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IN OUR BACKYARDS: REGIONAL INFLUENCES ON PUBLIC OPINION OF IMMIGRATION

Andrea Hetling, Ph.D.
Bloustein School of Planning and Public Policy
Rutgers, The State University of New Jersey

Michael Greenberg, Ph.D.
Bloustein School of Planning and Public Policy
Rutgers, The State University of New Jersey

Abstract

Immigration policy is a controversial topic in the United States, and public perceptions of whether or not immigration is "good" for the nation clusters within certain groups. However, the reasons behind these attitudes are not well understood. Using New Jersey as a test case, we examine what role geographic factors, specifically the proportion of foreign-born residents at the county level, play in shaping public attitudes regarding whether immigration is good or bad for the state of New Jersey. Findings, based on logistic regression analysis of a large statewide survey, suggest that a larger proportion of immigrants in "one's backyard" leads to a greater likelihood that immigration is perceived as a positive force. Further research on this question is needed and future public opinion polling on immigration should be expanded to include more questions and information on lower levels of geographic regions.

AUTHOR NOTE: Please address all correspondence to: Andrea Hetling, Bloustein School, Rutgers, The State University of New Jersey, 33 Livingston Avenue, New Brunswick, NJ, 08901, USA. Email: ahetling@rutgers.edu

INTRODUCTION

Controversy surrounds the growth of immigration in the United States. The presidential election of 2008 highlighted the complexity of the topic and related policy as well as the public nature of the debate. Surveys, aimed at gauging the national mood about immigration, are numerous. The National Immigration Forum (2007) reported on 22 surveys conducted during 2007 about public views of immigration policy. The surveys, constructed by news media across the nation, suggest that the majority of the public is not interested in harsh punitive actions against illegal immigrants and is interested in a set of realistic policies. However, a range of public sentiment exists and notably a consensus on supporting specific policy alternatives is lacking. This situation compromises the ability of elected officials to respond to the diverse concerns of their constituents. Complicating the matter further, polling study results are neither disaggregated to nor analyzed at revealing micro geographical scales.

A diverse and growing cross-disciplinary literature relates to and can inform these policy discussions. Recent studies have shown that individual characteristics, such as education level and ideology, as well as macro influences, such as the media and geographic location, have an effect on personal perceptions of immigration. But, the link between personal and regional characteristics and the possible interactions between them has not yet been sorted out. Assuming the proportion of immigrants in one's area does influence one's opinion, perhaps personal characteristics interact with this regional characteristic and leads to different positions in a unique but systematic way.

This paper attempts to further the empirical literature on the question of regional influences and more closely link the academic discussion with political and policy needs. Specifically, we highlight and connect the regional element of both public opinion and policy formation. Using one of the aforementioned surveys and New Jersey as a test case, we examine what role geographic factors, specifically the proportion of foreign-born residents at the county level, play in shaping public attitudes regarding whether immigration is "good" or "bad" for the state of New Jersey. Based on theoretical and empirical research, we hypothesize that an increase in the proportion of immigrants in one's county of residence is associated with more positive feelings towards immigration.

BACKGROUND

American history places great emphasis on the importance of immigrants in the growth of the United States. Indeed, the image of the United States as a melting pot is rooted in the continual influx of immigrants, their sacrifice and hard work, and eventual assimilation into society. Recent scholarship on the topic attributes our national identity of civic participation and citizenship to immigration, as descendents of intermarriages

between newer and older immigrant groups do not place great emphasis on ancestry (Hirschman, 2005).

The topic of immigration is nevertheless complex and sometimes controversial. Although the vast majority of US citizens can trace their recent ancestry to immigrants, public opinion on immigration into the US has been historically mixed and anti-immigration sentiments are not uncommon (Buck et al., 2003). Research on historical trends indicates that the general public is becoming increasingly negative towards immigration with a clear concern with levels of illegal immigration (Lapinski, Peltola, Shaw, & Yang, 1997). And, at the same time that the polls show a growing trend towards stricter immigration policy, the vast majority of respondents who had personal interactions with immigrants reported favorable experiences (Lapinski et al., 1997). Moreover, most respondents reported that they would welcome immigrants into their communities (Lapinski et al., 1997).

These complex and sometimes conflictual opinions have motivated a rich body of literature seeking to understand the factors that influence attitudes towards immigrants. Traditional individual level models include demographic characteristics, political and ideological views, and economic motivations. We attempt to control for these empirical influences in our models. Regarding demographic characteristics, previous research has demonstrated the importance of race, gender and age (Binder, Polinard, & Wrinkle, 1997). Of particular interest to group comparison theorists is a measure of education; individuals with college degrees are less likely to rely on stereotypes (Chandler & Tsai, 2001). Political and ideological influences are also considered important in both general public opinion research as well as research related specifically to immigration attitudes. The stated hypothesis, borne out by many analyses, is that Democrats and liberals are more favorable towards immigration and less likely to hold restrictionist views (Burns & Gimpel 2000; Citrin, Green, Muste, & Wong, 1997; Pantoja 2006).

