"Seeing or Living Diversity—Contact with Diverse Others and the Development of Generalized Trust"[1]

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In this article, we follow-up on our earlier research to shed new empirical light on the question of how generalized trust is influenced by neighborhood context. Originally it was believed that bridging ties and interactions with racially or ethnically diverse others are beneficial for civic values and attitudes (Putnam 2000). As a result, a recent surge in research has focused on how the context of diversity and particularly the composition of neighborhood environments influence generalized trust. Most studies have revealed, however, that increasing levels of diversity pose a challenge to civic and redistributive values in our modern democratic societies (Soroka et al 2005; Costa and Kahn 2003; Alesina and Ferrara 1999, 2000; Rice and Steele 2001). High levels of racial and ethnic heterogeneity are accompanied by lower levels of trust and civic engagement. At the same time, Marschall and Stolle (2004) have found that in the 1970's in Detroit, neighborhood diversity had positive effects on trust; and that social interactions in heterogeneous places were more beneficial than those in places where people were more racially similar. Research in Britain shows that neighborhood diversity does not have a negative effect on trust, once economic variables are controlled (Letki 2005). Moreover, in determining the roots and factors of Hindi and Muslim riots in India, Varshney (2001) shows that in cities where both communities have little interaction, communal conflict periodically descends into violence, whereas diverse interactions transcend different community boundaries and often channel conflict into peaceful avenues. These seemingly contradictory results about negative and positive effects of diversity on societal cohesion call for further investigation into how various degrees of racial and ethnic compositions across a variety of Western democracies influence the societal fabric and the ability to cooperate. Our paper then is chiming in on this debate about the role of diversity in our societies and presents a new empirical investigation on the consequences of diversity for generalized trust using a sub-sample of the Social Capital Benchmark Survey.

In the context of this debate, our paper makes three distinct contributions to the study of the consequences of diversity. First, whereas most studies of neighborhood context rely on contextual units measured at a geographic level that inaccurately reflects the racial and socio-economic realities that individuals encounter on a day-to-day basis, the structure of our dataset allows us to capture and measure characteristics of the contextual unit most likely to influence attitudes and behavior – the individual's *immediate* neighborhood. In our view, previous studies have measured the diverse context at a level of aggregation that does not reflect the actual experience of citizens (the state or city level, see for example public talks by Putnam 2003, 2004; Varshney 2000; Hero 2003).

Second, very rarely have researchers measured the extent or nature of social interactions occurring within neighborhoods or considered the possibility that social interaction might counter the negative effects of living in racially or socio-economically heterogeneous places (but see Jackman and Crane 1986; Stein et al. 2000). From the perspective of the social capital concept, however, the focus on social interactions beyond the sheer visibility of minorities or different others is a necessary step. In other words, we argue that based on the socio-psychological and social capital literatures, the development of generalized trust should focus on the contact and interaction with diverse others. By combining contextual measures with measures of both social interaction and interracial contact, our analysis provides substantial leverage in discerning the causal mechanism underlying the development of generalized trust.

Finally, often the effects of diversity have been studied in isolation from other neighborhood attributes. We address this limitation by including a wide range of neighborhood level variables in our models of generalized trust. In particular, we include both objective indicators of neighborhood socio-economic conditions (education and income) and more subjective measures that tap residents' perceptions of both the intensity of neighborhood social

interaction (formal and informal) and the degree to which this interaction is racially inclusive. This expanded range of measures allows for more direct tests of whether social interaction within racially diverse settings conditions potentially negative effects of racially diversity on generalized trust, and more generally, affords us substantial analytic leverage in sorting out how the nature of social interaction and the interaction setting are linked in shaping individual attitudes such as trust.

The present study attempts to address these gaps in the literature by focusing more directly on the connections between race, racial attitudes, social interactions, and neighborhood context on the one hand, and generalized trust on the other. Using individual-level data from the Social Capital Community Benchmark Survey (SCBS) and 2000 Census tract-level data, we analyze a sample of roughly 3,100 respondents situated in 329 neighborhoods in twelve US cities. Focusing on neighborhoods, we explore the ways in which racial context and social interaction work both independently and jointly to shape individuals' propensity to trust others. Controlling for a variety of factors, we confirm our earlier findings that blacks and whites differ significantly not just with regard to their likelihood of trusting others but also with respect to the ways in which contextual-level features shape these orientations.

When it comes to the important issue of diversity, however, our results support neither the recent academic consensus about the negative impact diversity has on civic values nor confirm our earlier finding that racial heterogeneity positively affects trust. Instead we find that the racial heterogeneity of neighborhoods has no effect on generalized trust. In attempting to reconcile these findings, we believe that differences in the underlying samples, particularly the range and average levels of diversity found in them, provide part of the answer. For instance, given the extremely low levels of heterogeneity in Detroit metropolitan area neighborhoods in the 1970s, what seemed diverse at that time, appears much more racially homogeneous when compared to the neighborhoods we analyze in the 2000 SCBS data. Moreover, focusing on metropolitan areas, which include both suburbs and central cities, also has implications for the range and variation of diversity we are likely to uncover. While American cities have become increasingly heterogeneous, suburbs continue to be segregated along racial and socio-economic dimensions. Thus, we believe it is important to consider not only how contextual units are measured and defined when examining their effects on civic attitudes and behaviors, but also how key attributes of these contextual units are distributed across population of interest.

The Centrality and Sources of Generalized Trust

As the lubricant that helps individuals overcome collective action problems and fosters productive social exchanges, trust has been shown to be an important part of the social fabric of societies. Generalized attitudes of trust extend beyond the boundaries of face-to-face interaction, incorporating people whom one has never even met. These attitudes are indicated by an abstract preparedness to trust "most other people" and by an individual's willingness to engage in cooperative actions with others. Trust is generalized when it goes beyond specific personal settings in which the partner to be cooperated with is already known. And, because generalized trust transcends the boundaries of kinship, friendship or even acquaintanceship, it is distinguished from "private" or "personalized" trust—the trust that develops among individuals with personal ties to each other and as a result of successful cooperation in the past and repeated interaction within an immediate circle of cooperators.[2]

The critical questions in the study of how generalized trust emerges include *whether* and *how* social interactions with other people or other types of social experiences contribute to the building of trust. Most importantly, which types of social interactions are most conducive for the development of generalized trust and which types of social interactions might hinder its creation?

Recently, two perspectives have been put forth, the first is anchored in the theoretical background of social capital theory and the contact hypothesis and focuses on the beneficial consequences of social interactions with diverse others. The second highlights the importance of the visibility of diversity. Empirical investigations here have often pointed to the negative effects of diversity, for example, as expressed in the threat hypothesis. We investigate both approaches in turn.

Social Interactions in diverse settings

Interestingly, social capital theory suggests that for generalized trust to thrive, it requires cooperative experiences among individuals situated in horizontally structured networks of civic engagement such as voluntary organizations (Putnam 1993). However, recent research on civic attitudes suggests that beneficial social interactions are manifested not simply in formal activities like membership in associations but also in informal activities that include a wide array of unorganized social encounters (Lowndes 1999; Molenaers 2003; Putnam 2000). The evidence about the importance of face-to-face interactions for trust is still shaky at best (Stolle 2001, Uslaner 2002). Social capital theorists have therefore started to pay more attention to whether it matters with *whom one interacts*. In other words, are all social interactions (formal and informal) equal or do social interactions that bring together individuals of heterogeneous backgrounds more conducive for the development of generalized trust. In social capital language, these differences have been labeled bonding (interaction with like citizens) and bridging.

So, how does generalized trust develop based on interactions with dissimilar others? In this case, generalized trust involves a leap of faith that the trustworthiness of those one knows can be broadened to include others whom one does not know. The process of broadening might be possible because one has had good (cooperative) experiences with individuals of different socio-economic, ethnic, religious or racial backgrounds with whom he or she had not been previously well-acquainted. The implication, then, is that familiarity, social interaction and the development of knowledge-based trust among *dissimilar* individuals may lead to the development of generalized trust, whereas strong knowledge-based or in-group trust among homogeneous individuals may make it much harder for, and indeed even prevent individuals from transferring their in-group trust to the outside world. In short, social capital accounts emphasize the importance of *interaction* and *direct experiences* with members of other social or racial groups, and suggest that positive experiences with dissimilar individuals will have greater effects on the development of generalized trust than will the cooperation that emerges among individuals who are more homogenous in terms of their characteristics, attitudes, or behaviors.

