

Structural Stigma and Health

How U.S. Policies Mitigate and Amplify Stigma

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Abstract

Research from across the social sciences has provided essential insights into how stigma operates to disadvantage those who are targeted by it. This research has, however, focused primarily on the perceptions of stigmatized individuals and on micro-level interactions. Over the past decade, a new line of stigma research has highlighted the adverse consequences of structural forms of stigma for members of stigmatized groups. This chapter reviews emerging evidence from cross-sectional, longitudinal, and quasi-experimental studies and demonstrates that one dimension of structural stigma—social policies—can amplify stigma processes, thereby heightening health risks. Furthermore, research shows that policy efforts that seek to mitigate structural stigma can have salubrious health effects. Strategies are discussed that researchers have used to address causal inferences regarding the relationship between social policies and health among stigmatized groups: identifying mechanisms; triangulating evidence across diverse methods, outcomes, and groups; conducting falsification tests; controlling for potential confounders; and evaluating plausible alternative explanations. Finally, ideas for future research are offered to strengthen and extend this work.

Structural Stigma and Health: How U.S. Policies Mitigate and Amplify Stigma

Stigma—defined as the co-occurrence of labeling, stereotyping, status loss, and discrimination in a context (e.g., same-sex marriage) in which power is exercised (Link and Phelan 2001)—has been a central topic of inquiry for nearly six decades across several social science disciplines, including psychology, sociology, economics, and anthropology. Most of this research has focused on the ways in which stigmatized individuals perceive and react to stigma as

well as on the interactional processes that occur between the stigmatized and nonstigmatized. Although this work has significantly advanced our understanding of how stigma operates to produce disadvantage, it has been criticized by numerous scholars for overlooking broader structural processes that promulgate and reinforce stigma (e.g., Link and Phelan 2001). Over the last decade, researchers have responded to this critique by conducting theoretical and empirical research on the role of structural stigma—defined as “societal-level conditions, cultural norms, and institutional policies that constrain the opportunities, resources, and well-being of the stigmatized” (Hatzenbuehler and Link 2014:2)—in shaping the lives of the stigmatized.

In this chapter, I selectively review the relatively new field of research on structural stigma by addressing four topics. First, I define structural stigma and consider one way in which it has been operationalized in the literature; namely, via social policies that restrict the opportunities of, or yield adverse consequences for, stigmatized individuals. Second, I review research evidence which demonstrates that social policies can amplify stigma processes and heighten health risks. I also discuss research evidence which indicates that policy efforts that seek to mitigate structural stigma can have salubrious health effects. Third, I describe several strategies that research groups have used to establish strong causal inferences regarding associations between structural stigma and health. Finally, I outline future directions to advance this emerging literature.

Definitions and Measures of Structural Stigma

It is well established that stigma is a multilevel construct that exists at individual, interpersonal, and structural levels (Link and Phelan 2001). *Individual forms of stigma* refer to the cognitive, affective, and behavioral processes in which individuals engage in response to stigma, such as expectations of rejection, self-stigma (i.e., the internalization of negative societal views about your group), and concealment. In contrast, *interpersonal forms of stigma* describe interactions that occur between the stigmatized and the nonstigmatized, including interpersonal discrimination.

Researchers have recently expanded the stigma construct beyond the individual and interpersonal levels to consider broader macro-social forms of stigma—termed *structural stigma*. Link and Phelan’s influential conceptualization of stigma was among the first to distinguish between individual and structural levels of stigma and to highlight that the concept of structural stigma “sensitizes us to the fact that all manner of disadvantage can result outside of a model in which one person does something bad to another” (Link and Phelan 2001:382). Following their initial use of this term, researchers began to delineate specific components underlying structural stigma. Corrigan et al. (2004), for instance, posited that structural stigma includes institutional policies that

either intentionally restrict the opportunities of, or yield unintended consequences for, stigmatized individuals. One prominent example is Jim Crow laws, which maintained White privilege in Southern states from Reconstruction to the early 1960s. More recent examples of policies that promulgate stigma include constitutional amendments that banned same-sex marriage, allowing special scrutiny of people “suspected” of being undocumented, and punitive policy responses to maternal substance use during pregnancy.

