JHPPL Advance Publication, posted on February 17, 2017

Fear by Association: Perceptions of Anti-Immigrant Policy and Health Outcomes

Edward D. Vargas
University of Wisconsin

Gabriel R. Sanchez
University of New Mexico

Melina Juárez
University of New Mexico

Abstract The United States is experiencing a renewed period of immigration and immigrant policy activity as well as heightened enforcement of such policies. This intensified activity can affect various aspects of immigrant health, including mental health. We use the Robert Wood Johnson Foundation 2015 Latino National Health and Immigration Survey ($n = 1{,}493$) to examine the relationship between immigration and immigrant policy and Latino health and well-being. We estimate a series of categorical regression models and find that there are negative health consequences associated with Latinos' perceptions of living in states with unfavorable anti-immigration laws, including reporting poor health and problems with mental health. This article builds on the work of public health scholars who have found a link between this heightened policy environment and the mental health of immigrants, yet expands on this research by finding that the health consequences associated with immigration policy extend to Latinos broadly, not just immigrants. These findings are relevant to scholars of immigration and health policy as well as policy makers who should consider these negative effects on the immigrant community during their decision-making process.

Keywords health disparities, immigration policy, Latino populations, perceptions, anti-immigrant sentiment

The project described is supported, in part, by a NICHD training grant to the University of Wisconsin–Madison (T32HD049302) and the Robert Wood Johnson Foundation Center for Health Policy at the University of New Mexico. The content is solely the responsibility of the authors and does not necessarily represent the official views of the Eunice Kennedy Shriver National Institute of Child Health and Human Development, the National Institutes of Health, or the Robert Wood Johnson Foundation. The authors would also like to thank Dr. Francisco I. Pedraza for the development of the perceived immigrant sentiment survey items.

Journal of Health Politics, Policy and Law, Vol. 42, No. 3, June 2017
DOI 10.1215/03616878-3802940

Introduction

The United States is undergoing a period of heightened immigration policy activity that has far- reaching consequences. Alongside increased funding for enforcement of federal immigration laws and record deportations during the Obama administration, the period between 2005 and 2012 saw an unprecedented rise in anti-immigrant legislation at the state level (Ybarra, Sanchez, and Sanchez 2015). This trend continues with over 150 immigration-related laws passed in the first half of 2015 (Morse et al. 2015). Turner and Sharry (2012) find that the rapid increase of anti-immigrant laws and the hostile climate that supported them came together to produce an intense "culture of fear" among Latino and immigrant families in Oklahoma.

This same culture of fear was dramatically present in Arizona after the passage of the Support Our Law Enforcement and Safe Neighborhoods Act (S. B. 1070) in 2010. Nicknamed the "breathing while Latino law" (Media Matters 2010), S. B. 1070's most controversial component required law enforcement to check the immigration status of an individual when "reasonable suspicion exists that the person is an alien who is unlawfully present in the United States" (Arizona State Senate 2010). Indeed, S. B. 1070 is now considered one of the most controversial and polarizing state immigrant laws since Prop. 187 passed in California, spurring mass mobilizations and unrest against it. Nill (2011: 36) argues that the passage of S. B. 1070 has triggered a broader phenomenon of Latino demonization, general acceptance of racial profiling, and a movement against birthright citizenship.

Despite the controversy surrounding S. B. 1070, states have continued to pass punitive immigrant laws. These policies are the result of a tense policy environment where political conservatives continue to pursue punitive laws aimed at driving out undocumented immigrants (*USA Today* 2011). The major argument underlying the conservative pressure for punitive laws blames the federal government for not doing enough to curb undocumented immigration. Of particular importance to our theory is the racialized undertone of this political dialogue, a hostility that is evident to Latinos. Couched in a period of economic turmoil, anti-immigrant (and anti-Hispanic) sentiments are interfused with punitive immigrant state laws. These laws codified the perceived "Hispanophobia" that has been mounting in recent years, especially in new destination states, and provided the structural mechanisms for its propagation (Nill 2011).

The repressive and hostile environments these laws helped perpetuate not only contribute to the flight of immigrants and their families (for

example, the Tulsa Chamber of Commerce has estimated that between 15,000 and 25,000 undocumented immigrants left Tulsa County as a result of H. B. 1804) (Turner and Sharry 2012), but they also take a toll on the physical and mental health of immigrants (Vargas, Sanchez, and Juárez 2015). This article uses a new and unique survey to directly assess the potential influence of Latinos' perceptions of the favorability of immigrant laws toward immigrants on Latino health outcomes. Building on the work of public health scholars who have found a link between this heightened policy environment and the mental health of immigrants (Cavazos-Rehg, Zayas, and Spitznagel 2007; Gonzales, Suarez-Orozco, and Dedios-Sanguineti 2013; Salas, Ayon, and Gurrola 2013; Anderson and Finch 2014), we find that there are health consequences associated with these laws that reach beyond the undocumented community in the United States. These findings are relevant to scholars of immigration and health policy as well as policy makers who should consider the negative health consequences of legislation being passed under their watch.

The Influence of Policy on Health Outcomes

The link between public policy and health outcomes has been established in the literature (see Navarro and Shi 2001; Navarro et al. 2006). This relationship has become a central component in the work pursued by international organizations concerned with health outcomes. For example, the World Health Organization's (WHO) Commission on Social Determinants of Health (CSDH) released a seminal report on worldwide health in 2008 that recognized political context and public policy as social determinants of health (SDH) (WHO 2008). The report acknowledged that politics and public policy influence health (both directly and indirectly) through the creation of the economic, social, and health policy environment within which the structural determinants of health and societal conditions function (Solar and Irwin 2007).

Given that the relationship between anti-immigrant laws and health is not a direct one, the SDH framework is an appropriate analytical frame to utilize as it helps to highlight the associations and mechanisms that lead to negative health outcomes. A key component in the SDH framework is its use of intermediary factors that help connect the sociopolitical context and health outcomes. These intermediary determinants of health are: material circumstances, psychosocial factors, and behavioral and biological factors (Solar and Irwin 2007). For a conceptual model of the World Health Organization's SDH framework, see Solar and Irwin (2007).

There is growing and compelling research that explores the links between immigration policy and immigrant self-rated health with particular focus on intermediary factors. The hostile environments created by punitive immigration and immigrant laws have led to the perception of "being hunted" by Immigration and Customs Enforcement (ICE), consequently producing intense feelings of anxiety, fear, and depression. These are all psychosocial reactions that exacerbate preexisting health conditions such as high blood pressure and diabetes (Cavazos-Rehg, Zayas, and Spitznagel 2007; Hacker et al. 2011; Salas, Ayon, and Gurrola 2013). Moreover, chronic psychological stress resulting from discrimination has been associated with increased body fat and higher fasting glucose levels among Latino immigrant adults (McClure et al. 2010). Borre, Ertle, and Graff (2010) found that immigrant farmworkers displayed high rates of obesity that compounded issues with diabetes and cardiovascular disease. Those farmworkers who struggled with obesity also reported increased musculoskeletal injuries and issues with job performance and economic opportunities.

