

A Multilevel Analysis of Stigma and Health: Implications for Research and Policy

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Abstract

This article reviews research on stigma and discrimination—at both the interpersonal and societal levels—faced by disadvantaged groups. Research on interpersonal discrimination primarily concerns discrimination that is perceived and directly experienced (e.g., discrimination in employment and health care), whereas research on societal discrimination focuses on broad societal factors (e.g., institutional policies, social attitudes). We review evidence across numerous fields of study that rely on several types of research designs, which indicate that both forms of stigma and discrimination demonstrably contribute to health inequalities for disadvantaged groups such as racial and ethnic minorities and lesbian, gay, and bisexual populations. These adverse health outcomes range from maladaptive physiological stress responses in a laboratory setting to premature mortality at a population level. The science on stigma and discrimination applies to policy issues in education, same-sex marriage, and health care delivery. Some current policies increase the experience of stigma. We argue that more holistic social policies can recognize the psychosocial factors that contribute to well-being, thereby reducing social inequalities in health.

Keywords

interpersonal stigma, structural stigma, health, well-being, health inequality

Tweet

Disadvantaged groups face stigma that increases inequality in health and well-being, but evidence-based policy can help to reduce health inequalities.

Key Points

- Stigma and discrimination at both the interpersonal and societal levels can harm health.
- Attention should be paid to current policies surrounding college admissions, same-sex marriage, and health care delivery that stigmatize historically marginalized populations.
- Evidence-based policy interventions that consider psychosocial factors can mitigate the adverse impact of stigma and discrimination on health.
- Policy makers can collaborate with social scientists to consider the health impacts of social policy such as race-sensitive admission policies, same-sex marriage laws, and health care delivery to disenfranchised groups.

Introduction

Health inequality is a difference in health, with disadvantaged groups—for example, the poor, racial/ethnic minorities,

sexual minorities—systematically experiencing worse health outcomes or greater health risks than more advantaged groups (Braverman, 2006). Stigma and discrimination contribute to this inequity, as documented in a substantial body of research (e.g., Hatzenbuehler, 2014; Pascoe & Richman, 2009; Schmitt, Branscome, Postmes, & Garcia, 2014). Compelling evidence emerging from numerous fields of study that rely on several types of research designs shows that stigma and discrimination—both interpersonal and societal—can harm health. Many policy interventions can mitigate the adverse impact of stigma and discrimination on health outcomes. Our goal here is to connect this research with policy proposals.

We first define our terms: *Stigma* is the occurrence of labeling, stereotyping, separation, status loss, and discrimination in a context that exercises power (Link & Phelan, 2001). Thus, discrimination is a feature of stigma; however, because the stigma process incorporates several other elements (e.g., labeling, stereotyping), the stigma concept is

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broader than discrimination.¹ *Interpersonal discrimination* refers to directly perceived discriminatory interactions between individuals—whether in institutional roles (e.g., employer/employee) or as public or private individuals (e.g., shopkeeper/shopper; Krieger, 2000). In contrast, *societal² discrimination* refers to societal conditions, cultural norms, and institutional policies and practices that constrain the opportunities, resources, and well-being of the stigmatized (Hatzenbuehler & Link, 2014). Research on interpersonal discrimination primarily concerns discrimination that is perceived and directly experienced, whereas research on societal discrimination focuses on societal factors (e.g., policies, social attitudes), with less focus on personal mechanisms. Reaching the widest audience requires understanding what each perspective contributes and the interplay between the two. Inquiries into societal discrimination can meaningfully inform population-based health policies (e.g., Hatzenbuehler, McLaughlin, Keyes, & Hasin, 2010; Hatzenbuehler et al., 2012); here, we encourage also applying the lessons of interpersonal experiences of discrimination to inform systemic policy reform.

This article first reviews the evidence on how stigma and discrimination affect health outcomes, focusing on both interpersonal and societal stigma. These research literatures have largely developed separately—residing in different fields and employing different methods—and rarely informing each other (see Gee, 2002, as an exception). Considering the interplay between societal stigma and individual-level stigma processes can explain how the experience of stigma and discrimination translates into poor health outcomes. The article then suggests how this research can inform three important policy issues: race-sensitive admissions, same-sex marriage, and health care delivery to low-income individuals.

