"Little" and "Big" Pictures in Our Heads:
Race, Local Context and Innumeracy about Racial Groups in the U.S.

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Abstract:

Americans do not know what percentage of the nation's residents are whites, blacks, Hispanics, Asians, and American Indians. Using the 2000 General Social Survey, I find that respondents of all races underestimate the percentages of whites and overestimate the percentages of racial/ethnic minority groups and multiracial Americans in the U.S.; however, they perceive their local communities quite differently. As a first step toward understanding this discrepancy, I test whether individuals' local surroundings serve as a source of information for their pictures of the U.S. I examine the relationship between "objective" data and respondents' subjective perceptions of where they live, and compare their respective effects on Americans' perceptions of the nation. Multivariate multilevel analyses show that respondents' perceptions of different racial group sizes in their communities are the strongest predictors of innumeracy at the national level, while "objective" racial context measured at the local level has less of an effect. These findings have important implications for research on racial context, which assumes that Census numbers for respondents' locales are good proxies for their perceptions of the size of racial/ethnic groups in their communities. Furthermore, these findings suggest that scholars need to start thinking about why whites and non-whites have similar "big pictures" of the nation, why their "little pictures" vary a great deal, and why the motivations for over- and under-estimation may differ by racial/ethnic group.

The world that we have to deal with politically is out of reach, out of sight, out of mind….Yet [man] has invented ways of seeing what no naked eye could see, of hearing what no ear could hear, of weighing immense masses and infinitesimal ones, of counting and separating more items than he can individually remember. He is learning to see with his mind vast portions of the world that he could never see, touch, smell, hear, or remember. Gradually he makes for himself a *trustworthy* picture inside his head of the world beyond his reach (Lippmann 1922, p.18, emphasis added).

Are the pictures in people's heads indeed so trustworthy? The American public's level of political information and knowledge is often surprisingly low (Delli Carpini and Keeter 1996; Neuman 1986), and ordinary citizens also frequently make incorrect inferences based on personal experiences or recent, salient facts or events (Nadeau and Niemi 1995; Ross 1977; Tversky and Kahneman 1974). For example, a few weeks before the 2004 Presidential election – and despite Congressional testimony and 9/11 Commission reports to the contrary – almost half of Bush supporters believed Iraq had Weapons of Mass Destruction (WMD) and 75 percent believed Iraq supported Al Qaeda (Kull 2004). Surveys have also shown that Americans have distorted pictures of subjects closer to home, such as the race and ethnicity of their compatriots.

Research has begun to look at the extent of Americans' innumeracy about minority groups, and there is evidence that ordinary people do not see an America anything like that depicted by the Census: they greatly overestimate the numbers of blacks, Jews, and Hispanics in the country (Gladwell 1995; Highton and Wolfinger 1992; Nadeau et al. 1993; Sigelman and Niemi 2001). While one might be inclined to dismiss these findings as examples of thoughtless, top-of-the-head responses or random guesses, some of these studies also provide vivid anecdotes that hint at the confidence with which at least some individuals state (and hold onto) their beliefs. For example, in 1995, the *Washington Post* (in collaboration with the Kaiser Foundation and Harvard University) conducted a national survey with questions about the demographics of America, including the percentage of blacks living in the U.S. A few of the respondents were interviewed afterwards by reporters about their answers. One woman from Florida said, "There are a lot of Blacks around

here" (Gladwell 1995, 7), and she put the number of African Americans nationwide at somewhere over half the population. When she was told the actual figure was closer to 12 percent, she said she did not believe it. Another woman, who estimated blacks made up 40 percent of the U.S. population, explained, "I'm thinking of the people I know and work with…The white people are more prone to having one or two children whereas my black friends have three or four and sometimes five. Plus, from what I've seen on television, we're quickly becoming a minority." And, a 62 year-old white man, who also said that blacks made up 40 percent of the population, explained his estimate this way: "I drive a truck. Some of these towns I go by, I may pass five or six school buses and not see a single white child. I just figured we were running behind." These reactions make sense to scholars of public opinion because, as Fiske and Taylor explain, "…instead of employing base rate or consensus information logically, people are more influenced by a single, colorful piece of case history evidence" (1984, 251). These mental pictures seem to be derived from personally-observed experiences, as well as "impersonal" sources (Mutz 1998). While one cannot generalize about the reasons for racial innumeracy from these few examples, they do indicate that innumeracy may not simply result from "nonattitudes," but rather from direct observation and inference, focused on an aspect of American life that is distinctly colorful, race.

Why does it matter if people's perceptions do not match reality? Individuals' misperceptions and innumeracy can influence policy preferences and choices. Beliefs about WMD affected attitudes about the war in Iraq, and scholars studying the effects of the economy on voting have found that perceptions of the state of the economy can be more important than government statistics in influencing vote choices (Hetherington 1996; Kramer 1983; Kinder and Kiewiet 1981; Kinder, Adams, Gronke 1989). Furthermore, researchers have shown that Americans who overestimated the numbers of poor blacks in the U.S. were more likely to oppose welfare programs (Gilens 1999).

The political effects of misperception are also of concern to interest groups. The NAACP's 2004 fund-raising letter, for example, highlighted the innumeracy of Americans with regards to Jews, Blacks, and Hispanics, and warns that "Thanks to misinformation and demagoguery, the average American now believes that minorities are the majority – 71% of the national population!"[1] The NAACP, however, is not simply concerned that Americans do not have their facts straight. The worry is that average Americans – meaning, most likely, whites – are going to act on that misinformation in ways that will have negative repercussions for racial minorities. After all, if certain groups make up a majority of the country, why would they need policies that protect them or grant them benefits (e.g., affirmative action or race-conscious redistricting) in this majoritarian democratic system? Furthermore, whites may feel threatened if they believe they are becoming the minority group in the neighborhoods in which they live.

How people react politically to their geographic surroundings – particularly with regards to whites and their racial context – has also been the focus of social science research for the past half century (Blalock 1967; Giles and Evans 1985; Glaser 1994; Key 1949; Taylor 2000; Wright 1977). This research is particularly crucial to a discussion of racial innumeracy, because the "power threat hypothesis" states that the more blacks that live in an area, the more likely it is that whites will feel threatened and try to repress political participation among blacks (Blalock 1967). Key (1949), for example, showed that counties in the American South with the highest percentages of black populations tended also to be places with the highest rates of voting by whites. The argument is that whites in the Black Belt presumably felt and reacted to their feelings of political and economic threat from blacks (assumed to arise from living near large numbers of blacks) with increased participation.

This literature on racial threat clearly emphasizes the importance of individuals' local contexts as sources of political motivation, such that people are *assumed* to observe their

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[1] This fund-raising letter was received by the author.

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surroundings and then make political decisions based on these observations. However, if people's perceptions of the environments in which they live do not match the local Census numbers, then the current psychological explanations for why objective numbers lead to political opinions and actions do not make sense. A test of this assumption has not previously been made, but the comparison between objective numbers and subjective perceptions of groups in a local area is necessary in order to gain a clearer understanding of the concept of "racial context." In this paper, I focus on whether context may be a combination of both perceptions and "objective" features, and test the hypothesis that "little pictures" of nearby surroundings affect individuals' broader generalizations about the "big picture" of the nation as a whole.

Researchers have also tended to focus on how whites (or a numerical majority group) feel threatened by blacks (or other numerical minority groups) without specifying how minority groups feel about the majority (Quillian 1995). If innumeracy were restricted only to whites or majority groups, then we might assume that innumeracy is a result (or possible cause) of racism. However, what happens if everyone overestimates the sizes of minority groups and underestimates the size of the majority group?[2] These results could be evidence of the power of the media, or of different psychological, social, or political mechanisms at work for different groups in society. In the analyses that follow, I compare the perceptions of white, black, and Latino respondents, and focus on whether there are systematic variations in the characteristics of individuals who incorrectly estimate the numbers of minorities and whites in the country or in the environments in which they live. Not only is it important theoretically to understand if the same mechanisms concerning context are at work for groups other than whites (as both observers and observed), as demographic changes occur in the U.S. over the next half century, it will become more relevant politically for understanding what might happen when "minority" groups are no longer numerically smaller.

In the next section, I begin with a brief description of the extent of Americans' innumeracy about five different racial/ethnic groups in the population (i.e. whites, blacks, Hispanics, Asians, and Native Americans).