Youth and children of undocumented immigrants are especially vulnerable to the high levels of stress associated with legal status and the hostile anti-immigrant environment. Feelings of hopelessness, anxiety, guilt, and despair are common among undocumented youth. Issues related to legal status compound the already difficult stages of psychosocial development experienced during adolescence, negatively impacting the mental and emotional health of these youth (Gonzalez, Suarez-Orozco, and Dedios-Sanguineti 2013).

Hostile environments also affect immigrants' health-seeking behaviors (Cavazos-Rehg, Zayas, and Spitznagel 2007; Hacker et al. 2011). Writing about California's Proposition 187, Berk and Schur (2001) found that the law did not have a direct impact on these behaviors, but the fear of deportation in general did. They found that those who reported being fearful of being denied care were often unable to receive the services they needed. Hacker et al. (2011) also note that these effects go beyond the individual level. In recent work, Vargas as well as Vargas and Pirog find that among mixed-status families the risk of being deported decreases the odds of using social services such as Medicaid and the federal Women, Infants, and Children (WIC) program (Vargas 2015; Vargas and Pirog 2016). Fear and distrust of law enforcement can lead to immigrants not reporting crimes and withdrawing from community engagement (Nichols, LeBron, and Pedraza 2016). This in itself has implications for the health of Latinos as a whole (citizens and noncitizens alike). In sum, it is not the laws

themselves causing negative health outcomes but the externalities of the laws—especially in terms of the hostile environment—that are causing detrimental health effects.

Moreover, Androff et al. (2011) also find that immigration policies affect the socioeconomic outcomes of immigrants and Latinos in the United States. They argue that although there is well-known evidence of the hardships endured by immigrant families, "public policies and actions have exacerbated these conditions for immigrant children and further compromised their health and well-being" (Androff et al. 2011: 82).

We build on this literature by exploring the relationship between Latino health outcomes and Latinos' perceptions of whether the immigrant laws in their state are favorable or unfavorable toward immigrants. The literature cited above strongly suggests that there are significant health consequences associated with these punitive immigrant laws. Furthermore, the racialized nature of these policies pose important challenges for Latinos. In fact, 78 percent of the respondents to the survey used in this article indicate that they believe there is an anti-Hispanic and/or anti-immigrant environment in the United States today. We therefore hypothesize that there will be a negative association between perceiving that the state you are living in has immigrant laws that are unfavorable toward immigrants and health outcomes among Latino adults. Our approach makes two important contributions to this literature. First, given our sample, we can explore the health consequences of the perceptions of these laws on Latino adults overall and nationally, not just on the undocumented or Latinos in specific states. And secondly, we are able to assess the association not only between perceptions of punitive immigrant laws and self-rated health, but also associations with these perceptions and Latinos' networks and emotional well-being. We believe that this research design provides a new perspective on this important and interesting research question.

Data and Methods

We take advantage of the 2015 Robert Wood Johnson Foundation (RWJF) Center for Health Policy at the University of New Mexico's Latino National Health and Immigration Survey (LNHIS), which is a unique survey designed for the specific purpose of examining the relationship between immigrant policy and Latino health and well-being. Latino Decisions implemented the survey and worked in conjunction with the scholars at the RWJF Center for Health Policy at UNM to design the survey instrument. This is therefore an ideal dataset for our research question. The

LNHIS (Total $N = 1{,}493$) relies on a sample provided by a mix of cell phone and landline households along with Web surveys. This mixed-mode approach improves our ability to capture a wide segment of the Hispanic population in the sample by providing a mechanism to poll the growing segment of the Hispanic population that lacks a landline telephone as well as those who prefer to engage surveys online. This approach is sensitive to some of the major shifts in survey methodology driven by changes in the communication behavior of the population. More specifically, the increasing number of Americans who have decided to use a cell phone for telephone communication while doing away with their landline telephone motivates our expansion of sample beyond landline households. A total of 989 Latinos were interviewed over the phone and an additional 504 Latinos were sampled through the Internet to create a dataset of 1,493 respondents. The Web-focused respondents were randomly drawn from Latino Decisions' national panel of Latino adults. Respondents on the Web were culled from a double-opt-in national Internet panel, then randomly selected to participate in the study, and weighted to be representative of the Latino population. The Web mode allowed respondents to complete the survey in either English or Spanish, and contained the exact same questions as the phone mode.

All phone calls were administered by Pacific Market Research in Renton, Washington. The survey had an overall margin of error of +/– 2.5 percent with an American Association for Public Opinion Research (AAPOR) response rate of 18 percent for the telephone sample. Latino Decisions selected Puerto Rico and the forty-four states with the highest number of Latino residents for the sampling design, states that collectively account for 91 percent of the overall US Latino adult population. Respondents across all modes of data collection could choose to be interviewed in either English or Spanish. All interviewers were fully bilingual. A mix of cell phone (35 percent) only and landline (65 percent) households was included in the sample, and the full dataset including both phone and Web interviews was weighted to match the 2013 Current Population Survey universe estimate of Latino adults with respect to age, place of birth, gender, and state. The survey was approximately twenty-eight minutes long and was fielded from January 29, 2015, to March 12, 2015.

The primary health outcome variables of interest are self-rated health status and problems with mental health within the LNHIS dataset. The self-reported health status question included in the LNHIS survey is very close in wording to the item included in the Centers for Disease Control and Prevention (CDC) Behavioral Risk Factor Surveillance System (BRFSS).

Both questions utilize a 1 to 5 Likert scale, with respondents rating their health status from excellent to poor. The specific survey question we utilize is, "How would you rate your overall physical health—excellent, very good, good, fair, or poor?," which is nearly identical to the CDC BRFSS question, "Would you say that in general your health is—excellent, very good, good, fair, or poor?" We keep the original coding in our analysis that ranges from 1 = excellent to 5 = poor to predict poor health using ordered logistic regression.

The variable used to capture problems with mental health was created using the survey question, "In the past 12 months did you think you needed help for emotional or mental health problems, such as feeling sad, anxious, or nervous—yes or no?," which is identical to the California Health Interview Survey, Fragile Families and Child Well-Being Survey, and other national surveys. Since this variable is binary, we use logistic regression to model it.

Our explanatory variables are two measures of perceived immigration sentiment to first understand perceptions of state immigrant policy, and then a broad indicator to sort out if respondents believe anti-immigrant or anti-Hispanic sentiments exists. We utilize the following question to measure perceptions of state immigrant policy, "Thinking about the immigrant population in your state, would you describe [STATE] policies as favorable or unfavorable towards immigrants?" The categories of the variable are favorable or unfavorable, which we coded (0 = favorable, 1 = unfavorable). We then utilize these two questions to create our second measure of immigrant sentiment:

> Some people have said that there seems to be a lot of anti-immigrant, and even anti-Hispanic, sentiments, policies, and attitudes surfacing in recent years; while other people have said that no such anti-immigrant environment exists today. How do you feel? Do you feel there is definitely an anti-immigrant or anti-Hispanic environment today, there is somewhat of an anti-immigrant or anti-Hispanic environment, or, do you think no such environment exists today—Definitely anti-Hispanic/anti-immigrant environment, Somewhat anti-Hispanic/anti-immigrant environment, no such environment exists?