Studying Interpersonal Discrimination: Why Methods Matter

The interpersonal research uses many methods (experiments, observation, meta-analysis). Each method has strengths and weaknesses, but together they supply converging evidence for the health effects of stigma. The range of the type of data supports the reliability of the findings.

One approach to documenting interpersonal discrimination employs experiments. These laboratory experiments typically examine the experience of discrimination as a social stressor that sets in motion a series of physiological responses, as well as affective, cognitive, and behavioral responses. When study participants experience discrimination, their blood pressure increases and the stress hormone cortisol increases, as compared with people having negative but nonbiased experiences (Gyull, Matthews, & Bromberger, 2001; Townsend, Major, Gangi, & Mendes, 2011). Also, following discriminatory experiences, people tend to engage in more risky health behaviors, which can then compromise

health over time. For example, when African Americans were asked to recall a personal experience of discrimination (vs. a neutral event), they were more likely then to prefer unhealthy over healthy snacks (Pascoe & Richman, 2011). Similar effects also occur for thoughts about substance use (Gibbons et al., 2012). Because these experiments hold constant all other aspects of the individual's situation, they allow strong causal inferences within the context of the experiment: Reminders of discrimination can trigger poor health choices. However, experimental studies typically measure only immediate responses and may not generalize to other settings.

Cross-sectional observational designs also commonly document interpersonal discrimination. Studies of this type have shown that interpersonal discrimination has a negative impact on psychological well-being and is strongly related to negative outcomes such as depression, anxiety, and distress. In one cross-sectional survey study (Williams et al., 2012), interpersonal discrimination was associated with decreased emotional well-being, as well as ratings of stressfulness. These associations did not differ by race, socioeconomic status (SES), or type of discrimination, suggesting that experiences of discrimination generate psychological distress, regardless of the interpretations and the characteristics of the target. Cross-sectional studies have also shown that interpersonal discrimination is related to increased risk factors for cardiovascular disease (Lewis, Aiello, Leurgans, Kelly, & Barnes, 2010) and to increased behavior linked to disease outcomes, such as smoking (Landrine & Klonoff, 1996) as well as alcohol and substance abuse (Richman, Boynton, Costanzo, & Banas, 2013). Studies of this type do not test causality, though they can help determine associations between interpersonal discrimination and various health outcomes. In addition, these studies enable researchers to examine how interpersonal discrimination affects health, while controlling for demographic characteristics such as SES, as well as other potentially relevant variables, such as personality traits (e.g., neuroticism).

Observational studies can also test prospectively, examining subjects over time: Interpersonal discrimination indeed predicts poor health outcomes. In longitudinal designs, routine interpersonal discrimination can become a chronic stressor that erodes an individual's protective resources, increases vulnerability to physical illness (e.g., Gee, Spencer, Chen, & Takeuchi, 2007), and even increases mortality risk (Barnes et al., 2008). Increases in reported everyday and lifetime interpersonal discrimination predict increased weight gain and waist circumference among Black women over an 8-year period (Cozier, Wise, Palmer, & Rosenberg, 2009). One methodological advantage of these prospective designs is that researchers determine whether interpersonal discrimination at Time 1 predicts adverse health outcomes at Time 2, controlling for health status at Time 1. Such prospective studies have shown that interpersonal discrimination predicts poor health, rather than, or in addition to, poor health

predicting reports of interpersonal discrimination (T. N. Brown et al., 1999).

Meta-analysis, which combines independent studies by averaging their effect sizes, provides additional evidence to examine how discrimination affects health. Meta-analyses provide strong evidence for the robust association between interpersonal discrimination and harmful health outcomes. Interpersonal discrimination, across a wide range of types (e.g., race, gender), was associated with compromised physical and mental health and was also associated with harmful health behaviors (Pascoe & Richman, 2009). More recently, in two separate meta-analyses, Schmitt et al. (2014) found interpersonal discrimination negatively related to psychological well-being across a range of well-being measures and for both personal and group discrimination. By summing effects between and within designs, meta-analyses comprehensively summarize the size of the discrimination–health relationship.