Data and Analysis

The data for the analyses presented here are drawn from the 2000 General Social Survey (GSS). The 2000 GSS is part of the biannual series of in-person national surveys conducted by the National Opinion Research Center (NORC) since 1972.[3] The 2000 GSS contains a module on the Multi-Ethnic United States (MEUS), and 1397 respondents were asked the MEUS items.[4] As part of the module, respondents were asked the following question: "Just your best guess – what percentage of the United States population is each group?" The groups listed included whites, blacks/African-Americans, Hispanics, Asian Americans, and American Indians. The instructions to the interviewers explained that the percentages did not have to add to 100% and that the listed groups were not mutually exclusive, consistent with the measurement of race and ethnicity in the Census. In a follow-up question, respondents were asked:

> People may come from one racial group such as being White, Black/African-American, Hispanic, Asian, or American Indian, or people may come from two or more of these groups. What percent of people in the United States today do you think have parents or their ancestors from two or more racial groups?[5]

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[2] Sigelman and Niemi (2001), for example, show that both white and African American respondents overestimate the numbers of blacks in the nation.

[3] The response rate for the 2000 GSS was 70%.

[4] For an excellent description of the MEUS items, their frequencies, and comparisons of responses by basic demographic groups, see Smith 2001.

[5] In contrast with the GSS, the 2000 Census asked about the race(s) of individuals separately from their ancestry. However, "ancestry" in the Census is equated with "ethnic origin," with no mention of race, and examples given include "Italian," "Jamaican," "Cambodian," and "Norwegian" (Skerry 2000, 210).

Respondents were also asked a similar set of questions about their "local community": "Just your best guess – what percentage of the people who live in your local community is each group?" The groups asked about were the same as for the U.S., with the exception of multiracial Americans.[6]

Because I wanted to be able to examine whether respondents' surroundings had any effects on their local and national demographic perceptions, I needed data on their "local communities." In response to a special request by the author, NORC provided identifiers for the 100 Primary Sampling Units (PSUs) from which the sample was drawn, and this individual-level dataset was then linked with 2000 Census data for these PSUs.[7]

While PSU is not a perfect match for a respondent's "local community," it is certainly "more local" than the nation, and more importantly, *it is the best data currently available*. It is also not clear what an ideal geographic match for "local community" would be for these data. No clear definition of "community" is given to respondents, nor is there a consensus in the academic literature about what "community" means to the American public.[8] Given the ambiguity about exactly what

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[6] Respondents are quite willing to give answers to these factual knowledge questions, with no more than 5 percent of the GSS sample giving a "Don't Know" or "No Answer" response for each group; of course, willingness to give a response does not mean that an individual has a real or "true" attitude.

[7] The 2000 sample was drawn from NORC's 1990 sampling frame of 100 PSUs. Because some of the PSUs are Standard Metropolitan Statistical Areas (SMSAs) that changed between 1990 and 2000, the 2000 Census data used are the aggregated data for the counties associated with each PSU, as reported in the GSS. According to NORC, all respondents are drawn from these counties. In other words, all respondents in the Atlanta MSA, for example, were drawn from 18 counties in Georgia. This decision to use aggregated county data for each PSU ensures that 2000 Census data can be linked to survey data gathered in the same year for these analyses, and that in future work, I can examine the effects of change in context (from 1990 to 2000, holding constant geographic boundaries) on respondents' perceptions of their community and racial attitudes. Furthermore, I chose to use 2000 Census data rather than that of 1990 because of the large demographic changes that could have occurred in locales during that decade.

I am using the PSU as the contextual unit of analysis because it is the *only* geographic unit available for these data, not because I am convinced that it is the optimal contextual unit. The GSS does not release geographic identifiers for smaller units of analysis (e.g., the city in which a respondent resides), even with special requests and confidentiality agreements. As it turns out, *over half of the PSUs analyzed here are composed of only a single county*. The PSUs vary a great deal in population size, with a median of 440,000 people (about the size of Atlanta) and a mean of 1.48 million people (about the size of Philadelphia). In other words, half of the PSUs were smaller than Atlanta. The PSUs also vary a great deal in terms of diversity: they range from 0 to 57% Hispanic, 40 to 99% white, 0 to 58% black, 0 to 20% Asian, and 0 to 30% American Indian.

[8] For examples, Fernandez and Dillman (1979) define community as the town or city in or near where one resides, shops, and receives services, and the rural area around it; Allensworth and Rochin (1998) refer to

geographic entity is in the heads of respondents as they answer questions about their "local community," I proceed in these analyses to use Census data on the smallest geographic unit that the GSS releases to represent "objective" characteristics of a respondent's "local community," while being sensitive to problems in equating them.

Extent of Americans' Innumeracy

Figure 1 presents, for each group listed, the 2000 Census figures at the national level, the mean percentage estimated for the U.S. population by the GSS respondents, and the distribution of people's perceptions of the percentage of the U.S. that belongs to that group. Each panel shows a curve, which is, in essence, a smoothed histogram.[9] The bottom center panel shows that the average percent of whites reported by the GSS respondents was 59% (shown by the dark circle), which is well below the Census figure of 75% (shown by the dark triangle). The area under the curve to the left of the Census figure shows that about 70 percent of the respondents *underestimated* the percentage of the country's population that is white. This underestimation of the proportion of whites in the U.S. contrasts with the other four panels, each of which shows a pattern of consistent *overestimation* of different racial and ethnic minority groups. For example, the top left panel shows that the percent black perceived by GSS respondents was 31%, while the Census figure was only 12%, and about 80% of the sample overestimated the percent black in the U.S.

Overall, almost three out of four Americans underestimate the percentage of whites in the U.S. population, and a majority overestimates the percentages of all racial minority groups in the

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Census "places" as communities, where "places" are densely settled concentrations of population that are identifiable by name but are not legally incorporated; and Munch and Campbell (1963) argue that a community is based on collective identification, not objective bases.

[9] The histograms are created from kernel density estimates using a Gaussian kernel. The "rug plot" on the bottom of the histograms presents the actual percentages given.

U.S.[10] Americans on average think that the proportion of African Americans is two and a half times greater than that reported by the Census; they estimate a percentage of Hispanics almost double that of government figures; and they overestimate the percentage of Asians and American Indians by over a magnitude of three. The picture of the nation's demographics that Americans have in their heads is like a reflection from a carnival mirror: the resemblance is there, but the features are distorted and even reversed.

From the dark circles in each panel of Figure 1, it is obvious that the mean percentages estimated for the different racial groups across respondents add up to more than 100%. Americans are also innumerate, no matter how one defines race, the multiracial category, and ethnicity. If only responses for whites, blacks, Asians, and American Indians are totaled — keeping to the racial categories that the Census considers to be mutually exclusive — the mean percentage is 122%. As estimates for Hispanics and multiracial Americans are added, the mean percentage continues to rise to 146% and 190%, respectively. Given that the mean estimated percentage of whites in America

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[10] If, however, Americans equate the category "Whites" with "non-Hispanic Whites" at the national level, the mean percentage estimated is closer to the actual Census figure of 69 percent for non-Hispanic whites (http://quickfacts.census.gov/qfd/states/00000.html).

     The issue of innumeracy about the nation's demography is complicated by people's understandings of race and ethnicity. Just as how people understand "the economy" – whether it refers to unemployment rates, inflation, one's own financial status, or a combination of them all – can lead to different assessments about the state of the economy, how people define race and ethnicity will also affect their perceptions of their nation's demography. Both the definition and measurement of race in the U.S. have changed radically over time (Diamond 1994; Gould 1994; Haney-Lopez 1996; Ignatiev 1995; Skerry 2000). In this "land of immigrants," ethnicity also has a peculiar American meaning that is partially affected by its intersection with race (Waters 1990, 1999; Skerry 2000). In recent history, ethnicity in the U.S. Census, for example, refers specifically to whether a respondent is of Hispanic background or not. This question of ethnicity is asked separately from race, with the assumption that they are not mutually exclusive. However, both ordinary Americans and elites oftentimes merge the categories of race and ethnicity (Hollinger 1995; Navarro 2003; Smith 1995).