The follow-up question then asks, "Would you say that this environment today is mostly anti-immigrant, anti-Hispanic or is it hostile to both immigrants and all Hispanics, no matter what their immigration status is? —Mostly anti-immigrant, Mostly anti-Hispanic, Both anti-immigrant and anti-Hispanic." To code our perceived anti-Hispanic/anti-immigrant

sentiment variable we created four nominal, mutually exclusive categories, 1 = no anti-immigrant/anti-Hispanic sentiment exists (if the response to the first question was "no such environment exists"), 2 = mostly anti-immigrant sentiment, 3 = mostly anti-Hispanic sentiment, 4 = both anti-immigrant/anti-Hispanic sentiment exists. Summary statistics for all variables used in this analysis are listed in table 1. Our analytic approach is focused on the exploration of various categorical regression techniques intended to determine if our measures of perceived immigration climate impact health outcomes among the Latino population.

Finally, we control for a handful of measures that have been found to be correlated with Latino health status in previous research. Among the demographic variables, we include standard measures of income, educational attainment, age, marital status, citizenship, and gender. To assess income we have included several dummy variables representing different income categories: $20,000–$39,999, $40,000–$59,999, $60,000–$79,999, $80,000–$99,999, $100,000–$149,999, and $150,000 and above, with less than $19,999 serving as the reference category. We also include a variable of "unknown" income in the model which includes respondents who did not report their income as a means of saving cases. One of the more important controls in our model is for insurance coverage, as previous literature has found that having access to health insurance influences Latino health outcomes (Probst et al. 2008; Fisher-Owens et al. 2013). We also include a measure of civic engagement to adjust for the variation in an individual's knowledge of current government and public affairs. This measure helps account for a general sense of awareness and engagement in civic affairs, a trait that could make respondents more conscious of the immigration climate in their community.[1]

The US Latino/Hispanic population is immensely diverse, with members originating from twenty-one countries. Latino/Hispanic subgroups tend to reside in different areas of the United States, have different cultural practices/norms, different immigration experiences, and varying levels of health status. The dataset we utilize for this analysis allows us to explore the influence of this diversity on health outcomes. For example, the Mexican origin population (which makes up 65 percent of the total Latino population) has been found to have unique health outcomes relative to Latinos from other backgrounds (Zsembik and Fennell 2005; CDC 2011). This variation motivates us to account for Mexican origin in our study, so we

1. We originally estimated only demographic controls and included health coverage and civic engagement variables to control for individuals who are not covered by health insurance and for individuals who might follow current events more frequently. We find that these two variables improve our overall model fit, and we included them in all analysis.

Table 1 Summary Statistics—2015 Robert Wood Johnson Foundation/Latino Decisions Latino National Health and Immigration Survey ($n = 1,493$)

VARIABLES	Mean	Standard Deviation	Minimum	Maximum
Self-rated health[1]	2.70	1.08	1	5
Mental health problems[2]	0.25	0.44	0	1
Unfavorable state immigrant policy	0.38	0.48	0	1
Both anti-immigrant/Hispanic	0.25	0.43	0	1
Anti-Hispanic climate	0.16	0.36	0	1
Anti-immigrant climate	0.39	0.49	0	1
No anti-immigrant/Hispanic climate	0.20	0.40	0	1
US citizens[3]	0.77	0.42	0	1
Worry about deportations[4]	0.45	0.50	0	1
Generational status[5]	1.69	0.78	0	1
Female[6]	0.62	0.49	0	1
Civic engagement[7]	2.73	1.08	1	4
Education[8]	5.52	2.36	1	10
Age	45.87	17.00	18	98
Income missing	0.21	0.41	0	1
Income: Less than 20k	0.20	0.40	0	1
Income: 20k–39k	0.21	0.40	0	1
Income: 40k–59k	0.13	0.33	0	1
Income: 60k–79k	0.09	0.28	0	1
Income: 80k–99k	0.06	0.24	0	1
Income: 100k–149k	0.07	0.25	0	1
Income: 150k+	0.04	0.19	0	1
Currently uninsured[7]	0.15	0.36	0	1
Married[9]	0.53	0.50	0	1
English[10]	0.58	0.49	0	1
Mexican origin[11]	0.55	0.50	0	1

Notes:

[1]Self-rated health: (1 = excellent, 2 = very good, 3 = good, 4 = fair, 5 = poor).

[2]Mental health problems [sought help for mental health problems in the last 12 months]: (0 = no, 1 = yes).

[3]Citizenship: (0 = noncitizens, 1 = US citizens).

[4]Worry about family or friend being deported: (0 = no, 1 = yes).

[5]Generational status: (1 = first generation, 2 = second generation, 3 = third generation).

[6]Civic engagement: (1 = hardly follow public affairs, 2 = now and then, 3 = some, 4 = most of time).

[7]Highest education levels completed: (1 = no formal schooling, 2 = grades 1–8, 3 = some HS, 4 = GED, 5 = HS graduate, 6 = some college, 7 = associates, 8 = bachelors, 9 = MA, 10 = PhD/MD).

[8]Insurance coverage: (0 = currently insured, 1 = currently uninsured).

[9]Married: (0 = unmarried, 1 = married).

[10]Language of interview: (1 = English, 0 = Spanish).

[11]Mexican origin: (0 = all else, 1 = Mexican origin).

include a binary variable for Mexican origin to account for Latino heterogeneity by national origin. Given the focus on immigration laws, we also include measures for citizenship status and language usage, two other important sources of variation often linked with Latino health outcomes (Afable-Munsuz et al. 2009; Rubens et al. 2013; Anderson and Finch 2014).

Lastly, we include a proxy for the respondent's relationship with immigrants by including a measure that queries Latinos on their network and emotional connection with immigrants. Included in the survey was the question "Do you worry that your friends or family members might be detained or deported due to their immigration status?" We expect Latinos who worry about having friends or family members deported to have higher odds of reporting problems with mental health. Over 45 percent of Latinos in the LNHIS worry about friends or family members being detained or deported due to their immigration status.

Finally, we also estimate models to examine the role of generational status on health. The LNHIS allows up to three generations using demographic indicators that ask respondents about both their country of birth as well as their parents' country of origin. To be coded first generation, respondents reported being foreign born. For second generation, respondents reported being US born with either parent being foreign born. To be coded as third generation, respondents must have been born in the United States and both parents must have been born in the United States. Respondents of Puerto Rican descent are coded as foreign born if they were born in Puerto Rico. Given that citizenship status and generational status are highly correlated, we run these models separately and our tables only report models using citizenship status. All statistical analysis was conducted using Stata 12 software (StataCorp 2011), and survey weights were used to account for the complex survey design. All analysis used state fixed effects to take into account unobserved state factors such as access to care, local immigration policies, and state economy by using the geocoded information. Our analytical approach is intended to determine the relationship between perceived immigration climates on multiple measures of health within a nationally representative sample of Latino adults. Our primary focus is to determine the effect of perceived negative immigrant climate on predicting poor health outcomes.