The view that direct bridging contacts might be important for the building of an overarching identity or trust that reaches beyond group boundaries is also supported by social psychology research as well as research on inter-group relations and racial attitudes (Bobo 1988; Brewer 1981; Dovidio & Gaertner 1999; Gaertner et al. 1996; Olsen 1972; Shingles 1981; Tajfel & Turner 1979). This work makes a distinction between in- and out-groups and suggests that individuals who share racial, ethnic or other salient characteristics create an in-group bias through which cooperation, trust, and affection are most easily developed for other members of this in-group. Emphasis on this shared identity fosters not only in-group affection, but out-group hostility as well. As research by Bobo (1988) demonstrates, the absence of direct contact with or sustained knowledge about individuals of different racial, ethnic, or class backgrounds serves to reinforce prejudices that are themselves based on inaccurate and rigidly held stereotypes. On the other hand, social interactions among individuals from dissimilar groups and the forging of common cooperative experiences foster a superordinate identity that helps to both diminish in-group bias

and to develop inclusion of former out-group members (Gaertner et al. 1996). In other words, social interactions among heterogeneous groups and individuals and positive cooperative experiences are more conducive to the development of trust that includes members of the former out-group.

In sum, theories of social capital and the contact hypotheses have formulated a rather positive view of bridging interactions. The challenge here is to find the appropriate context in which social interactions of this type matter. In other words, where are individuals and groups more likely to encounter those who are unlike themselves? In the social capital literature the most important setting for the generation of norms of reciprocity and trust is thought to be within formal and informal groups and associations since it is here that *regular* social interaction takes place. However, if the diversity of the interaction setting is a key aspect for the development of civic attitudes, then civic associations might not be the ideal focus of inquiry. In particular, associations often bring together people with similar backgrounds and interests and therefore create fairly homogeneous interaction settings (Popielarz 1999). If this is the case, it seems unlikely that involvement in civic groups and associations will lead to the development of generalized trust. On the other hand, if associations bring together individuals of diverse backgrounds and are not socially or racially homogeneous, then they could potentially function as an interaction setting conducive to the building social trust. Clearly, simply looking at associations is not sufficient. Rather, we need to explore the broader context in which voluntary associations are situated and where more informal modes of interaction take place as well.

The neighborhood context might be particularly appropriate here. For example, neighbors might talk to each other informally; they might visit each other, greet each other or have a brief chat over the fence. Alternatively, they might also interact more formally in voluntary organizations, neighborhood watch groups, or school-related associations. If neighborhoods structure the social interactions that take place within them, then obviously the socio-economic and racial characteristics of neighborhoods will not only play an important role in determining the extent to which bridging interactions and interracial contacts are possible, but will also likely contribute to residents' perceptions of themselves and each other, in particular, their in- and out-group orientations. For example, living in a racially diverse neighborhood forces residents to confront—sometimes on a daily basis—their preconceived attitudes and even stereotypes of other racial groups. The social capital perspective and contact hypothesis both suggest that such interactions lead to greater tolerance and more favorable perceptions of out-groups.

The Threat Hypothesis

Other theoretical approaches highlight the importance of the *visibility* of diversity. Often the tenure here is that diversity might cause feelings of threat and increased negative out-group orientations, however, in these approaches social interactions within diverse settings are not taken into account.

For example, empirical studies in the US and Canada on the relationship between heterogeneity and generalized trust or community attachment have found a negative, rather than positive, connection (Alesina and Ferrara 2000; Costa and Kahn 2003, Rice and Steele 2001; Soroka et al). Studies on racial attitudes confirm that whites who live in closer proximity to African Americans and other minority groups experience increasing racial hostility and prejudice (Fossett & Kielcolt 1989; Giles 1977; Giles & Hertz 1994; Glaser 1994; Key 1949; Stein et al. 2000; Taylor 1998; Wright 1997). However, as Oliver and Mendelberg (2000:575) point out, the impact of racial threat on whites' racial attitudes has typically been demonstrated with bivariate analyses so that the effects of other salient contextual features are infrequently controlled. Using

multivariate tests and multiple contextual measures, they find that whites' racial dispositions are affected not by the racial composition of neighborhoods, but instead by neighborhood socio-economic status.

There is also consistent evidence regarding the effects of neighborhood socio-economic status on a range of individual-level psychological orientations. For example, recent work by Ross et al. (2001) finds that net of individual disadvantage, residents of disadvantaged neighborhoods have low levels of trust as a result of high levels of disorder in their neighborhoods. In other words, disadvantage sets in motion a process that magnifies mistrust among persons with few resources. According to Ross et al. (2001:569): "Mistrust is the product of an interaction between person and place, but the place gathers those who are susceptible and intensifies their susceptibility." This finding is consistent with work by Oliver and Mendelberg (2000), who show that the stigma of living in a low-status environment, rather than living in a racially diverse setting, stimulates racial animosity and feelings of relative deprivation (see also Tajfel & Turner 1979). In sum, when only considering the proximity of different racial groups we often see negative effects of diversity on various civic attitudes. However, often these studies have measured heterogeneity at levels that do not constitute the immediate environment of respondents and might therefore not accurately reflect the *actual* experiences of heterogeneity. Secondly, thus far this work has not incorporated sufficient measures of economic disadvantage and of neighborhood sociability, and therefore lacks actual measures of the degree or nature interaction that takes place within neighborhoods of various racial and ethnic compositions.

The negative effect of proximity changes when social contact is taken into account. In particular, work by Jackman and Crane (1986) and Stein et al. (2000) finds that living in racially heterogeneous places significantly increases the probability and frequency of inter-group social interactions and direct interracial contacts. This research suggests that at least for whites, the effects of proximity and personal contact are mutually dependent and mutually reinforcing. As Stein et al. (2000) note, the very conditions that give rise to white hostility towards minorities set in motion a corrective for this hostility—inter-group contact. Research on racial attitudes has also confirmed a positive effect of diversity. For example, Bledsoe et al. (1995) found that African Americans who lived in more racially diverse neighbourhoods developed lower levels of group solidarity and stronger attachments to whites and other groups in society.

Clearly, the task of research on diversity is to find the conditions under which diversity can have positive or negative effects on social cohesion in our societies. Three different lessons can be drawn from the literature. First, given early empirical findings, the social capital literature takes a very optimistic view on how bridging networks are most beneficial for the social fabric in our societies; yet this camp of scholars reminds us that we should take into account the level and nature of social interactions when exploring the effects of diversity. The negative effects of the proximity of diverse others might be mediated by social interactions. Second, socio-economic characteristics should be taken into account when examining the consequences of heterogeneity. Third, given our own findings in the metro area of Detroit in the 1970's it is not clear whether all types of diversity alike. Are there thresholds of diverse compositions that pose limits to an effective development of generalized trust? In other words, might it be possible that too much diversity has a disabling effect on the development of all-encompassing values such as generalized trust? We will explore these issues in our analysis below.

Hypotheses for Generalized Trust, Social Interaction, and Neighborhood Context

What are the important dimensions of the neighborhood context for the development of generalized trust? Based on insights from comparative social capital research, social psychology and studies on racial attitudes and urban politics, we posit that generalized trust is a function of both individual- and neighborhood-level determinants. More specifically, we hypothesize that:

(1) Socio-economic resources of neighborhoods positively influence generalized trust (see Oliver & Mendelberg 2000; Ross et al. 2001).
(2) The threat hypothesis suggests that the sheer proximity of diverse others is negatively related to generalized trust; so according to this hypothesis we would expect diversity to negatively affect trust, particularly for whites.
(3) According to social capital accounts, the density of neighborhood social interactions (both formal and informal) will be positively associated with individuals' propensity to trust (Bledsoe et al. 1995; Bobo 1988; Putnam et al. 2000), and in juxtaposition to the threat hypothesis, interactions should be more important for trust in heterogeneous places than in homogenous ones (importance of bridging ties).
(4) Individuals who have had personal and direct experiences with others of different racial backgrounds will be more trusting than those who have not had such experiences (Jackman & Crane 1986; Stein et al. 2000).

Overall, we expect that the inclusion of socio-economic resources and social interactions overcome the previously found negative effects of the proximity of diverse others. As suggested by formulations of the social capital concept, we study these relationships at the level of the neighborhood. The underlying logic is that neighborhoods not only structure the social interactions that take place within them, but also determine the extent to which these interactions bring together homogeneous or heterogeneous groups of individuals.

Measuring Neighborhood Context

For the most part, prior research has failed to incorporate aspects of both context and interaction, and the few studies that have either measure context at too aggregate a level (e.g., Stein et al. 2000) or rely on subjective measures of both the neighborhood and its racial composition (Sigelman & Welsh 1993). Our study overcomes these problems by measuring context at the neighborhood-level (and precisely defining neighborhood boundaries) rather than at the county or metropolitan level, and by using census rather than survey data to measure neighborhood racial and socio-economic characteristics. We are therefore able to capture a more proximate and accurate picture of the degree of heterogeneity that exists within the neighborhoods in question.