Building on the work of Corrigan et al. (2004), Link and Hatzenbuehler (2016) posited that there are at least three ways in which social policies may be related to stigma processes. First, policy can invigorate stigma and produce harm. In this conceptualization, those in power use policy efforts to achieve their aims of keeping stigmatized people “in, down, or away” (Phelan et al. 2008). Second, policies can seek to mitigate stigma, thereby reducing harm. In this conceptualization, policies respond to stigmatizing conditions by reversing patterns of structural stigma or addressing stigma expressed at the interpersonal level. In these first two instances, policies are hypothesized to create, exacerbate, diminish, or mitigate stigma-related harms, thereby shaping health outcomes among the stigmatized. Additionally, Link and Hatzenbuehler (2016) argued that it is necessary to consider a third form of policy action; namely, no action at all. As they noted, “a core feature of stigma is a discounting—a mattering less—that allows and even fosters policy inattention toward the concerns of stigmatized groups” (Link and Hatzenbuehler 2016:653). Examples of policy inaction include when the circumstances of stigmatized groups are ignored or when policies are enacted but are implemented selectively or not at all, as in the case of the Americans with Disabilities Act (National Council on Disability 2007). In this conceptualization, policy inaction is a policy regime unto itself.

Research Evidence on the Health Consequences of Structural Stigma

Despite the foundational conceptualizations of structural stigma and recent attempts to operationalize this construct, there has been a dearth of empirical research linking specific measures of structural stigma to individual-level health outcomes among members of stigmatized groups. This under-representation of structural stigma (relative to individual or interpersonal forms) has been called “a dramatic shortcoming” in the literature, given that the processes involved “are likely major contributors to unequal outcomes” (Link et al. 2004:515–516). Over the last decade, however, there have been several exciting advancements in the empirical literature on the health consequences of structural stigma. A comprehensive review of this literature is beyond the scope of this chapter (for reviews, see Hatzenbuehler 2016, 2017a, b). Here, illustrative examples of this research, with potential applicability to migration research, will

be described. Evidence is presented across a range of health outcomes (e.g., psychiatric morbidity, adverse birth outcomes), social groups (e.g., African Americans, immigrants, sexual minorities), and methodological approaches (e.g., observational and quasi-experimental designs). This section is divided into two types of social policies discussed by Link and Hatzenbuehler (2016) in relation to stigma processes: policies that amplify versus policies that mitigate stigmatization.

Social Policies That Amplify Stigma Processes

Several studies have examined whether social policies that amplify stigma are associated with negative health outcomes among members of stigmatized groups. These studies have largely used two methods: (a) cross-sectional, observational designs, which examine correlations between social policies and health; and (b) quasi-experimental designs, which examine whether changes in social policies are associated with changes in health outcomes.

In an early example of studies that employed a cross-sectional approach, Hatzenbuehler et al. (2009a) coded all 50 states in the United States for the presence or absence of hate crime statutes and employment nondiscrimination policies that included sexual orientation as a protected class. They linked this data on state-level policies to individual-level data on mental health and sexual orientation from the National Epidemiologic Survey on Alcohol and Related Conditions (NESARC), a nationally representative health survey of U.S. adults. The results indicated that sexual orientation disparities in psychiatric morbidity were significantly elevated in states without policy protections. For instance, lesbian, gay, and bisexual (LGB) adults who lived in states with no protective policies were nearly 2.5 times more likely to have dysthymia (a mood disorder), nearly 3.5 times more likely to have generalized anxiety disorder, and nearly five times more likely to have two or more co-occurring disorders than were heterosexuals in those same states, controlling for individual-level risk factors for psychiatric disorder prevalence (Hatzenbuehler et al. 2009a).

Another set of cross-sectional studies focused on the health consequences of social policies related to immigration, which have proliferated over the past several years in the United States. In one study (Hatzenbuehler et al. 2017b), researchers created a multisectoral policy climate index that included 14 immigration and ethnicity-specific policies across different domains, such as immigration (e.g., access to drivers' licenses for undocumented immigrants), language (e.g., English as the official state language), and agricultural worker protections (e.g., eligibility of agricultural workers for workers' compensation). This policy climate index at the state level was then linked to individual-level mental health outcomes among Latinx respondents from 31 states in the 2012 Behavioral Risk Factor Surveillance System, a population-based health survey of noninstitutionalized individuals aged 18 years or older. Latinx respondents in states with less supportive immigration policies reported greater