     I emphasize here the changing "official" understandings and measures of race and ethnicity because I use Census numbers as a baseline for comparison with the pictures in people's heads. However, these "objective" numbers are not like measurements of height or temperature. They, like unemployment figures, are based on surveys, not uniform rulers or thermometers. "Innumeracy," in other words, assumes a deviation from "correct" numbers, but in the case of race and ethnicity, determining innumeracy is more difficult than deciding, say, whether someone has correctly identified the Vice President (Delli Carpini and Keeter 1996).

reported in Figure 1 is 59%, one could argue that many Americans think the country as a whole is already majority-nonwhite, confirming the NAACP's concerns about innumeracy.[11]

Of course, another possible route to concluding that the nation is already majority minority is if one considers multiracial individuals to be "minorities." The gap between Census numbers and people's perceptions is even greater for multi-racial Americans than for the separate racial or ethnic groups. GSS respondents clearly view multi-racial Americans as a non-exclusive category: the mean percentage of multi-racial Americans (defined by parents or ancestors of different races) estimated by respondents for the U.S. population is 43 percent. As a point of comparison, only 2 percent of Americans reported that they were multi-racial in the Census.[12]

There are, of course, a number of discrepancies between the Census and GSS questions: the Census asks for self-identification, while the GSS asks for a description of others; the Census question pertains to race alone, while the GSS includes "Hispanic" as an example of a racial group; and the Census does not specify why an individual should choose multiple races, but the GSS refers specifically to parents or ancestors of different races. Nevertheless, even if one simply added all Hispanics to the multiple race respondents in the 2000 Census (naively and incorrectly assuming these figures are mutually exclusive, for the sake of creating as large of a number as possible), this still would only total 15 percent of the U.S. population. I do not have information about perceptions of multiracial Americans at the local level, and this is not the main focus of the article. Nonetheless, the perception of the United States as being over 40 percent multiracial will be an

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[11] In previous research, Highton and Wolfinger (1992) raised the question of whether innumeracy is simply a result of non-attitudes because they found that 19 percent of their sample made estimates that added up to 100% or higher. It should be noted that it is possible for "true," relatively correct perceptions to add up to more than 100% as well. If, hypothetically speaking, a respondent gives "accurate" rough estimates (within 5 percentage points of the real Census numbers, rounding up to 80% whites, 15% blacks, 5% Asians, and 5% American Indians, for example), her estimates will total more than 100%.

[12] 2000 was the first time that the U.S. Census Bureau collected data on multiracial Americans; respondents were allowed to check more than one box on the Census form when asked about their race.

interesting topic for future research, raising questions about what role multiracial individuals ought to play in studies of racial context.

Factors that Could Affect the "Big Picture"

As mentioned earlier, the pictures of the U.S. that people have in their heads may be affected by respondents' local contexts and their race. Racial segregation in housing, for example, could lead individuals to believe they are living in different nations.

Local Context. While respondents describe the country as a whole as having much larger percentages of blacks, Hispanics, Asians, and American Indians than those reported in the Census, on average, they paint their communities to look like small microcosms of America. Table 1 shows that the mean percentages perceived for the various groups by respondents for their *local* community are closer to the actual breakdown of those groups in their PSUs than are their national perceptions. It seems that Americans' perceptions of their local communities are also more sensible, numerically-speaking. The sum of individuals' community estimates for whites, blacks, Asians, and American Indians average to 98%, and when Hispanics are added, the mean total rises only to 112%.

There is no easy way to determine with existing data why Americans seem to be more innumerate when it comes to minority populations nationally than locally. It is possible that people can visualize the people living nearby and may come into contact with them. So, if individuals picture their community of 100 neighbors, they may know that there are about ten African Americans, five Hispanics, and a few Asians living in the neighborhood and be able to make estimates relatively easily. By comparison, it is difficult to visualize a nation of 281 million people

and to estimate what proportion of that country is made up of blacks, whites, Asians, American Indians, and Hispanics.[13]

An alternative explanation, however, for why the local estimates sum closer to 100% than national estimates is that respondents are learning from one question to the next in the survey (the two sets of questions about demographic perceptions in the GSS were separated by six survey items). Answering questions about the nation may have given respondents practice in answering about percentages.[14] Unfortunately, it is not possible to determine with these data which cognitive mechanism led to the more accurate estimates of groups at the local level, given that the question order was the same for all respondents. What evidence is available presents an inconsistent story. Since the PSUs vary much more in racial diversity than the nation as a whole (see footnote 6), one should expect to see greater variance for perceptions of all groups in respondents' communities. However, the standard deviations of the responses to community perceptions of Asians and American Indians are smaller than for national perceptions of those groups, but the ranges of responses about whites and blacks in local communities are greater than those for the nation.[15]

Race. Another aspect of local contexts that could lead people to overestimate or underestimate the percentages of various groups in the U.S. population is the degree of racial integration. Since residential segregation is still relatively common, it is possible that respondents of different races have different views of the racial composition of their locality and nation (Welch et al. 2001). They may also have varying perceptions because of dissimilar social networks and socialization. For example, an African American growing up in Harlem may perceive a world that looks quite different from a white contemporary in New York who grew up in the West Village. In

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[13] There is some evidence for this hypothesis: respondents' perceptions of whites and blacks at the national level are not related (Pearon's r = .07), while the perceptions of whites and blacks at the "local community" level are highly correlated (r = -.69).

[14] I thank an anonymous reviewer for this interpretation.

[15] The range of responses for Hispanics is about the same at the national and local levels.

addition to the hypothesis that people use their local communities as cues for determining the racial make-up of the nation, there is an alternative explanation for potential racial group differences in pictures in people's heads: psychological factors, like a fear of outgroups that could lead one to inflate an outgroup's numbers, or a desire to boost one's self-esteem via exaggerating the physical presence of one's ingroup.

Tables 2a and b show the mean percentages for perceptions of the nation and for the respondents' "local communities," broken down by race/ethnicity of respondents; the comparison is with numbers from the Census for the same geographic units. Because there are so few Asian and American Indian respondents in the sample, the tables provide percentages for white, black, and Hispanic respondents only.[16]

The pattern in Table 2a is similar for the three subgroups: all underestimate the percentage of whites and overestimate the percentage of racial minorities in the U.S. In other words, regardless of whether one belongs to a majority or minority group, perceptions of the various racial groups in the nation are remarkably similar. Blacks and Hispanics, in fact, seem to overestimate minority group percentages even more than whites in the sample. For example, while whites on average believe Hispanics make up 23% of the U.S. population, Hispanics on average believe their group comprises over 40% of the nation. Nevertheless, all respondents have similarly distorted pictures of the numbers of whites, blacks, Asians, American Indians, multiracial Americans, and Hispanics in the U.S.

In contrast, local perceptions differ by markedly by race/ethnicity. Table 2b shows that from their descriptions, whites think they live in primarily white communities, while black and Hispanic respondents are more likely to report living in majority minority communities. These

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[16] There are only about 55 American Indians and 33 Asians who were selected to answer the questions in the MEUS module.

findings seem relatively consistent with the work on continuing residential segregation (Farley 1999; Massey 2000): whites tend to live with other whites, and minorities often live in segregated neighborhoods.

However, the 2000 Census data for the PSUs in which the respondents live indicate that, on average, *all* respondents – white, black, and Hispanic – live in majority white PSUs. For example, black respondents on average think that their communities are half black, but they also live in PSUs that are less than a quarter black according to the Census. And while white respondents live in PSUs with a higher proportion of white residents than do minority respondents, relatively speaking, black and Hispanic respondents live, on average, in PSUs made up of 70% and 71% whites, respectively. Black respondents do live among more blacks than do the white or Hispanic respondents, and Hispanic respondents also live among more Hispanics than do white or blacks respondents. Again, these differences between perceptions and Census numbers may arise because respondents do not equate their local community with their PSU, such that they live in a segregated block within an integrated PSU. Nevertheless, despite perceiving themselves as living in very *different* local communities, whites, blacks, and Hispanics have very *similar* – and also very inaccurate – estimates of the size of different racial groups in the nation.

Respondents of different races may react politically to their misperceptions in varying ways, but the fact that they *all* underestimate the numbers of whites and overestimate the numbers of minority groups indicates that different motivations may be driving whites', blacks', and Hispanics' misperceptions of each other. While whites might see an outgroup like blacks as larger because of a perceived threat from that group, it is unlikely that blacks, for example, would also overestimate the number of blacks (i.e., their own ingroup) for the same reason. African American respondents could inflate their own numbers because they are residing in areas that are racially segregated or for reasons of boosting self-esteem, but again, it is unlikely that these same reasons would lead whites –

who are also affected by segregation and self-esteem desires – to *under*estimate the size of *their* ingroup. In other words, similar patterns across races cannot translate into similar motivations.

