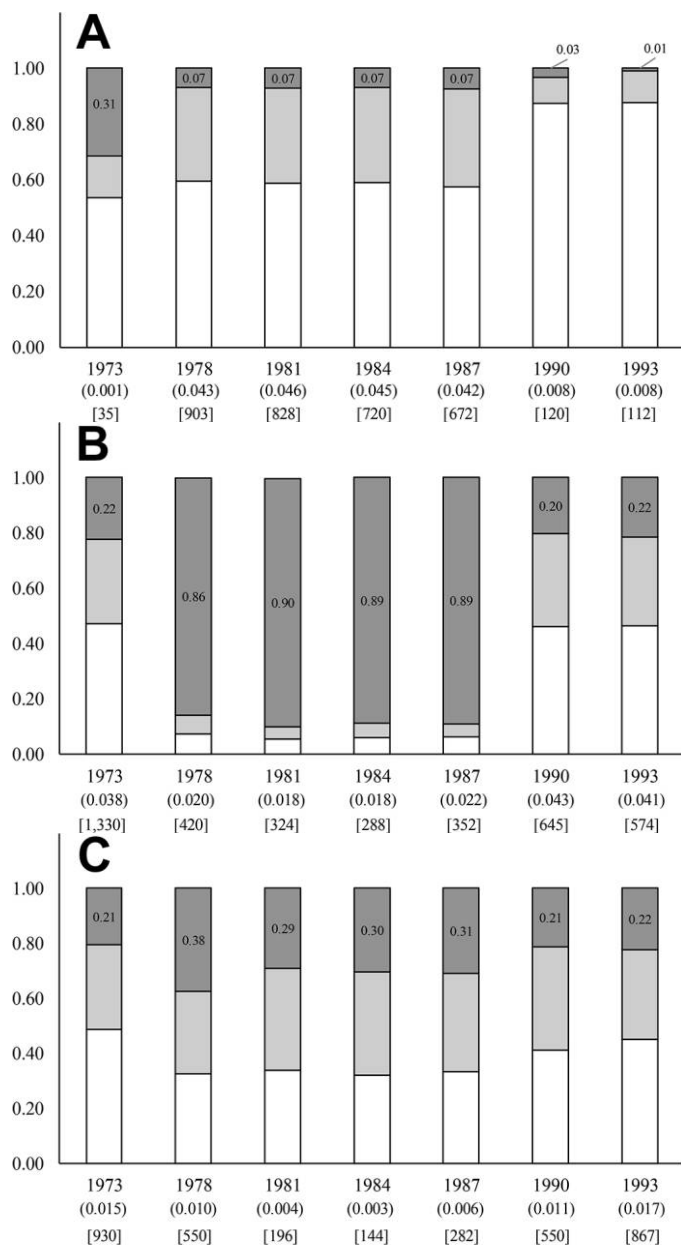


FIG. 3.—Grade distributions in LD3 and LD1 by race in selected years. Category percentages for each group (based on fig. 2) are in parentheses below years, and corresponding raw numbers are in brackets below the percentages. Actual years are hidden to protect MSD's anonymity. A, White LD3s; B, white LD1s; C, black LD3s; D, black LD1s.

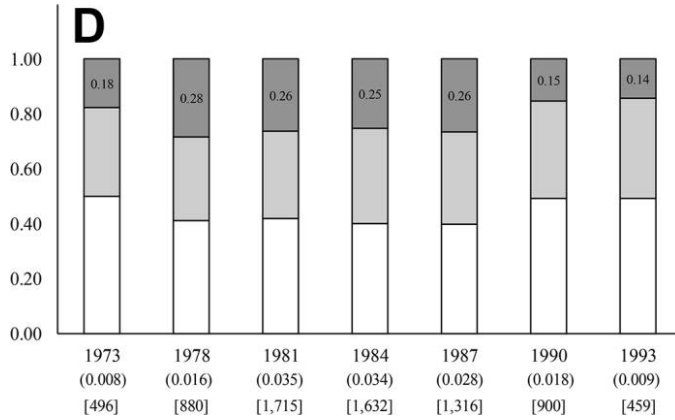


FIG. 3.—(Continued)

levels despite limited presence in LD3 in desegregation years (e.g., as little as 0.3% of blacks, or 144 blacks, in LD3 in 1984). Pre-desegregation grade distributions in categories were largely restored in resegregation when, percentages of disability categories within racial groups resembled patterns in pre-desegregation years—in particular, in figures 3B, 3C, and 3D compare the column for 1973 to those for 1990 and 1993.

*Was white migration related to school capacity?*

Issues of school capacity must be considered in relation to white migration. The question is whether racially sharing LD1 would have created too many LD1s for elementary and middle schools. The solid line in figure 4 shows the number of white LD1s over time (based on fig. 3B). The dashed line represents what the number would have been had the pre-desegregation LD1 share among whites persisted in desegregation. In 1973, 3.8% of whites were LD1 (see fig. 2C). We multiplied this by the total number of whites in later years to estimate the dashed line in figure 4. In 1978, had 3.8% of whites been LD1, there would have been 798 white LD1s. The differences between actual and projected numbers in desegregation years are in between the two lines. Since whites abandoned LD1 in elementary and middle school, the actual and projected differences pertain primarily to those grades. Thus, we divided each difference by the number of elementary and middle schools in the corresponding year (see columns). Since desegregation weakened neighborhood assignment zones, the 378 additional white LD1s in 1978 would have been spread across 113 elementary and middle schools, resulting in 3.35 additional white LD1s per building. This would have been 3.27 in 1981, 2.94 in 1984, and 2.37 in 1987, averaging to 2.77, or about 3 students per building. Assuming, conservatively, that there were at least 10 classrooms per school,

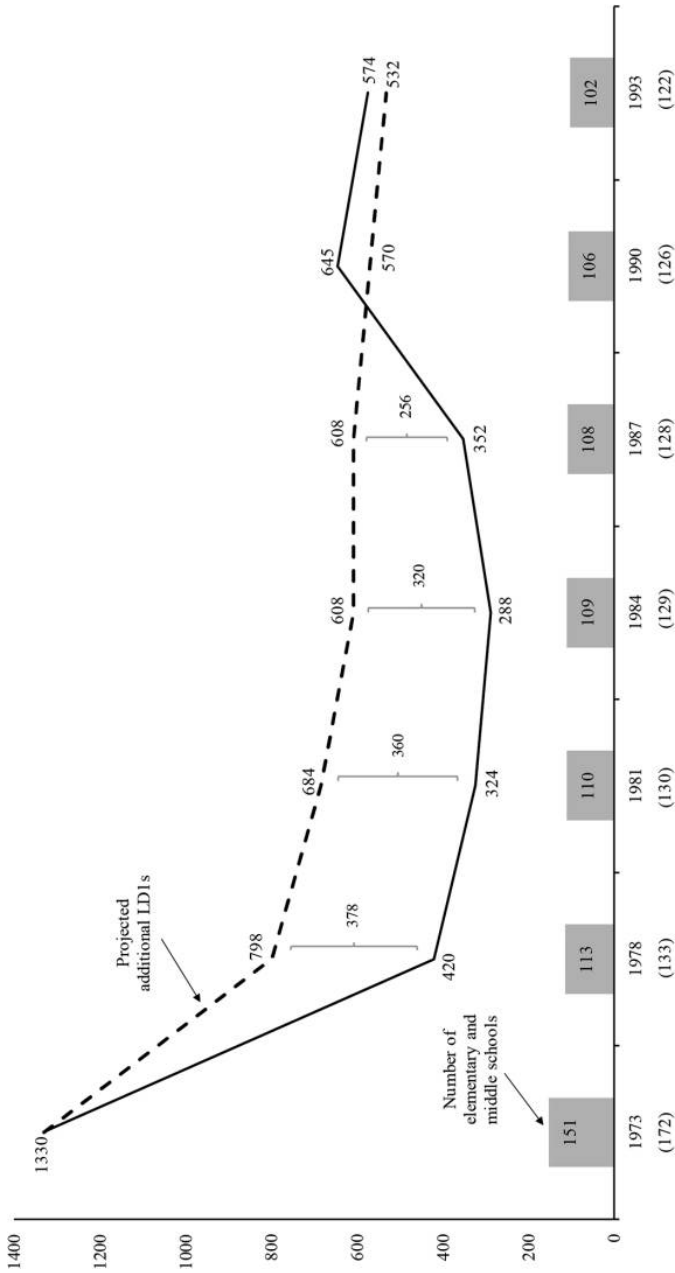


FIG. 4.—Actual and projected numbers of white LDIs and the number of elementary and middle school buildings in selected years. Total number of school buildings for each year is shown in parentheses below the year.

there would have been about 0.30 more white LD1s per classroom. This low number suggests that white migration out of LD1 was unrelated to school capacity.<sup>16</sup>

*Was categorization related to individual traits other than race?*

Social class factors such as poverty, family structure, and neighborhood instability increase the risk of stigmatizing disability labels and greater severity within any given label (Tomlinson 2014). We tested the extent to which such factors reduced racial differences in categorization by means of a multinomial logistic model for selected years. We fit the model first for elementary and middle school and then for high school:<sup>17</sup>

<sup>16</sup> As in other districts, the post-desegregation enrollment decline in MSD was driven primarily by the exit of the relatively affluent families from white neighborhoods. Since poorer students have a higher risk of mild disability, it is conceivable that the LD1 percentage for whites in desegregation years may have been greater than 3.8 (the pre-desegregation percentage) had whites not migrated to LD3. This implies an upward adjustment to our per building estimate of additional white LD1s. If we were to make the extreme assumption that the white LD1 percentage could have been 50% greater than 3.8 in desegregation years—that is, 5.7%—our per building estimate becomes approximately six rather than three additional students, and our per classroom estimate becomes 0.60 rather than 0.30, which is still marginally small as it is well below one student. We also examined the effect of school racial composition on white migration to LD3. Since migration was triggered by desegregation, we tested whether elementary and middle schools with greater percentages of blacks had more whites in the LD3 category. The court required the percentage of blacks in any school to be within a 20-percentage-point range of the proportion of blacks in the district. Thus, despite racial mixing, there was considerable variation in school racial composition, especially as MSD became less white over time. However, our regression analysis (involving a longitudinal fixed-effects model relying on school-level panel data) showed that the percentage of blacks in an elementary or middle school building had little effect on the percentage of white LD3s in the building. This is a sensible pattern given students' risk of multiple school reassignments over time for racial mixing (especially white students whose numbers declined) and the related problem for whites to switch back and forth between LD3 and LD1 depending on changes in building racial composition. For many whites, building racial composition may have changed at various times, even if they themselves were not reassigned but rather others in the building were reassigned because of MSD's racial-mixing policy in the context of broader demographic changes during desegregation. Additionally, as we show later, a formal means of white LD3 categorization involved test score deflation (to misrepresent the severity of learning problems), followed by a test score recovery once the student was in LD3, as a result of "appropriate services" in that category. Such a strategy is more feasible to employ once rather than multiple times. Thus, whites in elementary and middle school appear to have abandoned the LD1 category as a whole irrespective of school racial composition and reclaimed the category once the desegregation regime ended.

<sup>17</sup> A combined run required a complex layer of interactions with a dummy for high school level. Given the interactions already in the model, an additional layer of interaction terms created significant computational complexity. In addition, while the run for high school level included all students in high school, the run for elementary/middle school level relied on a 50% stratified random sample to facilitate convergence within tolerance limits.

$$\log\left(\frac{P_{ijt}}{P_{iJt}}\right) = \alpha_j + \beta_j \mathbf{Y}_i + \gamma_j \mathbf{B}_i + \delta_j(\mathbf{Y}_i \times \mathbf{B}_i) + \theta_j \mathbf{ST}_{it} + \lambda_j \mathbf{SC}_{it} + \xi_j(\mathbf{Y}_i \times \mathbf{SC}_{it}) + \varepsilon_{it},$$

where  $i$  = student and  $t$  = year. Outcome categories are denoted by  $j = 1, \dots, J$ , where  $J = 13$ . Nondisabled is the baseline. Nine of the remaining outcomes are customary mild disability categories in figure 1. The next three are for any biological disability paired with any placement option. Year is denoted by  $\mathbf{Y}$ ;  $\mathbf{B}$  is a dummy for black, interacting with year;  $\mathbf{ST}$  represents poverty, family structure, and neighborhood instability, as well as math achievement, GPA, grade level, and gender; and  $\mathbf{SC}$  represents school dummies interacting with year, picking up school effects such as culture, location, and racial composition.<sup>18</sup>

Figures 5 and 6 show black/white odds ratios for mild disabilities (all log-odds estimates are in tables A1 and A2 in the appendix). Covariate adjustment does not alter patterns in categorization. Results for elementary and middle school are in figure 5. As seen in figure 5A, blacks were about 75% less likely than whites to be LD1 in 1973 (odds ratio = 0.25;  $e^{-1.38}$  in table A1) and in 1974 (odds ratio = 0.25;  $e^{-1.38-0.01}$  in table A1). In each of these years, blacks were nearly 20 times more likely to be LD3 (fig. 5C). But by 1978, they were 4.41 times more likely to be LD1 and about 88% less likely to be LD3. In 1981, they were 7.23 times more likely to be LD1 and about 90% less likely to be LD3. This reversal persisted through desegregation, but previous patterns reemerged with resegregation in 1990. As for high school, figure 6 shows that, although blacks in high school had significantly limited access to LD1 in 1973 and 1974, by 1978 they were only about 10% less likely than whites to be LD1 (odds ratio = 0.90). Consistent with univariate findings, while LD1 was largely black in elementary and middle school, it was racially shared in high school. White persistence in LD1 in high school tilted the odds of being in LD1 slightly in favor of whites. This changed with resegregation in 1990, as blacks in high school lost significant ground in LD1. Turning to LD3, while the odds of being in that category in high school were dramatically greater for blacks before desegregation, blacks in high school were only slightly more likely to be LD3 in desegregation years (at its peak, the odds ratio was about 1.11). This modest

---

Subsampling preserved original yearly percentages by race, poverty, gender, family structure, school building, residential census tract, and educational category, which included mild disability categories, biological disability categories, and nondisability. We used the PROC CATMOD procedure in SAS 9.4 for estimation. Model diagnostics included tests for quasi-complete separation, influential cases, and collinearity.

<sup>18</sup> We also fit several other models, each of which included interactions of a given student measures (e.g., poverty) with year and race to account for how its effect varied by period or group, but key insights from these models are similar to those presented here.



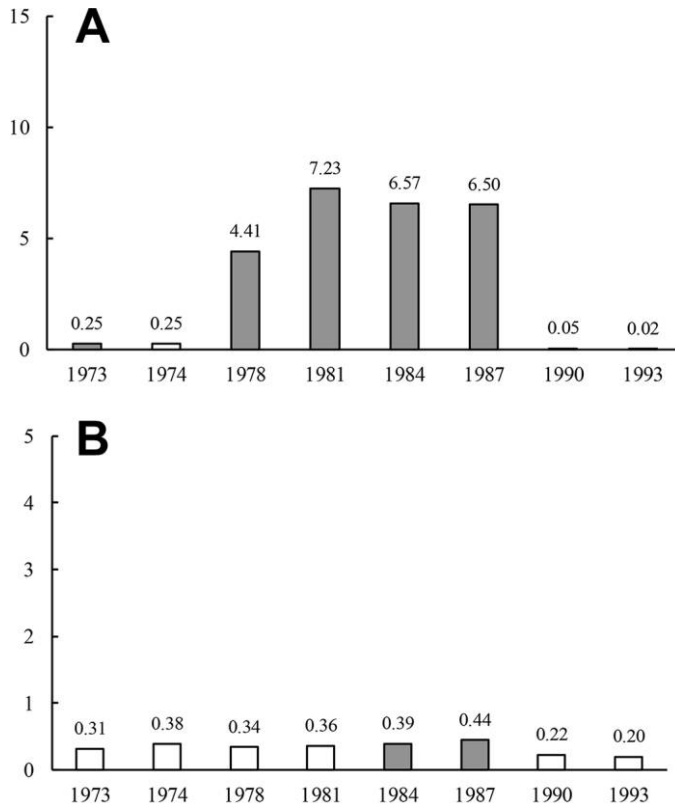


FIG. 5.—Estimates of black/white odds ratios for mild disability categories for elementary and middle school grades in selected years. Results are based on a 50% stratified random sample (see n. 17). Ratios significant at 0.05 level are shaded. See table A1 for full results. A, LD1 regular classroom; B, LD2 resource room; C, LD3 self-contained classroom; D, ED1 regular classroom; E, ED2 resource room; F, ED3 self-contained classroom; G, MR1 regular classroom; H, MR2 resource room; I, MR3 self-contained classroom.

difference reflects the similarly low presence of blacks and whites in LD3 in high school in desegregation. As noted earlier, black presence in LD3 declined across all grade levels, while white presence in it was limited specifically in high school.