Regarding economic motivations, Citrin, and colleagues (1997) present a comprehensive hypothesis and analysis of five interrelated influences: resources, pessimism, labor market competition, tax burden, and specifications. They conclude that measures of personal resources do not affect opinion towards immigration and thus that individuals do not base their opinions in self-interest alone. Beliefs and opinions regarding the economy and taxes, however, are strong influences on negative attitudes towards immigration and hold true under a number of different specifications, including different years and ethnic groups (Citrin et al., 1997, Alvarez & Butterfield, 2000). Other research indicates that support is positively associated with the strength of the US economy, with greater levels of support in times of economic booms especially in years with low levels of unemployment (Espenshade & Hempstead, 1996). On the individual level, those with the low levels of human capital usually are unlikely to view immigration in a favorable light (Scheve & Slaughter, 2001).

In sum, these first three categories of variables (demographics, politics and ideology, and economic motivations) do not consistently explain much of the variation in public attitudes towards immigrants. A consensus is emerging that pure self-interest as measured by personal characteristics and economic circumstances do not have as much explanatory power as perceptions and broader national circumstances (Espenshade & Hempstead, 1996). The findings then beg the question of how perceptions are formed if not from self-interest.

In answer to this question, interactions with immigrants are usually discussed as a theoretically important influence. Blumer's theory of symbolic interactionism states that individuals ascribe meanings to things based on an iterative process of social interactions with others (Stryker, 1987). Related to this theory, some speculate that group contact has a direct effect on lessening stereotypes among groups (Allport, 1954). Schneider (2007) examines the importance of immigrant group size in European countries and concludes that intergroup contact, such as having an immigrant friend or colleague, lessens feelings of perceived ethnic threat. A recent meta-analysis of research using group contact theory to explain prejudice found that 93 percent of the studies concluded that contact lessens prejudice (Pettigrew & Tropp, 2005). In contrast, others have theorized that intergroup contact heightens feelings of insecurity and animosity towards minority groups. In V.O. Key's seminal work on proximity and contempt of out-groups (1949), he concluded that the concentration of African Americans at the community level was strongly related to Whites' negative perceptions of that group. Similarly, other quantitative studies have echoed these findings (for a review see Forbes, 1997). Studies of Latino attitudes have also shown that opinions on immigration-related policies are related to one's level of acculturation (Branton, 2007; Rocha & Espino, 2009) or cultural identity (De La Garza, Polinard, Wrinkle, & Longoria, Jr., 1991). Thus, the process of reflecting group opinions on immigration can work both ways.

Complementary research has included a focus on geographic determinants, partly in an effort to capture personal interactions and also to further understand and refine the effect of macro-level circumstances. Previous studies have mixed results however. Some show no effect of living in high concentration areas (Citrin et al., 1997), while others indicate an important influence (Fennelly & Federico, 2005). More recent, detailed research on Anglo opinion indicates that geography and residential segregation are important (Branton, Dillingham, Dunaway, & Miller, 2007; Rocha & Espino, 2009). Although most findings indicate a positive relationship between exposure to immigrants and opinion, Hood and Morris (1998), in separating perceptions of documented and undocumented immigration, find that increasing levels of undocumented immigrants lead to a decrease in support.

Reasons for this lack of consensus about both intergroup contact and regional influences are many. Perhaps local influences are lost in national studies, or perhaps there is a threshold or tipping point of concentration. Maybe a particular type of interaction is

more critical than others, or personal circumstances and characteristics interact with regional influences. In a review of literature on intergroup bias, Hewstone, Rubin, and Willis (2002) reported that a variety of factors may mitigate or influence bias, including group size, perceptions of threats, and personality differences. Amin (2002) cautions against making simplistic assumptions and highlights the importance of factors such as social exclusion and ethnic isolation, insensitive policing, and institutional ignorance. Local media portrayals of the issue have also been examined recently as a critical macro level force in shaping attitudes about immigration (Abrajano & Singh, 2009; Branton & Dunaway, 2009a & 2009b). Branton and Dunaway (2009a & 2009b) demonstrate that newspapers located closer to the U.S.-Mexican border feature more negative coverage of immigration issues and more pieces on illegal immigration.

To complicate the matter further, geography and contact with other groups are seemingly related. It seems reasonable to assume that individuals who live in communities with higher proportions of foreign-born residents are more likely to interact with immigrants than those who live in communities with very few immigrants. Even if meaningful interactions take place outside of your county, for example, in your workplace for commuters, it is likely that most people you see live in your county. Visits to the grocery store, post office or even your child's public school are likely within your country of residence, and the employees, customers, and students are likely county residents. In these examples, are the visits measures of regional influences or intergroup contact? Similarly, the choice of empirical measures of one concept could be interpreted as measures of the other in some studies. For example, does international travel measure contact or regional influences? Haubert and Fussell (2006) found that individuals who have lived abroad are more likely than those who have not to possess pro-immigrant attitudes. Key's work (1949) on the concentration of African Americans could be interpreted as a regional influence measure as well as an intergroup contact measure.