Obviously 'neighborhood' is an elusive concept that defies either precise measurement or universally agreed-upon boundaries. Though census tracts are considered by some to be the best approximation of the neighborhood, objectively defined (see e.g., Ross et al. 2001; Tienda 1991), for many studies it is impractical to define neighborhoods by this standard. In particular, most survey data do not include sufficient numbers of respondents in individual tracts to allow for meaningful within-tract variation. An alternative measurement strategy is to define context more broadly, for example by utilizing zip codes (Oliver & Mendelberg 2000), municipalities (Oliver 1999, 2000; Pettigrew 1959), counties or metropolitan areas (Fossett & Kiecolt 1989; Giles & Hertz 1994; Glaser 1994; Stein et al. 2000). Although larger contextual units may be appropriate for studying some behaviors (e.g., county- or city-wide elections), it is unlikely that many of the causal mechanisms we have identified operate at this more aggregate level. For example, if we are

interested in the contextual effects of neighborhood socializing and the experience of contact with citizens from other racial groups, it is essential to measure neighborhood variables at the level that captures the most immediate experiences in one's living area. Furthermore, because the size of these units varies substantially across locales, under this approach, context will not represent the same thing to all individuals.[3]

To best capture the causal mechanism driving contextual effects while at the same time avoiding the problems inherent in existing measurement approaches, we employ a different strategy to operationalize neighborhoods in our research. Specifically, we utilize official neighborhood or community area boundaries as defined by municipal governments. Building on our earlier work (Marschall and Stolle 2004), which analyzed neighborhoods in the Detroit metropolitan area; in this research we extend our analysis to include twelve U.S. cities. Although neighborhood areas vary across cities, this variation in size is part of what distinguishes the meaning of neighborhoods across cities. The list of cities and neighborhoods, as well as the number of respondents included in the SCBS data is given below. Note that not all neighborhoods were included in the SCBS sample.

City	***Total number of Neighborhoods***	***Total Number of Respondents***[4]
Boston, MA	14	484
Chicago, IL	77	207
Cincinnati, OH	48	245
Cleveland, OH	36	382
Detroit, MI	39	96
Grand Rapids, MI	31	347
Los Angeles, CA	36	131
Phoenix, AZ	15	153
Rochester, NY	10	280
San Francisco	12	381
St. Paul, MN	17	114
Syracuse, NY	26	176

Data and Measures

To examine how contextual-level features, (including both demographics and levels of formal and informal sociability, as well as individual-level factors such as racial attitudes) influence generalized trust, our empirical analysis relies 2000 tract-level census data, aggregated to the neighborhood level, and the *Social Capital Benchmark Study* (SCBS), a large-scale survey of residents in forty-one communities located in twenty-six U.S. states conducted in 2000-2001. The SCBS survey included a battery of questions that tapped various different aspects of trust, including generalized trust, as well as many measures of formal and informal social interaction, particularly neighborhood interaction. Moreover, since the SCBS data include geographic identifiers, we were able to match individual-level characteristics and behaviors with census data on the economic, racial, and demographic characteristics of the neighborhoods where respondents reside.

For the analyses we report here, we focus on a subset of the SCBS survey respondents. Specifically, we selected cities that had a reasonably large number of respondents (in most cases, more than 100). From this list, we conducted a search of city websites and municipal planning departments to obtain information on whether these cities had official neighborhoods. The next

step involved identifying the boundaries of these neighborhoods and more specifically, the census tracts located within each neighborhood. There were a number of cities that we had to drop from our study either because they did not have official neighborhoods (this is the norm for southern cities) or because we could not obtain detailed enough maps to identify neighborhood boundaries. At present, our sample consists of roughly 3,100 respondents residing in twelve cities.[5] In Table 1 we report city-level 2000 census indicators along with summary statistics for neighborhoods and respondents in our sample in order to highlight the representativeness of our sample. As the figures in this table show, both the neighborhoods and respondents sampled in the SCBS survey reflect the general demographic characteristics of their city populations.

[Table 1 Here]

Though our intention is to explore the various ways in which neighborhood context shapes individual-level generalized trust, we focus in this paper on replicating our earlier work. Thus, we limit our analysis to only blacks and whites and define racial heterogeneity according to these two racial groups. We use the standard index of racial fragmentation (which measures the probability that two randomly drawn individuals in a given neighborhood belong to two different races: black or white), given as:

$$\text{Race}_i = 1 - \sum_k S_{ki}^2$$

Here, i represents the neighborhood, k represents the racial groups whites and blacks, and S_{ki} represents the proportion of the racial group in the neighborhood. The index is scored between 0 and 1, indicating maximum homogeneity to maximum heterogeneity). To provide a better idea of not only of how racially heterogeneous our twelve cities are, but also the differences in heterogeneity across neighborhoods where blacks and whites live, in Figure 1 we report the heterogeneity scores by respondent race. For purposes of comparison, we also report the heterogeneity score for blacks and whites based on 1970 census data in the Detroit metropolitan area sample that served as the basis for our earlier work.

[Figure 1 about Here]

As Figure 1 illustrates, blacks in these twelve cities tend to reside in more racially diverse neighborhoods than whites (median of blacks=.51, for whites=.43). For a little over half the cities, blacks live in neighborhoods that score .5 or higher on the heterogeneity index. On the other hand, in only three cities (LA, San Francisco and Boston) do whites live in neighborhoods this racially diverse. With the exception of three cities (Chicago, Cleveland and Denver), this pattern also obtains when we look at individual cities, where blacks again reside in more racially heterogeneous neighborhoods. While it is difficult to generalize beyond our sample of cities, at least for the twelve cities here, there seems to be a regional pattern as well. In particular, respondents in our Midwestern cities appear to live in neighborhoods with lower levels of racial heterogeneity than respondents in other cities, and this pattern is even stronger for blacks, who appear to be live in more racially segregated neighborhoods in these cities. Finally, it is worth pointing out that compared to Detroit in 1970, all cities are significantly more racially heterogeneous in 2000. In fact, the most homogeneous places in our current sample are more diverse than the most heterogeneous places in the 1970 sample. This difference is to be kept in mind when we present our results below.

In addition to investigating the effects of neighborhood racial heterogeneity, our empirical

analysis tests for the effects of a number of other neighborhood and individual-level effects on the development of generalized trust. Our basic model from which we start is summarized below:

Generalized Trust = ƒ (*Demographics*, *Racial Attitudes & Experiences, Neighborhood Perceptions & Characteristics*, *Neighborhood Sociability*)

The dependent variable in the model, *Generalized Trust*, is a dichotomous measure of whether respondents indicated that 'most people can be trusted' (y=1) or that 'you can't be too sure' (y=0).[6] *Demographics* is a vector consisting of dichotomous measures for whether respondents were employed, female, or black (1=yes), categorical variables measuring respondents' education levels and length of residence in community, and a discrete variable measuring the total number of children living at home. These socio-demographic variables have been shown to relate to generalized trust in previous research (Brehm & Rahn 1997; Uslaner 2002).

Racial Attitudes and Experiences includes measures that tap respondents' in- and out-group orientations and whether or not they have had direct, personal interactions with individuals of the opposite race. *Anti-Integration* is a binary variable constructed from survey questions that measure respondents' attitudes toward interracial marriage. Here it is coded 1 if respondents opposed marriage to someone of the opposite race (black or white only), and 0 otherwise. Since individuals opposed to racial integration are more likely to exhibit negative out-group orientations and lower levels of tolerance, they should also be less willing extend trust to generalized others. *Interracial contact* is a dichotomous variable indicating whether respondents had a friend of the opposite race (again, only black-white races considered here) (1=yes). We hypothesize that those who have had personal experiences with members of the opposite race—the 'out-group'—should exhibit a greater willingness to extend this experience to others more generally.

To examine the effects of neighborhood disorder and neighborhood socio-economic status on generalized trust, we rely on both individual- and neighborhood-level measures. Our individual-level variable, *Efficacy in solving neighborhood problems*, is a categorical indicator constructed from a survey question that asked respondents about the perceived impact of people like themselves on making the community a better place to live (1=no impact at all; 4=a big impact). Work by Ross et al. (2001) suggests that perceived neighborhood disorder influences mistrust by increasing residents' perceptions of powerlessness. However, perceptions of strong community efficacy are likely to have the opposite effect on generalized trust. In other words, the empowerment individuals derive from living in neighborhoods where they perceive fellow residents can collectively address problems should lead them to be more trusting of others. In addition, we measure the objective conditions of respondents' neighborhoods by utilizing 2000 census tract data aggregated to the neighborhood level. We utilize neighborhood-level measures of racial heterogeneity (racial fragmentation index), as well as socio-economic status (percent neighborhood residents with a college degree).

Finally, *Neighborhood Sociability* includes measures of both formal and informal social interaction. The informal sociability variable taps the degree to which neighbors socialize informally with one another and measures the average frequency neighborhood residents reported talking with or visiting immediate neighbors. It ranges from 0 (never) to 1 (just about every day). The formal sociability variable reflects the percentage of neighborhood residents who are members of at least one civic association or social group (1=all neighborhood respondents are members of at least 1 group; 0=no respondents are members of any groups).