Multivariate models: Race, Local Context, and Pictures in People's Heads

Because of continuing segregation, there is a correlation between an individual's race and her local context. However, do the circumstances in which an individual lives (the "little picture") affect how she sees the country as a whole (the "big picture")? If so, what aspects of the local context lead to perceptions of the nation? And if not, what other factors might lead to the carnival mirror image of the country? In order to answer these questions, I first need to determine if there is a link between "objective" characteristics and subjective perceptions of where a respondent lives. Then I can turn to whether objective local context and perceptions of a respondent's local community are related to perceptions of the nation, directly or indirectly. Because the racial similarities and differences in Tables 2a and 2b may be artifacts of other correlated factors, like socioeconomic status, I also move to present the results of a set of multivariate models.

The Little Picture. While both Census numbers for individuals' PSUs and local perceptions may affect how people see the nation's demography, I first want to determine if local "objective" circumstances influence local perceptions. They may be unrelated to one another and have independent effects on national perceptions; alternatively, they could be highly correlated, with one serving to moderate or mediate the other's effect on perceptions of the nation.

In order to examine the effects of both micro-level (individual) and macro-level (PSU) units, I estimated multilevel models, where the perception of the size of a racial group in the local

community of person *i* in PSU *j* is denoted as Y_{ij} (Raudenbush and Bryk 2002; Snijders and Bosker 1999).[17] The following equation represents the individual-level part of the model:

$$Y_{ij} = \beta_{0j} + \beta_1(\text{race})_{ij} + \beta_2(\text{education})_{ij} + \beta_3(\text{age})_{ij} + \beta_4(\text{income})_{ij} + \beta_5(\text{gender})_{ij} + \beta_6(\text{residential mobility})_{ij} + \beta_7(\text{immigrant generation})_{ij} + r_{ij},$$

where r_{ij} is the individual-level error term.[18]

I included this set of demographic variables and indicators of socioeconomic status as predictors because of their important role in past research explaining who is more or less likely to be knowledgeable about politics (see, for example, Delli Carpini and Keeter 1996). Education and gender have consistently been shown to have effects on political knowledge, with the better-educated and male respondents being more knowledgeable. Greater income and age can increase an individual's exposure to different experiences, and similar to education, they should provide more knowledge about the local community. Another source of information from lived experience may come from residential mobility, on the assumption that respondents who have never lived in more than one city or state since they were age 16 could have more knowledge about their own local area (and less knowledge about the country as a whole). A similar hypothesis explains controlling for the length of time respondents (and their families) have resided in the country; the variable runs from

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[17] Because a number of respondents are drawn from the same PSU, one cannot assume that all observations are independent. Furthermore, I am interested in both individuals and their PSUs as units of analysis. Therefore, multilevel models are appropriate for the analyses.

[18] All independent variables in these models have been recoded to run from 0 to 1. Education is a 5-category variable: less than high school, high school, associate or junior college, BA, and Graduate. Age is a 5-category variable: 18-29, 30-39, 40-49, 50-59, and 60+. Income is a 8-category variable: <$10k, $10k-$19km, $20k-$29k, $30k-$39k, $40k-$49k, $50k-$59k, $60k-$89k, $90k+. Mobility is a 3-category variable: R lives in a different state than when s/he was 16 years old, R lives in the same state but different city, and R lives in the same state and same city. Generation is a 4-category variable: R is an immigrant to the U.S., R is born in the U.S. and at least one of his/her parents are immigrants, R and R's parents are born in the U.S. and at least one of his/her grandparents are immigrants, R and R's parents and grandparents are born in the U.S. South combines three regions reported by the GSS: South Atlantic, East South Central, and West South Central. This includes the 11 states of the Confederacy plus Delaware, Kentucky, Maryland, Oklahoma, and West Virginia.

first generation (i.e. immigrant) to 4th+ generation.[19] An immigrant will likely have less information

about her new country – including its particular racial and ethnic make-up – compared to her

(hypothetical) native-born children or grandchildren, controlling for age.

At the PSU-level, the Census-reported percentage of the racial/ethnic group in the PSU in

question is added to the model. A regional control for the South is also added, since a great deal of

research has addressed the distinctive effect of racial context on whites in the South (see, for

examples, Key 1949 and Blalock 1967); residents in the South may be more attuned to racially

conflictual politics and, therefore, the racial make-up of their locales. Finally, in order to control for

the potential effects of the size of the geographic unit – with more populous areas being perhaps

harder to encapsulate in a "picture" – the natural log of the size of the PSU is added to the model

(Taylor 1998). The effects for each PSU on accuracy are presumed to vary across units, such that:

$$\beta_{0j} = \gamma_{00} + \gamma_{01}(\%\text{group in PSU})_j + \gamma_{02}(\text{South})_j + \gamma_{03}(\ln \text{ size of PSU})_j + \mu_{0j}$$

while all of the other level-1 coefficients are treated as fixed.[20] The random intercept allows us to

control for unmeasured PSU-level heterogeneity in the models, in case, for example, there are

characteristics of PSUs other than objective context, region, and locale size that affect the individual-

level intercept and respondents' perceptions of their local community.

Table 3 shows that the size of a group in a respondent's PSU affects her estimates of the size

of those groups in her local community: the larger the group, according to the Census, the larger

the estimates of whites, blacks, Hispanics, Asians, and American Indians living nearby. In other

words, a move from a PSU with no blacks to one that is 50% black would be predicted to lead to a

15 percent increase in one's perceptions of the percentage of blacks in one's local community. The

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[19] Of course, since we do not know from where people have moved, we cannot determine if increases or decreases in diversity in a respondent's local community affects her perceptions.

[20] These models were estimated using the nlme package for multilevel analysis written by Jose' Pinheiro and Douglas Bates for use in Splus and R. In this package, as in most others, the random intercepts and slopes are assumed to be normally distributed.

effects of objective numbers of whites and blacks on perceptions of these two groups are relatively small (.34 and .30, respectively), particularly in comparison to the relationships between "objective" and perceived numbers of Hispanics, Asians, and American Indians. A larger "objective" presence of these three minority groups greatly increases the likelihood that respondents will see larger percentages of each in their local communities. The population size of the PSU affected respondents' views of the percentages of whites and blacks only: in the more populous areas, residents were likely to perceive fewer whites and more blacks. Region did not appear to affect people's demographic perceptions; for example, the largest effect was for blacks, but a shift from a PSU outside the South to one located in the South would predict changes of perceptions of the size of African Americans as a group by an increase of only 4 percentage points.

At the individual level, a number of factors affected people's views of their local community. Compared to white respondents, blacks on average were estimated to see smaller percentages of whites and Asians and larger numbers of blacks in their communities; controlling for "objective" PSU context, black respondents' perception of the proportion of African Americans in their local community was 24 percent higher than that of white respondents. This racial difference could be a result of segregation at the sub-PSU level. Hispanics also perceived fewer whites in their communities, as well as larger percentages of all racial minority groups, than did white respondents. While education had no effect on perceptions, higher income did lead to larger estimates of whites and smaller estimates for racial minority groups in the respondents' local communities; in other words, the wealthy were more accurate in their perceptions than were the poor. Women were also more likely than men to give larger (and more inaccurate) estimates of the percentages of blacks, Asians, and American Indians living in their local communities. Finally, other than the fact that a lack of mobility led to perceptions of larger numbers of blacks in one's community, tenure in a locale or the nation did not affect group perceptions.

The analyses in Table 3 indicate that "objective" numbers are the strongest predictors in the models of "subjective" pictures of respondents' local communities. What this means for national politics (and the NAACP's concerns, for example) depends on how Americans' *national* perceptions are affected. For example, how people see the nation could be completely unrelated to their local contexts, objective or perceived, and instead be driven entirely be TV images. Therefore, I now turn to whether local circumstances as defined by the Census and people's local perceptions of racial groups affect their perceptions of these same groups at the national level.

The Big Picture. To test these relationships, I ran models similar to those in Table 3, where the dependent variables of interest are now the estimated percentages for the different racial groups in the U.S. Again, I estimated multilevel models, where the perception of the size of a racial group in the U.S. of person i in PSU j is denoted as Y_{ij}.[21] The following equation represents the individual-level part of the model:[22]

$$Y_{ij} = \beta_{0j} + \beta_{1j}(\text{perceived \%group in community})_{ij} + \beta_2(\text{race})_{ij} + \beta_3(\text{education})_{ij} + \beta_4(\text{age})_{ij} + \beta_5(\text{income})_{ij} + \beta_6(\text{gender})_{ij} + \beta_7(\text{residential mobility})_{ij} + \beta_8(\text{immigrant generation})_{ij} + r_{ij},$$

where r_{ij} is the individual-level error term.