Our research builds on this body of previous work with a focus on regional influences on the county level and how individual characteristics may interact with one's ecological circumstances. Our hypothesis is that the larger the proportion of immigrants at the county level, the less opposed residents will be towards immigration to the state. We also investigate the interaction of personal characteristics with our regional variable. Recent studies focused on racial and ethnic subgroups, whether they be Latinos or Anglos, demonstrate the critical interaction between geography and race (for example, Hood & Morris 1997; Rocha & Espino 2009) and point to other potentially confounding factors such as party affiliation (Branton et al., 2007). Based on these findings, we hypothesize that the influence of certain demographic, political and economic variables, identified by other researchers, may serve to intensify the effect of regional influences.

Counties serve as an ideal unit of analysis for political purposes as most local political discussion in US states center on county dynamics. Tolbert and Hero (1996 and 2001) use California counties in analyzing public policy regarding immigrants and

minority races, explaining that "neighborhoods or precincts could be used, we find these measures less desirable since they are not jurisdictions with formal/legal authority" (Tolbert & Hero, 2001, p. 583). Although New Jersey towns do have a considerable amount of authority, we continue this line of county level research since in most states policymakers are more attuned to county rather than town level public opinions. We also consider proportion of immigrants at the county level to be a good measure of exposure to immigrants. Regardless of the type of interaction, we hypothesize that seeing immigrants in your grocery store or in your child's public school classroom may increase acceptance and influence feelings towards immigration.

Case Study: New Jersey

By using New Jersey as a case study, we seek to capitalize on New Jersey as a forerunner in the demographic trends related to the growth and increasing diversity of immigration flows in the US. The number of immigrants in the US has been rising in recent years. Between 1990 and 2000, the proportion of foreign-born residents in the US grew 57 percent to 31.1 million people (Malone, Baluja, Costanzo, & Davis, 2003). In some states, the proportion of immigrants has reached record numbers. In 2000, one out of every four Californians were foreign-born and over ten percent of the residents in 13 additional states were foreign-born (Malone et al., 2003). Many of these immigrant groups are also of minority races and ethnicities, adding to the diversity of the nation and the complexity of public opinion. Their arrival in the US coupled with relatively high fertility rates is also having a profound effect on the racial and ethnic demographics of the US. Research has indicated that these shifts are leading to the "browning of America," and that eventually Whites will be the ethnic minority (for a discussion, see Johnson, Farrell, & Guinn, 1997). Padilla (1997) observed that if these trends continue, it is possible that by the year 2040, one in four US residents will be foreign-born. The US Census Bureau projected that in 2050 only 50% of the US population will be non-Hispanic Whites (US Census, 2005). Yet, in August 2008, it changed the estimate to 2042. In other words, the process is moving faster than had been anticipated. Media sources have reported on these trends in a more sensational light and furthered the popular debate on the topic (*Time*, 1990).

New Jersey is ranked third in having the highest proportion of foreign-born residents (US Census Bureau, 2000 Decennial Census). The 2000 US Census reports that 17.5 percent or close to one in five New Jersey residents are foreign born in comparison to 11.1% percent of the nation as a whole (Malone et al., 2003). This figure placed New Jersey just after California and New York in the proportion of resident born outside of the US. The Census Bureau's Current Population Survey of 2005 raised the New Jersey proportion to 18.7%, noting the arrival of 312,000 immigrants between 2000 and 2005 in a state with a population of a little more than 8 million.

New Jersey's foreign-born population is also the most diverse in terms of the number of ethnic groups (Lapham, 1993). New Jersey's immigrant population is more ethnically diverse than the nation as a whole, as well as in comparison to California.

New Jersey's immigrant population resembles that of New York, and along with New York, is arguably the most diverse in terms of the foreign-born population's region of birth (Espenshade, 1997). Specifically, 23.9 percent of New Jersey's immigrants come from Europe, 27.8 percent from Asia, and 43 percent from Latin America. The remaining 5.4 percent come from Africa, Oceania, and Northern America (not including Mexico) (Malone et al., 2003). Not only is New Jersey's population from nearly 100 countries, but it is markedly divergent in socioeconomic status. Davis and colleagues (2007) note that while 87% of immigrant children are citizens and that the vast majority speak English and at least one other language, disproportionately they have earned advanced degrees and yet as a whole are twice as likely not to have a high school degree. While they are more than twice as likely not to have health insurance, several groups (e.g., Asian Indian, Korean) are among the most affluent populations in the United States. Moreover, rather than concentrated in only very rural or urban areas, the foreign-born population is diffused throughout most areas of the state (US Census Bureau, 2000 Decennial Census), which makes New Jersey a good choice to study the impact of spatial segregation or propinquity on perceptions of immigrants.

These numbers and diversity are diffused throughout the 21 counties in an unsurprising manner with urban areas housing a larger portion of the foreign-born. The proportion ranges from 2.5 percent in Salem County, located in the inland southern part of the state adjacent to Delaware to 38.5 percent in Hudson County, a densely populated county close to New York City.

Figure 1.