psychological distress than those living in states with more supportive policies; this relationship was not observed for non-Latinx participants (Hatzenbuehler et al. 2017b). These results remained robust after controlling for sociodemographic characteristics, as well as for state-level confounders, including percent Latinx in the state and attitudes toward immigration and immigration policies held by residents of each state. Further, sensitivity analyses indicated that the results were specific to immigration policies. Specifically, there were no associations between psychological distress among Latinx participants and three plausible alternative factors: two indicators of political climate (percentage of the vote for Romney vs. Obama during the 2012 presidential election and the party affiliation of the governor in 2012) and state-level residential segregation between Latinos and non-Latinos (Hatzenbuehler et al. 2017b). This work suggests that a broad set of policies across multiple sectors (including transportation, education, labor, health, and social services) appear to be consequential for the mental health of Latinx populations in the United States.

Complementing these observational studies are quasi-experimental designs. Because it is not ethical to assign individuals randomly to conditions of structural stigma (i.e., to states with or without protective policies), researchers cannot conduct randomized experiments to study the health effects of structural stigma. However, it is possible to take advantage of naturally occurring changes in structural stigma (e.g., following a change in social policies targeting a specific stigmatized group) to conduct quasi-experiments, in which researchers examine whether health changes after the passage of a social policy. Because these policies represent exogenous events, quasi-experimental designs that leverage changes in social policies effectively minimize threats to validity of self-selection into the exposure status (i.e., structural stigma). Although quasi-experiments are not new, they have only recently been used to study the health consequences of structural stigma. This is due, in part, to the difficulty of conducting these studies, given that such designs require data from before and after changes in structural stigma (e.g., social policies), which are typically outside the control of researchers.

Despite these methodological challenges, a handful of studies have utilized this approach. In one study (Hatzenbuehler et al. 2010), researchers took advantage of the fact that in between two waves of data collection in the NESARC (described above), several states passed constitutional amendments banning same-sex marriage. NESARC respondents were first interviewed in 2001 and then were reinterviewed in 2005, following the passage of the same-sex marriage bans. This provided a quasi-experiment that enabled researchers to examine changes in the prevalence of psychiatric disorders among LGB and heterosexual respondents who had been assessed both before and after the bans were passed. LGB adults who lived in states that passed same-sex marriage bans experienced a 37% increase in mood disorders, a 42% increase in alcohol use disorders, and a 248% increase in generalized anxiety disorders between the two waves. In contrast, LGB respondents in states without these bans did

not experience a significant increase in psychiatric disorders during the study period. Moreover, the mental health of heterosexuals in states that passed the bans was largely unchanged between the two waves, documenting result specificity (Hatzenbuehler et al. 2010).

Policies that amplify stigma processes may not only influence health, but also the utilization of health care. Senate Bill (SB) 1070 in Arizona contained numerous restrictive policies related to immigrants, including the requirement that police officers verify the immigration status of any individual they suspect to be undocumented during a lawful stop. In a quasi-experiment (Toomey et al. 2014), researchers evaluated whether utilization of preventive health care differed before and after the enactment of SB 1070, using data from an ongoing longitudinal study of the health and development of Mexican-origin adolescent mothers and their infants, who were interviewed before and after the enactment of SB 1070. Participants reported that they were less likely to take their baby to the doctor after SB 1070 was implemented. Further, younger adolescents were less likely than older adolescents to use preventive health care themselves following the law's enactment (Toomey et al. 2014), indicating that immigration policies may shape utilization of health-care services among groups targeted by these policies.

Whereas these two studies (Hatzenbuehler et al. 2010; Toomey et al. 2014) used a longitudinal panel design, other quasi-experimental studies have used repeated cross-sectional datasets to explore how changes in social policies influence the health of stigmatized populations exposed to structural stigma. In one example of this work, Raifman et al. (2018b) used a difference-in-difference analysis, an econometrics approach, to compare changes in mental distress among LGB and heterosexual respondents in three states that implemented laws denying public accommodations services (i.e., any place that is open to the public where commerce is carried out) to same-sex couples in 2015. The authors then compared this with changes in mental distress among LGB and heterosexual respondents in six geographically nearby control states with similar demographics but without these laws. Data on mental health (psychological distress) and sexual orientation came from the 2014–2016 Behavioral Risk Factor Surveillance System. The researchers first showed that in the three years leading up to the policy implementation (2012–2014), there were no differences in time trends in psychological distress between states that passed these laws denying services to same-sex couples versus control states. This evidence for “parallel trends” in difference-in-difference designs is necessary to ensure that any observed changes after the policy implementation are not due to preexisting differences between these two groups of states.