The diversity of methods in studying the health consequences of interpersonal discrimination illustrates how robust this relationship is. The reviewed evidence from experimental studies, cross-sectional studies, and longitudinal studies—gathered together in meta-analyses—suggests that interpersonal discrimination is reliably related to health disparities. The fact that this conclusion comes from studies that vary in their strengths and weaknesses gives us more confidence in asserting that interpersonal discrimination is a critically important health determinant. We now turn attention to the same kinds of issues as they pertain to structural (societal) stigma.

Methods for Studying Societal Stigma

Societal stigma comes from policies and climates that systematically disadvantage particular groups, resulting in adverse health outcomes. Examining societal stigma requires different methods than those typically used in researching individual and interpersonal stigma (for a review, see Hatzenbuehler, 2014). As noted, research on individual and interpersonal stigma frequently uses laboratory experiments that manipulate exposure to discrimination. Because it is unethical to randomly assign individuals to societal environments with and without structural stigma, researchers cannot employ traditional experiments.³ Instead, research examining societal stigma has used two methods: observational designs (both cross-sectional and longitudinal) and quasi-experiments (“natural experiments”).

Several observational studies have examined the relationship between societal stigma and health. In one cross-sectional study, researchers coded state policies that protect gays and lesbians—namely, hate crime statutes and employment nondiscrimination acts that cover sexual orientation (Hatzenbuehler, Keyes, & Hasin, 2009). This policy information was linked to individual-level data on mental health and sexual orientation (from the National Epidemiologic

Survey on Alcohol and Related Conditions [NESARC], a nationally representative survey of 43,093 adults in the United States). Psychiatric disorders were more frequent among lesbian, gay, and bisexual (LGB) adults in states with policies that did not protect gays and lesbians, compared with LGB individuals living in states with protective policies. Results remained robust, even after controlling for demography, as well as for interpersonal discrimination, suggesting that societal stigma contributes to psychiatric disorders over and above stigma at the individual level.

In longitudinal designs, researchers examine whether exposure to societal stigma predicts later health outcomes, controlling for initial health. In one example, communities’ antigay prejudice, derived from General Social Survey data, was prospectively linked to mortality data via the National Death Index. Sexual minorities who lived in high-stigma communities had increased mortality, compared with those living in low-stigma communities, controlling for individual and community factors. Sexual minorities living in high-stigma communities had a shorter life expectancy of 12 years on average, compared with those living in low-stigma communities. This resembles life expectancy differences between individuals with and without a high school education (Muennig, Fiscella, Tancredi, & Franks, 2010).

Observational studies reveal associations between societal stigma and health; however, these designs often cannot show whether an observed effect is due to societal stigma causing poorer health. Any relationship could result from a third, unmeasured or poorly measured variable that could affect both the level of societal stigma and health. Consequently, where possible, researchers also use quasi-experimental designs. Although these studies cannot randomly assign people to experimental conditions, these quasi-experiments can provide essential information about the impact of social conditions on health and well-being (Shadish, Cook, & Campbell, 2002).

Quasi-experimental studies on societal stigma take advantage of naturally occurring changes, typically changed social policy surrounding a particular stigmatized group (e.g., constitutional amendments banning same-sex marriage). These natural experiments require baseline data before the change (e.g., before the policy was enacted). They then follow the sample over time to determine any changes in health following the change in societal stigma.

Quasi-experiments have capitalized on the rapidly changing policy environment surrounding same-sex marriage in the United States. For example, during 2004, 16 states passed constitutional amendments banning same-sex marriage. These events occurred between two waves of the NESARC. Respondents first interviewed in 2001 were reinterviewed in 2005, following the same-sex marriage bans. This natural experiment enabled examining rates of psychiatric disorders among LGB respondents, assessed before and after the bans. LGB adults in states that passed same-sex marriage bans experienced 37% more mood disorders, 42% more

alcohol-use disorders, and 248% more generalized anxiety disorders (Hatzenbuehler et al., 2010). LGB respondents in states without these bans did not experience those increases. Moreover, heterosexuals' mental health in the banning states was largely unchanged, pinpointing the effects to LGB respondents.