Results

We begin with a discussion of the distributions from our sample (which are provided in table 1). After dropping missing data, we have a total sample of

1,270 respondents. The mean self-rated health indicator is good health; on average about 44 percent of the sample stated that in the past twelve months they needed to seek help with mental health problems. For our measures of immigrant policy sentiment, 38 percent reported that their state's immigrant policies are unfavorable toward immigrants. Regarding general anti-Hispanic/anti-immigrant sentiment, 20 percent of respondents felt that no anti-Hispanic/anti-immigrant sentiments exists, 25 percent felt that the current environment is anti-immigrant, 16 percent believe the climate is anti-Hispanic, and 39 percent felt the current environment is both anti-Hispanic and anti-immigrant. The mean age in our sample is 52, and the majority of our sample has a high school education. Moreover, just over half of our sample completed the survey in English, and just under half of the sample was female. In regards to citizenship, 77 percent of our sample is made up of US citizens (9 percent undocumented and 14 percent non-citizens with permanent residency), and 55 percent of our respondents are of Mexican origin. Over 51 percent of the sample is first generation, 29 percent second generation, and 19 percent of the sample is third generation.

Our first set of categorical regression models test the difference between Latinos' perceptions of their state's immigrant policies on various health outcomes, controlling for a vector of variables (table 2). We then estimate models that examine Latinos' perceptions of the general climate toward Hispanics and immigrants to tease out if these differences in their perceptions are about ethnicity or immigration on various health outcomes (table 3).

The results of our first set of models are depicted in table 2. For parsimony, we only show the odds ratios from our analysis. Our first set of results in this table estimate an ordered logistic regression model that includes unfavorable state immigrant policies equal to one (favorable policies equal to zero), controlling for age, education, gender, income, insurance coverage, citizenship, civic engagement, language of interview, personal connection to immigrants, and state fixed effects. There is strong support for our primary theory, as we find that there are differences between individuals' perceptions of their state's immigrant policies on the probability of reporting poor health. In fact, the odds of reporting poor health are 1.7 times larger for respondents who perceive their state's immigrant policies as unfavorable, holding all else constant ($p < 0.01$).

In examining the association of poor health and unfavorable perceptions among Latinos, we run an interaction model and compare citizenship and perceptions of their state's immigrant policies. In modeling the full equation and interaction term, we continue to find that Latinos who perceive their state's laws as unfavorable are statistically more likely to report poor

Table 2 Ordered Logistics and Logistic Coefficients for Regressions of Latinos' Perceptions of Unfavorable State Immigrant Policies on Latino Health Using a 2015 Robert Wood Johnson Foundation/ Latino Decisions Latino National Health and Immigration Survey

	Ordered Logistic Model	Logistic Model
	Self-Rated Health (Excellent to Poor)	Mental Health Problems (0 = No, 1 = Yes)
VARIABLES	Odds Ratios	Odds Ratios
Unfavorable state immigrant policy[1]	1.665***	1.170
US citizens	0.714**	1.470*
Worry about deportations[2]	0.952	1.513**
Female	1.368***	1.113
Civic engagement[3]	0.770***	1.262***
Education[4]	0.847***	0.920
Age	1.026***	0.997
Reference income: less than 20k		
Income missing	1.109	0.659***
Income: 20k–39k	0.953	0.436***
Income: 40k–59k	0.935	0.650
Income: 60k–79k	0.843	0.625
Income: 80k–99k	0.823	0.569**
Income: 100k–149k	0.793	0.551**
Income: 150k+	0.543*	0.728
Currently uninsured	1.484***	1.257
Married	0.991	0.730***
English	1.629***	1.010
Mexican origin	1.062	0.512***
Observations	1,262	1,235
Adjusted R-squared	0.0672	0.0751

Notes: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$; state fixed effects using complex survey weights.

[1]Perceptions of state policies toward immigrants: (0 = favorable, 1 = unfavorable).

[2]Worry about family or friend being deported: (0 = no, 1 = yes).

[3]Civic engagement: (1 = hardly follow public affairs, 2 = now and then, 3 = some, 4 = most of time).

[4]Highest education levels completed: (1 = no formal schooling, 2 = grades 1–8, 3 = some HS, 4 = GED, 5 = HS graduate, 6 = some college, 7 = associates, 8 = bachelors, 9 = MA, 10 = PhD/MD).

health relative to living in a state that has favorable immigrant policies, yet the interaction is not significant. When we just include an interaction term in the model, we find that to be an interaction effect and conclude that noncitizen respondents who view their state as unfavorable are more likely to report poor health relative to citizens who view their state as favorable.

When including generational status as opposed to citizenship status, we find that third-generation Latinos are less likely to report poor health relative to first-generation Latinos.

Our next model estimates a logistic regression to examine the probability of needing to seek help for mental health problems. These results suggest no differences in effect on the probability of reporting poor mental health based on how you perceive your state's immigrant policies. However, we do find that worrying about a family member or friend being deported increases the likelihood of reporting poor mental health. In fact, Latinos who worry that a friend or family member will be deported because of their immigration status are 1.5 times more likely ($p < 0.01$) to report needing to seek help for emotional or mental health problems such as feeling anxious, sad, or nervous, holding all else constant. In our interaction model of citizenship and unfavorable policies, we do not find differences in help for emotional or mental health problems. When including generational status as opposed to citizenship status, we find that first-generation Latinos—as opposed to second- and third-generation Latinos—are less likely to report needing to seek help for emotional or mental health problems such as feeling anxious, sad, or nervous, holding all else constant.

Regarding demographic control variables, we find that, in general, socioeconomic status and civic engagement are strong predictors of health across our models. For example, income, civic and formal education, and age are strong predictors of health, as we find those who are more educated and who follow public affairs more often are less likely to report poor health, and older respondents are more likely to report poor health, which is consistent and expected given the health disparities literature. In our mental health models, we do find differences between Mexican and non–Mexican origin respondents, as Mexican origin respondents are less likely to report mental health problems compared to their co-ethnic Latino counterparts.

The results of our second set of models are depicted in table 3. These results estimate an ordered logistic regression model that includes the general climate toward immigrants and Hispanic populations as four mutually exclusive categories on self-rated health. In estimating our ordered logistic model we exclude the category of no anti-Hispanic/immigrant climate as the reference category, and test if there are differences between anti-Hispanic, anti-immigrant, and both anti-Hispanic and anti-immigrant categories on self-rated health. The results suggest that there are differences between Latinos' perceptions of the environment being both anti-Hispanic and anti-immigrant compared to respondents who believe such an environment does not exist when it comes to reporting poor health. In fact, the odds of reporting poor health are 1.4 times larger for respondents who

Table 3 Ordered Logistics and Logistic Coefficients for Regressions of Latinos' Perceptions of Their State's Environment toward Hispanics and Immigrants on Latino Health: Robert Wood Johnson Foundation/ Latino Decisions Latino National Health and Immigration Survey 2015