Having established these parallel trends before policy implementation, Raifman et al. then examined whether there was evidence for changes in the percentage of adults experiencing psychological distress in same-sex denial versus control states, stratified by sexual orientation identity. LGB individuals living in states with the same-sex denial law experienced a significant increase

in psychological distress following the implementation of the laws, which was equivalent to a 46% relative increase in sexual-minority adults experiencing mental distress in these states (Raifman et al. 2018b). In contrast, none of the other three comparison groups (i.e., LGB individuals living in states without the same-sex denial laws, and heterosexuals living in states with and without the laws) experienced a change in psychological distress during the study period. This study used state fixed effects, which not only controlled for baseline differences in rates of mental distress across states, but also for time invariant characteristics (e.g., political climate) that could have affected both the passage of the law and the prevalence of mental distress.

A third type of quasi-experimental design utilizes a comparative interrupted time series analysis, which enables researchers to capitalize on many years of data before the policy implementation to determine whether the policy “interrupted” the general trends in a health outcome that were apparent pre-policy implementation. One research group (Samari et al. 2020) employed this approach to examine the health consequences of the 2017 travel ban on individuals from Muslim-majority countries. Using the 2009–2018 National Center for Health Statistics period linked infant birth–death data, the researchers compared the monthly odds of preterm births to women from travel ban countries (Iran, Iraq, Libya, Somalia, Sudan, Syria, and Yemen) after the January 2017 ban to the number expected, had the ban not been implemented. A 6.8% increase in the odds of delivering a preterm birth was observed among women from travel ban countries between September 2017 and August 2018 (Samari et al. 2020).

Social Policies That Mitigate Stigma Processes

Having reviewed evidence which suggests that implementing policies that amplify stigma processes exerts negative health consequences for stigmatized populations, we now look at whether abolishing structural forms of stigma through social policies improve the health of the stigmatized. Researchers have tested this hypothesis using a variety of methods, including quasi-experiments, longitudinal studies, and divergent mobility patterns. Here, I describe illustrative examples of each of these types of studies.

One quasi-experimental study that explored this question was conducted by Hatzenbuehler et al. (2012) in Massachusetts, which became the first state to legalize same-sex marriage in 2003. They obtained data from previously collected medical records from a community-based health clinic in Massachusetts to examine the effect of the law on health-care use and costs among sexual-minority men. There was a 15% reduction in mental and medical health-care utilization and costs among these men in the 12 months following the legalization of same-sex marriage, compared to the 12 months before (Hatzenbuehler et al. 2012). To determine whether these reductions in health-care use and costs were driven, in part, by improvements in health, the researchers examined the

ICD-9 diagnostic codes that were charged by the providers following each visit. Results indicated substantial reductions in several stress-related disorders, including a 14% reduction in depression and an 18% reduction in hypertension, among sexual-minority men in the 12 months after the legalization of same-sex marriage compared to the 12 months before (Hatzenbuehler et al. 2012), providing preliminary evidence for a stress pathway linking structural stigma and health.

In another innovative quasi-experimental study, Krieger et al. (2013) examined associations between the abolition of Jim Crow laws (via the 1964 Civil Rights Act) and birth cohort trends in infant death rates among Blacks and Whites. In the four years prior to the abolition of the Jim Crow laws, the Black infant death rate was 1.19 times higher in Jim Crow states than in non-Jim Crow states; in contrast, ten years later, the rate ratio shrank to 1, indicating that the infant death rate among Blacks was statistically indistinguishable between those living in states that had previously enacted Jim Crow laws and those living in states that had not enacted these laws. There was no temporal change in the magnitude of the effect of the abolition of Jim Crow laws by birth cohort for White infants, documenting the specificity of these findings to Black infants (Krieger et al. 2013). These findings provide compelling evidence that the elimination of a structural form of racism through a social policy translated into downstream beneficial health consequences for Black mothers and their children.