Importantly, figures 5 and 6 suggest that desegregation also affected racial patterns in ED2. In each figure, the decline in the black/white odds ratio for ED2 in desegregation years is strong and statistically significant; the ratio returns to its pre-desegregation levels in resegregation years (see U-shaped pattern in panel E). As for MR, no categories within that label were affected by desegregation (panels G, H, and I). This suggests that the U-shaped dotted line in figure 2B (resource room for black MRs/EDs) reflects

Categorization by Organizations

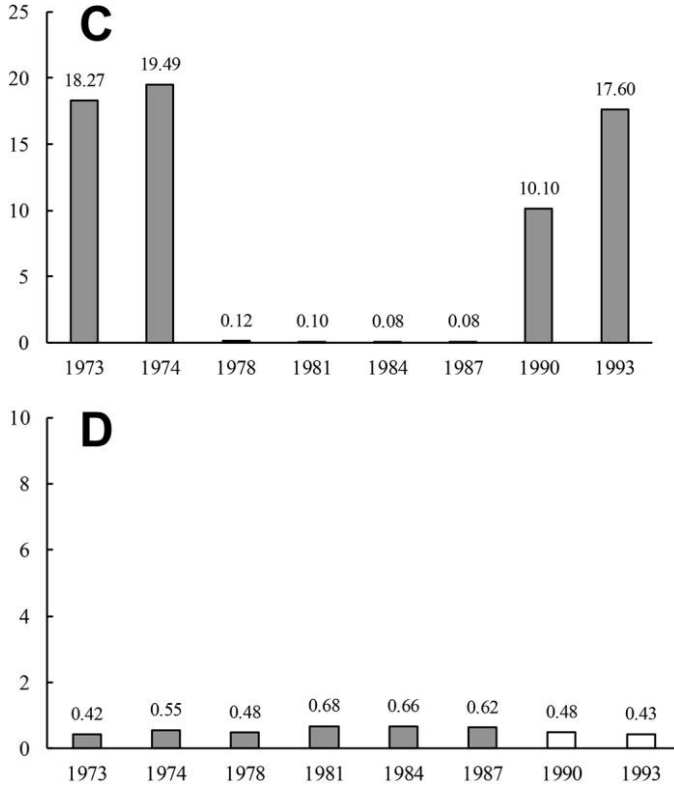


FIG. 5.—(Continued)

changes in ED2 more than MR2.<sup>19</sup> Thus, greater use of LD1 for blacks in desegregation appears to be coupled specifically with lesser use of LD3 and ED2 (although unlike LD3, ED2 was not a white destination in desegregation). Arguably, black LD1s during desegregation were often those students who otherwise were likely to be categorized as having either a severe learning disability (LD3) or a moderate emotional disturbance (ED2). We address the implications of this for the learning outcomes of other students in regular classrooms in the next section, in relation to dynamics of categorical revision.

*How were changes in white categorization achieved?*

Malleability facilitates reaffiliation. In migration from LD1 to LD3 (and back), the central enabling factor is the limited observability of LD severity.

<sup>19</sup> Univariate trends for MR2 confirm this.

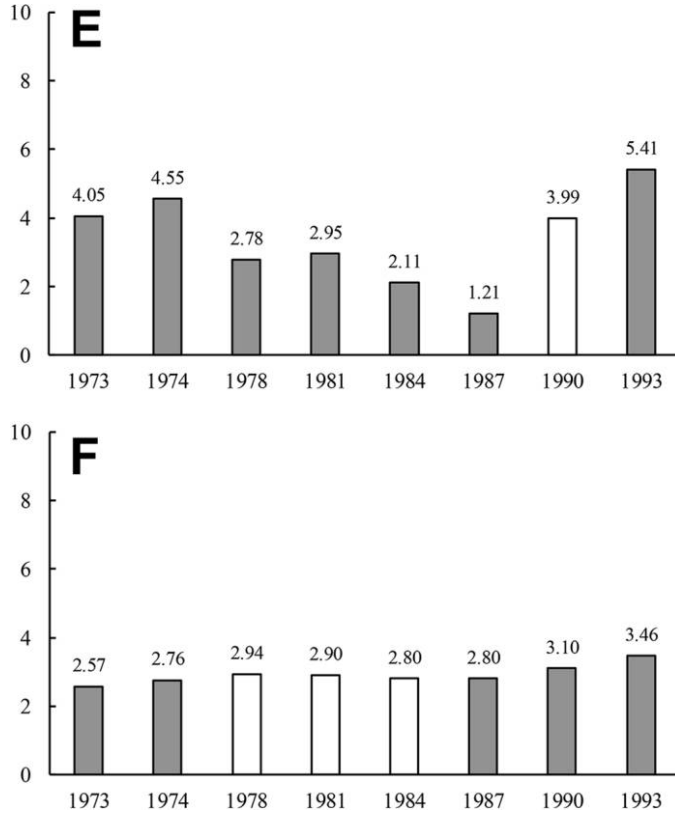


FIG. 5.—(Continued)

In contrast, the severity level of a biological disability like visual impairment is directly observable. LD severity is denoted by an IQ-achievement discrepancy, which is greater when achievement is lower than what IQ suggests. Unlike MR (low IQ), LD signifies achievement problems in the absence of low IQ. IEP teams can affect IQ-achievement discrepancy in two ways, given limited uniformity in categorization rules and procedures, another element of malleability. One approach is to readjust IQ scores. For instance, the degree to which an IQ test is verbally loaded can inflate or deflate scores (Jensen 1980). Yet notable changes in IQ are difficult to achieve and to justify, as IQ is more stable than achievement. A more viable option is to readjust achievement. Here, test scores can be influenced by test difficulty (depth of skills that are evaluated) or by testing conditions (e.g., time allowed for the test, whether supports such as test readers are provided). IQ data were unavailable from MSD, but national percentile ranks for CTBS math and reading scores (from each fall) helped examine changes

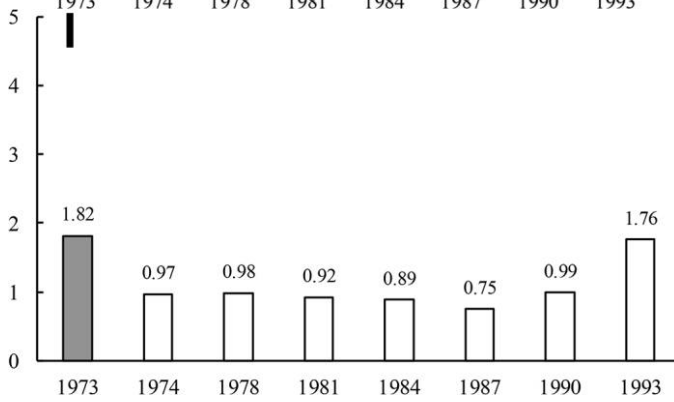
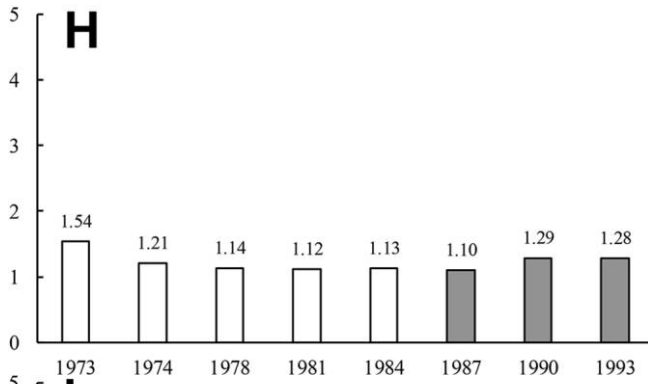
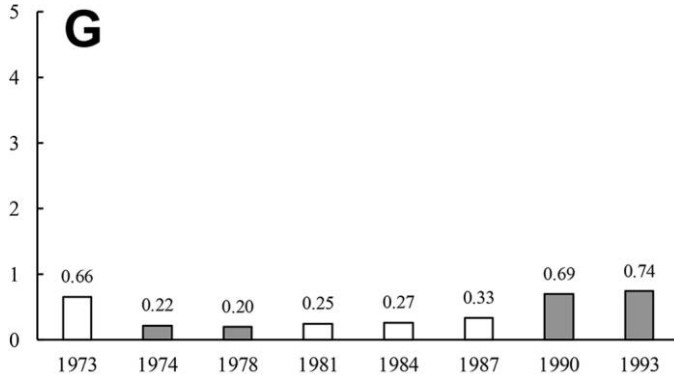


FIG. 5.—(Continued)

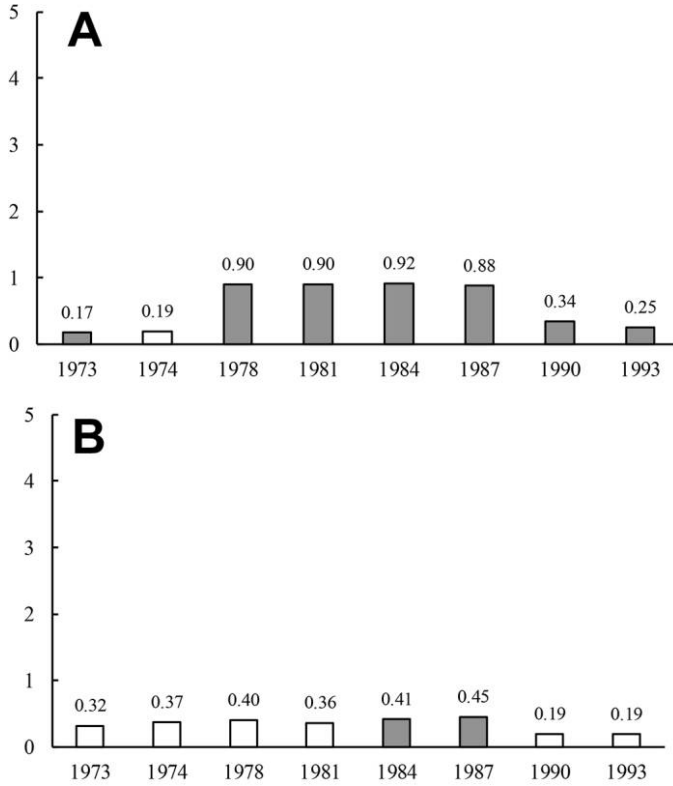


FIG. 6.—Estimates of black/white odds ratios for mild disability categories for high school grades in selected years. Ratios significant at 0.05 level are shaded. See table A2 for full results. A, LD1 regular classroom; B, LD2 resource room; C, LD3 self-contained classroom; D, ED1 regular classroom; E, ED2 resource room; F, ED3 self-contained classroom; G, MR1 regular classroom; H, MR2 resource room; I, MR3 self-contained classroom.

in white achievement in relation to migration from LD1 to LD3 and back (a percentile rank is the percentage of students in the nation whose scores are lower). For each student, yearly ranks for math and reading scores were combined into an average rank. In figure 7, we present overall means of these individual averages for selected years. Our findings indicate substantial test score deflation for white LDs to increase their IQ-achievement discrepancy.

Each panel in figure 7 has a base year, which is the second year on the X-axis, marked by arrows on each side (see 1974 in fig. 7A). The arrows convey our tracking of base year students' achievement over time, forward for three years (see 1975, 1976, and 1977 in fig. 7A) and backward for one year (see 1973 in fig. 7A). The base year data contain white LD students in ele-

Categorization by Organizations

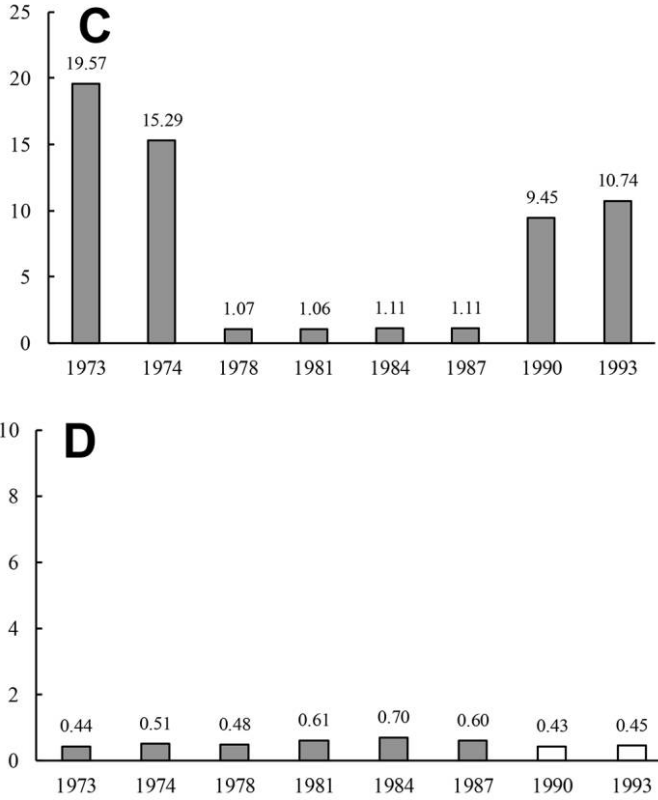


FIG. 6.—(Continued)

mentary and middle school in that year (white migration to LD3 did not extend to high school). For parsimony, we do not present separate means for white LD1s, LD2s, and LD3s, since white LDs in elementary and middle school were largely accumulated in only one of these categories depending on period—typically in LD1 or LD3, with very few in LD2. The overall white LD mean primarily reflects the mean of either LD1 or LD3, and changes in it are driven by changes in whether students were accumulated in LD1 or LD3. The base year mean is reported separately for new enrollees and for those who were previously enrolled. For instance, in figure 7A, base year white LDs who were new enrollees in that year (1974) have a mean rank of 0.43 (*light shading*), and those who were continuing in MSD have a mean rank of 0.47 (*dark shading*). Separating new from existing students helps examine if and when dynamics for the two groups were different. To the right of the base year are the means for base year students in the next

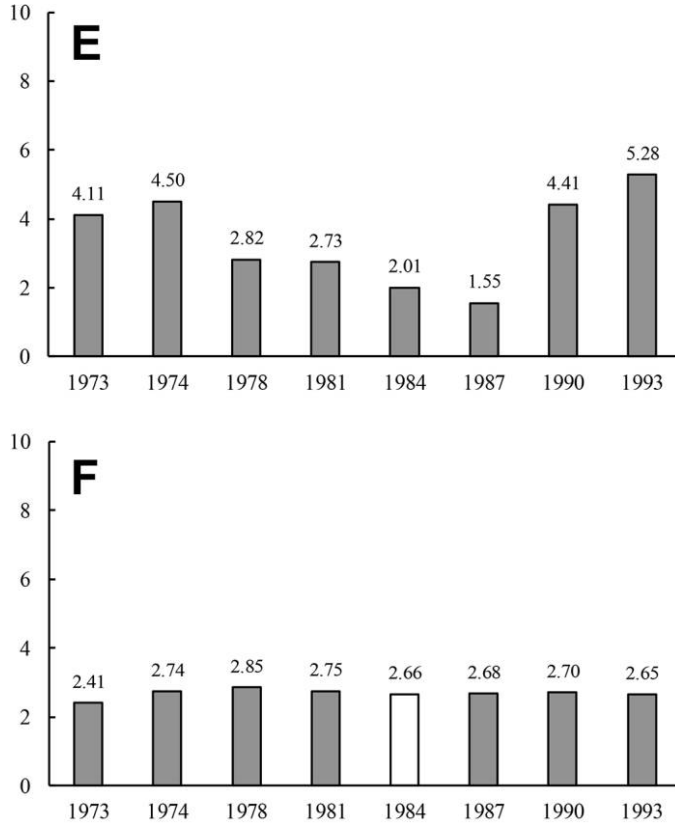


FIG. 6.—(Continued)

three years, adjusting for attrition. In figure 7A, base year white LDs who were enrolled in MSD before 1974 have a 1975 mean of 0.44, 1976 mean of 0.36, and 1977 mean of 0.44. Paired with these are the corresponding means for base year white LDs who were new enrollees in 1974: 0.43 in 1975, 0.36 in 1976, and 0.45 in 1977. Although base year observations are restricted to elementary and middle school, means for subsequent years draw on high school as well (e.g., in fig. 7A, we follow the percentile rank of base year eighth graders who finish middle school in 1974 and advance to ninth grade in 1975, tenth grade in 1976, and eleventh grade in 1977). This is important, as we track achievement over time. Finally, to the left of the base year, we show the lagged mean for base year white LDs who were in MSD a year earlier (0.47 for 1973 in fig. 7A). New enrollees in the base year do not have a lagged mean. The trend lines show the weighted average of paired columns except for the lagged column. Number of base year new enrollees varied between 5% and 7.5% of all base year students.