	Ordered Logistic Model	Logistic Model
	Self-Rated Health (Excellent to Poor)	Mental Health Problems (0 = No, 1 = Yes)
VARIABLES	Odds Ratios	Odds Ratios
Reference Category: No Anti-immigrant or Anti-Hispanic Climate		
Anti-immigrant climate	0.987	1.582**
Anti-Hispanic climate	0.829	1.338
Both anti-immigrant/ anti-Hispanic	1.433**	1.429*
US citizens	0.776*	1.355
Worry about deportations[1]	1.026	1.607***
Female	1.348***	1.098
Civic engagement[2]	0.784***	1.167**
Education[3]	0.859***	0.945
Age	1.027***	0.999
Reference income: Less than 20k		
Income missing	1.088	0.626**
Income: 20k-39k	0.999	0.393***
Income: 40k–59k	0.906	0.588**
Income: 60k–79k	0.815	0.564**
Income: 80k–99k	0.823	0.536*
Income: 100k–149k	0.739	0.513**
Income: 150k+	0.550*	0.607
Currently uninsured	1.522***	1.449**
Married	1.078	0.673***
English	1.593***	1.007
Mexican origin	1.126	0.489***
Observations	1,270	1,238
Adjusted R-squared	0.0628	0.0802

Notes: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$; state fixed effects using complex survey weights.
[1]Worry about family or friend being deported: (0 = no, 1 = yes).
[2] Civic engagement: 1 = hardly follow public affairs, 2 = now and then, 3 = some, 4 = most of time
[3] Highest education levels completed: (1 = no formal schooling, 2 = grades 1–8, 3 = some HS, 4 = GED, 5 = HS graduate, 6 = some college, 7 = associates, 8 = bachelors, 9 = MA, 10 = PhD/MD).

perceive the environment in which they live as both anti-Hispanic and anti-immigrant, holding all else constant ($p < 0.05$). We also estimated an interaction model and compare citizenship and anti-immigrant/anti-Hispanic sentiment. In modeling the full equation and interaction term, we do not find

an interaction effect. When including generational status as opposed to citizenship status, we find that third-generation Latinos are less likely to report poor health relative to first-generation Latino respondents.

Our next model estimates a logistic regression to examine views of a state's environment toward Hispanics and immigrants on the probability of needing to seek help for mental health. There is strong support for these results, as we find that there are differences between perceiving the current environment as anti-immigrant compared to not perceiving such an environment exists. In fact, Latinos who perceive the environment as anti-immigrant, as opposed to Latinos who believe no such environment exists, are 1.6 times more likely ($p < 0.05$) to report needing to seek help for emotional or mental health problems such as feeling anxious, sad, or nervous, holding all else constant. Moreover, Latinos who perceive the environment is both anti-Hispanic and anti-immigrant, as opposed to Latinos who believe no such environment exists, are 1.4 times more likely to report needing to seek help for emotional or mental health problems such as feeling anxious, sad, or nervous, holding all else constant, which is marginally significant.

Lastly, Latinos who worry that a family member or friend might be deported are 1.6 times more likely ($p < 0.01$) to report needing to seek help for emotional or mental health problems such as feeling anxious, sad, or nervous, holding all else constant. In other words, the odds of a Latino respondent worrying that a family member might be deported increases their odds of reporting poor mental health by 60 percent, holding all else constant. We also estimated an interaction model and compare citizenship and anti-immigrant/anti-Hispanic sentiment. In modeling the full equation and interaction term, we do not find an interaction effect. When including generational status as opposed to citizenship status, we find marginal differences yet conclude that, across generational status, Latinos are more likely to report problems with mental health.

Discussion and Conclusions

The United States is undergoing a nearly unprecedented period of heightened immigrant policy activity that has a marked punitive and anti-Hispanic undertone. Survey data collected by Latino Decisions and used in this research has made clear that Latinos are acutely aware of these laws, with the majority of respondents in this survey indicating that the laws in their state are unfavorable to immigrants. We set out to determine whether these perceptions are associated with the health outcomes of the

Latino population and find consistent evidence that they are. Although there are undeniable limitations in our research, this article makes several important contributions to the literature associated with the health consequences of public policies. Utilizing a new and unique survey specifically designed to assess the relationship between immigration and health policies, our research design provided the opportunity to assess the correlation between the perceived punitive nature of immigrant policy across multiple health outcomes. This led to findings that suggest that the health ramifications of punitive immigrant policy and the anti-Hispanic and anti-immigration climate underlying these laws are associated—although indirectly as the SDH framework suggests—with physical health as well as the more general self-rated health measure. Most importantly, our work suggests that the consequences of these laws are not limited to the immigrant community, as our sample is inclusive of the entire Latino population. This is a significant departure from the previous work in this area.

Given that our sample is representative of the Latino population nationally, our findings cue a natural follow-up question of what might be driving the correlations we find in our analysis. While future research should dive deeper into this question, our analysis provides some useful context for this larger discussion. First, the survey work from Latino Decisions has consistently found that the majority of Latino citizens report having undocumented immigrants in their personal networks. This suggests that even though Latino citizens may not be directly harmed by punitive immigration policies, they recognize that friends and family members are going to be directly impacted. Furthermore, it is plausible that Latino citizens may be concerned that, regardless of their personal immigration status, they could be impacted by punitive laws if they happen to look like an immigrant. We believe that this "fear by association" is a major driving factor behind the correlations found in our analysis, and potentially indicative of a sense of linked fate between Latinos regardless of immigration status (see Sanchez and Masuoka 2010 for a discussion of linked fate theory). Although well beyond the scope of this analysis, future work should explore whether there is a sense of linked or common fate among Latinos that is being manifested by reactions to punitive immigrant laws.

Second, we believe that Latino health, regardless of immigration status, is being influenced by a concern that family members and friends may be detained or deported. Fortunately, the survey we used provided the opportunity to directly test this hypothesis, which has been done in our analysis. We find that those who worry about a friend or family member

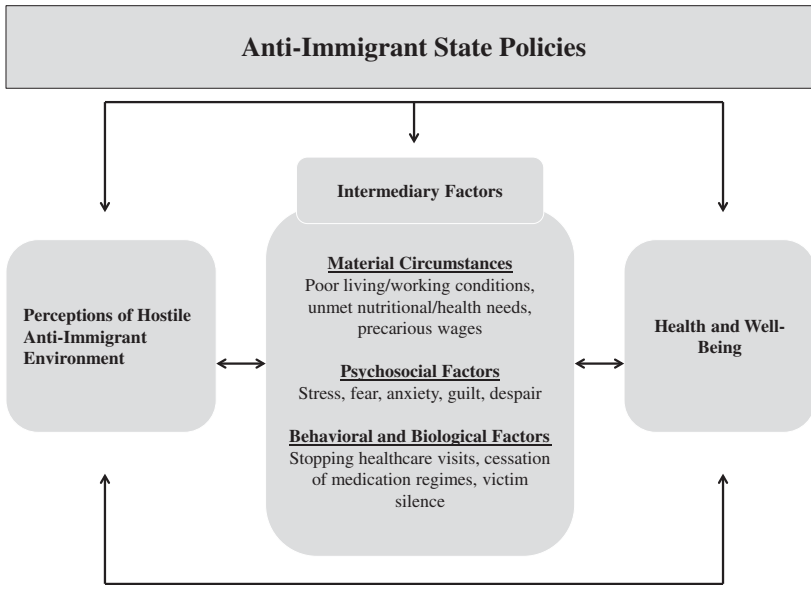

Figure 1 Pathway between State Anti-immigrant Laws and Health Outcomes

Source: Authors' own conceptualization of Solar and Irwin's (2007) SDH framework.

being deported have a higher likelihood of reporting the need to seek mental or emotional help. Although we cannot untangle the causal pathway in this manuscript, the SDH framework allows us to speak to the intermediary factors at play within these associations. Figure 1 offers a simplification of these associations. The SDH framework also allows for the illustration of the bidirectionality of how perceptions are associated with self-rated health outcomes and emotional well-being. These findings are important, as they help to further our understanding of the holistic effects of public policy, in this case immigrant/immigration policy at the state level. Additionally, our analyses of the emotional effects associated with increased deportations contribute to the growing literature on the intersections of Latino health and federal immigration policies.