Quasi-experimental designs cannot rule out the possibility that some other factor that occurred contemporaneously with the change in a social policy is driving the results. However, the plausibility of these alternative factors can be evaluated by examining whether they occurred during the same time period and, if so, whether they could have contributed to the results. To determine whether other factors unrelated to the same-sex marriage law contributed to their results, Hatzenbuehler et al. (2012) examined data from the Centers for Medicare & Medicaid Services to determine trends in health-care costs during the study period (2002–2004). These data revealed that health-care costs in the general population of Massachusetts' residents actually *increased* during the study period. This pattern was in the opposite direction of those observed in the study's sample of sexual-minority men, suggesting that external factors within the Massachusetts health-care environment were unlikely to have influenced the results.

Another approach researchers have employed is to use longitudinal studies that examine whether health disparities are reduced after declines in structural stigma at a population level, as reflected through changes in social policies. In one example of this approach, researchers used a population-based dataset in Sweden that has assessed sexual orientation and mental health every five years since 2005 (i.e., 2005, 2010, 2015). Over this ten-year period in Sweden, there were marked declines in structural forms of stigma, including changes in laws and policies that provided protections to sexual minorities, as well as declines

in prejudicial attitudes toward homosexuality. These declines in structural stigma were associated with reductions in the magnitude of the sexual orientation disparity in mental health. In 2005, gay men and lesbian women were nearly three times more likely to meet criteria for elevated psychological distress compared to heterosexual men and women; however, in 2015 the sexual orientation disparity in elevated psychological distress for gay men and lesbian women was eliminated (Hatzenbuehler et al. 2018). This finding suggests that sexual orientation disparities in mental health are responsive to changes in the social context and, in particular, to declines in structural stigma, as reflected through changes in social policies related to sexual orientation.

A third approach is to study stigmatized individuals who move to a different structural stigma context. This approach allows researchers to examine whether changes in exposure to diverse environments, in terms of structural stigma, are related to health. Examining whether this change in the structural stigma context is associated with health requires a novel data structure that includes

- a large sample of stigmatized individuals who have moved,
- linkage to objective indicators of structural stigma (e.g., social policies) in countries of origin and in receiving countries, and
- data on length of exposure to the receiving country and on health.

Until recently, the lack of such data has precluded researchers from leveraging mobility patterns to examine life-course variations in structural stigma exposure as a predictor of health.

Pachankis et al. (2021) used EMIS-2017/2018, a novel dataset compiled from the European Men-Who-Have-Sex-With-Men Internet Survey ($n = 123,428$ participants). These data were linked to an objective indicator of structural stigma related to sexual orientation, including 15 laws and policies as well as aggregated social attitudes, in respondents' countries of origin ($N = 178$ countries) and in their receiving countries ($N = 48$ countries). Among the 11,831 respondents who had moved from higher- to lower-structural stigma countries, longer exposure to the lower-structural stigma environments of their receiving countries was associated with a significantly lower risk of depression and suicidality, controlling for individual- and country-level covariates. Specifically, country-of-origin structural stigma was associated with depression and suicidality only for sexual-minority men who had recently moved (within 0–4 years) from higher- to lower-structural stigma countries. In contrast, there was no significant association between country-of-origin structural stigma and depression or suicidality among those men who had lived in their lower-structural stigma receiving country for five years or more, and who thus had longer exposure to lower levels of structural stigma (Pachankis et al. 2021).

Causal Inference

Researchers have used several different approaches to achieve the strongest causal inference possible regarding the health impact of structural stigma. As is evident from the discussion above, the field has incorporated a multi-measure, multi-method, multi-group, and multi-outcome approach to the study of structural stigma (as operationalized via social policies) and health. The use of multiple measures, methods, groups, and outcomes is an established approach to assessing validity; when convergence is demonstrated, this increases confidence that the results are not confounded by particular methods, measures, groups, or outcomes.