For descriptive purposes, in Table 2 we present summary statistics for all variables

included in our empirical analysis. In addition to reporting the statistics for the full sample, we also report them according to the race of respondents (white and African American).

[Table 2 Here]

Perhaps the most remarkable figures in Table 2 are those for generalized trust. Although over half of white respondents indicated that most people could be trusted, only about one quarter of black respondents felt the same way. This corresponds to previous findings on generalized trust. For example, Patterson (1999: 175ff) and others have found that blacks are consistently and substantially lower on generalized trust than other racial or ethnic groups, even after controlling for socio-economic background and other life cycle experiences. With regard to our neighborhood measurements of diversity and sociability, our sample indicates that blacks and whites experience similar levels of diversity and social interactions. However, this aggregate average hides many important differences of diversity across various types of cities as we discussed before.

Analysis and Findings

As insights from the literature on both social capital and social psychology suggest, settings that provide opportunities for heterogeneous interactions and direct interracial experiences should increase the capacity of individuals to overcome their racial prejudices and negative out-group orientations and thereby allow them to more successfully develop generalized trust. And, in accordance with previous empirical findings (see e.g., Bledsoe et al. 1995) we expect this to be particularly the case for African Americans. To test for the possibility that context operates differently on the development of generalized trust depending on the race of the individual we pursue a multi-faceted analytic strategy. We begin by estimating a general model for the entire sample and then investigate alternative specifications by dividing the sample according to the race of the respondent (white or African American). Since we try here to replicate our earlier findings form the analysis of the Detroit metro area (Marschall and Stolle 2004), we include our earlier table in the appendix (Table A1).

We begin by first estimating our model for the full sample. This model includes our main control variables, namely individual-level demographic predictors of generalized trust as well as the respondents' racial attitudes, their general interracial experiences, their perceptions of residents' collective efficacy in addressing neighborhood problems, and characteristics of their neighborhoods. As discussed above, we include socio-economic characteristics at the neighborhood level, the degree of neighborhood racial heterogeneity, and the extent of neighborhood sociability, both formal (density of associations) and informal (neighborhood socializing). The results of this model are presented in column 1 and 2 of Table 3. The first model includes a measure for anti-integration attitudes and so comes closest to replicating our earlier analysis. However, the survey question upon which this variable was constructed had a large number of non-responses (over 1,000), causing us to drop it in subsequent models.

[Table 3 Here]

In contrast to our earlier work (Table A1) where we found that individuals residing in more racially diverse neighborhoods were more likely to agree that most people could be trusted than were individuals residing in more racially homogeneous neighborhoods, the results in Table 3 indicate that neighborhood racial heterogeneity is unrelated to generalized trust.[7] At the same time, this finding fails to confirm the threat hypothesis (H2), which has found some support in

recent empirical studies (Alesina and Ferrara 2000; Costa and Kahn 2003). On the other hand, in line with our hypothesis 3, the results from Models 1 and 2 indicate that the degree of informal social interaction at the neighborhood level has a positive effect on generalized trust. This finding confirms arguments in the literature on social capital that face-to-face interaction should foster the development of generalized trust. To fully test hypothesis 3 however, we need to examine whether the positive effect of neighborhood sociability is stronger in racially heterogeneous rather than racially homogeneous contexts. We assume here that social interactions with neighbors in heterogeneous neighborhoods reflect weak bridging ties; whereas neighborly interactions in homogeneous neighborhoods measure weak bonding ties. In Figures 1a and 1b, we graph the effect of neighborhood sociability in neighborhoods with low (<.20) and high (>.67) heterogeneity scores. . While the slope appears to be essentially the same across the two figures, the reduced variation in neighborhood sociability for more homogeneous contexts yields an overall smaller effect than it does in the more heterogeneous contexts (a 17 versus 20 percentage-point change). This small difference however, is not sufficient for us to conclude that the effects of informal social interaction at the neighborhood level are stronger under higher levels of racial heterogeneity as social capital theory predicts.

[Figures 1a and 1b about Here]

Interestingly, we do not find any evidence that more formal forms of interaction, specifically, regularized involvement in formal associations, among neighborhood residents has an effect on individuals' propensity to trust others. Finally, in neither of these models do we find evidence to support our other hypotheses: neither direct interracial experiences nor living in a higher socio-economic status context (as measured by the percentage of college educated residents) significantly influence the development of generalized trust.

One question that emerges from this finding is whether the experience of living in racially diverse neighborhood settings differentially affects levels of trust among blacks and whites as suggested by the literature. The threat hypothesis implies that proximity to blacks, particularly without direct contact, would negatively affect trust development among whites. In other words, racially diverse neighborhoods should be associated with higher levels of distrust among whites. For blacks, previous findings suggest that living in neighborhoods with larger proportions of blacks should increase the strength of in-group feelings, which has typically been associated with negative affect toward the out-group. So we should find positive influences on generalized trust in heterogeneous neighborhoods for blacks; and negative effects in homogeneous places. In short, it is essential to understand how the development of generalized trust might differ according to racial identity.

Toward this end, we next analyze separate models for black and white respondents. One problem has to be kept in mind, however, when using questions about generalized trust that inquire about trust in *most people*. Specifically, it could certainly be the case that the expression "most people" has a different radius for blacks or whites or for people in various settings. Whereas whites might perceive most people to mean other whites, blacks might infer that most people stands for other whites, so that true inclusion for out-groups are not fully captured for all groups of people alike. No systematic research has been undertaken to examine this potentially confounding problem of the radius of trust, but we have to take this into account in our analyses.

In the third and fourth columns of Table 3 we present the results of our basic model estimated separately for both white and black respondents. Given the much smaller sample of black respondents in particular, it is not surprising that the standard errors consistently higher.

Since the variance of many independent variables is substantially reduced in the sub-sample models, the correlation among independent variables, particularly the neighborhood-level variables is increased. In spite of this, results from the *White* model (Model 3) reveal that in addition to informal social interaction at the neighborhood level, the percentage of neighborhood residents with college degrees has a positive and significant effect on generalized trust. This effect is conveyed more powerfully in Figure 2b, which shows the change in the probability of trusting others across the full range of values for the *Percent College Degree* variable in our *White* sample (from 0 to about 48%).

[Figure 2b about Here]

Holding other variables constant at their means, whites who live in neighborhoods where the percentage of college educated resident is 48 are more likely to trust others by roughly 11 percentage-points than are whites who live in neighborhoods where no neighborhood residents have a college degree. This finding is consistent with work by Oliver and Mendelberg (2000), who show that whites in low status contexts are more likely to develop anti-black affect and suspicion to out-groups more generally. Moreover, the nonsignificance of the racial heterogeneity measure in the *White* model provides further evidence against the threat hypothesis. In other words, the mere proximity of blacks does not have deleterious effects on whites' trust. This effect is presented in Figure 3b, where we plot the change in the probability of trusting others across the full range of heterogeneity scores for whites. As this graph shows, the effect of living in the least versus the most racially diverse neighborhoods is negligible, translating into a less than a five percentage-point change in the probability that whites trust others.

[Figure 3 b Here]

Turning to the results from the *Black* model, we find that neighborhood-level education is not related to trust (see Figure 2a), nor is informal social interaction. Instead, only individual-level variables turn out to explain the variance in blacks' willingness to extend generalized trust to others. Specifically, more educated blacks as well as blacks who had either lived longer in the community or who agreed more strongly that neighborhood residents could work together to solve collective problems, were significantly more likely to trust other.

[Figures 2a and 3a about Here]

Although the results from the sub-sample analyses indicate that there are substantial differences in the way that neighborhood socio-economic context and neighborhood sociability shape the development of generalized trust for whites and blacks, our results consistently find no effect for the degree of neighborhood racial heterogeneity (Figures 3a and 3b illustrate this null finding).

In the next set of analyses we address three additional points. First, how does the inclusion of additional measures of neighborhood socio-economic status change the results? Again, several scholars have found that negative effects of diversity vanish when other aspects of socio-economic status (e.g., income, poverty) are included. As a result, we added a measure of median family income at the neighborhood level (constructed by aggregating tract-level indicators) in the models that follow.

Second, how does the inclusion of individual social capital measures change the results? According to social capital accounts we would expect that individuals who socialize with their

neighbors are more trusting. Moreover, according to hypothesis 4 we expect that individuals who have had personal and direct experiences with others of different racial backgrounds, or who entertain bridging strong or weak ties, will be more trusting than those who do not engage in such diverse networks (Jackman & Crane 1986; Putnam 2000; Stein et al. 2000). In our earlier work we were unable to include individual level variables that measure the respondents personal social interactions, yet this data set allows us to include several variables that tab individual social contact as well as individual contact with diverse others. We include two individual level variables in our first models in Table 4: an individual's frequency of socializing with neighbors (measured 0=never to 1=every day), as well as the diverse ties a respondent holds within his/her associational memberships.[8] Because sociability and bridging ties might have different effects for blacks and whites, we include again estimate one model with the full sample (Model 1), as well as additional models for blacks (Model 2) and whites (Model 3).