The perceived percentage of the racial/ethnic group in the respondent's "local community" is the predictor of primary interest in the model. According to Nadeau and Niemi (1995), it is a cue variable for respondents, who can use judgments about their immediate environment as a heuristic

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[21] In their analyses using Gallup data, Sigelman and Niemi (2001) found that 17 percent of African Americans and 12 percent of whites did not give an estimate of the black population in the U.S. In order to analyze innumeracy, they used a selection model to take into account both the ability of respondents to give estimates as well as their accuracy. Because we had so few "don't know" responses, we did not replicate their selection model analyses.

[22] The analyses estimated models with random intercepts and random slopes for the variable *Perceived %Group in Community*.

or source of information.[23] The same set of demographic variables from the models in Table 3 is included here.

At the macro-level, the Census-reported percentage of the racial/ethnic group in the PSU, region dummy, and population measure are added to the model. The effects for each PSU on accuracy are presumed to vary across units, such that:

$$\beta_{0j} = \gamma_{00} + \gamma_{01}(\%\text{group in PSU})_j + \gamma_{02}(\text{South})_j + \gamma_{03}(\ln n)_j + \mu_{0j,}$$

$$\beta_{1j} = \gamma_{10} + \gamma_{11}(\%\text{group in PSU})_{j+} \mu_{1j.}$$

I expect that the perception of the size of a racial group in a respondent's local community (β_{1j}) may be affected by the "objective" composition of that individual's local context, so therefore an interaction is added to the models (i.e., β_{1j} is estimated as a function of %group in PSU).[24] For example, a respondent who lives in a PSU with a large number of Hispanics may be more likely to perceive a larger percentage of Hispanics in her "local community" than if she lived in a PSU that is made up of predominantly white residents.

Table 4 shows that the predictor with the largest and most consistent effects on the predictions of the size of all racial and ethnic groups in the U.S. is the perceived percentage of that group in the respondent's local community. How whites and blacks are perceived, however, differs from how the other racial/ethnic minority groups are viewed. The greater the percentage of whites believed to be living in one's locality, the greater the estimate of the percentage of whites in the nation. In this case, the available cues lead to a larger estimate (i.e., a more accurate underestimate

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[23] However, in their analyses, Nadeau and Niemi (1995) use objective measures of local context (i.e., a dummy for whether R's county had a population that was 15% Hispanic or greater, as well as dummies for California and Texas), not *perceptions* or judgments of this context.

[24] In each of the models, the correlation between the random intercept and slope was constrained to be zero in the interest of parsimony (and inspections of within-PSU models, diagnostics, and likelihood-ratio tests of nested models did not justify adding that parameter).

of the numbers of whites).[25] The more blacks a respondent thinks live in his local community, the

greater his likelihood of giving a larger estimate (i.e., a more inaccurate overestimate) of the presence

of the respective group in American society. In contrast to the effect of *perceptions* of racial context,

objective Census measures do not explain much about how the national pictures of either whites or

blacks vary. Not only are the sizes of the coefficients for objective context much smaller, their

effects and the interactions between objective and subjective context measures are indistinguishable

from zero.[26] Figure 2 shows predicted probabilities for the national perceptions of African

Americans: the different lines represent the predicted national perceptions for a range of different

local perceptions, from the minimum of 0% to the maximum of 100% black, along with lines for

quantiles of the responses (2.5%, 25%, 50%, 75%, and 97.5%).[27] In other words, the middle 50% of

the sample described their local communities as ranging from 4 to 30% black, and 95% of the

respondents said that their local communities ranged from 0 to 90% black. While the intercepts

vary – indicating that local perceptions affect national perceptions – the slopes for the lines are

relatively flat; no matter what a respondent's *perception* of her local community is, greater numbers of

blacks actually living around her do not affect her pictures of the country as a whole. This pattern

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[25] The coefficient for "Local Perception of Whites" is indistinguishable from zero in this model. However, this interaction model for National Perception of Whites does not provide an improved fit over a model without the interaction. (Nevertheless, log-likelihood ratio tests indicate that the fit is improved for National Perceptions of Latinos, Asians, and Native Americans, and so therefore the more elaborate models for all groups are presented in Table 4.) In a model without an interaction term, the coefficient for "local perception of whites" is .154 (p=.000) and the coefficient for %white in PSU is -.041 (p=.453).

[26] Both Nadeau et al. (1993) and Highton and Wolfinger (1992) use the 1991 NES Pilot Study and find that the proportion of Blacks and Hispanics in the county in which a respondent lived affected non-Hispanic Whites' estimates of the respective groups, with more diverse contexts leading to higher overestimates. While it is unclear from that article and report how many counties are included in the data, given the NES sampling frame, it is very likely that clustering and incorrect standard errors may have weakened their inferences (which are based on the sample size of individuals, not contextual units) (Stoker and Bowers 2002). I reran the multilevel models in Table 4 for non-Hispanic white respondents only. When the local perceptions variable is excluded, objective context *is* positively related to perceptions of Hispanics and Asians in the U.S. However, the effect of objective context is statistically insignificant for perception of African Americans, whites, and American Indians in the country).

of predicted probabilities for national perceptions of whites looks very similar (and so the figure is not shown here).

These results confirm a model of racial context for perceptions of whites and blacks in the U.S. with no indirect effect of "objective" local context on national perceptions. Local circumstances affect perceptions of the local community, and these localized perceptions in turn affect perceptions of the nation as a whole.

The story is more complicated for perceptions of Latinos, Asians, and Native Americans. While local perceptions clearly affect national perceptions (even more so than for whites and blacks), the interactions between local perceptions and Census numbers have an impact as well. Figure 3 shows the case for Hispanics (and while the predicted probabilities for national perceptions of Asians and American Indians are not shown here, the patterns of results are similar.): while the lines represent the entire range of responses (from 0 to 100% Hispanic), 75% of the respondents described their local communities as ranging from 0 to 20% Hispanic or less. For these latter respondents, their local perceptions provide strong cues for their national perceptions, but the Census numbers of Hispanics who live in their PSU also have a small effect, such that increasing numbers in a PSU is associated with increasing numbers perceived at the national level. For the top 2.5% of responses on local perceptions (ranging from 62% to 100% Hispanic), the interaction effect is even stronger: large numbers of Hispanics perceived in one's local community still lead to large overestimates of Latinos at the national level, but as more Hispanics are reported by the Census to live in a respondent's PSU, the more reasonable the national estimates become (i.e., smaller overestimates). For example, for the rare person who thinks that her community is 95% Hispanic, the model predicts that as more Hispanics actually live in her PSU, the smaller her (mis)perception

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[27] The line representing the value for 0% blacks perceived in the local community appears twice in this figure: it is both the minimum, as well as the value given the bottom 2.5% of the sample. In creating the predicted scores, the other variables in the model are all held at their mean or mode (white, women, and non-Southern).

of the numbers of Hispanics in the U.S. as a whole would be (albeit she would still be overestimating their size). Therefore, in contrast with how blacks and whites are seen in pictures of the nation, for perceptions of Latinos, Asians, and American Indians as groups in the U.S., local objective context has both a direct and indirect effect (via local perceptions).[28]

One important implication of these findings is that they cast doubt on the assumption that local Census numbers can serve as good proxies for individuals' perceptions of their local community, at least in predicting respondents' perceptions of the racial demographics of their nation. If we focus on the case of blacks, for example, it is clear that objective local numbers are related to subjective perceptions of the group, but it is also clear that it is not a one-to-one relationship and other factors affect respondents' pictures of their communities. Furthermore, the effect of local Census numbers on perceptions of blacks in the nation is completely mediated by respondents' localized perceptions.

Among the other macro-level predictors in the models, neither region nor size of the respondent's PSU has a discernible effect on perceptions of the nation's demographics. At the individual level, education has a substantively and statistically significant effect on perceptions of the size of all minority groups in the nation. The more educated a respondent, the more likely she would be to make a smaller estimate (i.e., a more accurate figure) of the percentage of any minority group. Gender is also a consistent predictor across the different minority groups, with women more likely than men to give overestimates of the percentages of blacks, Hispanics, Asians, and American Indians in the U.S., although the effect is not large.[29] Surprisingly, residential mobility and

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[28] The relatively large PSU-level variance component for American Indians does indicate that there may be other PSU-level factors that affect national perceptions besides the ones in the model.