Another approach has been to examine whether structural stigma exerts health effects only among the stigmatized group, and not among the nonstigmatized comparison group. To the extent that structural stigma has specific effects on specific groups, confidence in a causal effect is enhanced, because such a finding is consistent with the theoretical predictions made by stigma theories (Link 1987). In addition, when relationships between structural stigma and health are observed only among members of the stigmatized group, this increases the likelihood that this result is due to structural stigma itself rather than to factors that may be associated with it (e.g., economic conditions). Studies have generally documented this kind of specificity; for instance, state-to-state variations in policies banning same-sex marriage (Hatzenbuehler et al. 2010) and in policies denying services to same-sex couples (Raifman et al. 2018b) did not negatively impact the mental health of heterosexuals. In addition to documenting specificity to the stigmatized group, researchers have also documented specificity to theoretically informed outcomes through conducting falsification tests. In falsification tests, researchers examine whether structural stigma is associated with outcomes that it should not theoretically influence, such as fruit juice consumption (Raifman et al. 2017). The lack of association between structural stigma and these alternative outcomes provides further support that structural stigma–health relationship is not biased due to omitted variables.

The identification of plausible mechanisms through which structural stigma affects health is another crucial step toward understanding causal relations. Indeed, if no evidence for mechanisms linking structural stigma and health is ascertained, the plausibility of confounding by other, unmeasured contextual characteristics is greater. Thus far, researchers have identified several mechanisms that underlie the relationship between structural stigma and health. These include identity concealment (e.g., Lattanner et al. 2021), social isolation (e.g., Pachankis et al. 2021), self-stigma (e.g., Evans-Lacko et al. 2012), perceived discrimination (Frost 2020), and stress (e.g., Flores et al. 2018).

A final approach for improving causal inferences comes through the direct assessment of alternative explanations for the relationship between structural stigma and health. For instance, it is possible that stigmatized individuals with

better health move away from policy regimes and attitudinal contexts that disadvantage them, leaving unhealthy respondents behind. If this were to occur, differential selection by health status could contribute to the observed association between structural stigma and health. Studies have begun to address this possibility and as yet have not found robust evidence for this selection hypothesis (e.g., Hatzenbuehler et al. 2017a; Pachankis et al. 2021).

Future Research Directions

Despite recent developments in the study of structural stigma and health, the field is still in its relative infancy. To aid further development, I discuss a few of the most important directions for future research, particularly as they relate to social policies.

First, the predominant approach thus far has been to code the content of social policies (whether at the country, state, or municipal level) to determine the presence of structural stigma in institutions. The main advantage of this approach is that it relies on objective data sources to code the policies. However, a key limitation is that content analyses often do not capture other factors that are relevant to social policies, including implementation and inaction (Link and Hatzenbuehler 2016). The lack of research on these factors likely means that the existing research base underestimates the full range of ways in which social policies shape the health and well-being of the stigmatized. The development of measures that capture policy implementation as well as policy inaction will offer an important corrective to this general trend.

Second, existing research has typically focused on social policies at a single level of analysis, including European countries (e.g., Pachankis et al. 2021) or U.S. states (Hatzenbuehler et al. 2010; Hatzenbuehler et al. 2012; Raifman et al. 2018b). While this approach is appropriate for some research questions, analysis of policies at a single level of analysis can obscure heterogeneity at other levels. For instance, municipal-level policies that seek to lessen stigma against immigrants (e.g., so-called sanctuary cities) may exist within states that have more restrictive social policies related to immigration. The presence of divergent policy regimes raises the question of whether and how policies at different geographic levels interact to create risk for, or protection against, adverse health outcomes. Recent research suggests that the incorporation of structural stigma across multiple levels, including state and city, may, in fact, yield new insights into behavioral and psychosocial outcomes among the stigmatized (e.g., Lattanner et al. 2021).

Third, most research has tended to focus on social policies that either amplify or mitigate stigma processes as they relate to a single stigmatized identity, condition, or status (e.g., sexual orientation, gender identity, race, or immigration). While that approach can begin to illuminate how structural stigma operates to create risk for adverse health outcomes, it overlooks the fact that

individuals have many social identities, some of which may be subject to stigmatization within a particular social context. In fact, one large study found that individuals reported, on average, six stigmatized identities, conditions, or statuses, suggesting that intersectionality may represent the norm, rather than the exception (Pachankis et al. 2018). Recent studies have begun to incorporate intersectional approaches in structural stigma research. For instance, a study by Pachankis et al. (2017a) created policy (and attitudinal) measures of structural stigma related both to sexual orientation and to immigration, and they linked these measures to a dataset of HIV outcomes among migrant men who have sex with men (MSM) across 38 European countries. The results indicated that these two forms of structural stigma interacted, such that the association between anti-gay structural stigma and HIV risk was significantly stronger for MSM migrants who lived in anti-immigrant receiving countries compared to those who lived in immigrant-supportive countries (Pachankis et al. 2017a). More intersectional research like this is needed to understand how social policies related to multiple social identities interrelate to shape health outcomes among stigmatized populations.