Another quasi-experiment sampled gay and bisexual men living in Massachusetts, which in 2003 became the first state to legalize same-sex marriage. Several mental and physical health problems reduced—including 14% less depression and an 18% reduction in hypertension—in the 12 months after legalizing same-sex marriage, compared with the 12 months before (Hatzenbuehler et al., 2012). Furthermore, gay and bisexual men used 15% less mental and medical health care in the 12 months following the legalization, resulting in lower health care costs for this group. In contrast, during this same period, health care costs increased for the general Massachusetts population, specifying these effects to gay and bisexual men.

Quasi-experiments have also examined societal stigma in racial and ethnic minorities' health. Following September 11, 2001, Arab Americans (and those perceived to be Arabs) experienced increased harassment, violence, and other discrimination. Addressing whether this stigmatizing climate affected their health, Lauderdale (2006) analyzed birth certificate data comparing birth outcomes in the 6 months after September 11th with the same 6 calendar months 1 year before. Relative risks of poor birth outcomes, including low birth weight, were elevated in the 6 months afterwards, for Arabic-named women, but not for White, Black, Hispanic, Asian/Pacific Islander, or Native American women (Lauderdale, 2006). The Arabic women in the sample did not need to experience discrimination themselves; the events surrounding September 11 had created a potentially stigmatizing environment surrounding their group, heightening their social identity threat and resulting in adverse outcomes. Quasi-experimental evidence relating structural racism and health has demonstrated that, following the 1964 Civil Rights Act, Black infant mortality rates in the U.S. rural South substantially reduced (Krieger et al., 2013), as did Blacks' socioeconomic disparities in infant death and premature mortality (Krieger et al., 2008).

Evidence for societal discrimination relies on multiple methods that complement each other, with observational studies and quasi-experiments exploring different layers. Across numerous studies, societal stigma is robustly associated with adverse health outcomes among members of stigmatized groups, indicating that societal stigma—above individual and interpersonal levels—can also powerfully shape health.

Research Agenda Ahead

Research on interpersonal and societal stigma suggests two distinct ways that discrimination undermines health.

Examining how these separate mechanisms interact can refine insights into discrimination's health consequences (e.g., Fiske, 1998; Gee, 2002; Krieger, 2000). For example, combining population-level measures of discrimination with individual-level measures can reveal how social segregation (in residence, schools, workplace, or health care facilities) could modify individually reported discrimination. For example, sexual minority young men in high-stigma environments (states without gay-protective policies), who also reported more sensitivity to status-based rejection (a psychological response to stigma at the individual level), were at greatest risk for substance use (Pachankis, Hatzenbuehler, & Starks, 2014). Individual-level stigma processes can therefore magnify the negative health consequences of societal stigma.

Combining individual and structural approaches can yield insights into how stigma and discrimination translate into poor health outcomes. When a group or individual stigmatize and therefore disadvantage others, negative health consequences reliably ensue, at both interpersonal and societal levels. Recognizing this dual action is critical for policy makers; we therefore turn our attention to exploring how social and behavioral research on stigma and discrimination can inform such policy efforts.

Policy Implications

Arguably, all social policies are health policies because they have downstream health consequences (Robert Wood Johnson Foundation [RWJF], 2008). Policy makers should collaborate with behavioral scientists to consider these health impacts. In particular, attention should be paid to policies that, whether intentionally or inadvertently, heighten stigma for historically marginalized populations. Just as cost-benefit analyses inform certain policy proposals, and just as environmental impact statements guide certain land uses, policy makers could require health impact statements as well.

Although the research on stigma, discrimination, and health relates to many policies, we highlight three particular policy areas: race-sensitive admission policies, same-sex marriage laws, and health care delivery to disenfranchised groups. These policies affect access to top universities, spousal benefits, and health care, but this literature suggests that they also exacerbate health inequalities.

Race-Sensitive Admission Policies for State Universities

In response to *Grutter v. Bollinger* (2003; the U.S. Supreme Court permitting the University of Michigan's law school to continue its affirmative action admission policies), Michigan citizens circulated petitions to change the Michigan State Constitution. The measure, called the Michigan Civil Rights Initiative, or Proposal 2, was approved by popular referendum and consequently precluded the use of race in all public

university admissions processes. Proposal 2 is similar to California's Proposition 209, Washington's Initiative 200, and other popular initiatives that banned the use of race in public university admissions decisions.