Finally, so far we have conceptualized diversity as a simple heterogeneity measure—which in essence taps the visibility of diverse others. In order to truly get at the idea of bridging ties at the neighborhood level, we need to know how the actual contact with diverse others might influence generalized trust. Thus far we found that neighborhood social interaction is positively associated with trust, holding neighborhood racial heterogeneity constant. The question now is whether the combination of diversity and social ties makes a difference in the trust equation. In order to better get at how diversity and social contact interact, we should move to more sophisticated measures. In Models 4 and 5, therefore, we test further specifications of the diversity thesis in that we include neighborhood level measures of diverse weak and strong ties. To this end, we include two new variables: the first aggregates inter-racial friendships to the neighborhood level, assuming that some of these friends are neighbors. Respondents who live in neighborhoods with more such inter-racial friendships should be more trusting. The second variables aggregates memberships in associations perceived as diverse to the neighborhood level. Also here we would expect that respondents who live in neighborhoods where residents join diverse associations are more trusting.

[Table 4 about here]

These new models confirm many of our earlier results, e.g. levels of education relate to generalized trust, at the individual level and for whites also at the neighborhood level. The perception of efficacy of solving neighborhood problems is also positively associated with generalized trust. It is also confirmed that blacks who have lived at the community longer have developed significantly more trust than whites.

While the results indicate that median neighborhood household income is negatively related to trust only in Model 2 (blacks only) does it have a significant effect. Controlling for neighborhood level education, blacks who live in higher income neighborhoods are on average less trusting than blacks who live in lower income places. As social capital accounts would predict, *individuals* who socialize more frequently with their neighbors are also more trusting,[9] although for blacks this relationship is not significant. We do not engage here in the discussion about the causal relationship.

More surprising are the findings with regard to our individual and neighborhood level diversity measures. First, with the inclusion of the new variables, neighborhood heterogeneity is now negatively related to trust (Model 1). Moreover, as Models 1-5 show, those respondents who perceive more of their associational members to be of a different race or ethnic background (in social capital language, those who entertain weak bridging ties) seem less trusting of others. However, only in Model 3 (whites only) is this effect statistically significance ($p<.10$). Similarly,

in Model 5, we find at the neighborhood-level, this effect is also significant. In other words, independent of whether individuals are themselves involved in more racially diverse associations, the effect of living in a neighborhood where other residents have more racially inclusive associational memberships has a negative effect on the development of generalized trust. This finding is directly counter to social capital accounts and our hypothesis 3.

What about neighborhood-level effects of having interracial friendships? Does living in a neighborhood where residents have racially inclusive social networks encourage individuals (regardless of the racial composition of their own social networks) to extend generalized trust to others? To our surprise, our results (Model 4) do not lend any support for this contention and thus cast doubt on social capital accounts of the power of bridging ties.

Discussion and Concluding Remarks

Our analyses attempted to specify the importance of the combined effects of neighborhood context, levels of neighborhood sociability, and interracial experiences for the development of generalized trust. To date, these factors have either been examined independently of each other, or have been scrutinized only insofar as they relate to racial attitudes. As such, our research extends this line of inquiry by considering more general civic orientations such as trust. Two models dominate the theoretical debate about the effects of diversity on civic values such as generalized trust. On the one hand, generalized trust is seen as a product of bridging ties. The idea here is that the interaction with diverse others leads to the building of knowledge-based trust that eventually accumulates to a new quality, namely generalized trust. An alternative approach focuses on the visibility of diverse others, and emphasizes the threat majority groups perceive when encountering diverse others. In theory, of course, these models are not mutually exclusive. It is possible to find that the sheer visibility of diverse others is threatening, but that social interactions with diverse others exert mediating effects. However, this is not the exact story of our findings.

The findings from our empirical analyses call into question some aspects of both models. Overall, we have not found much evidence for the thesis on bridging ties, as proposed by social capital theory. Neither racially bridging weak nor strong ties contribute to the development of generalized trust in twelve selected cities in the United States. Instead, we find that weak social ties with neighbors generally enhance the development of generalized trust. This finding confirms that the frequency of social interactions, independent of the social context in which this interaction takes place, matter for trust. Yet, informal social interactions are significantly more important than formal group memberships (at the individual and neighborhood level). In this sense, our results do not advance the fine-grained development of social capital theory that the context in which interactions take place—or the *quality* of social interactions—are more important than their *quantity*. However, informal social interactions contribute to an atmosphere of generalized trust. One issue emerges with regard to this particular research finding. As with most research on contextual effects, we need to consider the possibility of endogeneity. More specifically, it is possible that more trusting citizens self-select into neighborhoods characterized by high levels of social interaction.

However, the evidence of the threat hypothesis is also weak. When we control for socio-economic resources and social contact, we find very little support for the negative effect of racial diversity. On the other hand, there is some indication that the perception of diversity in weak ties negatively affects generalized trust. Specifically we find both that whites who perceive their fellow associational members as more racially diverse are less likely to trust others and that individuals who reside in neighborhoods where residents' associational memberships are

perceived as more racially diverse are also less predisposed to trust. On the other hand, we find no evidence that informal social interactions that take place in more racially heterogeneous contexts dampen the development of generalized trust. Rather, interactions in these contexts have as much, if not slightly more, positive effects on trust.

An important finding of this study is that generalized trust is less likely to develop among whites who live in low status neighborhoods, as defined by both the education levels of residents and their perceptions of their neighbors' efficacy in solving collective problems. This finding is consistent with previous research by Oliver and Mendelberg (2000) and Ross et al. (2000). On the other hand, we do find positive effects of neighborhood socio-economic status blacks.

Overall, our study suggests that there is substantial value added in combining contextual variables with measures of both social interaction and interracial contact in models that seek to explain why people in some places trust more than others. Yet these contextual measures do not work uniformly for blacks and whites. Most likely this is due to the minority and majority status between these two groups. In addition, blacks are also more likely to live in more racially diverse and in more socio-economically disadvantaged neighborhoods, on average.

Our study has in some important ways not confirmed the results of our previous work on the metro area in Detroit in the 1970s, where we found that social interactions in heterogeneous places are more beneficial than they are in homogeneous ones. The difference between the two time periods is not so much that overall proportions of minorities have changed-- at least not with regard to our focus on relationships between blacks and whites in the US. What has changed, however, is that American cities are now characterized by much greater racial and ethnic heterogeneity as a result of the substantial increase in the Latino and Asian populations over the past several decades. Again, even the most homogeneous places today, are more diverse than the most heterogeneous neighborhoods were in the 1970's. In that sense we cannot really replicate our earlier study.

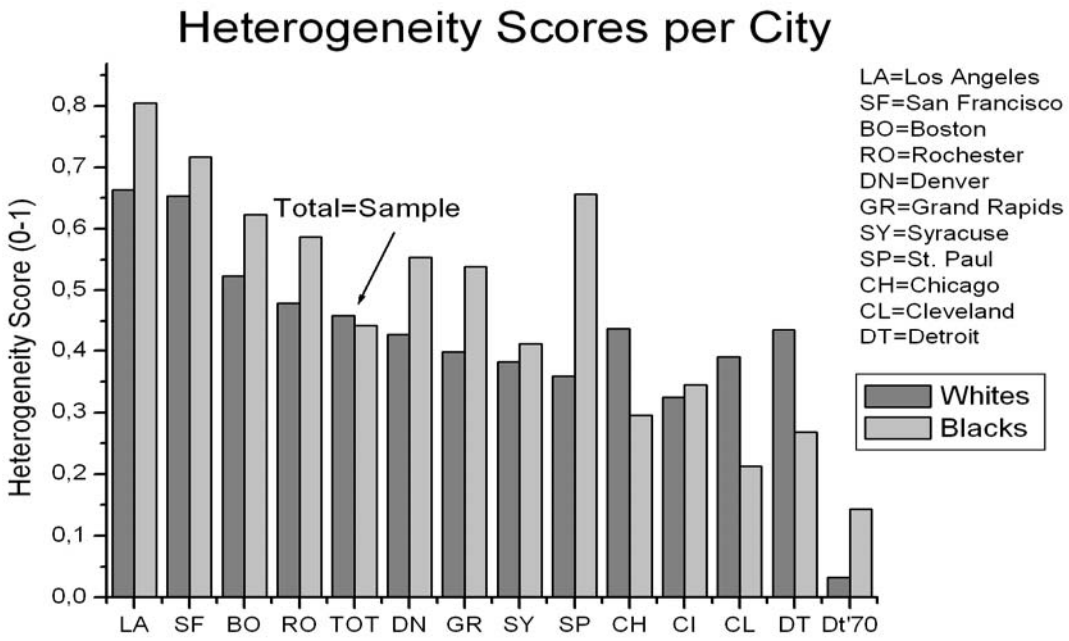
Several important tests remain before we can draw conclusions about today's level of diversity and its effect on our societal fabric. First, in order to adjust to the demographic changes within the United States, in a next research step we will examine full heterogeneity including other minority groups such as Hispanics and Asians. Second, our sample is special as it includes only respondents within US cities, and excludes suburban contexts, which continue to be more racially and ethnically homogeneous than American urban centers. Including a wider variety of level and types of diversity will perhaps allow for a better analysis about the threshold at which heterogeneity starts to flip from positive to negative effects. Third, our finding that informal social interactions at the individual and neighborhood level are related to the development of generalized trust have been confirmed now in two studies of two different time periods in the US. In our earlier study, we found such positive effects only in heterogeneous neighborhoods, and today in both types of places (although today the effects only hold for whites). Our next task should be to understand how diversity influences these patterns of informal social interaction that are so beneficial to generalized trust.