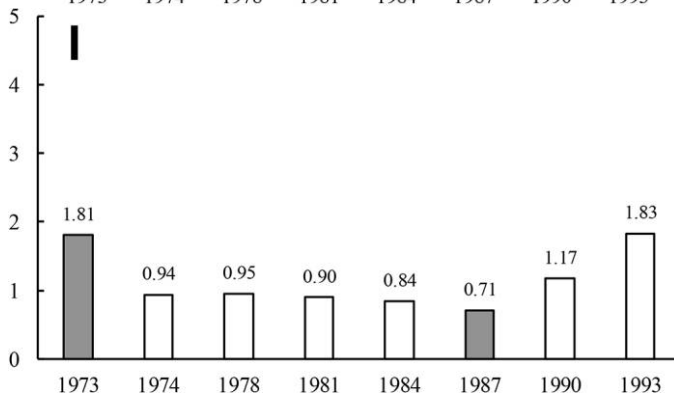
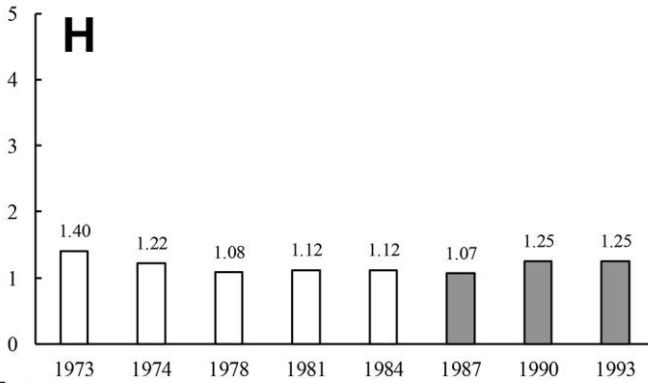
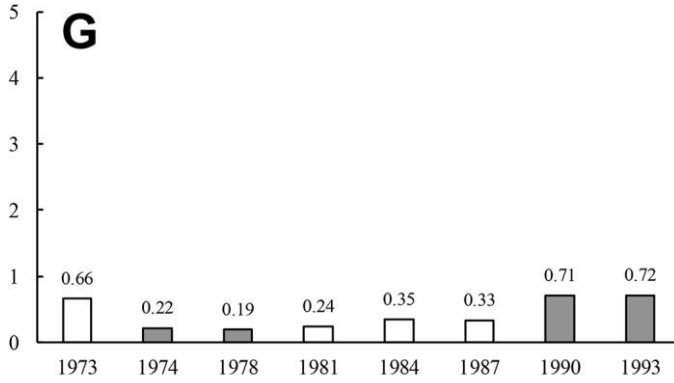


FIG. 6.—(Continued)



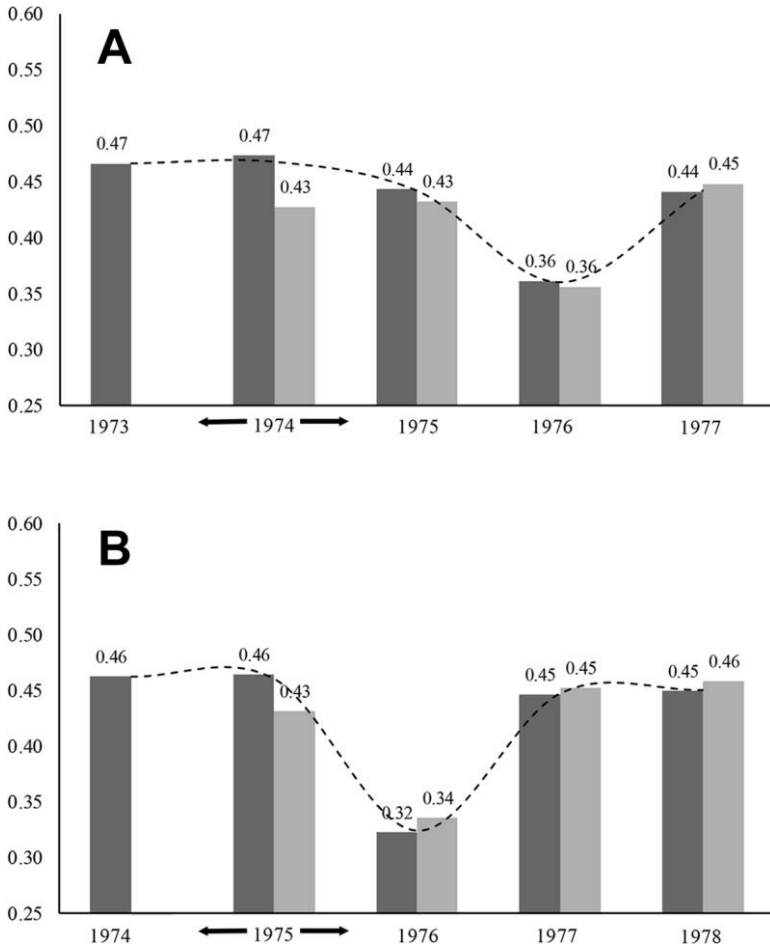


FIG. 7.—Longitudinal patterns of mean CTBS percentile rank for white LDs in selected years. Means are for math and reading combined. Each panel focuses on a specific (i.e., base) year (A, 1974; B, 1975; C, 1976; D, 1977; E, 1978; F, 1982; G, 1986; H, 1990; I, 1993) and shows (1) means for previously and newly enrolled white LDs in the base year, (2) subsequent yearly means for the same two groups for three years following the base year, and (3) a lagged mean for the base year white LDs who were at MSD a year earlier. The trend line represents the weighted average of means for the dark-shaded and light-shaded columns, except for the first year in each panel (the year before the base year). Base year new enrollees varied between 5% and 7.5% of all base year white LDs.

In figure 7A, the 1976 achievement decline for base year white LDs is consistent with our finding that a significant proportion of whites who were LD1 in 1974 migrated to LD3 in 1976 (60% in table 2). The approximately eight-point dip in mean rank is a sharp deviation from prior achievement, and the recovery (of about eight points) in 1977 suggests that the dip was

Categorization by Organizations

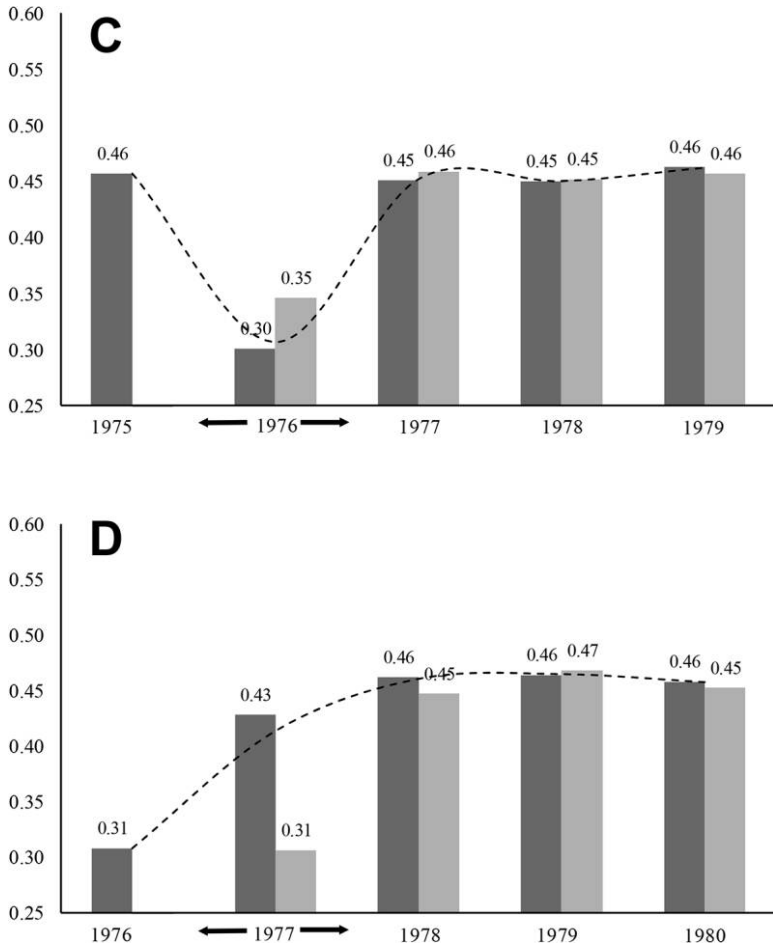


FIG. 7.—(Continued)

likely strategic, to facilitate migration to LD3. Once an LD1 student is recategorized as LD3 on the basis of declining achievement (greater IQ-achievement discrepancy), he or she can remain in LD3 despite subsequent achievement recovery because parents and other IEP team members can argue that LD3 services are appropriate, as they have stopped and reversed the decline. This argument may not even be required, as the student need not be reevaluated until the parent formally requests a reevaluation (Turnbull and Turnbull 1998). In MSD, as in other districts, IEP teams typically reevaluated a student once every three years, but parents could ask for ex-

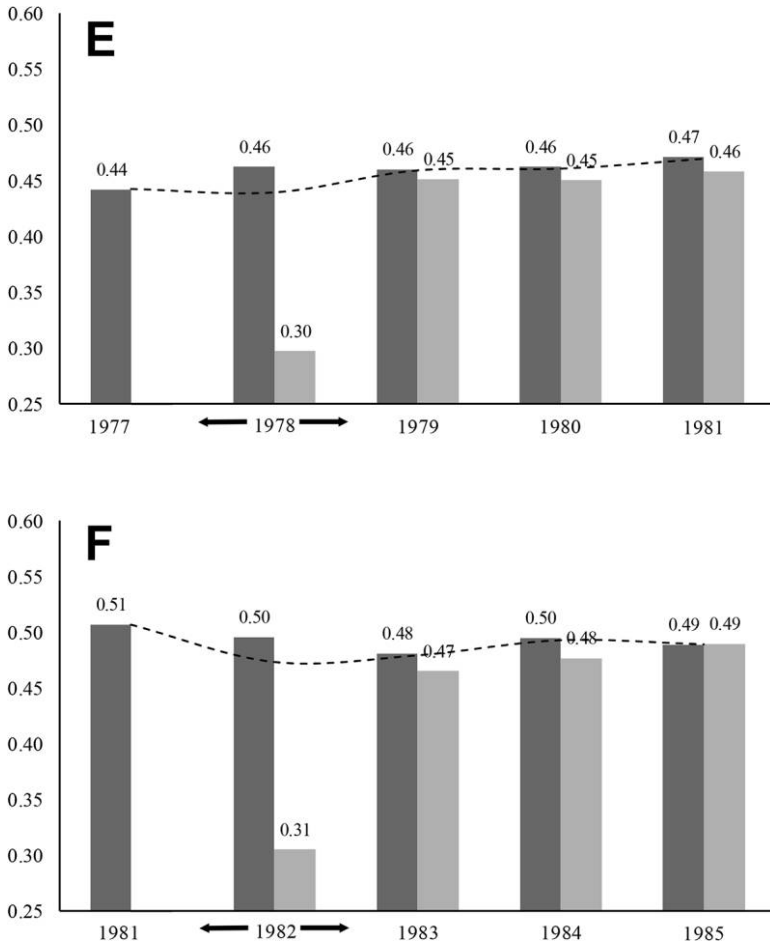


FIG. 7.—(Continued)

emptions. They also could request a reevaluation at any time if they desired adjustments to services. Thus, depending on conditions, the parent could point to improved achievement in LD3 to demand recategorizing the student as LD1, since higher test scores could be cast as evidence that the student now can be successful in LD1 (in the regular classroom). Importantly, figure 7A does not reflect the full extent of the score dip related to white migration to LD3 in 1976 because the 1976 observations for figure 7A include ninth and tenth grade (high school) achievement for base year students who were in the seventh and eighth grades in 1974. IEP teams did not need to deflate test scores in high school, as white migration to LD3 excluded high school. The 1976 dip is deeper in figure 7B (base year 1975), as

Categorization by Organizations

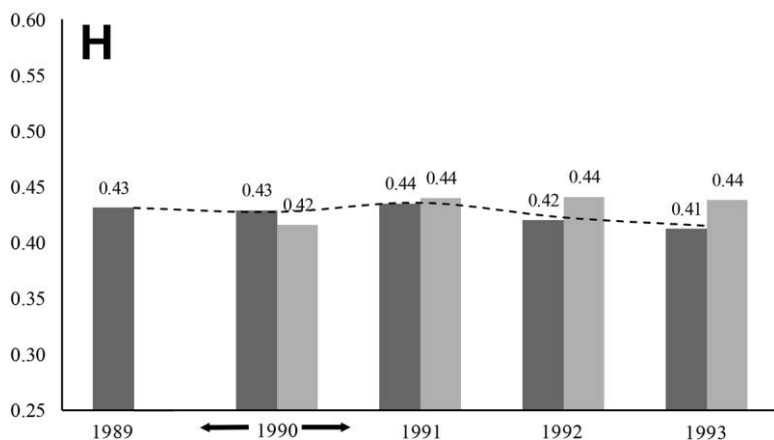
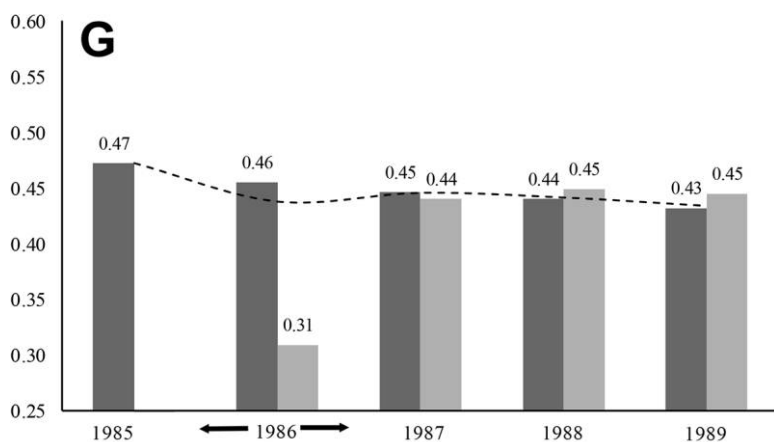


FIG. 7.—(Continued)

the 1976 observations here include fewer high school students—only those who were in eighth grade (and not in seventh grade) in the base year. The full extent of the 1976 dip is seen in figure 7C, where the base year is itself 1976. Here, base year students who are continuing in MSD have a mean rank of 0.30, which is nearly 16 points below the rank from a year earlier (0.46 in 1975). And new enrollees in the base year have mean rank of 0.35. The means for both groups recover to 0.45 in the following year and are maintained in 1978 and 1979.

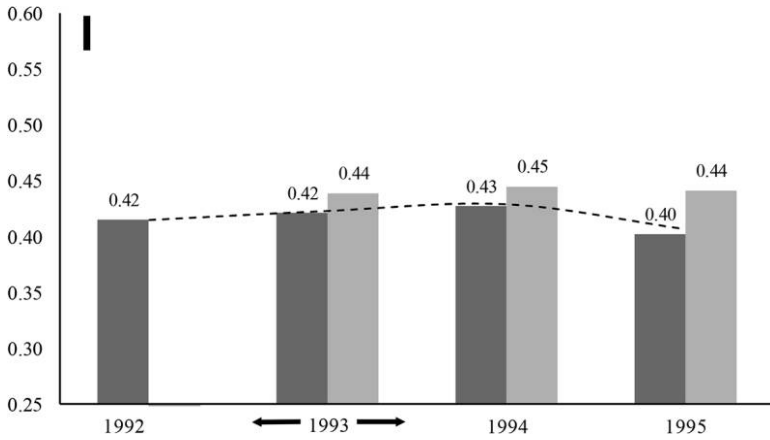


FIG. 7.—(Continued)

The 1976 dip shows up for the last time in figure 7D (base year 1977) as the lagged achievement for base year students. Figure 7D is also the first panel where new enrollees in the base year start out with a substantially lower mean rank than previous enrollees (0.31 vs. 0.43) but catch up in the following year and remain on par with other base year white LDs in subsequent years. This pattern persists in figures 7E, 7F, and 7G. It suggests that, after 1976, IEP teams deflated test scores of only the incoming white LDs in elementary and middle school to facilitate LD3 categorization on arrival. Since MSD maintained the same test over time, test score deflation for white LDs reflects changes in testing conditions—such as less time allowed for the test or removal of supports like test readers. Parents in MSD could request the district to provide or not provide such test accommodations. In 1980, the leading local newspaper reported that an evaluation commissioned by the school board suggested that there were “significant problems with the use of tests and test results in . . . placement into special education programs for learning disabilities . . . and that race may be a factor.” This evaluation never resurfaced in the media, which, along with our findings on white migration to LD3 throughout the 1980s, suggests that the evaluation had no consequence. When category attributes (in this case, severity of learning disability) are not directly and verifiably observable and when categorization rules and procedures (in this case, testing conditions) lack uniformity, organizations enjoy greater discretion in categorization decisions and can find it easier to conceal biases. Figures 7H (base year 1990) and 7I (base year 1993) indicate that deflationary practices were discontinued in resegregation when whites migrated back to LD1. We also examined

achievement patterns of blacks, addressing the same base years as in figure 7. This analysis focused on students who switched to LD1 from any other category as well as students for whom LD1 was the only category ever held. No substantial achievement declines or gains were observed. The mean percentile rank varied longitudinally between 0.40 and 0.44 for any given group of base year students, for both new enrollees and previous enrollees.

*What were stakeholder interests and actions related to white migration to LD3?*

The majority of white families opposed desegregation. Few disagreed in media reports that schools were unequal, but many favored reforms other than desegregation, such as voluntary school choice programs. They feared that desegregation could undermine schooling for whites to help blacks. Reactions to sharing privileges with blacks were strong among whites with disabled children in our interview sample. Five were parents of LD1s when MSD desegregated. They all expressed the urgency they and others felt to maintain “good educational services,” which, as one mother put it, was “more important than [racial] separation,” although separation also may have been a factor. Key advantages of LD1 (less stigma and access to a full curriculum) were intertwined with its racially exclusionary nature. Ultimately, white efforts to maintain “quality education” amounted to construction of yet another predominantly white category, namely, LD3. One of these parents (one of the five mentioned above) was open about such efforts: “We had to do *something!* My son had special needs. We did not want the quality of education to suffer because of [desegregation]. We did not trust the district to help us out. . . . Several of our friends left [MSD]. . . . Many of us worked with teachers and evaluation teams in our schools [IEP teams in schools in white neighborhoods] to have our kids reassigned to separate [self-contained] rooms and get better education in there.”