The constitutionality of Proposition 2 was subsequently challenged in court, opponents arguing that the referendum improperly targeted the state's African American population, but in *Schuette v. Bamn* (2014), the U.S. Supreme Court deemed the referendum constitutional. However, in a dissent, Justice Sotomayor articulated why the Michigan referendum had implications beyond access to the state's top public universities. Michigan's referendum was not merely a judgment of public university admissions policies, but instead "establishe[d] a distinct and more burdensome political process for the enactment of admissions plans that consider racial diversity" (Sotomayor, 2014, p. 17). Thus, Justice Sotomayor viewed the referendum as revising the state's political processes, and thus also how Michigan welcomed diversity among its citizens. She characterized the referendum as an action by which a "majority of the Michigan electorate changed the basic rules of the political process in that State in a manner that uniquely disadvantage racial minorities" (Sotomayor, 2014, p. 2). In her opinion, therefore, it was a transparent exercise of power, directed at a discrete and historically disenfranchised minority.

If Michigan's racial minority viewed the referendum similarly to Justice Sotomayor, then discrimination research suggests that its consequences reached beyond public university admissions policies. Justice Sotomayor described how Michigan's non-White citizens might interpret the referendum as an attack on their marginalized status, thus sharpening their stigmatized racial identity. If so, then the social and behavioral evidence on stigma, discrimination, and health suggests the heightened sense of stigma might also have adverse health consequences for the state's citizenry as well. Unfortunately, although the case attracted widespread attention and prompted numerous amicus curiae briefs, none referenced the research demonstrating the impact of stigma and discrimination on health.

Moreover, several have noted the close links between education, income, wealth, and health (RWJF, 2008). The primary focus of the debates surrounding investment in and access to public education has been the benefits to employment, earnings, income, and other such outcomes (e.g., affirmative action policies enhance the academic achievement of minority students; Fischer & Massey, 2007). Along with these essential areas, the benefits to health should also be considered.

Same-Sex Marriage Laws

The 1996 federal Defense of Marriage Act (DOMA) defined marriage as a legal union between a man and a woman. DOMA was followed by state constitutional amendments banning same-sex marriage; currently, 28 states have passed

constitutional amendments that ban marriage or other forms of relationship recognition for same-sex couples. However, in *United States vs. Windsor* (2013), the U.S. Supreme Court found DOMA to be unconstitutional, and 19 other states and the District of Columbia now allow same-sex couples to marry. Although the public debates surrounding same-sex marriage policies continue, invoking moral, religious, and economic arguments, the social and behavioral science data suggest another important and often neglected dimension to this policy debate—namely, health.

Numerous mechanisms link same-sex marriage policies to the health of LGB populations (Hatzenbuehler et al., 2010; Herek, 2006). First, policies that prohibit same-sex marriage create unique financial burdens for same-sex couples. For example, the financial advantages of marriage range from tax laws and employee benefits to health insurance, social security, pension plans, and death benefits. In 1,138 federal provisions alone, marital status helps determine eligibility for federal benefits, rights, and privileges (U.S. General Accounting Office, 2004). Moreover, a large research literature documents associations between economic adversity and developing health problems (Sorlie, Backlund, & Keller, 1995). The financial insecurity brought about by constitutional amendments banning same-sex marriage can therefore compromise the health of LGB populations.

Second, heterosexual individuals who are married (and satisfied) experience better health, compared with those who are unmarried (Simon, 2002) and compared with cohabiting couples (S. L. Brown, 2000): The protective effect of marriage does not result merely from being in a romantic relationship. These well-established findings suggest that marriage confers many social benefits—including social support from family members and greater integration with the larger social community—that contribute to the positive associations between marriage and health (Herek, 2006). As such, policies that prohibit same-sex marriage create fewer opportunities for gays and lesbians to procure these health-enhancing properties of social support that coincide with marriage.

Third, and most relevant here, legal validation or disapproval of one's marriage communicates whether the state and surrounding community accept a same-sex couple's identity. Prohibition of marriage for same-sex couples therefore confers on gays and lesbians a marginalized status that is imbued with a derogatory social appraisal. Both social evaluation (Pettigrew, 1967) and symbolic interaction work (Stryker & Statham, 1985) suggest that others negatively evaluating one's group can lead to negative self-regard and poor mental health (Meyer, 2003).