Foreign-Born Residents in New Jersey, USA
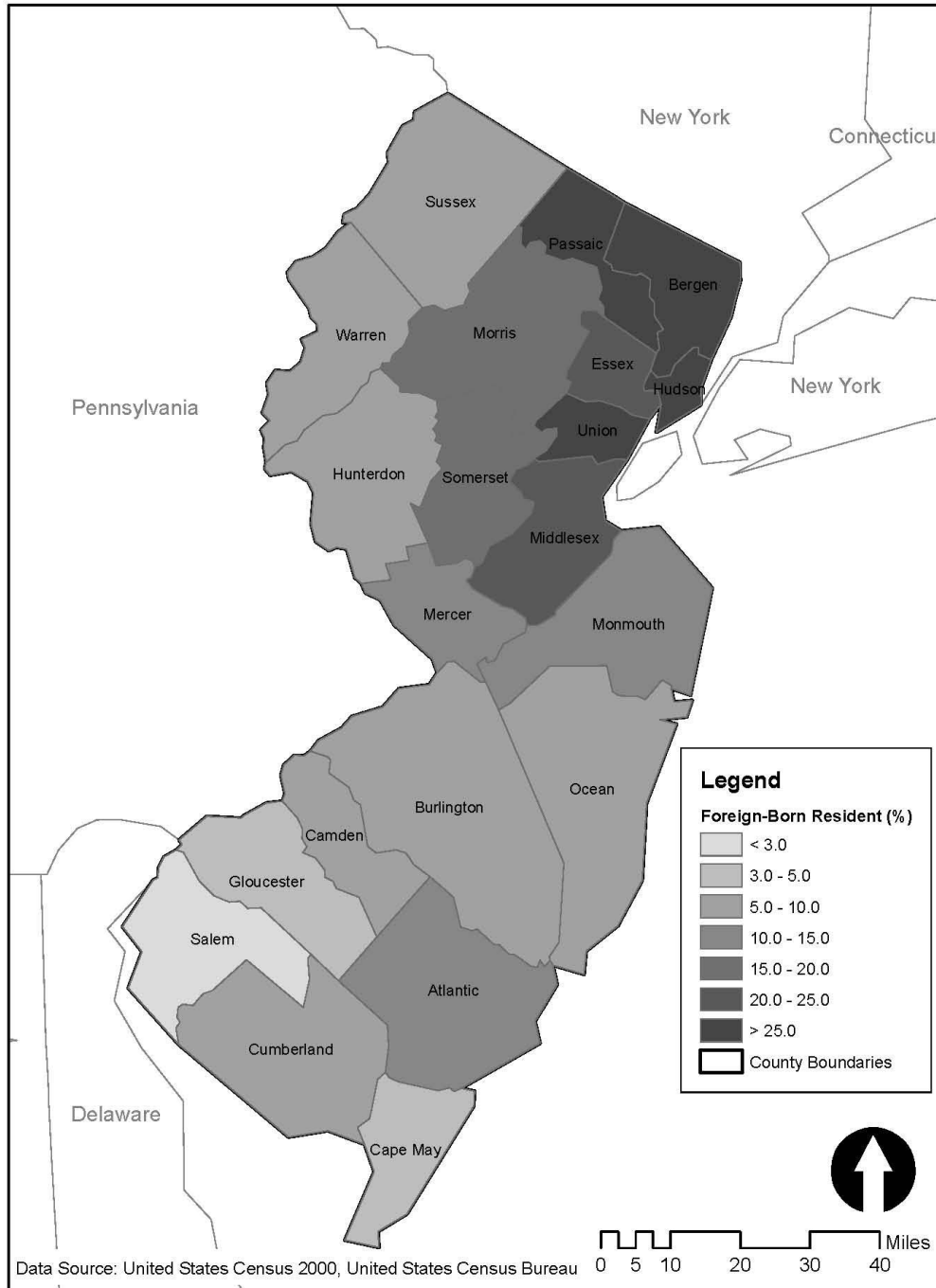
METHODS

The present study is based on survey data from the Polling Institute of Monmouth University. The poll, Immigration in the Garden State, was sponsored by the Monmouth University/Gannett NJ Poll and contains questions related to immigration in New Jersey. Telephone interviews were conducted by the Monmouth University Polling Institute between July 16 and 19, 2007. The random sample of 800 New Jersey residents is representative of the state with a 95% confidence level and a plus or minus 3.5 percentage point margin of error. Table 1 presents demographic information on the sample.

Table 1. **Sample characteristics**

	Survey respondents (n = 800)
Average age	43.65
Female	50.8%
Race/ethnicity	
White	64.4%
Black	12.7%
Latino	12.8%
Other	7.0%
Educational attainment	
High school degree or less	46.7%
Some college	22.2%
College grad	29.6%
Foreign- born	14.9%
Annual earnings:	
Under $50K	28.5%
Between $50K - $100K	33.8%
Over $100K	27.1%
Don't know/ no response	10.6%
Registered voter	77.5%
Party affiliation	
Republican	21.4%
Democrat	31.9%
Independent	40.9%
County of residence	
Urban	23.5%
Suburban	68.3%
Rural	6.8%

The dependent variable is based on the survey question that asked: "Overall, do you feel that immigration into New Jersey has been good or bad for the state?" Responses included, "bad," "good," "both good and bad," "neither good nor bad," and "don't know." The frequencies for all responses are analyzed descriptively and discussed, and a dichotomous variable is used in the multiple regression analysis. We recoded the original question into a dichotomous variable for which a value of one represents an opinion that immigration is bad for New Jersey and a value of zero represents an opinion that it is not bad. The new dichotomous variable contrasts those with solely negative feelings with those whose feelings are at least partially positive.