[29] These results are relatively consistent with the findings of Nadeau et al. (1993) and Highton and Wolfinger (1992). Nadeau et al. found that older, college-educated males gave more accurate estimates. Highton and Wolfinger did not find age effects, although they also controlled for political information and interest in their models. While Nadeau et al. found strong effects for region, the results here do not confirm that finding; one possible explanation for the difference is that the samples differed (e.g., Nadeau et al. were able to code only

immigrant generation have no effect on the accuracy of these group estimates. That is, greater exposure to the nation – geographically or temporally – does not appear to provide Americans with better factual information, holding constant the other predictors in the models. Income has a statistically significant effect only on perceptions of Native Americans in the nation, although it approaches levels of significance for perceptions of Asians and whites; the wealthier a respondent, the more likely she was to be accurate about the size of racial minority groups and inaccurate about the percentage of whites in the nation.

The effects of race that were so prominent in Tables 2 and 3 here are mitigated. When measures of socioeconomic status are added to the equation, for example, the race of the respondent does not have a consistent effect across all the models. Hispanics are more likely than whites to overestimate the percentages of minority groups in the nation, but to have more accurate perceptions (smaller underestimates) of the percentage of whites in the U.S. (p<.10). Blacks are more likely than whites to overestimate the size of the Native American populations (but the size of the effect is relatively small). [30]

These analyses indicate that respondents of different racial groups perceive the nation's demography in relatively similar ways, controlling for a number of socioeconomic and demographic characteristics. The sizes of non-white groups are consistently over-estimated, and the proportion of whites is underestimated. However, what is noteworthy about these results is that their *meaning* is quite different for whites and non-whites: whites are underestimating the size of their ingroup and

7 states as "the South" in the NES pilot study, while the GSS codes result in 16 states being counted as "the South"). More generally, research on political knowledge has consistently found that men and the better educated are more informed (Bennett 1988; Dell-Carpini and Keeter 1996).

[30] I reran the models in Table 4 for white, black, and Hispanic respondents separately (the results are not shown here), and the substantive interpretation of the results does not change. I also reran the models in Table 4 such that "inaccuracy" (defined as distance from the Census numbers) was the dependent variable. Given the distribution of responses shown in Figure 1, I modeled overestimation of minorities and underestimation of whites. The results are very similar to those presented in Table 4, in terms of which

overestimating that of their outgroups, while blacks and Hispanics are underestimating the size of

one if their outgroups (i.e., whites), overestimating the size of their other outgroups, and

overestimating the size of their ingroup.

While it would be tempting to say that the fact that national pictures in people's heads are so

similar – regardless of their own race – is simply a reflection of the power of the images that the

media portrays, in that case we would not find such strong effects of respondents' perceptions of

their local community on their national portrayals.[31] Thus, while race appears to have only small

effects in Table 4, more research on the mechanisms behind perceptions by different groups is

needed.

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factors had an effect on respondents' overestimates of minority group sizes and underestimates of
percentages of whites.

[31] Since observation (via "impersonal influence") could provide information as well as lived experience
(Hughes 1980; Johnson et al. 2002; Mutz 1998), I also reran the models in Table 4 with controls for the
frequency of newspaper readership and television-watching. Surprisingly, neither TV exposure nor
newspaper reading provides a major frame of reference; neither has a significant effect on the accuracy of the
group estimates (controlling for all of the same variables as in Table 4). However, simple frequency of
exposure to newspapers and the television may be overly blunt measures of the potential effects of media,
and I do not want to downplay its potential power in shaping pictures in people's heads.

Because racial proximity is an important predictor of racial attitudes (Kinder and Mendelberg 1995)
and because a white respondent perceiving Blacks in his "local community" does not necessarily mean that he
has contact with African Americans, I also reran the model in Table 4 of national perceptions of blacks for
only non-Hispanic white respondents, including measures of whether there were any Blacks living in the
respondent's neighborhood and the racial composition – ranging from all white to all black – of the
respondent's workplace. (Both measures are self reports by R (i.e., perceptions).) White respondents who
report having a Black neighbor are more likely to have an accurate estimate (i.e., smaller overestimate) of the
size of the Black population in the U.S. than respondents who report having no Black neighbors, controlling
for the perceptions of the racial context of their local community (the correlation between having a black
neighbor and perceptions of the local black population is .22). However, whites who work in more diverse
settings were not more likely to make accurate estimates of the percentage of Blacks living in the nation.
Because a large number of cases are lost with the addition of media usage or racial proximity variables in
these models (e.g. "don't know" responses, questions asked only of the employed, or questions only asked
about black/white work and neighborhood composition), I report more parsimonious models here. The
effects of the key variables – objective and perceived context – are the same. Clearly, these results suggest
that future surveys should include questions about respondents' personal experiences and contexts that
include *all* racial groups.

Conclusion

A majority of Americans have inaccurate perceptions of the racial demography of the country. White, black, and Hispanic respondents all overestimate the numbers of blacks, Hispanics, Asians, and Native Americans in the nation, and they all underestimate the numbers of whites. Much like political information, these estimates become more accurate with higher socioeconomic status, and women have less accurate information than men.

Furthermore, the *perceived* sizes of the racial/ethnic groups in respondents' local communities affect the accuracy of these perceptions at the national level, while the *objective* local contexts play a much smaller role. In other words, salience of a group in a locale matters, but often only when it is translated into the minds of individuals. Local Census numbers are not good proxies for people's perceptions of the size of racial/ethnic groups in their "local community," at least in predicting factual information about the nation's demography. However, people are clearly generalizing from their perceptions of their immediate surroundings to make inferences about the nation as a whole.

Of course, it could be argued that Americans have no true underlying attitudes about the percentage of minority groups in the U.S. and in their communities. However, the stubbornness with which some survey respondents hold onto their beliefs that the nation is half-black – as exemplified by the interviews mentioned in the introduction – belies the idea that this innumeracy is a result only of "doorstep," off-the-cuff responses. The proliferation of state lotteries, after all, provide some evidence that Americans act on a daily basis on their innumeracy – beyond the case of race and ethnicity shown here – and that these decisions can have social and political consequences, particularly for local economies and state budgets. And, if Americans are innumerate about racial groups in the U.S. on the whole, they may also be as inaccurate when it comes to numbers of Asian American doctors, Hispanic undocumented immigrants, and white and black college students in the

nation.   If so, innumeracy and stereotypes can strongly affect attitudes about the need for policies concerning affirmative action, immigration, and social welfare policies.

The findings presented here raise important questions for the research on racial threat and racial context, particularly with regard to the relationship between "objective" indicators and individuals' perceptions of the racial breakdown of the local area. One cannot assume that larger numbers of blacks, for example, lead to greater anti-black prejudice among whites, because whites actually *perceive* and feel threatened by the size of their outgroup. When local perceptions are included in the model predicting national perceptions, local Census numbers played a much smaller role in determining "the Big Picture"; would the same hold true if the dependent variable of interest were a racial or political attitude? For example, research on the state of the economy and presidential approval found the following:

> Presidential Approval responds to the economy only to the extent the economy alters *public perceptions* of the economy. Meanwhile…economic perceptions clearly affect approval even when not caused by the objective economy (MacKuen et al. 1992, emphasis added).

As demographers analyze the 2000 Census data, they are finding that not only is the country becoming more diverse, it is also on the move. Blacks are returning to the South, for example, and these new migrants are moving into suburbs and cities, not the rural areas (Frey 2000). Immigrants also settle in certain cities and states more than others. In other words, there are more racial and ethnic minorities in the U.S. as a whole, and they are distributed unevenly across localities. If the "little pictures" people have of their communities are distorted reflections of reality – and if whites, blacks, and Hispanics see these distortions for different reasons – these misperceptions at the local and national levels may exacerbate feelings of outgroup threat and increase the possibilities for interracial conflict. In order to know what effects these diverse environments have on American society and politics, we need to gain a better understanding of how geographic contexts are translated into the pictures in people's heads of their communities, both local and national.

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Table 1

Perceptions about Racial Groups in the US Population and in Local Communities

	Objective Context	Subjective Context
	2000 Census % of PSU Population	Mean % Estimated for Local Community
%White	81%	66%
%Black	13	21
%Asian	3	7
%American Indian	2	5
%Hispanic	9	15

Note: Data from the 2000 General Social Survey. N = 1397.