Table 1: Key Demographic Indicators for City Populations and Sample

	Pct College Degree		Median HHold Income		Percent White			Percent Black		
	City	*Nhds in Sample*	*City*	*Nhds in Sample*	*City*	*Nhds in Sample*	*Respond-ents*	*City*	*Nhds in Sample*	*Respond-ents*
Phoenix, AZ	15.1	16.1	41,207	46,046	71.1	76	63.1	5.1	6.1	4.0
Los Angeles, CA	16.4	15.7	36,687	42,758	46.9	48.6	44.2	11.2	11.4	14.7
SanFrancisco, CA	28.6	29.0	55,221	59,655	49.7	53.8	60.1	7.8	6.0	5.9
Denver, CO	22.1	22.5	39,500	41,115	65.3	64.7	62.2	11.1	14.2	13.1
Chicago, IL	15.5	17.7	38,625	43,759	42	51.3	49.3	36.8	31.0	32
Boston, MA	20.2	18.0	39,629	41,116	54.5	49.7	49.2	25.3	29.8	24.8
Detroit, MI	6.8	6.7	29,526	29,091	12.3	16.0	16.3	81.6	76.6	73.9
Grand Rapids, MI	15.8	16.3	37,224	38,568	67.3	69	72.9	20.4	18.6	12.1
St. Paul, MN	20	22.7	38,774	41,627	67	73.9	80.7	11.7	9.3	8.2
Cincinnati, OH	15.5	16.5	32,384	33,982	56.5	60.6	64	39.7	35.6	32.6
Cleveland, OH	7.6	7.6	25,928	25,129	41.5	45.4	34.6	51	44.6	34.8
Rochester, NY	12.1	10.1	27,123	25,686	48.3	42.2	33.0	38.5	41.7	35.1
Syracuse, NY	26	14.2	25,000	27,151	64.3	66.9	65.5	25.3	23.2	18.7

Population figures are based on 2000 census data. Neighborhood figures are aggregated 2000 census tract level data, but may not include all neighborhoods in the city since sample respondents were not necessarily drawn from all city neighborhoods. Summary statistics are for respondent in the SCBS sample for that city.

Figure 1:



Source: 2000 Census Tract Level Data, aggregated to the neighborhood level.

Table 2: Summary Statistics

Individual-Level	***Min***	***Max***	***Full Sample***	***Blacks***	***Whites***
Trust	0	1	.47 (.010)	.24 (.016)	.57 (.012)
Education (levels)	1	7	3.96 (.038)	3.14 (.060)	4.32 (.046)
Female	0	1	.61 (.010)	.67 (.017)	.59 (.012)
Employed	0	1	.68 (.009)	.64 (.018)	.70 (.011)
Children in household	0	9	.63 (.023)	1.04 (.054)	.45 (.022)
Length of residence	1	6	3.66 (.031)	3.62 (.055)	3.67 (.037)
Black	0	1	.30 (.009)	--	--
Anti-Integration[a]	0	1	.11 (.009)	.10 (.015)	.11 (.011)
Interracial contact	0	1	.68 (.010)	.68 (.017)	.68 (.011)
Efficacy in solving nhood problems	1	4	3.10 (.017)	3.13 (.032)	3.09 (.020)
Neighborhood-Level					
Pct with college degree	0	48.1	17.58 (.213)	10.97 (.291)	20.43 (.248)
Median Income	6,875	144,058	39,744.94 (289.48)	31,239.68 (397.86)	43,389.45 (346.50)
Racial heterogeneity	.03	.92	.45 (.004)	.44 (.009)	.46 (.005)
Percent black	.10	98.33	28.26 (.589)	56.41 (1.120)	16.14 (.436)
Informal social interaction	.00	1.00	.66 (.003)	.64 (.005)	.67 (.003)
Associational membership	.00	1.00	.89 (.002)	.88 (.004)	.89 (.003)
Number obs			2420	729	1691

Table entries are means, proportions or percentages with standard deviations in parentheses. [a]For this variable, the overall N was only 1187.

Table 3: Replication of Marschall-Stolle (2004) Models

	Model 1 Full Sample	**Model 2 Full Sample**	**Model 3 Whites**	**Model 4 Blacks**
Education (levels)	**0.126*** ** (0.022)	**0.130*** ** (0.015)	**0.122*** ** (0.019)	**0.149*** ** (0.028)
Female	**-0.181*** (0.084)	**-0.103*** (0.062)	-0.107 (0.070)	-0.077 (0.110)
Employed	-0.046 (0.091)	-0.008 (0.062)	-0.003 (0.071)	-0.029 (0.118)
Children in household	-0.060 (0.042)	-0.019 (0.027)	-0.033 (0.037)	-0.003 (0.037)
Length of residence	0.035 (0.030)	**0.030*** (0.020)	-0.004 (0.019)	**0.134*** ** (0.039)
Black	**-0.735*** ** (0.097)	**-0.692*** ** (0.069)	---	---
Interracial contact	0.111 (0.089)	0.063 (0.062)	0.023 (0.071)	0.164 (0.122)
Anti-Integration attitudes	**-0.285**** (0.143)	---	---	---
Efficacy in solving nhood problems	**0.167*** ** (0.054)	**0.221*** ** (0.034)	**0.247*** ** (0.043)	**0.159*** ** (0.054)
Neighborhood-Level				
Pct with college degree	0.000 (0.005)	0.005 (0.003)	**0.007*** (0.004)	-0.000 (0.006)
Racial heterogeneity	-0.301 (0.191)	-0.205 (0.140)	-0.108 (0.180)	-0.196 (0.241)
Informal social interaction	**0.649*** (0.382)	**0.754*** ** (0.254)	**1.241*** ** (0.320)	-0.471 (0.463)
Associational membership	**0.799*** (0.433)	0.265 (0.278)	0.085 (0.325)	0.757 (0.589)
Constant	-1.913 (0.489)	-1.890 (0.331)	-2.021 (0.396)	-2.507 (0.601)
Number of obs	1,115	2,262	1,590	672
Pseudo R sq.	0.13	0.12	0.07	0.07
Chi Square	202.63***	385.8***	137.2***	69.9***

Table entries are probit coefficients with robust standard errors in parentheses. *p<.1; **p<.05; ***p<.01