“Working” with IEP teams in schools in white neighborhoods was a viable means of migrating to LD3, as white parents likely found it easier to influence those IEP teams than teams in schools in other parts of MSD. Homosocial reproduction to maintain white LD students’ privileges may have been more likely in schools in white neighborhoods given the greater presence of white educators and administrators. New categorizations would follow the students if they were bused away. Four of the six school principals in our interview sample who worked in white neighborhoods in the early years of desegregation commented openly on white migration to LD3 at the time. As one recalled: “Many [white LD1 parents]. . . were upset when they realized their kids would be in class with black kids. So many wanted to get their kids out of those programs . . . even leave the schools alto-

gether. . . . They thought the quality of education would suffer. . . . Many of them wanted their kids rediagnosed by their schools [in white neighborhoods].”

However, desire to maintain privilege can be inconsequential unless coupled with resources and efficacy. Thus, parental influence likely involved not just any parents but those most able to help bring about discriminatory changes in categorization. We tested this by examining patterns of parental advantage for white LD1s and LD3s in elementary and middle school. We used data for family structure, poverty, and neighborhood instability. These are critical proxies for parental resources, education, and occupational attainment, which strongly predict parental influence on schools (Duncan and Murnane 2011). We first created a composite disadvantage measure for white LD1s and LD3s by averaging each year’s percentages for single-parent family, poverty status, and neighborhood instability (for each student, the yearly neighborhood instability percentage is itself an average of percentages for five crime and vital life statistics in the student’s residential census tract; see table 1). For a given category in a given year, we added the single-parent-family percentage, the poverty percentage, and the neighborhood instability percentage and divided this by three. Finally, we inverted our disadvantage measure (1/composite) to convert it to an advantage score. Patterns of this score for white LD1s and LD3s are in figure 8A.

In 1973, the parental advantage score for white LD1s was 2.41, which was 1.6 times greater than the score for white LD3s (1.50). By 1978, the situation reversed, as the score for white LD1s (1.81) was 36% smaller than that for white LD3s (2.82). The reversal persisted through the 1980s. Thus, migration to LD3 was related to parental capacity to influence IEP teams, leaving relatively disadvantaged white LDs in LD1 (those who were more likely to live in single-parent families, poverty, and unstable neighborhoods). Consistent with prior figures, pre-desegregation patterns were restored with resegregation starting in 1990. Thus, parental influence was also coupled with migration back to LD1.

At the group level, parental influence can be more effective when coordinated. Parents of many white LDs were mutually aware of their efforts. Beyond the neighborhood- and school-based networks (mentioned by interviewees), the local LDA played a key coordination role. Established in the white part of MSD in the mid-1960s, LDA functioned as a hub for parents of white LDs and was well connected to the district office and several (typically white) school psychologists on IEP teams across MSD schools. LDA had very few nonwhite members. Figure 8B shows how LDA’s membership (*dark shading*) closely tracked the total white LD enrollment in MSD (*light shading*) until the association disbanded in 1989. LDA membership varied between 71% and 86% of the number of white LDs. LDA was particularly active in coordinating efforts in the early and middle years of desegregation.

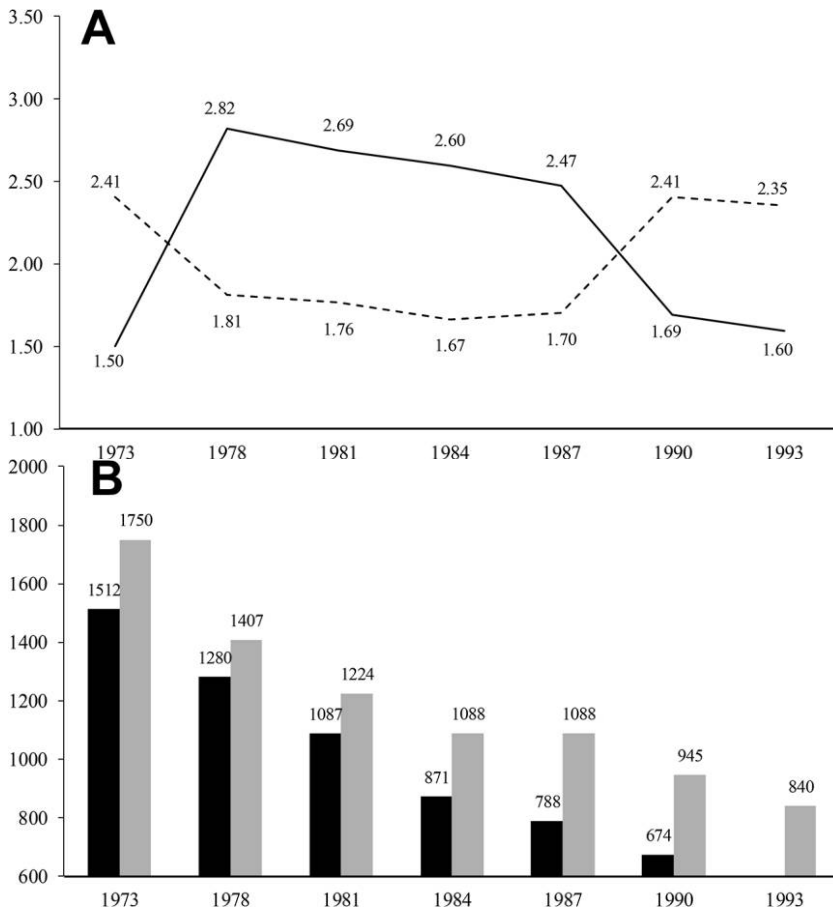


FIG. 8.—White LD parental advantage in elementary and middle school grades (A), and total LDA membership compared to total white LD enrollment in selected years (B). Each score in A is the inverse of a composite disadvantage measure (to denote “advantage”). The composite disadvantage measure is the mean of the percentages for single-parent family (%SP), eligibility for free or reduced-price lunch (%FRL), and neighborhood instability (the instability measure is the average of percentages for five crime and vital life statistics for the student’s residential census tract; see table 1). For instance, 2.41 for LD1 in 1973 is calculated as  $1/((\%SP + \%FRL + \%N)/3)$ , where %N is the average of percentages for the five crime and vital life statistics. For B, white LD enrollment totals are based on percentages in figure 2C. LDA membership totals were obtained from the president of the association, except for 1984, which was unavailable. We estimated the 1984 total (871) on the basis of 1981 and 1987 data. LDA memberships in 1981 and 1987 respectively were 88% and 72% of total white LD enrollment (i.e., 1,087/1,224 in 1981 and 788/1,088 in 1987). Taking the average of these two proportions, we estimated the 1984 membership to be 80% of white LD enrollment in that year ( $0.80 \times 1,088$ ). Finally, the LDA membership for 1990 (674) is from 1989, the year LDA disbanded.



From 1975 to 1979, it held information sessions and operated two hotlines. Its president from 1979 to 1986, who we quoted above (regarding white avoidance of LD3 in high school), became an LDA member in 1974 and was actively involved in parental coordination. She noted:

At some point that first year [1975] we were having large meetings every month. I'm talking 300–400 people. . . . Parents were freaking out about busing. . . . Those who had kids in high school weren't as worried [as their children would be graduating soon]. Some of them were even pleased about deseg. For the rest of us, this wasn't a racial thing. We just didn't want the instruction to suffer. . . . [Early meetings] were focused on asking the judge to keep kids with special needs out of the deseg plan, but the issue then became getting our kids into separate [self-contained] classrooms and offering full instruction [full curriculum] in there. The judge didn't know how distracting it would be to bring kids with special needs from across town [black students] into mainstream [regular] classrooms. This wasn't a racial thing. . . . The judge simply didn't think things through.

She went on to explain how LDA meetings became a context of support and collective effort among members, a forum for developing “solutions,” including test score deflation, addressed above.

[Our] newsletter addressed questions and concerns. . . . We also regularly invited local principals and [school] psychologists to our meetings to answer questions and inform us on what our members can and cannot do. . . . We knew the rules. . . . Next spring [of 1976], we were advising parents to ask for their kids to be tested without special assistance [extra time, separate rooms, test readers] in the fall test [CTBS]. Some didn't do it and others hated it, but they were willing to do it. . . . They could ask for assistance later on [future CTBS occasions]. . . . Some parents talked to their principals for ways to avoid disruptions in their kids' services [including] donat[ing] money for [self-contained] classrooms. . . . Others talked to special ed teachers for what was needed in [self-contained] classrooms.

Finally, she, like several other interviewees, noted a key motive for MSD schools to cooperate with white LD parents' efforts to change categorization patterns in the context of desegregation. As she put it, “The schools didn't mind helping our parents at all . . . they wanted to keep as many white kids as possible. They were losing so many [white] families. The district's LD program was great. Everyone wanted to save it [from desegregation]. . . . Principals didn't like what was going on either. . . . They helped us out well into the 1980s in *both* parts of town [white and black neighborhoods]. . . . We [LDA] informed new parents [of new white LDs] as best we could as they came into the program.”

Between 1980 and 1989, LDA had five large meetings per year. Its bi-monthly newsletter included parent questions and related answers, including information on district, state, and federal regulations. The newsletter also included the association's contact information, meeting schedule, and

curricular information. LDA's newsletter was mailed to members and was freely available in schools and the central district office, which made it easily accessible to prospective members and nonmembers.

Apart from the goal of helping curb white exit from the district, MSD schools may have had a specific financial incentive in keeping white LD parents from leaving. As the principal of an MSD middle school in the mid-1980s stressed, "fewer [white LDs] meant fewer special ed dollars." One of the two school psychologists in our sample put this in a more elaborate context. She worked in MSD from the early 1980s to the mid-1990s and regularly participated in IEP team meetings. According to her, "[Special education programs] always need more money. Ask any principal, [state funds] for special ed kids are a big deal. The district [special education unit] knew that, too. No one liked to see [state funds] go. . . . A lot of the state money went to instruction, but principals had a bit of control over how to divide it up in the building." The state funds addressed here are in addition to the base funds MSD received for each student from local, state, and federal sources regardless of disability status. Revenues became increasingly critical, as district enrollment declined and additional fiscal problems emerged in the 1980s. As noted earlier, organizations may favor dominant groups in categorization out of self-interest, in addition to effects of homosocial reproduction and the role of bias and prejudice against subordinate groups.

### Categorical Revision

Categorical manipulation may require revisions to technical attributes of low-status categories. For LD3, this implies alteration in the scope of curricular coverage and reinterpretation of the self-contained classroom as a setting that is more desirable than the regular classroom for disabled students.

#### *What did attribute alteration in LD3 involve?*

There is nothing about settings separated from the regular classroom that inherently restricts curricular coverage—as noted earlier, in gifted education they are used for covering advanced curricula. Thus, self-contained classrooms can be construed as places where it is appropriate to cover material beyond the reduced curriculum. This introduces a degree of flexibility in how LD3 is defined and configured, since it is possible to deliver the full curriculum to LD3s by increasing paraprofessional support in self-contained classrooms to assist instruction by special education teachers. Such assistance ordinarily is provided to regular classroom teachers in delivering the full curriculum to LD1s, but in elementary and middle school, where topics do not require the same degree of teacher specialization as in

high school, paraprofessionals also can be used in self-contained classrooms. Yet, without abundant resources to hire more paraprofessionals, this may result in fewer paraprofessionals in regular classrooms and thus reduced learning opportunities for LD1s. There is a strong presumption in local and state special education funding that the full curriculum will be delivered in regular classrooms and that paraprofessionals are integral to that process (Parrish, Chambers, and Guarino 1999). Given this strong presumption, there is little that formally limits the extent of paraprofessional reallocation to self-contained classrooms. Thus, considerable reallocation can occur at the discretion of administrators, namely, building principals and staff at the central district special education unit. Our interviewees who held district-level administrative posts in various years in MSD declined to comment on this issue. As for principals, only two were willing to address it, but they came to MSD in resegregation years and did not have direct knowledge of or experience with curricular modification to LD3 during desegregation. However, both noted that, in their buildings, veteran special education teachers described self-contained classrooms of the desegregation era as “enhanced special ed classrooms” given “all the extra staff allocated to [them].” For an analysis of paraprofessional reallocation to self-contained classrooms, we examined trends in per pupil “excess cost” for LD3. Excess cost is the difference between the costs of educating a disabled and a non-disabled student.

Figure 9 shows trends for MSD’s LD3 excess cost relative to its LD1 excess cost (*columns*) and relative to the national average excess cost for LD3 (*solid line*). In 1973, per pupil excess cost for LD1 was approximately 10% less than that for LD3 ( $1 - 0.91$ )—a common difference given the extra expenditures for specialized staff and services in self-contained classrooms (Parrish 1996). But the difference grew to 27% by 1979 ( $1 - 0.73$ ) and 34% in 1982 ( $1 - 0.66$ ). In terms of amount, LD1 excess cost dropped by \$469 from 1973 to 1982 or nearly \$60 per year per student, while that of LD3 rose by \$823, about \$100 per year per student. Although not enough to raise controversy in any single year, these changes indicate that, in aggregate, MSD raised resources per pupil in LD3 when whites dominated it. Also, data not reported by grade level may have obscured the scope of resource reallocations to a degree. Since reallocations likely occurred only in elementary and middle schools, and not in high schools, isolating excess cost information for pre-high school grades may reveal differences favoring LD3 greater than what is discernible from data available from the district. In 1983, the chairperson of the paraprofessional chapter of MSD’s teacher union was quoted in the media as saying she “received complaints from [regular] teachers . . . about problems caused by the declining number of aides [paraprofessionals] for students with learning disabilities.” In the same story, an elementary school parent was quoted as asserting that “students

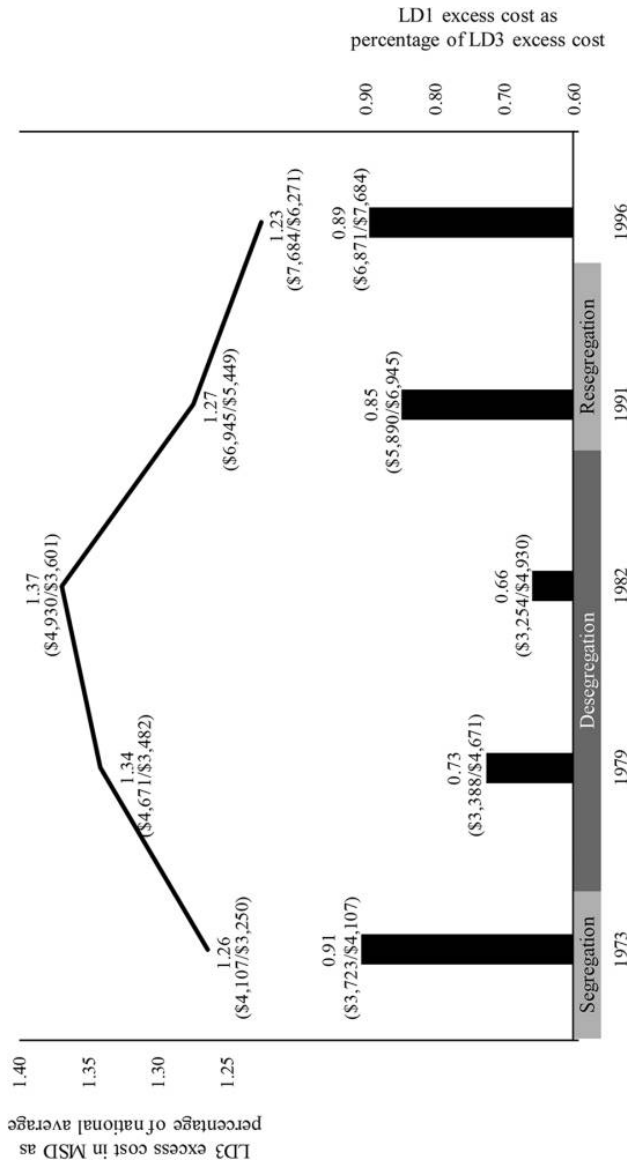


FIG. 9.—LD1 and LD3 excess costs in MSD for available years. Costs associated with reported percentages are in parentheses. All costs are expressed in 1990 dollars. Uneven intervals on the year axis are displayed evenly for visual simplicity. MSD costs were obtained from MSD officials. National averages for LD3 excess cost for 1973, 1979, 1982, and 1996 are from four different federally funded special education finance studies (citations not provided to protect site anonymity since citations reveal the years of MSD's court case). The national average for 1991 (\$5,449) is the authors' calculation based on the linear yearly rate of increase from 1982 to 1996:  $3,601 + \{[(6,271 - 3,601)/(20 - 7)] \times (16 - 7)\}$ . No formal national studies exist for that particular year.

with learning disabilities [in regular classrooms] were having difficulties because there were only a few aides to . . . relieve the teacher.” MSD records offer no evidence of downsizing of paraprofessionals at the time. By 1991, the second year of resegregation, LD1 excess cost in MSD was 15% less than that of LD3 ( $1 - 0.85$ ). In 1996, a year after resegregation was completed, it was 11% smaller ( $1 - 0.89$ ), resembling the pre-desegregation difference and suggesting that LD3 resources declined as whites returned to LD1.

Reviews of special education finance (Parrish 1996) indicate no national changes in funding conventions for regular and self-contained classrooms that could explain the shifts in MSD. The solid line in figure 9 compares MSD’s LD3 excess cost to the national average. It was 26% greater than the national average in 1973. This is consistent with differences in urban districts to which states allocate additional funding, as low-income students have more intensive needs than peers in the same categories in other districts (Donovan and Cross 2002). But the difference grew to 34% by 1979 and 37% in 1982. Taking each trend individually, the national average grew by about 11% (\$3,250 to \$3,601) compared to an increase of 23% in MSD (\$4,107 to \$4,930). This pattern was reversed by 1991 when MSD’s LD3 excess cost was 27% greater than the national average. It dropped to 23% in 1996 following resegregation. Thus, with resegregation, MSD’s LD3 excess cost moved closer to both its LD1 excess cost and the national average for LD3 excess cost.