To further illustrate these associations, we can analyze the various components of two of the most punitive state anti-immigrant laws passed in recent years: Georgia's S. B. 529, and Alabama's H. B. 56. This analysis, we believe, also helps provide context for the correlations we find between perceptions of immigration laws and health outcomes across a wide sample of Latino adults.

Georgia's Security and Immigration Compliance Act (S. B. 529) is considered especially punitive. Passed in 2006, the omnibus legislation included implementation of federal immigration policy as well as restrictions on state benefits (Georgia Security and Immigration Compliance Act 2006). The law required all public agencies, their contractors, subcontractors, and staffing agencies to enroll in the federal E-Verify program. E-Verify is a national database based on Department of Homeland Security (DHS) and Social Security Administration (SSA) data where employers can verify a potential (or current) employee's citizenship or immigration status (USCIS 2015). This measure was meant to bar undocumented immigrants from public jobs at all levels. The law also allowed for the state of Georgia to implement the federal 287(g) program. This program requires the state to enter into a memorandum of agreement with DHS whereby local police officers would be trained and deputized to enforce federal immigration law (ICE 2015). Deputized officers have the power to ask for and inspect documents related to immigration status, and are authorized to carry out duties related to immigration and customs enforcement.

The law also requires 6 percent of an undocumented individual's income to be withheld, despite having an IRS-issued taxpayer identification number. Moreover, the law bars employers from claiming tax exemptions on employees with unverified or undocumented status. Supporters of the law claim this is a way to punish not only those who violate federal immigration laws (i.e., undocumented immigrants) but also those that benefit from this violation (e.g., employers). Sponsors of S. B. 529 also sought to restrict access to public benefits, especially access to public health services, arguing that this "would help to reduce the strain on the public health system caused by illegal immigrants infected with communicable diseases such as tuberculosis, leprosy, and dysentery" (quote from Georgia State Law Review 2006: 253 Barney, Field, and Hair 2006). Officials are now required to verify proof of citizenship or lawful immigration status when processing requests for public assistance or benefits.

As Sabia (2010) notes, the enforcement of S. B. 529 in Georgia has been "draconian, discriminatory, and inconsistently applied" (2010: 70). Violations of civil liberties (of both documented and undocumented Latinos) and widespread fear have been reported in Georgia's rapidly growing Latino communities. Violations are especially salient in the health care realm, with stories of mentally ill patients being removed mid-treatment from emergency rooms and newborn babies being confiscated from undocumented mothers hours after birth—the consequences of hospital staff reporting their patients' immigration status to ICE agents (Sabia 2010).

Similar conditions have been found in Alabama after the passage of the Beason-Hammon Alabama Taxpayer and Citizen Protection Act (H. B. 56) in 2011. The Southern Poverty Law Center has deemed H. B. 56 one of the most punitive anti-immigrant state laws on the books (Southern Poverty Law Center 2012). This omnibus legislation, similar to Georgia's S. B. 529, aimed to curtail public benefits for undocumented immigrants and increased enforcement of federal immigration policies at the state level.

One of the most controversial aspects of the law was the directive that school officials must determine the immigration status of students and their families, including for postsecondary education. This portion of the law was meant to address concerns over the "burden" undocumented children were placing on public schools (ACLU 2011). This served as a deterrent against immigrant families enrolling their children in public schools for fear of exposing their entire family to ICE. Moreover, public schools are required to periodically inform the state legislature on how many undocumented children are enrolled in their schools.

Another controversial aspect of the law was the criminalization of those individuals (including family members) who interacted with undocumented immigrants (Brooks 2011). For example, landlords could face up to ten years in prison and fines of up to $15,000 for having rental agreements with undocumented immigrants. And it became a Class C felony to transport or harbor undocumented individuals, unless it was transportation aimed at returning them to their country of origin (Beason-Hammon Alabama Taxpayer and Citizen Protection Act 2011). Using language taken directly from Arizona's S. B. 1070, the law authorized police officers to ask for immigration documentation during routine stops when "reasonable suspicion exists that the person is an alien who is unlawfully present" (ACLU 2011). However, as the ACLU (2011) notes, the law does not outline what constitutes "reasonable suspicion," leaving room for racial profiling.

In terms of access to public benefits, US citizens must sign a declaration of citizenship status. The law, however, is confusing in that it does not formally *require* that public officials ascertain the documentation status of those seeking benefits, yet neither does the law *prohibit* officials from doing so either. This leaves room for bureaucratic interpretation, resulting in the haphazard implementation of the law and allowing for "vigilantism." Not knowing if and when officials will ask for proof of documentation, many immigrants avoided seeking public services, including emergency treatment (ACLU 2011).

Immigrants and Latinos in Alabama have detailed stories similar to those experienced in Georgia. In its report, *Alabama's Shame: H. B. 56*

and the War on Immigrants, the Southern Poverty Law Center (2012) concluded that "HB 56 has unleashed a kind of vigilantism, leading some Alabamians to believe they can cheat, harass, and intimidate Latinos with impunity." The report outlines the aftermath of H. B. 56, detailing its effects on multiple facets of everyday life. For example, families reported having gone weeks without water in their homes due to undocumented status, underage youth being denied emergency care, and undocumented day laborers being threatened with a gun by a boss refusing to pay their wages.

The increased enforcement of federal immigration laws by state and local officials and the denial of public services (particularly health services), coupled with ideologically charged anti-immigrant rhetoric at the social and political levels, have joined to foster a hostile anti-immigrant and anti-Hispanic environment. As the SDH framework suggests, living in such an environment affects individuals at a material, psychosocial, and biological level. Job insecurity caused by the enforcement of E-Verify and stricter employment standards further push undocumented workers into informal, precarious jobs with lower wages and dangerous working conditions. Labor and wage issues can translate into poor housing conditions and financial instability, affecting access to nutritious food and health care.

In addition to the effects on the material well-being of immigrants and Latinos, as previous research and our findings show, there are important psychosocial and behavioral effects that ultimately produce negative health outcomes. The daily stress of unmet needs and overwork, the fear and anxiety over detention and deportation, and the guilt over the inability to meet one's own and one's family's needs—as well as being viewed as a criminal because of undocumented status—combine to result in poor mental and physical health.