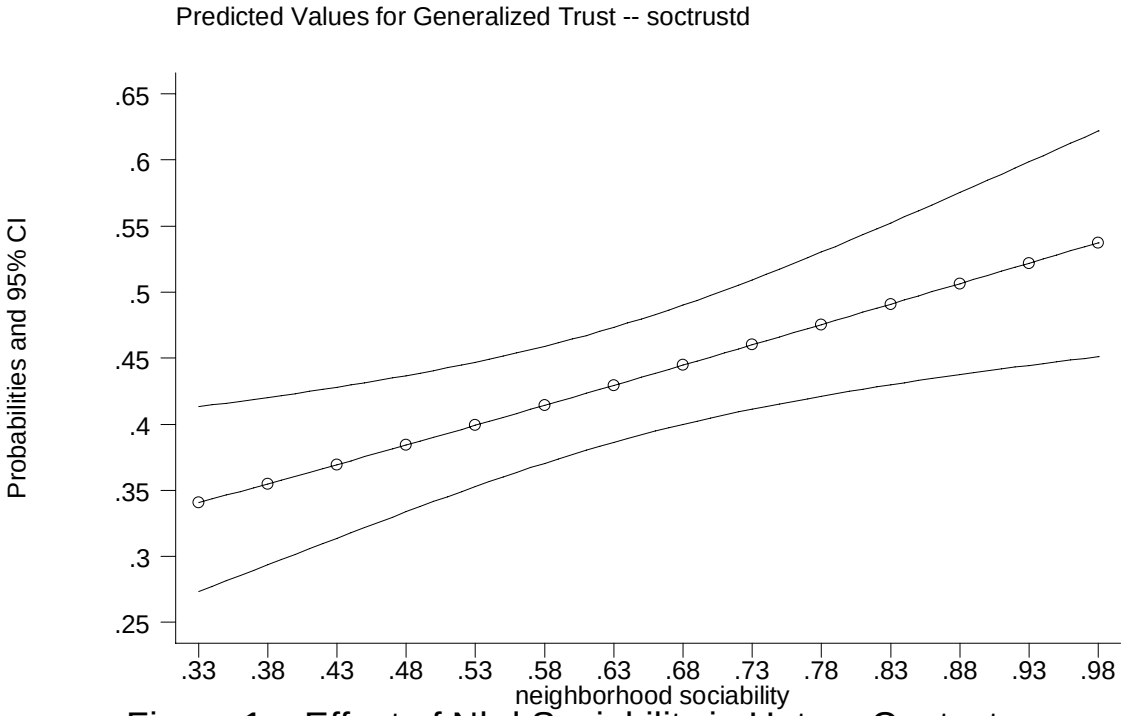


Figure 1a: Effect of Nhd Sociability in Hetero Contexts

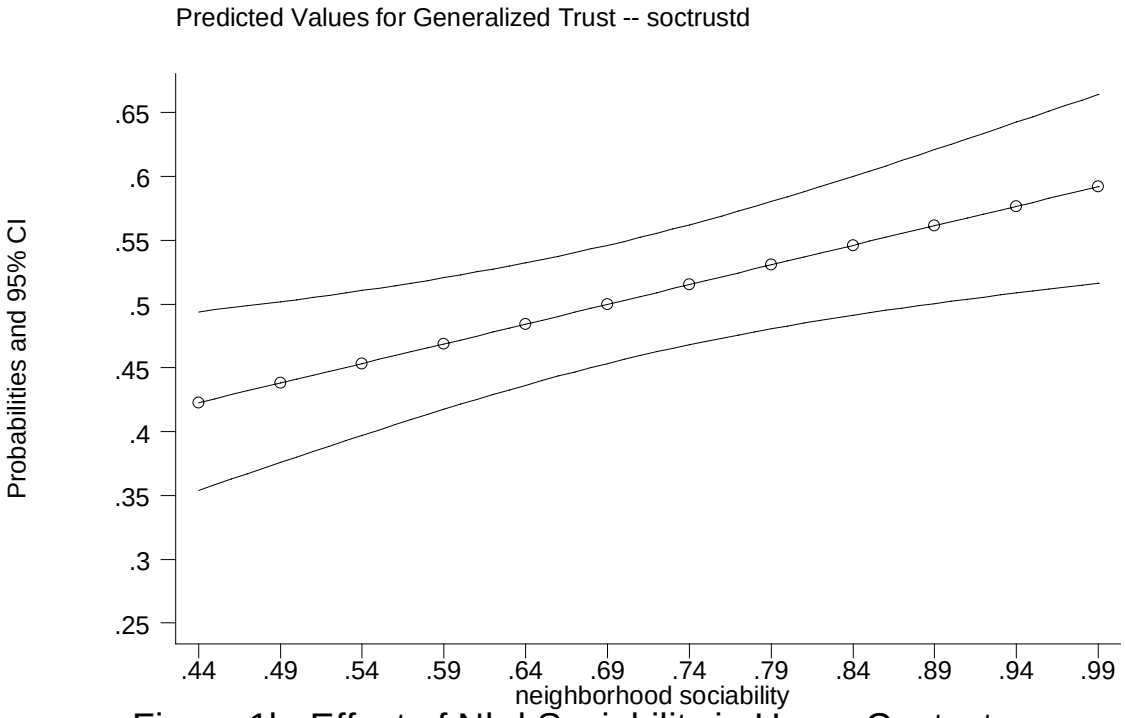


Figure 1b: Effect of Nhd Sociability in Homo Contexts

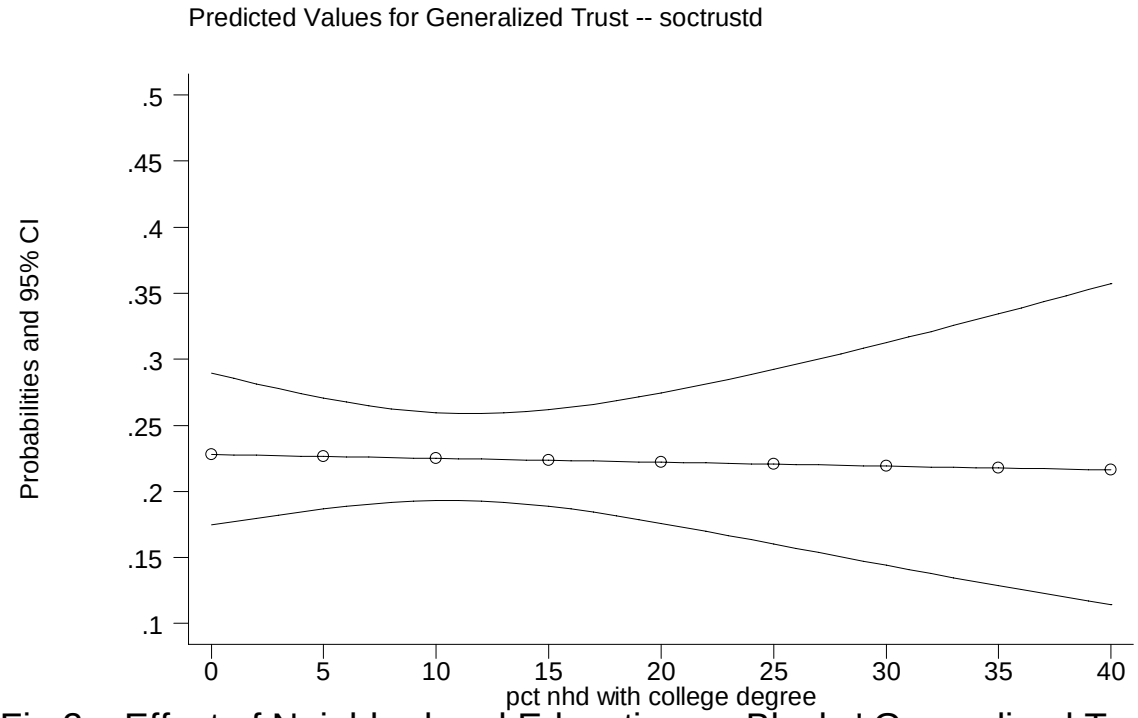


Fig 2a: Effect of Neighborhood Education on Blacks' Generalized Trust

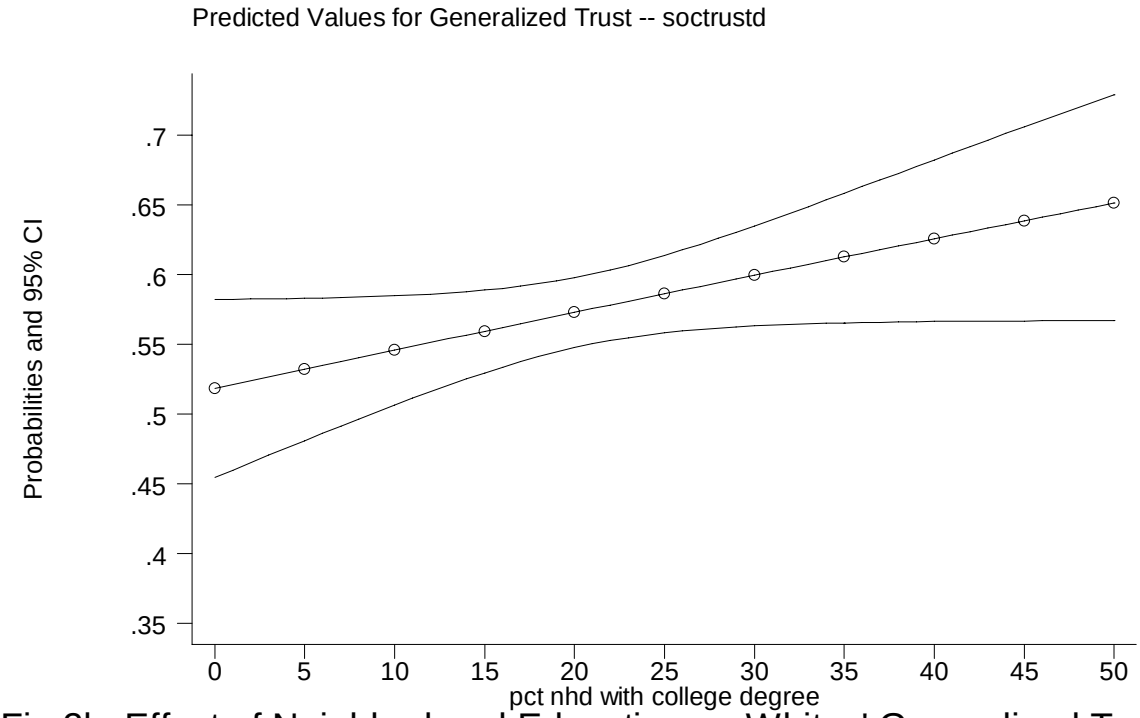


Fig 2b: Effect of Neighborhood Education on Whites' Generalized Trust

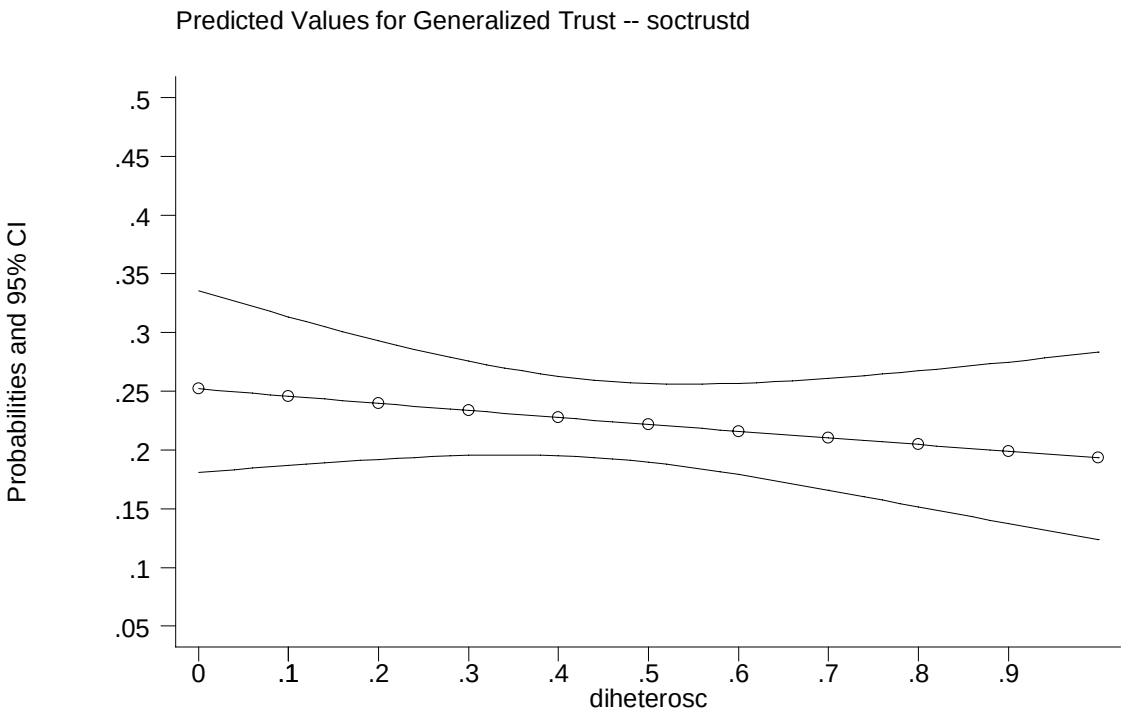


Fig 3a: Effect of Nhd Heterogeneity on Blacks' Generalized Trust

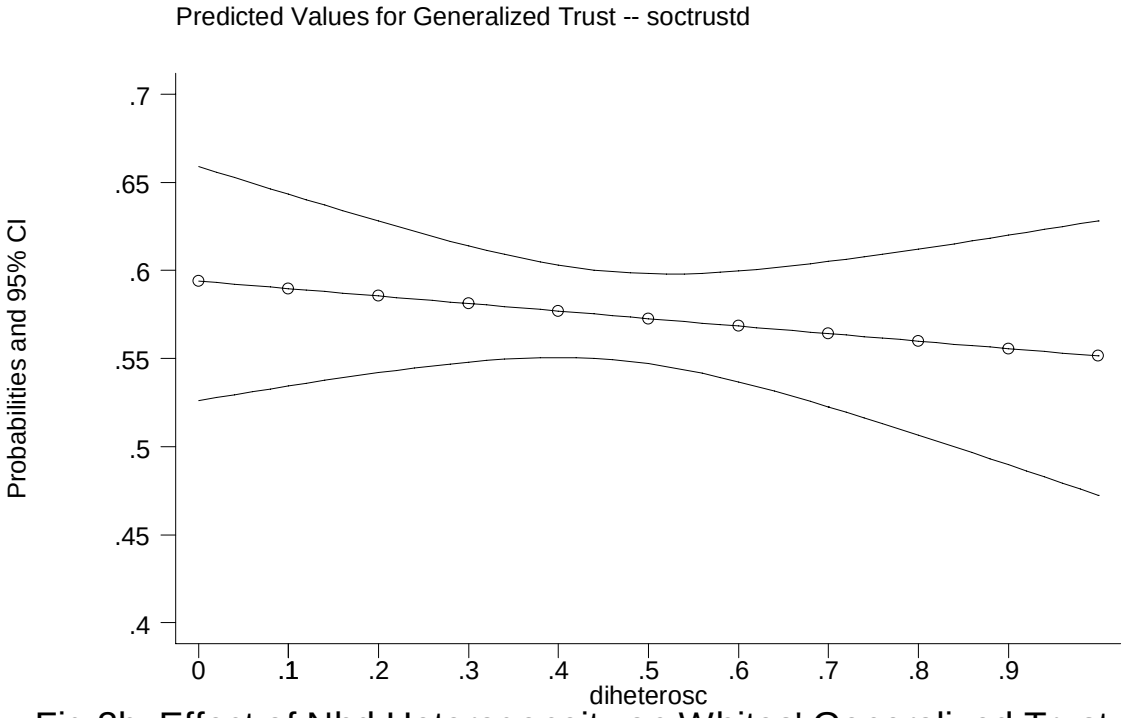


Fig 3b: Effect of Nhd Heterogeneity on Whites' Generalized Trust

Table 4: Exploring the Effect of Diversity

	Individual-Level Social Interaction Variables Included			***Neighborhood-Level Diversity Variables Included***	
	Model 1 Full Sample	**Model 2** Blacks	**Model 3** Whites	**Model 4** Full Sample	**Model 5** Full Sample
Education (levels)	**0.131***** (0.016)	**0.157***** (0.029)	**0.119***** (0.019)	**0.130***** (0.016)	**0.130***** (0.015)
Female	-0.097 (0.062)	-0.090 (0.109)	-0.103 (0.070)	-0.091 (0.062)	-0.097 (0.062)
Employed	0.001 (0.062)	-0.010 (0.120)	0.014 (0.072)	0.001 (0.062)	0.001 (0.062)
Children in household	-0.023 (0.027)	0.001 (0.037)	-0.040 (0.038)	-0.022 (0.027)	-0.024 (0.027)
Length of residence	0.022 (0.019)	**0.134***** (0.039)	-0.016 (0.020)	0.026 (0.019)	0.024 (0.019)
Black	**-0.684***** (0.069)	---	---	**-0.676***** (0.069)	**-0.667***** (0.070)