Thus, the extant research (Hatzenbuehler et al., 2009; Hatzenbuehler et al., 2010; Hatzenbuehler et al., 2012) lends strong empirical support that inclusive state marriage policies also promote better health for LGB populations. Efforts to restrict the rights of LGB individuals (e.g., constitutional amendments banning same-sex marriage, "no promo homo"

laws in schools) likely undermine the mental and physical health of the LGB community. Recognizing that social and behavioral science can meaningfully inform public policies related to sexual minorities, several of the reviewed studies were cited in amicus curiae briefs as courts scrutinized the constitutionality of same-sex marriage (e.g., *Perry vs. Schwarzenegger* in California).

Patient–Provider Interactions

The umbrella of Medicaid programs supply beneficiaries with insurance coverage for certain medical services. When eligible individuals receive care at approved facilities, state and federal funds reimburse providers. The expansion of Medicaid coverage under the Affordable Care Act, and the costs and benefits of Medicaid programs, are ongoing subjects of debate (Baicker & Finkelstein, 2011). A major criticism of the program is that, despite its provision of health care services and health insurance to America's poor, Medicaid has done little to mitigate health inequalities across income. Even recent research, including a major study of Oregon's expansion of Medicaid (Baicker et al., 2013), questions whether increased consumption of health care services improves outcomes and suggests room for improvement in how Medicaid benefits low-income individuals.

Providing health insurance to the poor might have a limited impact on reducing health inequalities because, despite health insurance, low-income individuals benefit less from the care they receive from providers (B. D. Richman, 2005). Interpersonal discrimination within the medical encounter could inhibit people with stigmatized statuses from benefiting fully from offered health care. Social psychological research reveals that biases toward group members occur implicitly, without intention or awareness, as well as explicitly, and both of these biases have implications for understanding how patient–provider interactions frequently produce mistrust (Dovidio et al., 2008; Penner, Blair, Albrecht, & Dovidio, 2014).

Patient–provider communication affects health outcomes and doctor–patient interactions. Perceived disrespect lowers trust in one's provider, decreases compliance with medical recommendations, lowers reported satisfaction with provided services, and lowers health-related behavior changes (Beck, Daughtridge, & Sloane, 2002; Bohnert, Zivin, Welsh, & Kilbourne, 2011). Perceived discrimination—an extreme form of disrespect—lowers trust between patient and medical provider and decreases willingness to disclose personal information. In turn, mistrust relates to missing medical appointments and delaying needed or preventive medical care (e.g., Aronson, Burgess, Phelan, & Juarez, 2013). One of the few experiments examining interpersonal stigma within medical encounters (Utamsingh, Richman, Martin, & Lattanner, 2014) measured the impact of “heteronormativity” (presuming heterosexuality as the default sexual orientation). Some nationally sampled LGB adults were randomly

assigned to read vignettes of a doctor–patient interaction that was heteronormative—including the use of opposite sex pronouns when the patient indicates he or she has a partner and asking whether a person is “single, divorced, or married,” excluding those cohabiting or in civil unions; others read nonheteronormative vignettes, in which the doctor used more inclusive language. LGB participants in the heteronormative condition were less willing to disclose health-relevant information to a doctor and were less trustful of the doctor, as compared with those exposed to nonheteronormative communication. Heterosexual assumptions communicated by the physician lead to feeling invisible, fearing mistreatment post disclosure, lacking trust and confidence in the physician, and not disclosing sexual orientation (Röndahl, Innala, & Carlsson, 2006). These responses can undermine accurate diagnoses and complete patient histories (Cegala, Street, & Clinch, 2007).

Moreover, even the threat of being stigmatized negatively affects interpersonal interactions within medical settings. Stereotype threat is a disruptive psychological state experienced when people risk confirming a negative stereotype associated with their social identity—for example, their race, gender, ethnicity, social class, or sexual orientation (Steele & Aronson, 1995). Studied most extensively in educational contexts, this has recently been applied to how stereotype threat may strain the relations between patients and care providers (Burgess, Warren, Phelan, Dovidio, & Ryn, 2010). Stereotype threat is likely to be triggered by features in the clinical setting that make salient the stereotype of low-status patients as unintelligent, noncompliant, difficult, and likely to make bad health decisions. According to Burgess et al. (2010), activating these stereotypes may have potential negative consequences for minority patients, including (a) reduced adherence to treatment; (b) reduced working memory capacity, and therefore diminished ability to process instructions; (c) lower performance expectations and self-control; (d) lower effort and motivation; (e) discounting feedback; (f) disengagement; and (g) disidentification (with being a healthy person who makes good health decisions).