Logistic regression analysis was used to investigate the important influences affecting public attitudes. We created four separate models, each addressing one possible explanation of attitude formation towards immigration. The first, a demographic model, contains seven dichotomous variables: gender (coded as 1 = female, 0 = male); Latino; Black; Asian; under 30 years old, over 50 years old, and education (coded as 1 = high school graduate or less, 0 = at least some college). The second model uses measures of individual self-interest as explanatory variables. Included in this model are whether or not the respondent is foreign-born and two dichotomous variables measuring income: whether or not an individual makes under $50,000 annually, and whether or not an individual makes over $100,000 annually. The ideology and politics model, Model 3, includes four dichotomous variables: Republican, Democrat, voter, and an opinion variables measuring whether or not one felt that illegal immigrants take unwanted jobs.

Lastly, Model 4 uses independent variables related to regional influences to explain public opinion on immigration. Two dichotomous variables measure urbanicity, with one variable for urban residence and one for rural residence, leaving suburban residence as the comparison group. Model 4 also introduces our main independent variable, proportion of foreign-born individuals per 10 residents at the county level.

The final model is a full model consisting of all of the variables in the initial four smaller models: the demographic, the individual self-interest, the ideology and politics, and the regional influences model. The full model assesses whether the effect of the individual variable withstand the addition of control variables. Most importantly for our research question, we are interested in whether our variable of interest, the proportion of foreign-born residents by county, has a significant impact on public opinion while controlling for other theoretically and empirically important influences.

As a complement to these models, we then investigated interaction effects. First, the continuous variable of the proportion of foreign-born residents was converted to three dichotomous variables: low proportion of foreign-born residents, moderate proportion, and high proportion. We defined counties (n = 10) with a low proportion as those with less than seven percent of residents born in a foreign country. Moderate proportion

counties (n = 5) were those with between 10 and 19 percent foreign-born residents. High proportion counties (n = 6) are those with foreign-born residents comprising more than 20 percent of the residents. Second, each independent variable was interacted with the dichotomous high foreign-born variable and the dichotomous low foreign-born variable, leaving the moderate category as our comparison group. A logistical regression model was run with all of these new variables in hopes of adding to our understanding of the effect of the proportion of foreign-born residents. The resulting sample sizes of some of the subgroups were very small (e.g., n=11 for residents of urban, low-immigrant counties, n = 14 for Latinos in low-immigrant counties); thus our analysis is only able to detect the strongest relationships and leaves open the possibility of missing other relationships. We were specifically interested in any evidence of a tipping point and the importance of the effect of residence in high or low proportion counties on other predictor variables.

RESULTS

Do residents perceive immigration as bad for New Jersey?

Sample members are split on their perceptions of immigration. In answer to the question, "Overall, do you feel that immigration into New Jersey has been good or bad for the state?" 44.4 percent responded "bad" and 39.9 percent responded, "good." The remaining 15.7 percent of respondents were split fairly equally among the three remaining responses: 6.4 percent thought that immigration was "both good and bad;" 3.7 percent thought it was "neither good nor bad;" and 5.6 percent responded, "don't know."

Table 2 displays the survey responses by county. Responses vary greatly by county. Less than a third of residents in Camden, Cape May, and Morris counties hold the opinion that immigration is bad for the state. In contrast, over two-thirds of residents in Burlington and Salem counties feel immigration is bad.

Table 2. **Proportion of residents who think immigration is bad for New Jersey**

County	Proportion with negative opinion
Cape May	25.0%
Camden	31.8%
Morris	32.6%
Bergen	34.8%
Essex	35.1%
Union	39.4%
Somerset	40.7%
Warren	41.2%
Hudson	43.1%
Middlesex	45.6%
Gloucester	45.8%
Mercer	48.1%
Atlantic	50.0%
Hunterdon	50.0%
Passaic	51.7%
Ocean	52.2%
Monmouth	54.4%
Sussex	57.1%
Cumberland	61.5%
Salem	66.7%
Burlington	67.4%

Factors influencing opinions:

Demographics

The results of our first model, measuring the relative influences of demographic characteristics of survey respondents are presented in Table 3. Of the seven independent variables, four have a statistically significant relationship with opinion on immigration into New Jersey. Latinos, Blacks, and Asians are less likely than Whites to consider immigration bad for the state. Both Latinos and Blacks are approximately half as likely to think immigration is bad, and Asians are a third as likely. Education level is also an important influence; those with a high school degree or less are significantly more likely to view immigration badly. The influences of variables measuring gender and age are not distinguishable from zero.