*What did attribute reinterpretation in LD3 involve?*

Since the regular classroom is the customary setting for maximum access to the full curriculum, disabled students in this setting interact with nondisabled peers and other disabled ones who receive instruction there. This is seen as a social benefit of the regular classroom naturally coupled with the full scope of curricular coverage. Because removal from this setting can limit the student’s social experience, it is commonly a less desirable option unless genuinely warranted (Sailor 1989). Thus, white migration from LD1 to LD3 in MSD required a change in valuation direction about separation from the regular classroom—more separation had to be reinterpreted as more beneficial than less separation in revaluing LD3, at least under conditions of desegregation. Maintaining “quality education” by migrating to LD3 was, for several white parents in our interview sample, a strategy that implied not just curricular modifications to LD3 but the creation of a space that was “quieter and less distracting” than the regular classroom, as one mother put it. Three of the five white LD1 parents from early years of desegregation (all with children in elementary or middle school) addressed how they and other parents feared that desegregation could make regular classrooms “disorderly places if not managed well,” places in which their

children may find it “difficult to focus” and may be “intimidated and isolated from others.” Although such views reflect white prejudice about black behavior generally, they were specifically tied, in this case, to concerns with disabled blacks, who white parents feared could be “disruptive” and “pose challenges to teachers and aides [paraprofessionals]” in regular classrooms. The same sentiment was conveyed by LDA’s president who, as quoted above, claimed that the “judge didn’t know how distracting it would be to bring kids with special needs from across town [black students] into mainstream [regular] classrooms.” A white elementary special education teacher, who came to MSD in the early 1980s, recalled how white LD parents had come to believe that the self-contained classroom was more beneficial:

They did not view the regular class as better than the special ed [self-contained] classroom. It was quite dumb really. . . . I was in a few [IEP] meetings when I first came in and I tried to convince some parents [to favor the regular classroom] and they sort of got mad. They genuinely believed their children would be served better in a [self-contained] class. . . . They looked down upon services in regular classes. The whole thing was upside down in [MSD]. . . . unlike in my previous job [in another district]. . . . But I was told [by school administration] and some teachers that this is the way it is. It went on for a quite a while.

This account is consistent with those from five other white and two black teachers. They suggest that separation from the regular classroom was a desirable attribute of LD3 (for whites) under desegregation, provided, as our findings indicate, that the full curriculum was delivered in self-contained classrooms. Statements from six other white parents with LD children in the middle years of desegregation support this. Our findings also shed light on why whites preferred LD3 over LD2 in reaction to black access to LD1. Unlike LD3s, LD2s spend only part of the day removed from the regular classroom, for remedial instruction. Thus, LD2 normally is a higher status category than LD3, but white LD2s in MSD would have had to be in regular classrooms for part of the school day, sharing an instructional space that many white parents viewed as potentially disruptive. We also found that separating white LDs from regular classrooms may have become an organizationally preserved norm over time under conditions of desegregation. Four of the white parents with LD children in the middle years of desegregation commented on how IEP team members recommended the LD3 category rather than the parents themselves advocating for it. As one recalled: “When my son was diagnosed with [LD], I wanted him to stay in the regular class but the psychologist said the special ed [self-contained] class was the best option. . . . I knew some of the teachers, they said the same thing. . . . I was told at the [IEP meeting] it was really up to me but they recommended against the regular class. They said he should be better off in the [self-contained] class with better services and learning, so I went along. It

was fine.” Interview data indicate that customary valuation patterns for LD1 and LD3 were restored during resegregation. Six white parents in our sample directly experienced this. All of them addressed how their children were switched from LD3 to LD1 to maintain “good services.” As one explained:

We [she and her daughter] moved here from Florida in [1985] to stay with my sister. . . . I knew there was a busing program at the time. . . . My fourth grade daughter had [LD] and had been in the gen ed [regular] class [in Florida]. But my sister said we should have her placed in the special ed [self-contained] class. One of her three kids had been in one. . . . When busing ended we got our kids out and had them put in the [regular classroom]. My daughter liked that. Many parents in [the local school building] did that to maintain good services. The special ed class was for more troubled kids [pointing her finger in the direction of black neighborhoods]. It’s bad to say that, but still.

*Were black LD1s detrimental to regular classrooms?*

In desegregation, black LD1s may have been composed of two groups: (1) those whose impairments truly warranted the LD1 category (“true LD1s”) and (2) those who may have been miscategorized as LD1 (“false LD1s”) because of pressure for black access to LD1 and the effort to keep blacks out of LD3. As noted in our discussion of figures 5 and 6, greater use of LD1 for blacks was coupled with lesser use of LD3 and ED2. Thus, both true and false black LD1s were plausibly students who otherwise may have been categorized as having either a severe learning disability (LD3) or a moderate emotional disturbance (ED2). MSD is likely to have maximized the number of true LD1s to minimize instructional challenges and complications in compliance with the court order. Eighteen of the 23 teachers in our sample were regular education teachers who taught black LD1s at various points in the 1975–95 period. Nearly all commented on how black LD1s were neither a burden nor disruptive. As a white teacher who taught middle school math during the entire time frame of our study elaborated: “[MSD] was apprehensive about mainstreaming black special ed kids [placing them in regular classrooms] before busing. But they did just fine and they didn’t bug anybody. Some of them didn’t even need the extra help. . . . Some needed more attention [which] we couldn’t always provide since we didn’t have enough aides [para-professionals]. So they fell behind at times but they never caused trouble. We had to cover the whole curriculum. . . . So maybe they didn’t fulfill their full potential, but they all came out OK.”

Lack of proper support for black LD1s and the possibility that some were false LD1s (because LD3 or ED2 categorization was more appropriate) were unlikely sources of disruption in regular classrooms because of what one teacher referred to as the “quiescent posture” of black LD1s. According

to 9 of the 13 white teachers and 5 of the 10 black ones we interviewed, black LD1s were often “allowed to remain passive and underperform[ing],” “were not always given the opportunity to blend in,” and “received limited attention”—a pattern observed in other districts as well (Carlberg and Kavale 1980; Wright et al. 1982). As one white middle school math teacher, who joined MSD in the mid-1980s, recalled: “[Black LD1s] usually didn’t mix in. . . . Some struggled with the material [but] they rarely said anything. You had to probe them a bit to know they didn’t get it. I think they felt embarrassed. I helped when I could but I wasn’t always successful since I had to keep the class going. . . . We needed more aides.”

The “embarrassment” this and several other teachers observed may have had different sources. For students with LDs—in this case, both the true LD1s and those who may have been miscategorized as LD1 when they needed to be LD3—requests for help in regular classrooms can be stigmatizing, especially when appropriate paraprofessional support is lacking. A black fourth grade teacher who was at MSD for much of the desegregation period explained this as follows:

You had to relate to them, or they’d be quiet. We are talking about a few special needs kids in a whole class here. . . . It can be uncomfortable. . . . If you are not getting all of what’s being taught, you’d ask for help once, or twice, or three times, but in the end you’d stop [because] you wouldn’t want to be *that* kid [who slows everyone down]. . . . They read well [in terms of decoding skills] but I felt their interpretation skills were weaker. I paid attention and helped, but I had to keep going in terms of the curriculum. See, that’s why you need the aides, which we did not have enough of.

For students with ED—in this case, false LD1s who needed to be ED2—an additional source of embarrassment can be their particular impairment. ED2s are likely to suffer from internalizing behaviors, inwardly directed negative acts such as hesitation and social withdrawal (compared to ED3s who often manifest disruptive outward acts such as aggression and bullying; see Gage 2013). Thus, ED2s miscategorized as LD1s may remain reserved and quiescent in regular classrooms and underperform. This can be particularly acute without proper paraprofessional support, which several teachers said was lacking.

For empirical tests of black LD1 effects on regular classrooms, we estimated building-level correlations of nondisabled student achievement with the number of black LD1s. We expressed the number of black LD1s in a school as the share of enrollment. To reduce cross-sectional bias, we specified measures in terms of yearly change. For instance, for 1975–76, we calculated the average change in math scores of nondisabled students in each building and correlated it to the change in the share of black LD1s in the buildings ( $n = 135$ ). This resulted in a coefficient of 0.03 ( $P = .90$ ). Thus, the change in the share of black LD1s in a school from 1975 to 1976 was un-



related to the change in the mean achievement of nondisabled peers in the school. We repeated the procedure through 1989–90 and found similarly small and nonsignificant effects (e.g., 0.03 in 1977–78; 0.02 in 1980–81 and 1983–84; 0.03 in 1986–87 and 1989–90). The results were similar for reading (e.g., 0.02 in 1975–76; 0.03 in 1977–78; 0.02 in 1980–81, 1983–84, 1986–87, and 1989–90). The rejected hypothesis here is that the handful of black LD1s in a few classrooms could impede overall learning in their classrooms and thus reduce building-level achievement. To test the same hypothesis differently, we correlated the change in the share of black LD1s to the change in the standard deviation of nondisabled achievement. This is important as learning losses for pockets of nondisabled students in a school may show up less in the change in mean achievement than in the change in the spread around that mean. All estimates for math and reading were near zero (not exceeding 0.01 in any given year). We had similar findings when we broke the analysis by grade level (elementary, middle school, high school). At the high school level, we correlated the share of black LD1s separately with both the achievement of nondisabled peers and the achievement of white LD1s. This is because, after middle school, white LDs switched from LD3 to LD1 and shared regular classrooms with black LD1s in high school. The share of black LD1s in a high school was unrelated to the achievement of both nondisabled peers and white LD1s in the school. Significant learning losses in regular classrooms attributable to black LD1s would have likely raised controversy. We found no sign of this in media coverage or periodic desegregation implementation reports, which included parent surveys. Instead, what seems to have happened is that MSD categorized greater numbers of blacks as LD1 as mandated by the court but did not provide proper paraprofessional support, allowing these students to perform below their potentials, while learning patterns were unaffected for others in regular classrooms.

### Black Exclusion from White Categories

In categorical manipulation, the subordinate group is excluded from categories held by dominant groups. It is thus important to address how blacks were excluded from LD3 during desegregation and from LD1 during resegregation. Three of the eight black parents with children labeled LD in our interview sample commented on how their children were switched from LD3 to LD1 in early years of desegregation with negative consequences. Their accounts are echoed in a vivid complaint from the parent of another black LD student, voiced in a public meeting held in 1978: “My son used to do better in the separate class [LD3], but now he is failing [in LD1]. He can’t keep up. He is nervous. . . . The school says it is better for him. I couldn’t get them to get him out of the common classroom [LD1]. . . . He was tested again

[after the tests that made him eligible for LD1] but the result [categorization] was the same. He is unhappy.”<sup>20</sup>

In the same meeting, another black parent, whose son also was reassigned from LD3 to LD1, complained about her son’s inability to “keep up with classmates” and her unsuccessful “struggle . . . to place him [back] in a special ed [self-contained] class.” MSD may have underestimated the IQ-achievement discrepancy for some blacks by inflating their tests scores in order to categorize them as LD1 when LD3 was more appropriate. But, as noted above, significant test score swings were not observed for black LD1s (compared to significant swings for whites LDs, shown in fig. 7). There were hardly any black LD1s in any given year whose initial assignment to LD1 was tied to a high test score that became notably lower in subsequent years. Thus, it is more likely that IEP teams simply judged non-manipulated IQ-achievement discrepancies for at least some blacks as small enough to justify LD1 categorization even when LD3 may have been a better choice. Ultimately, resulting grievances were rare, as LD1 normally was a more desirable category than LD3 and parents were unlikely to complain about LD1 categorization—particularly when resource reallocations from LD1 to LD3 (for paraprofessionals) were not high enough in any single year to raise controversy and were not publicly well exposed and thus not well understood.<sup>21</sup> Yet the fact that there were some grievances about limited access to LD3 suggests black exclusion from LD3. As for resegregation, blacks were increasingly excluded from LD1 when whites returned. But this relied more on limiting the number of new black LD1s than on reassigning existing ones, reducing the risk of grievances about declining access. Such grievances were absent in our interviews, media accounts, and desegregation implementation reports. In 1989, one year before resegregation, there

<sup>20</sup> This was reported in a periodic desegregation implementation report submitted to the court. Citation not provided to protect district anonymity.

<sup>21</sup> The number of black parents who could have complained was small to begin with, which can be deduced from fig. 2A. In 1973, there were about 930 black LD3s ( $0.015 \times 62,000$ ). It is reasonable to question whether all 930 were appropriately categorized because, given the racial bias in MSD, at least some of them plausibly could have been better served in LD1 or LD2. This would mean that not all 930 were benefiting from their LD3 assignment, and, conjecturally, their families may have appreciated leaving LD3. As for the remaining ones—arguably the “true LD3s”—even if all were forced into LD1 during desegregation, not every one of them was likely to have parents who were dissatisfied with the move and at the same time aware of the problem and efficacious enough to complain. With regard to later years of desegregation, since LD3 was an increasingly unlikely destination for blacks, the number of blacks who would have experienced a move from LD3 to LD1 was more limited than in earlier years. Thus, the number of black students who experienced both LD3 and LD1, and who also had parents who could compare and complain, was increasingly limited. This likely reduced the risk of complaints about LD1 assignment by black parents whose children could have benefited more from LD3.

were about 935 black LD1s, which as seen in figure 2A, dropped slightly to 900 in 1990 ( $0.018 \times 50,000$ ). This indicates that resegregation was not coupled with a speedy reassignment of black LD1s to other categories. But the number of black LD1s dropped to 460 in 1993 (fig. 2A;  $0.009 \times 51,000$ ). Of these 460, 383 were among the 935 LD1s from 1989, meaning only 77 blacks ( $460 - 383$ ) were new to LD1, many of whom were also new to MSD. This indicates a limited assignment of new blacks to LD1.<sup>22</sup>

## DISCUSSION AND CONCLUSION

Resisting pressure for greater subordinate group access to high-status categories is a common means by which organizations perpetuate inequality. We focus on a different modality of resistance, categorical manipulation. Here, subordinate groups do gain significant access to high-status categories, but existing high- and low-status categories are reranked. Dominant groups reaffiliate with low-status categories, which also may be revised for improvements. Previously low-status categories become new markers of distinction and territories of exclusion, while previously high-status categories suffer in rewards and value. We illustrate this in the context of how schools rerank mild disability categories in response to pressure for greater black access to a customarily majority-white, high-status category.

Categorical manipulation extends understanding of organizations' role in "categorical work" (Tilly 1998) in relation to inequality. Such work involves not just creating and adopting categories and assigning people to them in inequitable ways but also rearranging and reconstructing categories and reassigning people to them in ways that preserve disparities. This extended view captures a broader variety of dynamics pertinent to the study of organizations and inequality. Categorical manipulation may be rarer than the more familiar modalities by which dominant group interests are protected (e.g., closure, creating a new category), but rarity itself is significant evidence of the basic insight that people invent, reinvent, and modify categorizations to produce inequality. We contribute to the literature in three specific ways. First, categorical manipulation is a previously unexamined response type in the analysis of reactions to pressure for equality, one that is not fully captured by familiar concepts such as symbolic compliance, ritualization, tokenism, cooptation, and defiance. Second, categorical manipulation injects a bidirectional view of status competition into research

<sup>22</sup> We determined the new enrollees to MSD by using the transaction code information in student records (see table 1). Transaction codes also helped determine that among the 552 blacks who were LD1 in 1989 but not in 1993 ( $935 - 383$ ), about 8% graduated, 12% dropped out, and 15% withdrew from MSD. Most of the remaining 65%—about 360 LD1s—were gradually recategorized as LD3 and, in a few cases, ED2.

on organizations and inequality, one that accounts not for just upward but also for downward movements along the hierarchy of status markers in competition for advantage. And third, categorical manipulation helps highlight the activity environment where clients, audiences, and constituencies are categorized. This context involves a wide spectrum of malleable categorical arrangements, offering ample opportunities to examine their manipulation. Thus, future research can explore categorical manipulation not just in the employment context but also in the activity environment.

### Guideposts for Examining Categorical Manipulation

Below we summarize elements that are important to address in the study of categorical manipulation, which future work can extend and modify.

*Address compliance and reaffiliation.*—The first step is to substantiate that subordinate group access to high-status categories is not tokenistic or ritualistic and that dominant group reaffiliation with low-status categories is correlated to subordinate group access to high-status categories.

*Test alternative reasons and motives for reaffiliation.*—In categorical manipulation, downward movement by dominant groups occurs specifically to maintain advantage, not for other reasons. In the MSD case, we tested alternative reasons for white migration to LD3, such as school capacity. We also relied on interview and other archival data (media accounts, court reports) to show that white resistance to sharing special education services for “quality education” was a principal factor in migration to LD3.

*Address how reaffiliation occurred.*—Since malleability is a scope condition for categorical manipulation, inquiry can address which aspects of malleability enabled reaffiliation and how. We provided strong evidence on test score deflation as a means of white migration to LD3. This strategy was plausible given the latent nature and the limited direct observability of IQ-achievement discrepancy as a yardstick for LD severity. The strategy was possible also because of the limited uniformity in categorization rules and procedures. Test score deflation may have been combined with other factors enabling reaffiliation—such as subjective judgments at play in IEP meetings—but these were beyond the scope of our data.