Table 2a
Perceptions about Racial Groups in the US Population by Race

	2000 Census % of US Population	Mean % Estimated for US Population		
		White R's	Black R's	Hispanic R's
% White	75	59	56	60
% Black	12	30	38	40
% Asian	4	16	21	30
% American Indian	1	13	17	23
% 2+ Races	2	41	48	50
% Hispanic	13	23	27	42

Table 2b
Perceptions about Racial Groups in Local Communities by Race

	2000 Census % of Rs' PSU Population			Mean % Estimated for Local Community		
	White R's	Black R's	Hispanic R's	White R's	Black R's	Hispanic R's
% White	80	70	71	74	37	43
% Black	12	22	12	15	50	27
% Asian	3	4	6	6	5	14
% American Indian	2	1	1	5	3	6
% 2+ Races	2	2	3	na	na	na
% Hispanic	10	10	23	13	13	34

Note: Data from the 2000 General Social Survey.
The sample size for whites, blacks, and Latinos are 967, 171, and 72, respectively.

Table 3
Effects of Objective Context on Misperceptions about the Local Community Population

	Estimate of Whites		Estimate of Blacks		Estimate of Hispanics		Estimate of Asians		Estimate of American Indians	
	B	p-value	B	p-value	B	p-value	B	p-value	B	p-value
(Intercept)	.491	.000	.050	.166	.135	.000	.032	.085	.040	.014
%Group in PSU	**.340**	**.001**	**.304**	**.001**	**.659**	**.000**	**.571**	**.000**	**1.280**	**.000**
South	-.028	.219	.037	.062	.002	.853	-.009	.226	.002	.755
ln(size PSU)	-.273	.000	.184	.000	-.010	.740	.022	.299	-.008	.571
Black	-.232	.000	.237	.000	-.001	.972	-.020	.042	-.006	.516
Hispanic	-.158	.000	.062	.021	.087	.000	.056	.000	.007	.602
Education	.044	.089	-.029	.178	-.022	.234	-.010	.427	-.005	.627
Age	.051	.013	-.021	.213	-.036	.017	-.023	.018	-.014	.103
Female	-.020	.139	.033	.003	.014	.152	.023	.000	.015	.009
Income	.152	.000	-.126	.000	-.058	.001	-.006	.573	-.023	.015
Generation	.038	.145	-.004	.857	-.027	.155	.011	.374	-.006	.594
No mobility	-.026	.119	.038	.007	.013	.289	.003	.666	.010	.159
# of individual units	1001		979		953		943		927	
# of contextual units	100		100		100		100		100	
log-likelihood	108.73		283.08		413.05		838.19		945.57	
sd(μ_0)	0.064		0.051		0.033		0.015		0.013	

Note: Data from the 2000 General Social Survey. The coefficients reported are from linear mixed-effects models.

Table 4
Effects of Objective and Subjective Context on Misperceptions about the US Population

	Estimate of Whites		Estimate of Blacks		Estimate of Hispanics		Estimate of Asians		Estimate of American Indians	
	B	p-value	B	p-value	B	p-value	B	p-value	B	p-value
(Intercept)	.508	.000	.313	.000	.167	.000	.135	.000	.107	.000
Perception of Group	**.106**	**.348**	**.259**	**.000**	**.387**	**.000**	**.663**	**.000**	**.976**	**.000**
% Group in PSU	**-.083**	**.457**	**.062**	**.449**	**.179**	**.021**	**.215**	**.375**	**-.048**	**.858**
South	.014	.251	-.012	.412	-.006	.619	-.006	.638	-.001	.947
ln(sizePSU)	.042	.179	-.053	.073	.022	.461	.007	.849	.042	.090
Black	.007	.647	-.007	.691	.017	.288	.027	.066	.034	.019
Hispanic	.042	.063	.063	.008	.126	.000	.083	.000	.062	.005
Education	.019	.278	-.108	.000	-.062	.001	-.081	.000	-.095	.000
Age	.042	.003	-.025	.098	-.010	.488	.006	.662	.029	.043
Female	-.010	.291	.060	.000	.072	.000	.062	.000	.037	.000
Income	-.032	.054	.005	.780	-.019	.274	-.026	.099	-.042	.009
Generation	-.012	.522	.000	.990	-.006	.749	-.009	.602	-.016	.366
No mobility	.014	.228	.007	.589	.014	.238	.016	.155	.014	.218
Perception*% Group	**.065**	**.664**	**-.157**	**.538**	**-.690**	**.011**	**-1.930**	**.029**	**-3.092**	**.058**
# of individual units	980		960		926		904		894	
# of contextual units	100		100		100		100		100	
log-likelihood	468.525		405.231		421.830		493.848		472.025	
sd(u0)	.010		.015		.022		.031		.019	
sd(u1)	.024		.126		.150		.062		.435	