Table 3. **Models of Predictors of Immigration Attitudes Stratified by Predictor Category**

	Model 1	**Model 2**	**Model 3**	**Model 4**
Predictor	**Demographics**	**Individual self-interest**	**Ideology and politics**	**Regional influences**
Female	-0.089 (0.148) [0.915]			
Latino	*-0.608 *** (0.236) [0.544]			
Black	*-0.536 ** (0.214) [0.585]			
Asian	*-1.007 *** (0.306) [0.365]			
High school degree or less	*0.608 **** (0.149) [1.836]			
Age: Over 50 years old	0.015 (0.173) [1.015]			
Age: Under 30 years old	-0.106 (0.198) [0.899]			
Foreign- born		*-0.543 *** (0.210) [0.581]		
Annual earnings: Under $50K		*0.394 ** (0.172) [1.483]		
Annual earnings: Over $100K		-0.293 (0.178) [0.746}		
Belief that illegal immigrants take unwanted jobs			*-1.538 **** (0.157) [0.215]	

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Table 3 (Continued). Models of Predictors of Immigration Attitudes Stratified by
Predictor Category

	Model 1	**Model 2**	**Model 3**	**Model 4**
Predictor	**Demographics**	**Individual self-interest**	**Ideology and politics**	**Regional influences**
Republican			0.118 (0.201) [1.125]	
Democrat			_-0.787 ***_ (0.183) [0.455]	
Percent foreign-born				_-0.216*_ (0.089) [0.806]
Urban county				0.196 (0.200) [1.217]
Rural county				0.144 (0.293) [1.155]
n Pseudo R^2 -2 Log likelihood	800 0.060 1062.426	800 0.030 1080.931	800 0.190 976.290	800 0.021 1091.507

Notes: n = The above are logistic regression models with standard errors shown in parenthesis and odds ratios in brackets. The dependent variable is binomial and equals one if the individual believes immigration is bad for the state of New Jersey.   [* p ≤ 0.05; ** p ≤ 0.01; *** p ≤ 0.001]

Individual Self-interest

Model 2 examines the effects of individual self-interest. Two of the three variables we included from the survey are statistically significant. Foreign-born residents are about 42 percent less likely than their native-born counterparts to think that immigration is bad for New Jersey. Regarding income level, respondents making under $50,000 a year are more likely to have a negative opinion of immigration.

Ideology and Political Views

Of the ideological and political variables included in Model 3, two variables are statistically significant. Whether or not one felt that illegal immigrants take unwanted

jobs is correlated with one's opinion of immigration. Those who feel that immigrants take only unwanted jobs are less likely to consider immigration bad for New Jersey. Regarding party affiliation, Democrats are much less likely to think immigration bad. Voter status, however, has no effect.

Regional Influences

With our last partial model, we begin to focus on our research question directly. Model 4 contains variables that measure potentially important regional influences on public opinion of immigration. Although the two dichotomous variables measuring urban, suburban, and rural residences do not have a statistically significant effect, the variable measuring the proportion of foreign-born residents at the county level is related to our dependent variable at a statistically significant level. A larger proportion of foreign-born residents decreases one's odds of holding the opinion that immigration is bad for New Jersey.

Full Model

Lastly, the full model (Table 4) contains the total of variables in the previously discussed four models. In this last model, no previously insignificant variables gain statistical significance. Two demographic variables, Latino and education level, and two self-interest variables, foreign-born and annual earnings, lose statistical significance. Of note, our regional influence variable measuring proportion of foreign-born residents at the county level also loses statistical significance in this model. Four variables are left as the critical influences in the model. Blacks and Asians continue to have a statically significant relationship to the dependent variable. The dichotomous variable on opinion regarding illegal immigrants and jobs retains statistical significance. And, Democrats remain statistically significantly less likely to consider immigration bad for the state.

Table 4. **Full Model of Predictors of Immigration Attitudes**

Predictor	B	S.E.	Exp(B)
Female	0.014	0.162	1.014
Latino	-0.498	0.268	0.608
Black	*-.570 **	0.250	0.566
Asian	*-1.192 ***	0.457	0.304
High school degree or less	0.255	0.170	1.291
Age: Over 50 years old	-0.089	0.192	0.915
Age: Under 30 years old	-0.074	0.224	0.929
Foreign- born	0.168	0.279	1.183
Annual earnings: Under $50K	0.308	0.193	1.361
Annual earnings: Over $100K	-0.254	0.203	0.776
Belief that illegal immigrants take unwanted jobs	*-1.476 ****	0.166	0.229
Voter	0.204	0.210	1.227
Republican	0.138	0.208	1.148
Democrat	*-0.746 ****	0.192	0.474
Percent foreign-born	-0.133	0.099	0.875
Urban county	0.324	0.244	1.383
Rural county	0.106	0.320	1.112
N	800		
Pseudo R^2	0.230		
-2 Log likelihood	948.088		

Notes: * p ≤ 0.05; ** p ≤ 0.01; *** p ≤ 0.001
The above are logistic regression models with beta coefficients denoted as *B*, standard errors denoted as *S.E.* and odds ratios denoted as *Exp(B)*.

Interaction Effects

Table 5 presents the results of a logistic regression model using interaction variables as predictors. Although we did not find as many statistically significant variables as we had hypothesized, the general trends as well as a handful of particular variables show an interesting impact of foreign-born proportions on the other predictors. Moreover, these findings differ from the results of our full model in Table 4 in that regional influences have a statistically significant relationship with individual attitudes towards immigration. Most strikingly, we see that county of residence has an impact on the attitudes of Blacks and Latinos. Both Blacks and Latinos residing in high proportion counties are significantly less likely to view immigration as bad for New Jersey. In contrast, being Black or Latino and residing in a low proportion county does not have a

statistically significant effect on ones attitudes. The influences of these variables differ in comparison to results of our full model discussed above in which being Latino did not have an impact on attitudes and being Black had a monolithic effect. Similarly, voters residing in low proportion counties are more likely to have a negative opinion of immigration, but those in high proportion counties are not predisposed to either hold favorable to unfavorable opinions.