*Address whether categorical revision occurred and, if so, how.*—Malleability also enables revision to low-status categories. Documenting attribute alterations and reinterpretations provides evidence on how low-status categories are revalued. We did this by examining resource reallocations from LD1 to LD3 (regarding paraprofessional support) and by addressing how white parents reinterpreted more separation from the regular classroom as more desirable than less separation under conditions of desegregation.

*Address exclusion from low-status categories.*—Illustrating subordinate group exclusion from previously low-status categories and examining

how it occurred can strengthen evidence for categorical manipulation. In MSD, student records showed limited black presence in LD3 when the category was white dominated, but we lacked direct evidence of how blacks were excluded from LD3. Plausibly, IEP teams judged IQ-achievement discrepancies for at least some black LDs as small enough to justify LD1 categorization when LD3 was a better choice. Our qualitative data indicate that black parents were unable to switch their children from LD1 to LD3 even when they demanded it. But grievances about exclusion from LD3 were rare in MSD, as LD1 normally was more desirable than LD3 and many black parents may not have been aware of or efficacious enough to complain about the LD1 category when LD3 was more appropriate. This, however, is an idiosyncratic aspect of the MSD case, as subordinate groups may be aware of and systematically oppose exclusion from previously low-status categories in other cases, even though they may lack the power to ultimately prevent exclusion.

*Address transiency and selectivity.*—Two other elements are important to address in future research. They are based on our empirical findings. The first is transiency, or the temporary nature of categorical manipulation. In MSD, the traditional categorical hierarchy and patterns of racial assignments were restored when pressure for equality ended. This shows that categorical manipulation need not be permanent and that it prevails as long as it helps maintain privilege. Thus, observations of “categorical restoration” can strengthen the evidence on the strategic nature of categorical manipulation and further substantiate the role of power in such manipulation and in group relations more generally. As Halnon (2002) notes, dominant group power figures into the adoption and abandonment of low-status categories. The second element is selectivity regarding choices about (a) which low-status category to adopt when more than one is available and (b) how much of the low-status category to adopt. Manipulation in MSD occurred along lines of instructional placement within the same label (LD1 and LD3) and did not involve different labels (LD vs. MR/ED). This is likely because switching labels may have required overcoming racially nuanced stigma associated with MR or ED and may have been more difficult than changing instructional placement. Moreover, sticking to a traditionally white label (i.e., LD) and manipulating the categories within it was a more efficient option as long as it helped maintain advantage. Evidence on such selectivity can further highlight the strategic nature of categorical manipulation. Relatedly, migration to LD3 did not extend to high school because of the infeasibility of offering the full high school curriculum in self-contained classrooms. Whites were selective about which “slice” of LD3 to adopt. Observing such dynamics strengthens evidence on the strategic nature of categorical manipulation. Selectivity reveals how dominant groups pick status-enhancing features and reject status-harming ones when adopting low-status categories.

## Conclusion

Organizations often resist pressure for change by limiting their compliance with a given demand or by decoupling compliance from functional activities. Categorical manipulation addresses how even full compliance with a demand (e.g., ending subordinate group exclusion from high-status categories) may not result in genuine change, as the organization may enact other changes alongside its compliance in order to reduce or nullify intended benefits of compliance (e.g., reranking existing high- and low-status categories). In this regard, categorical manipulation may be viewed as a case of a broader class of “countervailing responses” limiting change. Conceivably, mortgage lenders may comply with consumer protection rules that limit profits but also create new products violating the spirit of the law, the effects of which are not well understood or readily detectable. Food producers may incur new costs by complying with pressures to abandon cheap, harmful ingredients but recover losses by lowering the quality of other ingredients to legal minimums. Crozier (1964) offers a classic example of a countervailing dynamic in which petty officials in French provincial administrations resisted innovation efforts of prefects they viewed as trespassing on their sphere of influence. While petty officials complied with prefects’ mandates, they also engaged in incessant rule following in other tasks to disrupt innovation efforts. We illustrate how compliance with a demand for equality can be part of a broader strategy to maintain inequality. Future research can address different patterns of countervailing responses that may occur in other situations of demand for change.

Discriminatory acts vary in visibility. Some are undisguised (e.g., Jim Crow laws), while others are more obscure (e.g., implicit racism in job promotions). This distinction pertains to categorical manipulation, too. Depending on conditions, elements of the process may be readily visible, such that specific actions and actors are easily identifiable, or the process may involve varying degrees of what Morrill, Zald, and Rao (2003) call “social occlusion.” Various actions related to categorical manipulation in MSD transpired outside of public view, such as in demarcated group settings like the LDA meetings or in bureaucratic settings like IEP meetings or principals’ offices, where actions may be shielded from scrutiny. None of the actions were secret, but they often were undetectable unless one knew to look for them and to view them as elements of a process by which inequality is maintained. Such obscurity is not an inherent feature of categorical manipulation, but, since the concept treats compliance with a demand for equality as part of an effort to maintain inequality, it can expose discriminatory acts coupled with compliance that may otherwise remain unexplored. Thus, categorical manipulation extends inquiry’s reach into organizations’ “dark side,” where benevolent acts can be a means of distracting attention away from harmful ones (Vaughn 1999).

The concept of categorical manipulation also brings into focus less recognized limits on regulation. Research on organizations and inequality views flaws in antidiscrimination regulation as a principal factor enabling evasion of pressure for equality. Specifically, when regulation involves a high degree of legal ambiguity (i.e., vague language on objectives, greater emphasis on bureaucratic rituals than on substantive methods for equity, or weak enforcement mechanisms; Edelman 1992), organizations can evade change by reinterpreting and ceremonializing mandates (Sutton and Dobbin 1996). This insight's utility focuses attention on weaknesses of regulation itself, with limited recognition of the degree to which a given domain of categorization is regulatable in the first place: Is a weak regulation "weak" because less ambiguous laws are absent albeit possible or because the targeted domain precludes more effective laws? Highly malleable categorical arrangements are less open to regulation given limits on the strength and utility of categorization rules and procedures and given the role judgment or taste can play in determining category attributes and in interpreting them for valuation. Mild disability categories are a case in point, as they are highly open to reaffiliation and revision. In MSD, this precluded the court's ability to set clear and strong guidelines and monitoring mechanisms to enforce genuine equity in mild disability categorization, in effect enabling categorical manipulation. Contextual limits on regulative clarity and strength are not lost on Edelman (1992), who notes that legal ambiguity stems partly from the difficulty of formalizing and monitoring human activity and decisions, introducing indeterminacy in any setting. But independent of this, settings themselves vary in how they impose indeterminacy regardless of actors' preferences for or against regulative strength. Under conditions of high malleability, strong pressure for equality may trigger categorical manipulation because the context itself may not permit regulation to prevent or even expose such manipulation. In fact, under such conditions, organizations may not resist demands for equal access to high-status categories because they can maintain dominant group privilege by helping to reverse the hierarchy of existing categories.

APPENDIX

TABLE A1  
LOG-ODDS ESTIMATES FOR MILD DISABILITY CATEGORIES IN ELEMENTARY AND MIDDLE SCHOOL GRADES FROM 1973 TO 1993

	LEARNING DISABILITY			EMOTIONAL DISTURBANCE		
	Regular Classroom	Resource Room	Self-Contained Classroom	Regular Classroom	Resource Room	Self-Contained Classroom
Year (1973 is baseline):						
1974.....	.16 (.19)	.93*** (.17)	-2.33*** (.12)	-2.58 (1.55)	3.11*** (.28)	-.73 (.63)
1978.....	-1.58*** (.33)	-.61** (.28)	11.47*** (.19)	-1.70 (2.34)	12.90*** (.58)	-2.28** (.86)
1981.....	-1.18*** (.34)	-.59** (.27)	11.53*** (.19)	1.67*** (.49)	13.46*** (.55)	2.71** (1.29)
1984.....	-2.87*** (.55)	.52** (.25)	10.97*** (.19)	1.65*** (.40)	14.26*** (.55)	2.96** (1.48)
1987.....	-1.85*** (.41)	-.27 (.29)	10.81*** (.21)	1.64*** (.61)	15.97*** (.54)	1.81** (.85)
1990.....	1.46*** (.26)	-.30 (.29)	-.81** (.23)	1.16 (2.12)	15.32*** (.54)	-1.93 (1.43)
1993.....	1.24*** (.23)	-.45 (.32)	-1.25*** (.24)	1.09 (2.63)	16.12*** (.59)	-1.57 (1.41)
Race:						
Black.....	-1.38*** (.21)	-1.17*** (.24)	2.91*** (.88)	-.87 (1.87)	1.40*** (.36)	.94*** (1.06)
Race × year:						
Black × 1974.....	-.01 (.22)	.21 (.21)	.07*** (.02)	.27** (.11)	.12 (.07)	.07** (.03)
Black × 1978.....	2.86*** (.34)	.08 (.38)	-5.02*** (.99)	.14** (.07)	-.38*** (.12)	.13** (.06)
Black × 1981.....	3.36*** (.37)	.14 (.38)	-5.25*** (1.03)	.48*** (.15)	-.32*** (.13)	.12 (.58)
Black × 1984.....	3.26*** (.56)	.23 (.31)	-5.42*** (1.00)	.46*** (.19)	-.65*** (.19)	.09 (.56)
Black × 1987.....	3.25*** (.42)	.35 (.21)	-5.37*** (.95)	.40*** (.14)	-1.21*** (.35)	.08 (.33)
Black × 1990.....	-1.70*** (.32)	-.32 (.38)	-.59*** (.02)	.14** (.07)	-.01 (.11)	.19** (.08)
Black × 1993.....	-2.53*** (.44)	-.45 (.39)	-.04** (.04)	.03 (.06)	.29*** (.11)	.30** (.12)



TABLE A1 (Continued)

	LEARNING DISABILITY			EMOTIONAL DISTURBANCE		
	Regular Classroom	Resource Room	Self-Contained Classroom	Regular Classroom	Resource Room	Self-Contained Classroom
<b>Student characteristic:</b>						
Male	1.12*** (.06)	1.19*** (.07)	1.00*** (.04)	1.19*** (.57)	1.92*** (.13)	-.01 (.25)
FRLN	-.35*** (.13)	-.15 (.13)	-.18 (.13)	-1.74 (1.14)	.02 (.24)	10.63*** (.20)
Single-parent household	-.31*** (.08)	-.33*** (.08)	-.53*** (.08)	-.09 (.84)	-.86*** (.14)	.29 (.37)
Log(neighborhood instability)	.23*** (.08)	.51*** (.09)	.48*** (.09)	-.52 (1.28)	1.76*** (.24)	-.47 (.45)
Grade level	.01** (.01)	-.07*** (.01)	.12*** (.01)	.12 (.13)	.13*** (.03)	-.02 (.09)
Mathematics achievement	-.02*** (.00)	-.04*** (.00)	-.03*** (.00)	-.02 (.04)	-.05*** (.00)	.00 (.01)
GPA	-.15*** (.04)	-.25*** (.07)	-.19*** (.04)	.54 (.70)	-.25*** (.09)	-.24 (.33)
School-by-year effects	...	...	...	...	...	...
Constant	-4.11*** (.91)	-4.43*** (.90)	-19.22*** (.90)	-22.23*** (9.13)	-35.64*** (1.78)	-27.88*** (4.51)
<b>Biological Disabilities</b>						
<b>Mental Retardation</b>						
Year (1973 is baseline):						
1974	-3.25*** (1.05)	-.03 (.13)	.91*** (.25)	9.83*** (1.11)	1.63*** (.61)	.82*** (.28)
1978	-10.07*** (4.1)	-.36*** (.14)	.47 (.38)	2.16*** (.85)	2.30*** (.71)	.17 (.44)
1981	-10.11*** (5.4)	-.32** (.16)	.66 (.37)	11.69*** (.93)	1.88** (.85)	.19 (.42)
1984	-10.58*** (5.7)	-.63*** (.13)	1.12*** (.36)	11.47*** (1.31)	2.77*** (.74)	.14 (.42)
1987	-10.67*** (4.8)	-.53*** (.17)	.68 (.45)	12.90*** (1.33)	3.77*** (.63)	.13 (.41)
1990	-10.71*** (4.5)	-.22 (.16)	-.64 (.61)	13.12*** (1.32)	3.44*** (.63)	-.39 (.45)
1993	-11.19*** (3.8)	-.15 (.15)	-.92 (.65)	14.28*** (1.26)	3.32*** (.64)	-.49 (.43)
Race:						
Black	-.42 (.50)	.43*** (.12)	.60 (.44)	-1.72** (.63)	1.57*** (.71)	-.75 (.50)



TABLE A2  
LOG-ODDS ESTIMATES FOR MILD DISABILITY CATEGORIES IN HIGH SCHOOL GRADES FROM 1973 TO 1993

	LEARNING DISABILITY				EMOTIONAL DISTURBANCE				
	Regular Classroom	Resource Classroom	Self-Contained Room	Regular Classroom	Resource Room	Self-Contained Classroom	Regular Classroom	Resource Room	Self-Contained Classroom
Year (1973 is baseline):									
1974	.17 (.17)	.99*** (.15)	-2.18*** (.12)	-2.25 (1.53)	3.16*** (.25)	-.83 (.64)	-2.25 (1.53)	3.16*** (.25)	-.83 (.64)
1978	-1.41*** (.31)	-.75** (.32)	7.89*** (.17)	-1.87 (2.43)	13.12*** (.49)	-2.05** (.86)	-1.87 (2.43)	13.12*** (.49)	-2.05** (.86)
1981	-1.31*** (.33)	-.51** (.27)	7.46*** (.17)	1.55*** (.54)	13.64*** (.47)	2.40** (1.13)	1.55*** (.54)	13.64*** (.47)	2.40** (1.13)
1984	-2.21*** (.33)	-.52** (.24)	7.30*** (.21)	1.56*** (.34)	15.20*** (.50)	2.23** (1.11)	1.56*** (.34)	15.20*** (.50)	2.23** (1.11)
1987	-1.78*** (.40)	-.24 (.19)	7.55*** (.21)	1.62*** (.70)	15.56*** (.49)	1.88** (.83)	1.62*** (.70)	15.56*** (.49)	1.88** (.83)
1990	1.55*** (.21)	-.24 (.21)	-.76** (.20)	1.10 (3.33)	14.88*** (.53)	-1.76 (1.33)	1.10 (3.33)	14.88*** (.53)	-1.76 (1.33)
1993	1.21*** (.23)	-.41 (.31)	-1.14*** (.20)	1.07 (3.35)	15.78*** (.54)	-1.41 (1.36)	1.07 (3.35)	15.78*** (.54)	-1.41 (1.36)
Race:									
Black	-1.77*** (.21)	-1.15*** (.24)	2.97*** (.87)	-.82 (1.67)	1.41*** (.33)	.88*** (.10)	-.82 (1.67)	1.41*** (.33)	.88*** (.10)
Race × year:									
Black × 1974	.11 (.17)	.15 (.22)	-.25*** (.01)	.14** (.06)	.09** (.04)	.13*** (.03)	.14** (.06)	.09** (.04)	.13*** (.03)
Black × 1978	1.66*** (.21)	.24 (.34)	-2.91*** (.96)	.09** (.04)	-.38** (.18)	.17*** (.01)	.09** (.04)	-.38** (.18)	.17*** (.01)
Black × 1981	1.66*** (.35)	.13 (.35)	-2.92*** (.97)	.33*** (.15)	-.41** (.20)	.13 (1.55)	.33*** (.15)	-.41** (.20)	.13 (1.55)
Black × 1984	1.68*** (.45)	.26** (.12)	-2.87*** (.96)	.46*** (.16)	-.72** (.34)	.10 (1.72)	.46*** (.16)	-.72** (.34)	.10 (1.72)
Black × 1987	1.64*** (.40)	.35*** (.11)	-2.87*** (.95)	.31*** (.12)	-.97*** (.30)	.10*** (.05)	.31*** (.12)	-.97*** (.30)	.10*** (.05)
Black × 1990	.69*** (.06)	-.50 (.31)	-.73*** (.02)	-.02 (.21)	-.07** (.03)	.12*** (.02)	-.02 (.21)	-.07** (.03)	.12*** (.02)
Black × 1993	.39*** (.01)	-.51 (.35)	-.60** (.05)	.02 (.28)	.25** (.12)	.10*** (.03)	.02 (.28)	.25** (.12)	.10*** (.03)

Student characteristic:												
Male	1.12***	(.06)	1.15***	(.08)	.94***	(.05)	1.22**	(.54)	1.78***	(.12)	-.02	(.27)
FRLN	-.37***	(.12)	-.17	(.15)	-.11	(.12)	-1.69	(1.10)	.07	(.30)	1.05***	(.19)
Single-parent household	-.38***	(.07)	-.34***	(.08)	-.55***	(.06)	-.06	(.78)	-.86***	(.11)	.28	(.31)
Log(neighborhood instability)	.23***	(.09)	.53***	(.09)	.52***	(.76)	-.49	(1.12)	1.69***	(.20)	-.49	(.42)
Grade level	.02**	(.01)	-.07***	(.01)	.09***	(.01)	.11	(.09)	.13***	(.02)	-.04	(.07)
Mathematics achievement	-.03***	(.00)	-.04***	(.00)	.05***	(.00)	-.02	(.03)	-.06***	(.00)	-.01	(.01)
GPA	-.16***	(.04)	-.25***	(.06)	-.23***	(.04)	.57	(.55)	-.27***	(.08)	-.23	(.31)
School-by-year effects	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Constant	-3.21***	(.86)	-3.77***	(.81)	-17.45***	(.81)	-26.55***	(9.92)	-31.01***	(1.26)	-28.88	(3.98)