Fourth, while studies have begun to identify numerous mechanisms through which structural stigma shapes health outcomes (e.g., Frost 2020; Lattanner et al. 2021; Pachankis et al. 2021), comparatively less attention has been paid to characteristics of individuals, their interactions, and their broader social contexts that moderate the structural stigma–health association, either to potentiate or to buffer risk against adverse health outcomes. One notable exception is a study by Everett et al. (2016), who examined whether race/ethnicity and socioeconomic status moderated the relationship between the passage of a civil union law and health outcomes in an ongoing, longitudinal study of sexual-minority women. Intriguingly, they found that the benefits of the civil union law in terms of reductions in stigma consciousness, perceived discrimination, depressive symptoms, and adverse drinking consequences were concentrated largely among racial/ethnic minority women and women with lower levels of education (Everett et al. 2016). Although these findings suggest that social policies that mitigate stigma may confer stronger benefits for those most at risk for poor health, this hypothesis warrants replication in future studies.

Finally, the focus of this chapter has been on one indicator of structural stigma in the form of social policies, which represents one of the primary ways in which the field has operationalized structural stigma to date. However, researchers have also explored other measurement approaches for capturing structural stigma, including aggregated measures of explicit and implicit attitudes (e.g., Leitner et al. 2016), Google searches of racial epithets (e.g., Chae et al. 2015), Twitter-expressed negative racial sentiment (e.g., Nguyen et al. 2021), and media campaign ads run during voter referenda on the rights of stigmatized groups, such as same-sex marriage (Flores et al. 2018). Still other research groups have created multicomponent measures of structural stigma,

recognizing that many dimensions of structural stigma are correlated (e.g., Lattanner et al. 2021).

The relationships among these different indicators of structural stigma are only beginning to be explored. For instance, Ofosu et al. (2019) used an interrupted time series analysis with 12 years of data and over a million responses to examine whether legalization of same-sex marriage by the U.S. Supreme Court in 2015 was associated with changes in attitudes toward sexual minorities. Whereas implicit and explicit bias toward sexual minorities were already decreasing before legalization of same-sex marriage, this decrease doubled in magnitude following the Supreme Court decision, suggesting that litigation may not only reflect, but also positively shape, public attitudes toward marginalized groups. This association was moderated, however, by whether states had previously legalized same-sex marriage locally. For states that did not legalize same-sex marriage locally before the Supreme Court decision, anti-gay bias (both implicit and explicit attitudes) increased after the decision, suggesting a reactive or backlash effect to this litigation in geographic areas where social institutions had not signaled local acceptance of same-sex marriage (Ofosu et al. 2019). That study suggests that research evaluating the interplay of different indicators of structural stigma may offer new ways of understanding the production of health inequalities that result from structural stigma.

Conclusion

Although stigma research has typically focused on individual and interpersonal processes (Link and Phelan 2001), recent work indicates that structural stigma is an important, but heretofore largely underrecognized, determinant of population health inequalities (Hatzenbuehler 2016, 2017a, b). In this chapter, I reviewed evidence from a range of methods, measures, stigmatized groups, and health outcomes demonstrating that structural stigma, in the form of social policies, is associated with the health of members of stigmatized groups. Further, this research shows that policies exacerbate stigma (thereby shaping poor health) as well as mitigate stigma (thus contributing to improved health). The consistency of this evidence and the multiple attempts to establish strong inferences suggest that these relationships are robust and are not spurious. Despite the important advancements in this literature, much remains to be understood about how social policies influence the health of stigmatized populations. Greater attention should be paid to several areas, including the creation of measures of policy implementation and inaction, the examination of policy enactment across multiple levels simultaneously, the consideration of issues of intersectionality, and the identification of moderators of the association between policies and health. Moreover, social policies are but one component of structural stigma. More research is needed into the interrelationships of social policies and other dimensions of structural stigma, such as social attitudes and

institutional practices. Attending to these important questions will further expand our understanding of the manifold ways in which structural stigma operates to affect the distribution of life chances among the stigmatized, which will ultimately inform efforts to reduce stigma-induced harms.