Before concluding, we also must acknowledge the limitations of this study. Given that our study is cross-sectional and a study of Latino populations, we are limited in our ability to make causal claims and generalizations across racial and ethnic populations over time. This limitation is not particular to this study, as currently there are no datasets which query respondents on their perceptions of anti-immigrant laws and the anti-Hispanic climate of their state over time. Related to this, our survey does not take into account actual enacted policies. However, recent research has found that Latinos' perceptions of anti-immigrant climates match the actual enacted immigrant policies of their states (Ybarra, Juárez, and Sanchez 2016). Latinos are acutely aware of the hostile environments around them. Future research should consider exploring the relationship between enacted laws and health outcomes to build on the association

established in this research. Given the likelihood of continued policy activity in the area of immigration at both the state and federal level for the foreseeable future, the consequences of these laws will continue to be felt among Latinos. With continued growth of the Latino population expected by demographers, the health ramifications of these laws should be of concern to not only public health advocates but also to policy makers who may be costing their states valuable economic resources to treat the health issues created by the immigrant policies that they are enacting.

■ ■ ■

Edward D. Vargas obtained his PhD in public affairs from the School of Public and Environmental Affairs at Indiana University. His research interests include the effects of poverty and inequality on quality of life, focusing specifically on health, education, and social policy, and how these factors contribute to the well-being of vulnerable families. He also investigates the methodological issues involved in the quantitative study of race and ethnicity. Dr. Vargas is investigating how sociopolitical, familial, and personal contexts that make up the Latino/a experience affect physical and mental health. In particular, he is examining the effects of immigration policy and deportations on health outcomes.

Gabriel R. Sanchez is a professor of political science at the University of New Mexico and also serves as the executive director of the Robert Wood Johnson Foundation Center for Health Policy and codirector of the Institute of Policy, Evaluation, and Applied Research (IPEAR) at the University of New Mexico. Sanchez was formerly the director of research, and now principal at Latino Decisions, the nation's leading survey firm focused on the Latino electorate. Sanchez is an expert on politics in the Southwest, having directed many research projects and polls for Latino Decisions in New Mexico, Colorado, and Arizona, and he has been invited to give talks and presentations for the Congressional Hispanic Caucus Institute, LULAC, AFL-CIO, and the Democratic Congressional Campaign Committee (DCCC), and he often serves as an expert policy advisor to the New Mexico State Legislature.

Melina Juárez is a PhD candidate in political science and a Robert Wood Johnson Foundation Center for Health Policy doctoral fellow at the University of New Mexico. Her areas of focus include immigrant and immigration policies; race, gender, class, and sexuality politics; and minority health and politics. Her work centers on the minority experience to understand the different ways public policy intersects and interacts with various facets of identity, and how these dynamics ultimately affect health and well-being.

References

ACLU (American Civil Liberties Union). 2011. "Preliminary Analysis of HB 56 'Alabama Taxpayer and Citizen Protection Act.'" www.aclu.org/files/assets/prelimanalysis_alabama_hb56_0.pdf.

Afable-Munsuz, Aimee, Su-Ying Liang, Ninez A. Ponce, and Judith M. E. Walsh. 2009. "Acculturation and Colorectal Cancer Screening among Older Latino Adults: Differential Associations by National Origin." *Journal of General Internal Medicine* 24, no. 8: 963–70.

Anderson, Kathryn F., and Jessie K. Finch. 2014. "Racially Charged Legislation and Latino Health Disparities: The Case of Arizona's S. B. 1070." *Sociological Spectrum* 34, no. 6: 526–48.

Androff, David, Cecilia Ayon, David Becerra, Maria Gurrola, Lorraine Salas, Judy Krysik, Karen Gerdes, and Elizabeth Segal. 2011. "US Immigration Policy and Immigrant Children's Well-Being: The Impact of Policy Shifts." *Journal of Sociology and Social Welfare* 38, no. 1: 77–98.

Arizona State Senate. 2010. "Fact Sheet for S. B. 1070." January 15. www.azleg.gov/legtext/49leg/2r/summary/s.1070pshs.doc.htm.

Barney, Valerie, Katharine Field, and Nichole Hair. 2006. "Peach Sheet: Professions and Business." *Georgia State University Law Review* 23, no. 1: 247–51. reading room.law.gsu.edu/gsulr/vol23/iss1/19.

Beason-Hammon Alabama Taxpayer and Citizen Protection Act, House Bill 56. June 2011. www.ago.state.al.us/File-Immigration-Act-No-2012-491.

Berk, Marc L., and Claudia L. Schur. 2001. "The Effect of Fear on Access to Care among Undocumented Latino Immigrants." *Journal of Immigrant Health* 3, no. 3: 151–56.

Borre, Kristen, Luke Ertle, and Mariaelisa Graff. 2010. "Working to Eat: Vulnerability, Food Insecurity, and Obesity among Migrant and Seasonal Farmworker Families." *American Journal of Industrial Medicine* 53, no. 4: 443–62.

Brooks, Jennifer E. 2012. "'No Juan Crow!': Documenting the Immigration Debate in Alabama Today." *Southern Cultures* 18, no. 3: 49–56.

Cavazos-Rehg, Patricia, Luis Zayas, and Edward Spitznagel. 2007. "Legal Status, Emotional Well-Being and Subjective Health Status of Latino Immigrants." *Journal of the National Medical Association* 99, no. 10: 1126–31.

CDC (Centers for Disease Control and Prevention). 2011. "CDC Health Disparities and Inequalities Report—United States, 2011." *Morbidity and Mortality Weekly Report* 60, supplement: S1–S116.

Fisher-Owens, Susan A., Inyang A. Isong, Mah-J Soobader, Stuart A. Gansky, Jane A. Weintraub, Larry J. Platt, and Paul W. Newacheck. 2013. "An Examination of Racial/Ethnic Disparities in Children's Oral Health in the United States." *Journal of Public Health Dentistry* 73, no. 2: 166–74.

Georgia Security and Immigration Compliance Act, Senate Bill 529. 2006. www.legis.ga.gov/Legislation/20052006/64549.pdf.

Georgia State University Law Review. 2006. "Professions and Business Registration of Immigration Assistance: Enact the 'Georgia Security and Immigration Compliance Act'; Provide that it Shall Be Unlawful to Traffic a Person for Labor or Sexual Servitude; Provide for Valid Identification Documents; Provide for the Comprehensive Regulation of Private Immigration Assistance Services; Specify Conditions Under Which Certain Compensation Paid by a Taxpayer Shall Be Disallowed as a Business Expense for State Income Tax Purposes; Provide for Verification of Lawful Presence Requirements, Procedures, and Conditions Regarding Applications for Certain Benefits; Provide for Exceptions; Provide for the Promulgation of Regulations; Provide for Criminal and Other Penalties; Repeal Conflicting Laws; and for Other Purposes." *Georgia State University Law Review* 23, no 1: Article 19. readingroom.law.gsu.edu/gsulr/vol23/iss1/19.