Biological Disabilities

Mental Retardation

Year (1973 is baseline):												
1974	-3.00***	(1.01)	-.12	(.11)	.93***	(.24)	9.39***	(1.05)	1.27***	(.61)	.88***	(.28)
1978	-11.35***	(.23)	-.37**	(.15)	.48	(.38)	2.33***	(.81)	2.23***	(.71)	.07	(.44)
1981	-11.56***	(.36)	-.35**	(.16)	.59	(.36)	11.71***	(.99)	1.89**	(.80)	.14	(.41)
1984	-11.00***	(.31)	-.69***	(.17)	.90***	(.31)	12.83***	(1.27)	2.77***	(.71)	.88	(.41)
1987	-11.40***	(.40)	-.57***	(.16)	.69	(.42)	13.22***	(1.30)	3.26***	(.66)	.05	(.43)
1990	-11.79***	(.33)	-.24	(.14)	-.68	(.58)	13.58***	(1.26)	3.48***	(.67)	-.25	(.43)
1993	-11.56***	(.31)	-.16	(.14)	-.89	(.61)	12.97***	(1.21)	3.16***	(.64)	-.46	(.41)
Race:	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Black	-.41	(.42)	.34***	(.12)	.59	(.39)	-1.65***	(.66)	1.63***	(.68)	-.63	(.51)

TABLE A2 (Continued)

	LEARNING DISABILITY			EMOTIONAL DISTURBANCE		
	Regular Classroom	Resource Classroom	Self-Contained Room	Regular Classroom	Resource Room	Self-Contained Classroom
Race × year						
Black × 1974	-1.11 (1.13)	-1.14 (.12)	-.65** (.28)	1.24 (1.30)	.09*** (.03)	.50** (.22)
Black × 1978	-1.24** (.52)	-.26* (.16)	-.64** (.31)	.91*** (.26)	.02*** (.01)	.35 (.63)
Black × 1981	-1.01** (.50)	-.23 (.18)	-.70*** (.28)	.82 (.88)	.11** (.06)	.08 (.61)
Black × 1984	-.65* (.39)	-.22 (.19)	-.76* (.43)	1.25 (.89)	.25*** (.10)	-.14 (.61)
Black × 1987	-.68 (.48)	-.28** (.13)	-.93** (.44)	1.15 (.88)	.27*** (.10)	-.33 (.60)
Black × 1990	.07** (.03)	-.12*** (.04)	-.43* (.26)	.87 (.68)	.27*** (.05)	.12 (.60)
Black × 1993	.08** (.04)	-.12*** (.05)	.01 (.03)	.86 (.61)	.29*** (.07)	.24 (.50)
Student characteristic:						
Male	.57*** (.20)	.42*** (.03)	.59*** (.10)	1.13*** (.24)	.33*** (.09)	.38*** (.10)
FRLN	.34 (.44)	.36*** (.11)	.46* (.23)	.32 (.47)	-.34* (.20)	-.12 (.22)
Single-parent household	-.43* (.23)	-.39*** (.04)	-.71*** (.10)	-.55** (.13)	-.61*** (.13)	-.10 (.13)
Log(neighborhood instability)	.26* (.15)	.52*** (.04)	.35* (.16)	-.08 (.42)	.37*** (.13)	.26** (.13)
Grade level	-.19*** (.02)	.15*** (.01)	-.13*** (.02)	.18*** (.05)	-.17*** (.02)	-.17*** (.02)
Mathematics achievement	-.06*** (.01)	-.08*** (.00)	-.03*** (.00)	-.02 (.01)	-.04*** (.00)	-.02*** (.00)
GPA	-.73** (.27)	-.06** (.03)	-.29*** (.10)	.17 (.20)	-.09 (.10)	.27*** (.10)
School-by-year effects	...	...	...	...	...	...
Constant	-4.36** (1.40)	-4.12*** (.36)	-11.52*** (1.21)	-34.13*** (2.60)	-3.17*** (1.11)	-.88 (.94)

NOTE.—Estimation is based on yearly records for about 142,000 students. SEs are in parentheses and are adjusted for clustering within student ID. Wald chi-square = 591,584.860 ( $P \leq 0.01$ ). FRLN: eligible for free or reduced-price lunch. School-by-year effects (about 180 dummy coefficients) are not shown.

\*  $P \leq .10$ .

\*\*  $P \leq .05$ .

\*\*\*  $P \leq .01$ .

REFERENCES

- Abbott, Andrew. 1988. *The System of Professions: An Essay on the Division of Expert Labor*. Chicago: University of Chicago Press.
- Acker, Joan. 1990. "Hierarchies, Jobs, Bodies: A Theory of Gendered Organizations." *Gender and Society* 4:139–58.
- Arndt, Margarete, and Barbara Bigelow. 2005. "Professionalizing and Masculinizing a Female Occupation: The Reconceptualization of Hospital Administration in the Early 1900s." *Administrative Science Quarterly* 50:233–61.
- Artiles, Alfredo J., Elizabeth B. Kozleski, Stanley C. Trent, David Osher, and Alba Ortiz. 2010. "Justifying and Explaining Disproportionality, 1968–2008: A Critique of Underlying Views of Culture." *Exceptional Children* 76:279–99.
- Barley, Stephen R. 1986. "Technology as an Occasion for Structuring: Evidence from Observations of CT Scanners and the Social Order of Radiology Departments." *Administrative Science Quarterly* 31:78–108.
- Bearman, Peter, and Marissa King. 2009. "Diagnostic Change and the Increased Prevalence of Autism." *International Journal of Epidemiology* 38:1224–34.
- Bechky, Beth A. 2003. "Object Lessons: Workplace Artifacts as Representations of Occupational Jurisdiction." *American Journal of Sociology* 109:720–52.
- Becker, Dana, and Sharon Lamb. 1994. "Sex Bias in the Diagnosis of Borderline Personality Disorder and Posttraumatic Stress Disorder." *Professional Psychology: Research and Practice* 25:55–61.
- Berger, Jonah, and Chip Heath. 2008. "Who Drives Divergence? Identity Signaling, Outgroup Dissimilarity, and the Abandonment of Cultural Tastes." *Journal of Personality and Social Psychology* 95:593–607.
- Bjork, Cassie. 2016. "The 20 Best Full-Fat Foods for Weight Loss." Eat This, Not That. <http://www.eatthis.com/best-full-fat-foods/>.
- Blanchett, Wanda J. 2006. "Disproportionate Representation of African American Students in Special Education: Acknowledging the Role of White Privilege and Racism." *Educational Researcher* 35:24–8.
- Boren, Cindy. 2014. "Is Soccer Really More Popular in U.S. than NASCAR?" *Washington Post*, June 12. [https://www.washingtonpost.com/news/early-lead/wp/2014/06/12/is-soccer-really-more-popular-in-the-u-s-than-nascar/?utm\\_term=.5812b02bf343](https://www.washingtonpost.com/news/early-lead/wp/2014/06/12/is-soccer-really-more-popular-in-the-u-s-than-nascar/?utm_term=.5812b02bf343).
- Bourdieu, Pierre. 1984. *Distinction: A Social Critique of the Judgement of Taste*. Cambridge, Mass.: Harvard University Press.
- Bowker, Geoffrey C., and Susan Leigh Star. 1999. *Sorting Things Out: Classification and Its Consequences*. Cambridge, Mass.: MIT Press.
- Bradley, Harriet. 1989. *Men's Work, Women's Work*. Minneapolis: University of Minnesota Press.
- Brownell, Hiram H., and Alfonso Caramazza. 1978. "Categorizing with Overlapping Categories." *Memory and Cognition* 6:481–90.
- Brownell, Mary T., Eric Hirsch, and Seonjin Seo. 2004. "Meeting the Demand for Highly Qualified Special Education Teachers during Severe Shortages: What Should Policymakers Consider?" *Journal of Special Education* 38:56–61.
- Capps, Kriston. 2015. "Minorities and the 'Slumburbs.'" *Citylab*, January 21. <https://www.citylab.com/equity/2015/01/minorities-and-the-slumburbs/384680/>.
- Carey, Allison C. 2009. "Rise of the Parents' Movement and the Special Child." Pp. 105–33 in *On the Margins of Citizenship: Intellectual Disability and Civil Rights in Twentieth-Century America*, by Allison C. Carey. Philadelphia: Temple University Press.
- Carlberg, Conrad, and Kenneth Kavale. 1980. "The Efficacy of Special versus Regular Class Placement for Exceptional Children: A Meta-analysis." *Journal of Special Education* 14:295–309.

- Carrier, James G. 1986. *Learning Disability: Social Class and the Construction of Inequality in American Education*. Westport, Conn.: Greenwood.
- Chambers, Jay G., Yael Kidron, and Angeline K. Spain. 2004. *Characteristics of High-Expenditure Students, 1999–2000*. Report 8. Palo Alto, Calif.: American Institutes for Research.
- Charles, Maria, and David B. Grusky. 2005. *Occupational Ghettos: The Worldwide Segregation of Women and Men*. Stanford, Calif.: Stanford University Press.
- Chong, Lisa. 2015. "Benefits of Breastfeeding." *Science* 348:1440–43.
- Cross, Simon, and Barbara Bagilhole. 2002. "Girls' Jobs for the Boys? Men, Masculinity and Non-traditional Occupations." *Gender, Work and Organization* 9:204–26.
- Crozier, Michel. 1964. *The Bureaucratic Phenomenon*. Chicago: University of Chicago Press.
- Davis, Gerald F. 2017. "How Institutions Create Income Inequality." Pp. 690–704 in *The SAGE Handbook of Organizational Institutionalism*, edited by Royston Greenwood, Christine Oliver, Thomas B. Lawrence, and Renate E. Meyer. 2d ed. Thousand Oaks, Calif.: Sage.
- DeNora, Tia. 1991. "Musical Patronage and Social Change in Beethoven's Vienna." *American Journal of Sociology* 97:310–46.
- DiMaggio, Paul. 1988. "Interest and Agency in Institutional Theory." Pp. 3–22 in *Institutional Patterns and Organizations: Culture and Environment*, edited by Lynne G. Zucker. Cambridge, Mass.: Ballinger.
- . 1991. "Constructing an Organizational Field as a Professional Project: U.S. Art Museums, 1920–1940." Pp. 267–92 in *The New Institutionalism in Organizational Analysis*, edited by Walter W. Powell and Paul J. DiMaggio. Chicago: University of Chicago Press.
- DiMaggio, Paul, and Walter W. Powell. 1983. "The Iron Cage Revisited: Collective Rationality and Institutional Isomorphism in Organizational Fields." *American Sociological Review* 48:147–60.
- Donovan, Susan M., and Christopher T. Cross, eds. 2002. *Minority Students in Special and Gifted Education*. Washington, D.C.: National Academy.
- Duncan, Greg J., and Richard J. Murnane, eds. 2011. *Whither Opportunity? Rising Inequality and the Uncertain Life Chances of Low-Income Children*. New York: Russell Sage.
- Durand, Rodolphe, Nina Granqvist, and Anna Tyllström. 2017. "From Categories to Categorization: A Social Perspective on Market Categorization." Pp. 3–30 in *From Categories to Categorization: Studies in Sociology, Organizations and Strategy at the Crossroads*, edited by Rodolphe Durand, Nina Granqvist, and Anna Tyllström. Research in the Sociology of Organizations 51. Bingley: Emerald.
- Durand, Rodolphe, and Lionel Paoletta. 2013. "Category Stretching: Reorienting Research on Categories in Strategy, Entrepreneurship, and Organization Theory." *Journal of Management Studies* 50:1100–23.
- Edelman, Lauren B. 1992. "Legal Ambiguity and Symbolic Structures: Organizational Mediation of Civil Rights Law." *American Journal of Sociology* 97:1531–76.
- Ellyatt, Holly. 2013. "All Change at Downton Abbey: Female Butlers are Moving In." CNBC. <http://www.cnbc.com/2013/12/27/stand-aside-jeeves-female-butlers-are-moving-in.html>.
- England, Paula. 1992. "From Status Attainment to Segregation and Devaluation." *Contemporary Sociology* 21:643–47.
- Eyal, Gil. 2013. "For a Sociology of Expertise: The Social Origins of the Autism Epidemic." *American Journal of Sociology* 118:863–907.
- Field, Shelly. 2005. *Advertising and Public Relations*. New York: Ferguson.
- Frey, William H. 2011. *Melting Pot Cities and Suburbs: Racial and Ethnic Change in Metro America in the 2000s*. Washington, D.C.: Brookings.

## Categorization by Organizations

- Gage, Nicholas A. 2013. "Characteristics of Students with Emotional Disturbance Manifesting Internalizing Behaviors." *Education and Treatment of Children* 36:127–45.
- Goetz, Edward. 2011. "Gentrification in Black and White: The Racial Impact of Public Housing Demolition in American Cities." *Urban Studies* 48:1581–604.
- Golumbia, David. 2016. *The Politics of Bitcoin: Software as Right-Wing Extremism*. Minneapolis: University of Minnesota Press.
- Goodrick, Elizabeth, and Gerald R. Salancik. 1996. "Organizational Discretion in Responding to Institutional Practices: Hospitals and Cesarean Births." *Administrative Science Quarterly* 41:1–28.
- Grant, Anthony. 2003. "The Impact of Life Coaching on Goal Attainment, Metacognition, and Mental Health." *Social Behavior and Personality* 31:253–64.
- Greenfeld, Liah. 1988. "Professional Ideology and Patterns of Gate-Keeping: Evaluation and Judgment within Two Art Worlds." *Social Forces* 66:903–25.
- Hallahan, Daniel P., and James M. Kauffman. 1977. "Labels, Categories, Behaviors: ED, LD, and EMR Reconsidered." *Journal of Special Education* 11:139–49.
- Halnon, Karen B. 2002. "Poor Chic: The Rational Consumption of Poverty." *Current Sociology* 50:501–16.
- Halnon, Karen B., and Sandra Cohen. 2006. "Muscles, Motorcycles, and Tattoos: Gentrification in a New Frontier." *Journal of Consumer Culture* 6:133–56.
- Handler, Joel F. 1986. *Conditions of Discretion: Autonomy, Community, Bureaucracy*. New York: Russell Sage.
- Harry, Beth, and Janette K. Klingner. 2006. *Why Are So Many Minority Students in Special Education?* New York: Teachers College Press.
- Harry, Beth, Janette K. Klingner, Keith M. Sturges, and Robert F. Moore. 2002. "Of Rocks and Soft Places: Using Qualitative Methods to Investigate Disproportionality." Pp. 71–92 in *Racial Inequity in Special Education*, edited by Daniel J. Losen and Gary Orfield. Cambridge, Mass.: Harvard Education.
- Hartung, Cynthia M., and Thomas A. Widiger. 1998. "Gender Differences in the Diagnosis of Mental Disorders: Conclusions and Controversies of the DSM-IV." *Psychological Bulletin* 123:260–78.
- Hoberman, John. 2012. *Black and Blue: The Origins and Consequences of Medical Racism*. Berkeley and Los Angeles: University of California Press.
- Hofstadter, Douglas. 1985. *Metamagical Themas: Questing for the Essence of Mind and Pattern*. New York: Basic.
- Hosp, John L., and Daniel J. Reschly. 2003. "Referral Rates for Intervention or Assessment: A Meta-analysis of Racial Differences." *Journal of Special Education* 37:67–80.
- Hyra, Derek S. 2012. "Conceptualizing the New Urban Renewal: Comparing the Past to the Present." *Urban Affairs Review* 48:498–527.
- Jargowsky, Paul A. 1997. *Poverty and Place: Ghettos, Barrios, and the American City*. New York: Russell Sage.
- Jensen, Arthur R. 1980. *Bias in Mental Testing*. New York: Free Press.
- Kalev, Alexandra, and Frank Dobbin. 2008. "Enforcement of Civil Rights Law in Private Workplaces: The Effects of Compliance Reviews and Lawsuits over Time." *Law and Social Inquiry* 31:855–903.
- Kanter, Rosabeth M. 1977. *Men and Women of the Corporation*. New York: Basic.
- Kauffman, James M., Jeanmarie Bantz, and Jenn McCullough. 2002. "Separate and Better: A Special Public School Class for Students with Emotional and Behavioral Disorders." *Exceptionality: A Special Education Journal* 10:149–70.
- Kauffman, James M., and Daniel P. Hallahan. 1995. *The Illusion of Full Inclusion: A Comprehensive Critique of a Current Special Education Bandwagon*. Austin, Tex.: PRO-ED.
- Kauffman, James M., and John W. Lloyd. 2017. "Statistics, Data, and Special Education Decisions: Basic Links to Realities." Pp. 29–39 in *Handbook of Special Education*, ed-