Note: Data from the 2000 General Social Survey. The coefficients reported are from linear mixed-effects models.
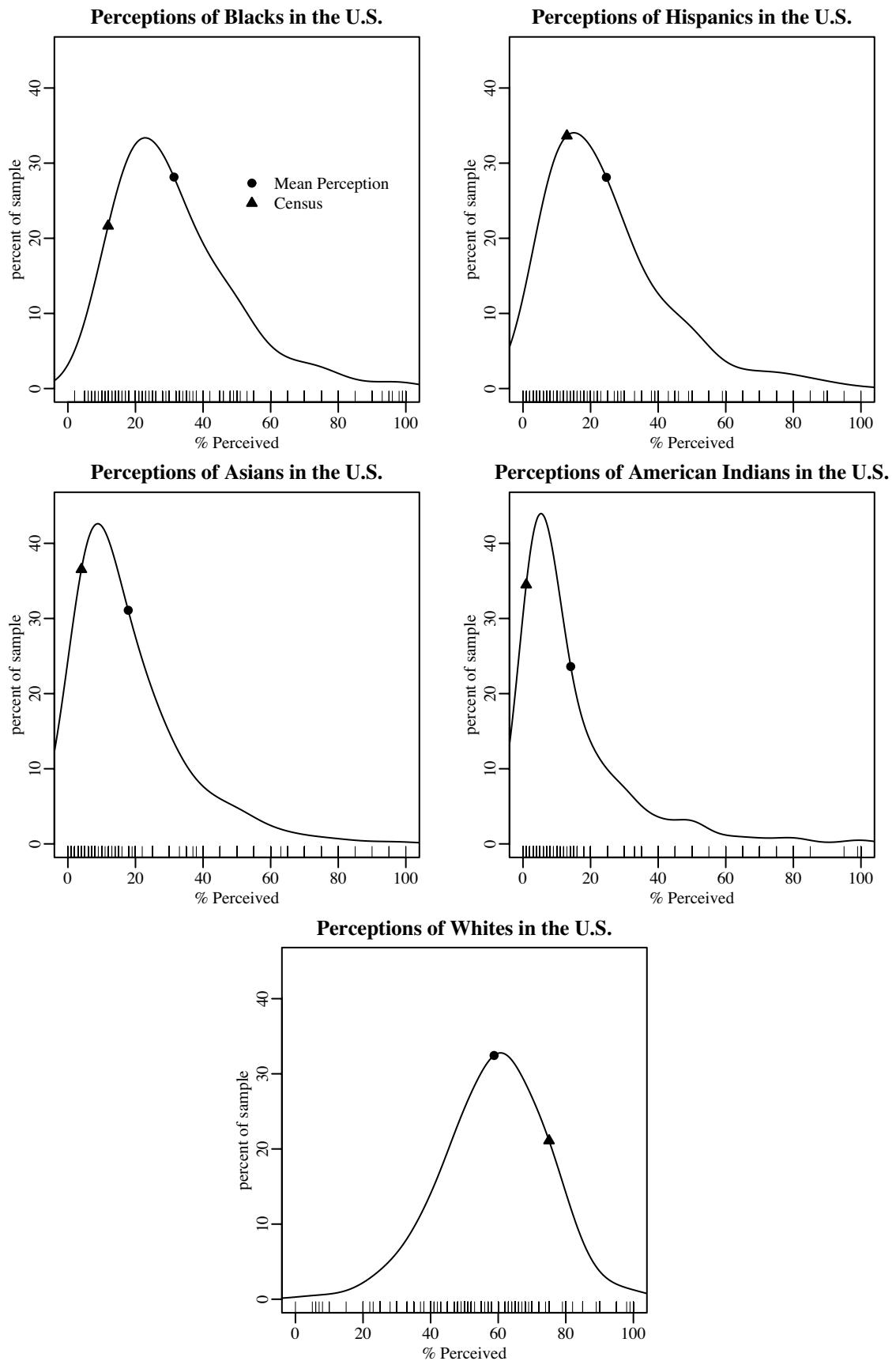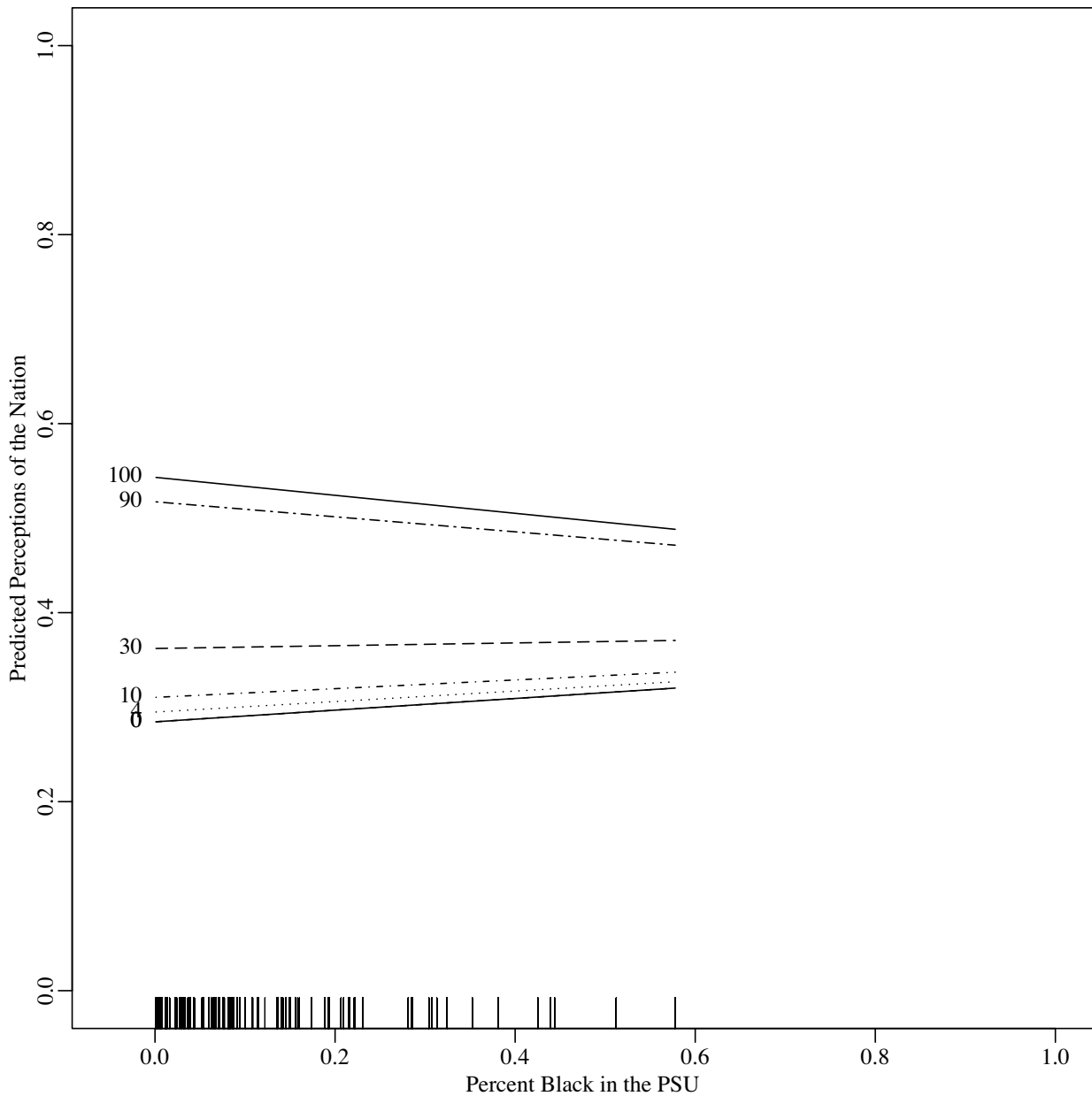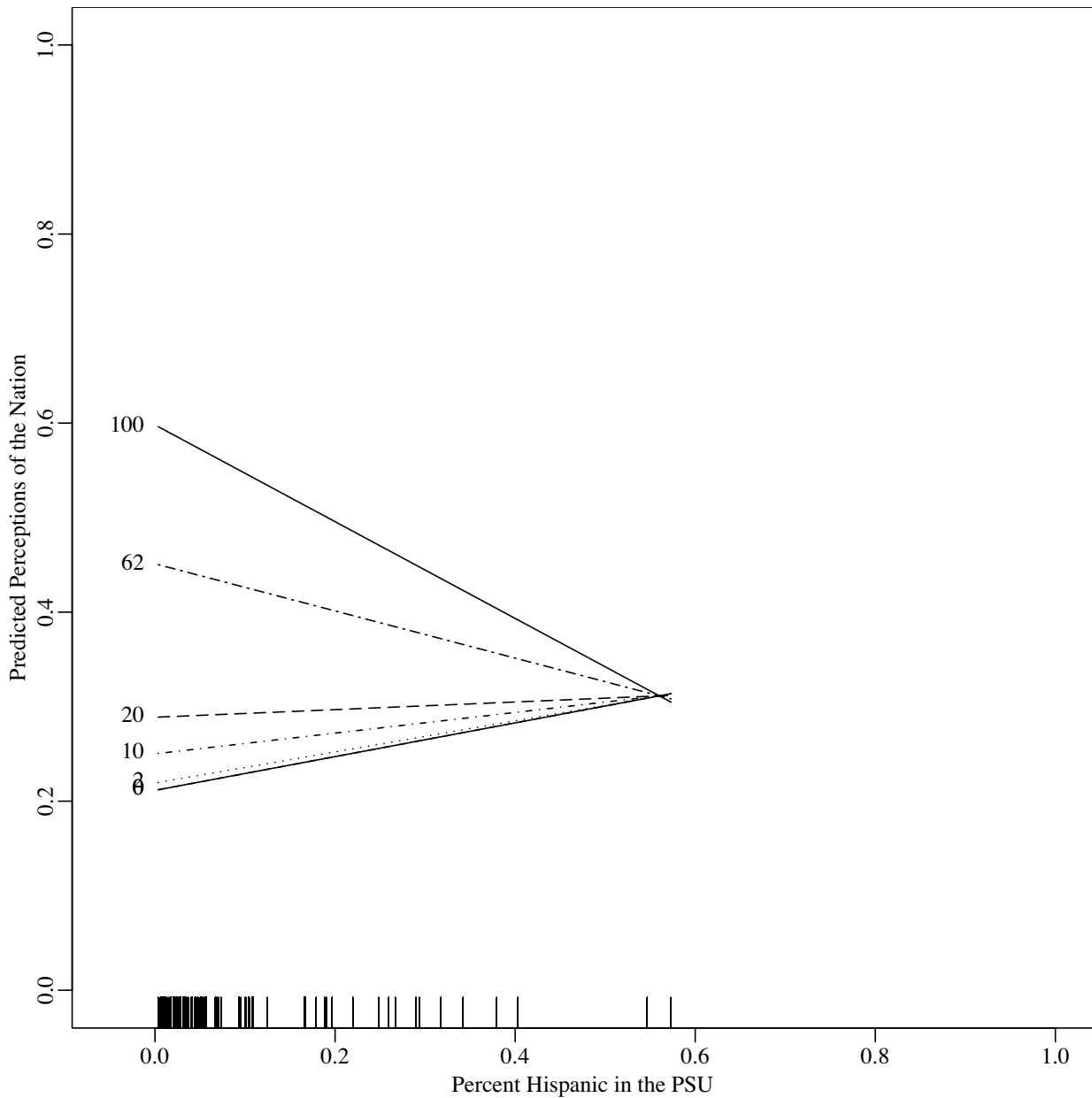
Figure 1: Distribution of Perceptions of the Racial Composition of the U.S.

Figure 2: National Perceptions of Blacks by

"Objective" and "Subjective" Local Context

Each line represents percentiles of responses about the percentage of blacks in respondents' local communities, including the minimum, 2.5th, 25th, 50th, 75th, 97.5th, and the maximum. The numbers next to each line represent the value chosen by the respondents. For example, the median response was that respondents lived in a local community that was 10% black, and 50% of the responses ranged from 4% black (the 25th percentile) to 30% black (the 75th percentile). Only 2.5% of respondents reported that their local community was more than 90% black.

Figure 3: National Perceptions of Hispanics by

"Objective" and "Subjective" Local Context

Each line represents percentiles of responses about the percentage of Hispanics in respondents' local communities, including the minimum and maximum. The numbers next to each line represent the value chosen by the respondents. The median response was that respondents lived in a local community that was 10% Hispanic. 50% of the responses ranged from 2% Hispanic (the 25th percentile) to 20% Hispanic (the 75th percentile).