Gonzales, Roberto, Carola Suarez-Orozco, and Maria Dedios-Sanguineti. 2013. "No Place to Belong: Contextualizing Concepts of Mental Health among Undocumented Immigrant Youth in the United States." *American Behavioral Scientist* 57, no. 8: 1174–99.

Hacker, Karen, Jocelyn Chu, Carolyn Leung, Robert Marra, Alex Pirie, Mohamed Brahimi, Margaret English, Joshua Beckmann, Dolores Acevedo-Garcia, and Robert P. Marlin. 2011. "The Impact of Immigration and Customs Enforcement on Immigrant Health: Perceptions of Immigrants in Everett, Massachusetts, USA." *Journal of Social Science and Medicine* 73, no. 4: 586–94.

ICE (Immigration and Customs Enforcement). 2015. "Delegation of Immigration Authority Section 287(g) Immigration and Nationality Act." Department of Homeland Security. Retrieved from: www.ice.gov/287g.

McClure, Heather H., J. Josh Snodgrass, Charles R. Martinez Jr., J. Mark Eddy, Roberto A. Jimenez, and Laura E. Isiordia. 2010. "Discrimination, Psychosocial Stress, and Health among Latin American Immigrants in Oregon." *American Journal of Human Biology* 22: 421–23.

Media Matters for America. 2010. "Shep Smith Calls AZ Immigration Law the 'Breathing While Latino Law,' Says It Sounds a Lot Like the Old 'Driving While Black Law.'" April 27. mediamatters.org/video/2010/04/27/shep-smith-calls-az-immigration-law-the-breathi/163856.

Morse, Ann, Gilberto Mendoza, Leila Malow, and Hannah Weigle. 2015. "2015 Immigration Report." National Conference of State Legislatures. www.ncsl.org/research/immigration/2015-immigration-report.aspx#cateorgies.

Navarro, Vicente, Carles Muntaner, Carme Borrell, Joan Benach, Agueda Quiroga, Maica Rodriguez-Sanz, Núria Vergés, and Maria Isabel Pasarin. 2006. "Politics and Health Outcomes." *Lancet* 368: 1033–37.

Navarro, Vicente, and Leiyu Shi. 2001. "The Political Context of Social Inequalities and Health." *Social Science and Medicine* 52: 481–91.

Nichols, Vanessa C., Alana LeBron, and Francisco Pedraza. 2016. "Cautious Citizen: Policy Feedback Lessons and Consequences for Democratic Citizenship." Paper presented for the University of New Mexico Fieldwork Conference, Albuquerque.

Nill, Andrea C. 2011. "Latinos and S. B. 1070: Demonization, Dehumanization, and Disenfranchisement." *Harvard Latino Law Review* 14: 35–36.

Probst, Janice C., Jong-Yi Wang, Charity G. Moore, M. Paige Powell, and Amy B. Martin. 2008. "Continuity of Health Insurance Coverage and Perceived Health at Age 40." *Medical Care Research and Review* 65, no. 4: 450–77.

Rubens, Sonia L., Paula J. Fite, Joy Gabrielli, Spencer C. Evans, Michelle L. Hendrickson, and Casey Pederson. 2013. "Examining Relations between Negative Life Events, Time Spent in the United States, Language Use, and Mental Health Outcomes in Latino Adolescents." *Child and Youth Care Forum: Journal of Research and Practice in Children's Services* 42, no. 5: 389–402.

Sabia, Debra. 2010. "The Anti-immigrant Fervor in Georgia: Return of the Nativist or Just Politics as Usual?" *Politics and Policy* 38, no. 1: 53–80.

Salas, Lorraine M., Cecilia Ayon, and Maria Gurrola. 2013. "Estamos Traumados: The Effect of Anti-immigrant Sentiment and Policies on the Mental Health of Mexican Immigrant Families." *Journal of Community Psychology* 41, no. 8: 1005–20.

Sanchez, Gabriel R., and Natalie Masuoka. 2010. "Brown Utility Heuristic? The Presence and Contributing Factors of Latino Linked Fate." *Hispanic Journal of Behavioral Sciences* 32, no. 4: 519–31.

Solar, Orielle, and Alec Irwin. 2007. "A Conceptual Framework for Action on the Social Determinants of Health." Discussion paper for the Commission on Social Determinants of Health. Geneva: World Health Organization.

Southern Poverty Law Center. 2012. "Alabama's Shame: H. B. 56 and the War on Immigrants." www.splcenter.org/sites/default/files/d6_legacy_files/downloads/publication/Alabamas_Shame.pdf.

StataCorp. 2011. *Stata Statistical Software: Release 12*. College Station, TX: StataCorp LP.

Turner, Robert, and William Sharry. 2012. "From Progressive Pioneer to Nativist Crackdown: The Transformation of Immigrant Policy in Oklahoma." *Politics and Policy* 40, no. 6: 983–1018.

USA Today. 2011. Editorial, "Block Alabama's Anti-immigrant Law for Good." August 30. usatoday30.usatoday.com/news/opinion/editorials/story/2011-08-29/Editorial-Block-Alabamas-anti-immigrant-law-for-good/50181146/1.

USCIS (US Citizenship and Immigration Services). 2015. "What is E-Verify?" Department of Homeland Security. www.uscis.gov/e-verify/what-e-verify.

Vargas, Edward. 2015. "Immigration Enforcement and Mixed-Status Families: The Effects of Risk of Deportation on Medicaid Use." *Children Youth Services Review* 57: 83–89.

Vargas, Edward, and Maureen Pirog. –2016. "Mixed Status Families and WIC Uptake: The Effects of Risk of Deportation on Program Use." *Social Science Quarterly* 97, no. 3. doi: 10.1111/ssqu.12286.

Vargas, Edward, Gabriel R. Sanchez., and Melina Juárez. 2015. "The Impact of Punitive Immigrant Laws on the Health of Latinos." Paper presented at the annual meeting of the Western Political Science Association, Las Vegas, April 1–4.

WHO (World Health Organization). 2008. "Closing the Gap in a Generation: Health Equity through Action on the Social Determinants of Health." Final Report of the Commission on Social Determinants of Health. whqlibdoc.who.int/publications/2008/9789241563703_eng.pdf?ua=1 (accessed May 24, 2015).

Ybarra, Vickie, Melina Juárez, and Gabriel R. Sanchez. 2016. "Do Perceptions Match Reality? Analyses of Latinos' Perceived Views of State Immigrant Policy Compared to Enacted Legislation." Paper presented at the annual meeting of the Western Political Science Association, San Diego, March 24–26.

Ybarra, Vickie D., Lisa M. Sanchez, and Gabriel R. Sanchez. 2016. "Anti-Immigrant Anxieties in State Policy: The Great Recession and Punitive Immigration Policy in the American States, 2005-2012". *State Politics and Policy Quarterly* 6, no 3: 313–39.

Zsembik, Barbara A., and Dana Fennell. 2005. "Ethnic Variation in Health and the Determinants of Health among Latinos." *Social Science and Medicine* 61, no. 1: 53–63.