- ited by James M. Kauffman, Daniel P. Hallahan, and Paige C. Pullen. London: Routledge.
- Kirk, Mimi. 2018. "The Granny Flats Are Coming." *Citylab*, January 16. <https://www.citylab.com/design/2018/01/the-granny-flats-are-coming/550388/>.
- Kirk, Stuart A., and Herb Kutchins. 1992. *The Selling of the DSM: The Rhetoric of Science in Psychiatry*. New York: de Gruyter.
- Kitwana, Bakari. 2005. *Why White Kids Love Hip Hop? Wankstas, Wiggers, Wannabes, and the New Reality of Race in America*. New York: Civitas.
- Knowlton, Steven A. 2005. "Three Decades since *Prejudices and Antipathies*: A Study of Changes in Library of Congress Subject Headings." *Cataloging and Classification Quarterly* 40:123–45.
- Langwiler, Martin. 2009. "Double Standards: The History of Standardizing Humans in Modern Life Insurance." Pp. 95–122 in *Standards and Their Stories: How Quantifying, Classifying, and Formalizing Practices Shape Everyday Life*, edited by Martha Lampland and Susan Leigh Star. Ithaca, N.Y.: Cornell University Press.
- Lazerson, Marvin. 1983. "The Origins of Special Education." Pp. 15–47 in *Special Education Policies: Their History, Implementation, and Finance*, edited by Jay G. Chambers and William T. Hartman. Philadelphia: Temple University Press.
- Lethbridge, Lucy. 2013. *Servants: A Downstairs History of Britain from the Nineteenth Century to Modern Times*. New York: Norton.
- Levanon, Asaf, Paula England, and Paul Allison. 2009. "Occupational Feminization and Pay: Assessing Causal Dynamics Using 1950–2000 US Census Data." *Social Forces* 88:865–91.
- Linder, Meadow. 2001. "The Diagnostic Divide: The Construction and Use of Posttraumatic Stress Disorder." In *2001 Brown University Senior Honors Theses*. Providence, R.I.: Wayland.
- . 2004. "Creating Post-traumatic Stress Disorder: A Case Study of the History, Sociology, and Politics of Psychiatric Classification." Pp. 25–40 in *Bias in Psychiatric Diagnosis*, edited by Paula J. Caplan and Lisa Cosgrove. New York: Aronson.
- Lott, John R., and Carlisle E. Moody. 2016. "Do White Police Officers Unfairly Target Black Suspects?" SSRN. <https://ssrn.com/abstract=2870189>.
- Martinelli, Michelle R. 2017. "Jamie McMurray Proves Race Car Drivers Are Athletes with 2 Simple Images." *USAToday*, July 25. <http://ftw.usatoday.com/2017/07/jamie-mcmurray-nascar-drivers-athletes-fitness-cycling-biking>.
- Martino, Victor. 2018. "Has Organic Become Mainstream in the US?" Just-Food.com, April 16. [https://www.just-food.com/analysis/has-organic-become-mainstream-in-the-us\\_id139055.aspx](https://www.just-food.com/analysis/has-organic-become-mainstream-in-the-us_id139055.aspx).
- Maume, David J., Jr. 1999. "Glass Ceilings and Glass Escalators: Occupational Segregation and Race and Sex Differences in Managerial Promotions" *Work and Occupations* 26:483–509.
- McAdam, Doug, and W. Richard Scott. 2005. "Organizations and Movements." Pp. 4–40 in *Social Movements and Organization Theory*, edited by Gerald F. Davis, Doug McAdam, W. Richard Scott, and Mayer N. Zald. New York: Cambridge University Press.
- Mehan, Hugh, Alma Hertweck, and J. Lee Meihls. 1986. *Handicapping the Handicapped: Decision Making in Students' Educational Careers*. Stanford, Calif.: Stanford University Press.
- Mercer, Jane R. 1973. *Labeling the Mentally Retarded*. Berkeley and Los Angeles: University of California Press.
- Mervis, Carolyn, and Eleanor Rosch. 1981. "Categorization of Natural Objects." *Annual Review of Psychology* 32:89–115.
- Meyersohn, Nathaniel. 2019. "Dollar General Tries to Make Healthy Food More Accessible." CNNBusiness, December 6. <https://www.cnn.com/2018/12/05/business/dollar-general-stores-food/index.html>.

## Categorization by Organizations

- Mintzberg, Henry. 1979. *The Structuring of Organizations*. Englewood Cliffs, N.J.: Prentice-Hall.
- Mock, Devery R., and James M. Kauffman. 2005. *Fads: Dubious and Improbable Treatments for Developmental Disabilities*. Mahwah, N.J.: Erlbaum.
- Mohr, John W., and Vincent Duquenne. 1997. "The Duality of Culture and Practice: Poverty Relief in New York City, 1888–1917." *Theory and Society* 26:305–56.
- Montague, Marjorie, and Asha K. Jitendra, eds. 2006. *Teaching Mathematics to Middle School Students with Learning Difficulties*. New York: Guilford.
- Morrill, Calvin, Mayer N. Zald, and Hayagreeva Rao. 2003. "Covert Political Conflict in Organizations: Challenges from Below." *Annual Review of Sociology* 29:391–415.
- Moskowitz, Peter. 2017. *How to Kill a City: Gentrification, Inequality, and the Fight for the Neighborhood*. New York: Nation.
- Oakes, Jeannie. 2005. *Keeping Track: How Schools Structure Inequality*. 2d ed. New Haven, Conn.: Yale University Press.
- Oliver, Christine. 1991. "Strategic Responses to Institutional Processes." *Academy of Management Review* 16:145–79.
- Omi, Michael, and Howard Winant. 2014. *Racial Formation in the United States*. 3d ed. New York: Routledge.
- Ong-Dean, Colin. 2009. *Distinguishing Disability: Parents, Privilege, and Special Education*. Chicago: University of Chicago Press.
- O'Reilly, Carolyn, Gregory B. Northcraft, and Darrell Sabers. 1989. "The Confirmation Bias in Special Education Eligibility Decisions." *School Psychology Review* 18:126–35.
- Osgood, Robert L. 2008. *The History of Special Education: A Struggle for Equality in American Public Schools*. Westport, Conn.: Praeger.
- Padavic, Irene, and Barbara Reskin. 2002. *Men and Women at Work*. Thousand Oaks, Calif.: Sage.
- Parkin, Frank. 2001. "Strategies of Social Closure in Class Formation." Pp. 1–18 in *The Social Analysis of Class Structure*, edited by Frank Parkin. Oxon: Routledge.
- Parrish, Thomas. 1996. *Special Education Finance: Past, Present, and Future*. Palo Alto, Calif.: Center for Special Education Finance.
- Parrish, Thomas, Jay G. Chambers, and Cassandra M. Guarino, eds. 1999. *Funding Special Education*. New Bury Park, Calif.: Corwin.
- Paterson, Jim. 2008. "Counseling vs. Life Coaching." *Counseling Today*, December 15. <http://ct.counseling.org/2008/12/counseling-vs-life-coaching-2/>.
- Patton, Leslie, and Craig Giamonna. 2015. "The New Organic Walmart Is Eating Whole Foods' Lunch." *Bloomberg Businessweek*, April 14. <https://www.bloomberg.com/news/articles/2015-05-14/whole-foods-walmart-costco-steal-growth-in-organic-groceries>.
- Pearlman, Alison. 2013. *Smart Casual: The Transformation of Gourmet Restaurant Style in America*. Chicago: University of Chicago Press.
- Pearman, Francis A., and Walker A. Swain. 2017. "School Choice, Gentrification, and the Variable Significance of Racial Stratification in Urban Neighborhoods." *Sociology of Education* 90:213–35.
- Perrow, Charles. 2014. *Complex Organizations: A Critical Essay*. Brattleboro, V.T.: Echo Point.
- Peter, Juslin, Henrik Olsson, and Anna-Carin Olsson. 2003. "Exemplar Effects in Categorization and Multiple-Cue Judgment." *Journal of Experimental Psychology* 132:133–56.
- Poland, Jeffrey, and Paula J. Caplan. 2004. "The Deep Structure of Bias in Psychiatric Diagnosis." Pp. 9–23 in *Bias in Psychiatric Diagnosis*, edited by Paula J. Caplan and Lisa Cosgrove. New York: Aronson.
- Powers, David W. 2005. "Close but No Cigar: A Comparison of Paramedics and PAs." *EMSWORLD*, August 1. <http://www.emsworld.com/article/10323797/close-no-cigar-comparison-paramedics-and-pas>.

- Ramdoyal, Ramesh D. 1977. *The Development of Education in Mauritius, 1710–1976*. Réduit: Mauritius Institute of Education.
- Reschly, Daniel J. 1996. "Identification and Assessment of Students with Disabilities." *Future of Children* 6:40–53.
- Reskin, Barbara F., and Irene Padavic. 2006. "Sex, Race, and Ethnic Inequality in United States Workplaces." Pp. 343–74 in *Handbook of the Sociology of Gender*, edited by Janet Saltzman Chafetz. Boston: Springer.
- Reskin, Barbara F., and Patricia A. Roos. 1990. *Job Queues, Gender Queues: Explaining Women's Inroads into Male Occupations*. Philadelphia: Temple University Press.
- Richardson, John G. 1999. *Common, Delinquent, and Special: The Institutional Shape of Special Education*. New York: Falmer.
- Ridgeway, Cecilia L. 2011. *Framed by Gender: How Gender Inequality Persists in the Modern World*. New York: Oxford University Press.
- Rogers, Karen B. 1993. "Grouping the Gifted and Talented: Questions and Answers." *Roeper Review* 16:8–12.
- Rosch, Eleanor. 1978. "Principles of Categorization." Pp. 27–48 in *Cognition and Categorization*, edited by Eleanor Roach and Barbara B. Lloyd. Hillsdale, N.J.: Erlbaum.
- Ross, Brian H., and Gregory L. Murphy. 1999. "Food for Thought: Cross-Classification and Category Organization in a Complex Real-World Domain." *Cognitive Psychology* 38:495–553.
- Ross, Stephen L., and John Yinger. 2002. *The Color of Credit: Mortgage Discrimination, Research Methodology, and Fair-Lending Enforcement*. Cambridge, Mass.: MIT Press.
- Russell, Mark C., and Charles R. Figley. 2013. *Treating Traumatic Stress Injuries in Military Personnel: An EMDR Practitioner's Guide*. New York: Routledge.
- Sailor, Wayne. 1989. *The Comprehensive Local School: Regular Education for All Students with Disabilities*. Baltimore: Brookes.
- Schuman, Andrew J. 2003. "A Concise History of Infant Formula (Twists and Turns Included)." *Contemporary Pediatrics* 20:91–98.
- Scott, W. Richard. 2008. *Institutions and Organizations: Ideas, Interests, and Identities*. Thousand Oaks, Calif.: Sage.
- Sheehan, George. 2013. *Running and Being: The Total Experience*. Emmaus, Pa.: Rodale.
- Skiba, Russell J., Lori Poloni-Staudinger, Sarah Gallini, Ada B. Simmons, and Renae Feggins-Azziz. 2006. "Disparate Access: The Disproportionality of African American Students with Disabilities across Educational Environments." *Exceptional Children* 72:411–24.
- Skiba, Russell J., Ada B. Simmons, Shana Ritter, Ashley C. Gibb, M. Karega Rausch, Jason Cuadrado, and Choong-Geun Chung. 2008. "Equity in Special Education: History, Status, and Current Challenges." *Exceptional Children* 74:264–88.
- Skrtic, Thomas M. 1991. "The Special Education Paradox: Equity as the Way to Excellence." *Harvard Educational Review* 61:148–207.
- Sleeter, Christine E. 1986. "Learning Disabilities: The Social Construction of a Special Education Category." *Exceptional Children* 53:46–54.
- Smith, Ryan A. 2002. "Race, Gender, and Authority in the Workplace: Theory and Research." *Annual Review of Sociology* 28:509–42.
- Stainback, Kevin, and Donald Tomaskovic-Devey. 2012. *Documenting Desegregation: Racial and Gender Segregation in Private Sector Employment since the Civil Rights Act*. New York: Russell Sage.
- Stainback, Kevin, Donald Tomaskovic-Devey, and Sheryl Skaggs. 2010. "Organizational Approaches to Inequality: Inertia, Relative Power, and Environments." *Annual Review of Sociology* 36:225–47.
- Strang, David, and James N. Baron. 1990. "Categorical Imperatives: The Structure of Job Titles in California State Agencies." *American Sociological Review* 55:479–95.

## Categorization by Organizations

- Sutton, John R., and Frank Dobbin. 1996. "The Two Faces of Governance: Responses to Legal Uncertainty in US Firms, 1955 to 1985." *American Sociological Review* 61:794–811.
- Thurlow, Martha L., Sheryl S. Lazarus, Sandra J. Thompson, and Amanda Blount Morse. 2005. "State Policies on Assessment Participation and Accommodations for Students with Disabilities." *Journal of Special Education* 38:232–40.
- Tilly, Charles. 1998. *Durable Inequality*. Berkeley and Los Angeles: University of California Press.
- Tolin, David F., and Edna Foa. 2006. "Sex Differences in Trauma and Posttraumatic Stress Disorder: A Quantitative Review of 25 Years of Research." *Psychological Bulletin* 132:959–92.
- Tomaskovic-Devey, Donald. 1993. *Gender and Racial Inequality at Work: The Sources and Consequences of Job Segregation*. Ithaca, N.Y.: Cornell University Press.
- Tomlinson, Sally. 2014. *The Politics of Race, Class and Special Education: The Selected Works of Sally Tomlinson*. New York: Routledge.
- Toomey, Rosemary, Han K. Kang, Joel Karlinsky, Dewleen G. Baker, Jennifer J. Vasterling, Renee Alpern, Domenic J. Reda, William G. Henderson, Frances M. Murphy, and Seth A. Eisen. 2007. "Mental Health of US Gulf War Veterans 10 Years after the War." *British Journal of Psychiatry* 190:385–93.
- Trainor, Audrey A. 2010. "Diverse Approaches to Parent Advocacy during Special Education Home-School Interactions: Identification and Use of Cultural and Social Capital." *Remedial and Special Education* 31:34–47.
- Turnbull, H. Rutherford, and Ann P. Turnbull. 1998. *Free Appropriate Public Education: The Law and Children with Disabilities*. 5th ed. Denver: Love.
- Vaughan, Diane. 1999. "The Dark Side of Organizations: Mistake, Misconduct, and Disaster." *Annual Review of Sociology* 25:271–305.
- Waitoller, Federico R., Alfredo J. Artiles, and Douglas A. Cheney. 2010. "The Miner's Canary: A Review of Overrepresentation Research and Explanations." *Journal of Special Education* 44:29–49.
- Weber, Blaine. 2011. "Are You Ready for the New Urbanites?" *Daily Journal of Commerce*, July 28. <http://www.djc.com/news/re/12031480.html>.
- Wehman, Paul, and John Kregel. 2003. *Functional Curriculum for Elementary, Middle, and Secondary Age Students with Special Needs*. Austin, Tex.: Pro-Ed.
- Weick, Karl M. 1995. *Sensemaking in Organizations*. Thousand Oaks, Calif.: Sage.
- Wingfield, Adia Harvey, and Renée Skeete Alston. 2014. "Maintaining Hierarchies in Predominantly White Organizations: A Theory of Racial Tasks." *American Behavioral Scientist* 58:274–87.
- Winkler, Adam. 2018. "'Corporations Are People' Is Built on an Incredible 19th-Century Lie." *Atlantic*, March 5. <https://www.theatlantic.com/business/archive/2018/03/corporations-people-adam-winkler/554852/>.
- Wolff, Sula. 2004. "The History of Autism." *European Child and Adolescent Psychiatry* 13:201–8.
- Wright, Anne R., Rhonda A. Cooperstein, Ellen G. Renneker, and Chirstine Padilla. 1982. *Local Implementation of P.L. 94-142: Final Report of a Longitudinal Study*. Menlo Park, Calif.: SRI.
- Ysseldyke, James E., Robert Algozzine, and Martha L. Thurlow. 2000. *Critical Issues in Special Education*. Boston: Houghton Mifflin.
- Ysseldyke, James E., Martha L. Thurlow, Janet Graden, Caren L. Wesson, Bob Algozzine, and Stanley Deno. 1983. "Generalizations from Five Years of Research on Assessment and Decision Making." *Exceptional Education Quarterly* 4:75–93.
- Zald, Mayer N., and Michael Lounsbury. 2010. "The Wizards of Oz: Towards an Institutional Approach to Elites, Expertise and Command Posts." *Organization Studies* 31:963–96.

American Journal of Sociology

- Zald, Mayer N., Calvin Morrill, and Hayagreeva Rao. 2005. "The Impact of Social Movements on Organizations: Environment and Responses." Pp. 253–79 in *Social Movements and Organization Theory*, edited by Gerald F. Davis, Doug McAdam, W. Richard Scott, and Mayer N. Zald. New York: Cambridge University Press.
- Zhao, Yong. 2012. *World Class Learners: Educating Creative and Entrepreneurial Students*. Thousand Oaks, Calif.: Sage.
- Zhou, Xueguang. 2005. "The Institutional Logic of Occupational Prestige Ranking: Reconceptualization and Reanalyses." *American Journal of Sociology* 111:90–140.
- Zong, Geng, Yanping Li, Anne J. Wanders, Marjan Alsema, Peter L. Zock, Walter C. Willett, Frank B. Hu, and Qi Sun. 2016. "Intake of Individual Saturated Fatty Acids and Risk of Coronary Heart Disease in US Men and Women: Two Prospective Longitudinal Cohort Studies." *British Medical Journal* 355: i5796.
- Zuckerman, Ezra W. 2012. "Construction, Concentration, and (Dis)Continuities in Social Valuation." *Annual Review of Sociology* 38:223–45.
- . 2017. "The Categorical Imperative Revisited: Implications of Categorization as a Theoretical Tool." Pp. 31–68 in *From Categories to Categorization: Studies in Sociology, Organizations and Strategy at the Crossroads*, edited by Rodolphe Durand, Nina Granqvist, and Anna Tyllström. Research in the Sociology of Organizations 51. Bingley: Emerald.