In contrast to this trend, the interaction between county type and education and party identification yields differing results. First, individuals with a high school degree or less and live in a high immigrant county are significantly more likely than those in both middle and low immigrant counties to consider immigration bad for the state. Second, Democrats in low immigrant counties are less likely than those in middle and high immigrant counties to view immigration as bad. In both of these instances, the effect of the proportion of foreign born is opposite of our hypothesized relationship.

Also statistically significant in this model are two other interaction variables. Individuals in both low and high proportion counties who think immigrants take only unwanted jobs are less likely to view immigration as bad.

Although other predictors are not statistically significant, the trend among the pairs is for the high proportion county residents to be less likely to feel immigration is bad and the low proportion county residents to be more likely. Again, however, these influences are not statistically significant using our dataset.

Table 5. **Interaction Effects of Predictors of Immigration Attitudes**

Predictor	B	S.E.	Exp(B)
High immigrant: Female	0.340	0.239	1.404
Low immigrant: Female	0.109	0.277	1.116
High immigrant: Latino	*-0.936***	0.335	0.392
Low immigrant: Latino	0.453	0.676	1.574
High immigrant: Black	*-0.691**	0.335	0.501
Low immigrant: Black	0.088	0.467	1.092
High immigrant: Asian	*-1.282**	0.591	0.277
Low immigrant: Asian	-20.110	15045.957	0.000
High immigrant: High school or less	*0.520**	0.244	1.683
Low immigrant: High school or less	0.198	0.271	1.218
High immigrant: Age: Over 50	-0.084	0.302	0.919
Low immigrant: Age: Over 50	0.576	0.324	1.779
High immigrant: Age: Under 30	0.017	0.323	1.017
Low immigrant: Age: Under 30	0.531	0.383	1.700
High immigrant: Foreign-born	0.402	0.331	1.495

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Table 5 (Continued). **Interaction Effects of Predictors of Immigration Attitudes**

Predictor	B	S.E.	Exp(B)
Low immigrant: Foreign-born	-1.456	1.284	0.233
High immigrant: Annual earnings: under $50K	0.327	0.280	1.387
Low immigrant: Annual earnings: under $50K	0.409	0.329	1.506
High immigrant: Annual earnings: Over $100K	-0.224	0.316	0.799
Low immigrant: Annual earnings: Over $100K	0.225	0.345	1.252
High immigrant: Belief that illegal immigrants take unwanted jobs	*-1.118****	0.247	0.327
Low immigrant: Belief that illegal immigrants take unwanted jobs	*-1.329****	0.284	0.265
High immigrant: Voter	0.046	0.276	1.048
Low immigrant: Voter	*0.727**	0.318	2.068
High immigrant: Republican	0.663	0.339	1.940
Low immigrant: Republican	-0.534	0.353	0.586
High immigrant: Democrat	-0.494	0.276	0.610
Low immigrant: Democrat	*-0.838**	0.345	0.433
High immigrant: Urban county	0.433	0.273	1.558
Low immigrant: Urban county	-0.738	0.734	0.478
Low immigrant:Rural county	0.002	0.352	1.002
N	800		
Pseudo R^2	0.179		
-2 Log likelihood	984.215		

<u>Notes:</u> * p ≤ 0.05; ** p ≤ 0.01; *** p ≤ 0.001

The above are logistic regression models with beta coefficients denoted as **B,** standard errors denoted as **S.E.** and odds ratios denoted as **Exp(B)**.

DISCUSSION

Before discussing the results in a broader context, we reiterate some of the limitations of the project. One is that the available variables were limited. It would have been helpful to have other outcome measures, such as perceptions of environmental protection, funding public education, and other policy issues in order to determine if respondent views were a reflection of their views of immigrant but also of other policy

issues. On the independent variable side, it would have been potentially valuable to have personal indicators such as trust of authority, optimism-pessimism, sense of control, and methods of coping with stress in order to evaluate if these personal factors shed light on reaction to immigration. Other research has shown the importance of ideology in comparison to partisanship, but the survey lacked a question on the former. A question about length of residence would have allowed us to control for migration. Second, the creation of interaction terms with a sample size of 800 led to some small cell sizes compromising the statistical power of the analyses. It is possible that some of the effects that were found not to be statistically significant might be significant with larger sample sizes. Finally, the present research is a one-state, cross-sectional, case study. Although in some respects New Jersey is an ideal test case, the findings are limited in their generalizability to other situations. We should also caution that the findings only demonstrate a correlation between the dependent variables and some independent variables and do not prove a causal relationship. We discuss alternative interpretations and suggestions for further research in our conclusion.

Noting these caveats, the influence of our variable of interest, proportion of foreign-born residents at the county level, on attitudes both supports our original hypothesis and at the same time forces us to refine our thoughts. Considering descriptive statistics, at one end of the spectrum, only 33.3 percent of respondents in Salem County, the county with the lowest proportion of immigrants, did not think that immigration was bad, compared to 55.7 percent in Hudson county, the county with the highest proportion. In support of this trend, our model indicates that residence in a high immigrant county interacts with certain demographic variables, leading to positive outlooks on immigration among groups who may think differently if living among fewer immigrants. Findings related to the interaction of race and place also echo the findings of past research (e.g., Branton 2007). We found minorities, including Latinos, in high immigrant counties are less likely to hold negative views of immigration.