Efficacious health care policy should take into consideration many issues on an interpersonal level. Currently, Medicaid is not sensitive to these issues that confront its users. As Medicaid is designed to improve outcomes for low-income individuals, it could advance this goal by explicitly considering how low-income people are treated within the health care system, rather than merely paying for services currently offered.

One approach is to encourage states to take advantage of flexibility under expanded Medicaid to invest in training health professionals. Physicians who treat economically and socially disadvantaged patients need to be trained to effectively manage the total care of their patients and to take more responsibility for services that extend beyond their individual interactions with patients. Although enhancing patients' trust in physicians is important, trust alone is unlikely to

mitigate the inequality that may have created the patient's health status long before the medical encounter (e.g., Penner, Albrecht, Coleman, & Norton, 2007; Penner et al., 2014).

Medicaid policy makers, in seeking to improve the efficacy of beneficiaries' interaction with health care providers, might focus beyond the individual patient-provider interaction and rethink the systemic delivery of care under Medicaid. For example, if concerns about discrimination preclude people from seeking care at traditional medical establishments, bringing physicians to well-functioning community venues, such as churches, schools, or YMCAs, may increase use of preventive health care services among low-income individuals and minorities, which in turn will reduce health care costs in the long term. Findings that stereotype threat is elicited only in certain settings suggest that changing the health care delivery setting could improve trust in health care professionals and increase benefit from treatment. States can use Medicaid dollars to experiment with different modes of and different settings for health care delivery—and in particular take advantage of funds available for demonstration projects under the Affordable Care Act or waivers under Medicaid—in determining how health care delivery can be more effective.

Thus, research offers immediate insights for policies relevant to race, sexual orientation, and socioeconomic status. The same logic would apply to other policies that affect marginalized groups. Given that, to date, the majority of research on the impact of discrimination on health has focused on racial discrimination, we strongly encourage continuing research on the commonalities and differences between identity, stigma, and health. As recent meta-analyses suggest, the processes of discrimination operate similarly across different identities, at least for mental health outcomes (Schmitt et al., 2014). However, a more nuanced analysis—dividing the groups according to whether discrimination is relatively unacceptable (e.g., racial) or still acceptable (e.g., the overweight) in society—found that disadvantaged groups for whom discrimination is still acceptable fared worse on mental health outcomes. Thus, most work on race discrimination may *underestimate* the effect of discrimination on other groups for which discrimination is still socially acceptable—and in some instances, quite prevalent—such as sexual minorities, the overweight, and the poor. Our findings and policy suggestions therefore may have even more compelling implications for other marginalized groups.

Conclusion

Despite spending more per capita than any other nation in world on health care, the United States continues to exhibit unequal health outcomes for disadvantaged groups. One reason for persistent and pervasive inequality is our failure to have holistic social policies that recognize the psychosocial factors that contribute to well-being. The reviewed evidence unequivocally establishes the role of societal and

interpersonal stigma and discrimination in contributing to health disparities. But this literature has yet to be fully appreciated and incorporated into social policies. This research can meaningfully inform policies as far-reaching as education, marriage, and health care. Careful review of other policies is likely to reveal that this literature applies to other policy domains as well.

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Notes

1. In this article, we incorporate literatures on both discrimination and stigma, given their relevance to our topic. In the remainder of the article, where possible, we have used the terms that individual studies have employed; when both apply, we have chosen one term for the sake of readability.
2. The literature most often uses the terms structural and institutional, but for ease of interpretability we use the word societal to refer to this form of stigma.
3. One notable exception is the case of field experiments, such as audit studies. For instance, a study by Tilcsik (2011) revealed that employment discrimination against a gay male applicant was more likely to occur in states with higher levels of structural stigma (i.e., states without employment nondiscrimination laws). However, no experimental studies have used audit designs to explicitly examine health outcomes and are therefore not considered in the remainder of this article.

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