Yet the relationship is not so simple, and as past research has found, other influences may change the direction of this influence. For example, unflattering local media coverage as well as personal perceptions of poor economic conditions may lead to negative opinions of immigrants in regions with large immigrant populations (Alvarez & Butterfield 2000; Branton & Dunaway 2009b). In our study, a higher proportion of immigrants in one's county of residence interacts with certain personal demographic characteristics to create a negative influences on one's perception of immigration. Those with high school degrees or less and live in high proportion districts have poor opinions of immigration. And, similarly, only Democrats in low proportion counties are significantly more likely to hold positive views. Perhaps groups in more vulnerable positions feel more anxiety with higher proportions of immigrants.

CONCLUSION AND POLICY IMPLICATIONS

During Spring 2007, the U.S. Congress bitterly debated immigration policy. While some called for harsh anti-immigrant measures, others pressed for practical political solutions. Demographic trends suggest that immigration will remain a policy challenge for the US. From a policymaking perspective, understanding people's perceptions and values about immigration is critical. Toward that objective, this paper supports the theory that larger proportions of immigrants or intergroup contact, loosely defined, usually correlates with more positive feelings. If that is so, then the perception of the immigrant population as a positive force may increase as the population grows and migrates across the US. It is also possible, based on our findings, that the reception may not be as warm in locales dominated by groups in more vulnerable positions who likely would feel more anxiety with such an influx.

Of course, the present analysis reveals only statistically significant correlations and cannot test causal relationships. Perhaps those comfortable with immigrants seek out and move to counties with a more diverse population. It is also not implausible that non-immigrants would be comfortable up to a point at which they feel that their preferred culture is being threatened, their shopping choices have been changed, their schools no longer emphasize what they value, and so on. Our findings cannot fully address this question, but do not support a tipping point hypothesis and again point to the complexity of the issue. In general, the findings here indicate that, regardless of the causal direction, the trend is not monolithically negative.

From an academic perspective, researchers from multiple disciplines such as political science, sociology, demography, policy analysis, and psychology, are involved in the conversation and should continue their efforts. Understanding a public opinion on immigration is a large endeavor spanning a wide range of disciplines. We would encourage, however, a stronger cross-disciplinary dialogue and modestly hope that a stronger focus on the more practical policy implications of the topic may further unite the discussion.

In terms of further academic research as well as public opinion reporting, this New Jersey study suggests that further research is much needed. Based on both the findings of the research and its limitations, we have a number of suggestions. Most critically, comprehensive, inter-disciplinary research is hindered by the lack of detailed data sources. Additional questions on demographic and geographic location are needed in national surveys. Opinion questions about the details of immigration policy, such as separate questions asking specifically about legal versus illegal immigrant policy would also be of use. Subsequent analyses of the data beyond merely reporting summary statistics would then be possible. While county-level results are somewhat revealing, we suggest that micro scale analyses at the municipal and census tract and block areas would be more revealing of the complex relationships that underlie public opinion of

immigration policy. The findings of such micro-level analyses would further clarify our thoughts on the importance of counties as well. If support for this type of polling could be sustained, longitudinal studies with a focus on decisions about where to live and when to move would further the conversation to a true investigation on the causal nature of the relationship. Finally, replication studies with larger sample sizes may uncover interaction effects that have been left undetected by the present analysis, and those in different regions or states are critical to our ability to understand how generalizable these findings may be.

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AUTHOR INFORMATION:

Andrea Hetling's research interests lie in the domestic social policies that target disadvantaged or marginalized groups. She particularly interested in evaluating the implementation and outcomes of social programs designed to reduce poverty and violence, including how changes in social policies and programs affect public opinion. The attitudes held by the public are a critical element in understanding how social programs are advanced on the policy agenda.   Andrea's recent research takes a multi-level approach, focusing on macro-level influences, such as public programs and neighborhoods characteristics, in promoting individual and family well-being. Address: Andrea Hetling, Assistant Professor, Edward J. Bloustein School of Planning and Public Policy, Rutgers, The State University of New Jersey, New Brunswick, NJ 08901-1958. Email: ahetling@rutgers.edu.

Michael Greenberg studies environmental health, especially the application of risk analysis to problems ranging from decommissioning weapons of mass destruction to remediation and reuse of contaminated brownfield sites in urban neighborhoods. He has developed mental models of public perception and preferences for alternative energy sources, waste management and transport options. Currently, he is designing a the fourth national survey aimed at determining public understanding of activities at U.S. nuclear weapons facilities; developing educational programs about homeland security for front-line transit workers and their managers; and he is writing a book about environmental impact statements. Address: Michael Greenberg, Professor and Associate Dean of the Faculty, Edward J. Bloustein School of Planning and Public Policy, Rutgers, The State University of New Jersey, New Brunswick, NJ 08901-1958. Email: mrg@rci.rutgers.edu.