Efficacy in solving nhood problems	**0.211***** (0.034)	**0.154***** (0.056)	**0.235***** (0.043)	**0.213***** (0.034)	**0.210***** (0.034)
Interracial contact	0.041 (0.062)	0.129 (0.123)	0.016 (0.072)	0.037 (0.064)	0.039 (0.061)
Socialize with neighbors	**0.419***** (0.091)	0.100 (0.142)	**0.596***** (0.125)	**0.425***** (0.091)	**0.420***** (0.090)
Racially Mixed Associations	-0.018 (0.026)	0.054 (0.040)	**-0.059*** (0.032)	-0.022 (0.026)	-0.006 (0.027)
Neighborhood-Level					
Percent with College degree	**0.009***** (0.004)	0.010 (0.008)	**0.008*** (0.005)	**0.011***** (0.004)	**0.011***** (0.003)
Median Income Level	-0.000 (0.000)	**-0.000**** (0.000)	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)
Racial heterogeneity	**-0.263*** (0.140)	-0.224 (0.240)	-0.218 (0.172)	---	---
Interracial friends at nhood	---	---	---	0.000 (0.170)	---
Members in diverse associations	---	---	---	---	**-0.178**** (0.087)
Constant	**-1.255***** (0.197)	**-2.026***** (0.340)	**-1.314***** (0.233)	**-1.393***** (0.202)	**-1.190***** (0.213)
Number of obs	2252	670	1582	2252	2252
Pseudo R sq.	.13	.08	.07	.13	.13

Table entries are probit coefficients with robust standard errors in parentheses. *p<.1; **p<.05; ***p<.01

Appendix

Table A1: Table 3 from Marschall and Stolle 2004
Effects of Individual and Contextual Factors on Generalized Trust

Individual-Level	***Full Sample (1)***	***dy/dx (2)***	***Blacks (3)***	***dy/dx (4)***	***Whites (5)***	***dy/dx (6)***
Education	**.073****	.017	**.225****	.018	.044	.011
	(.030)		(.078)		(.034)	
Female	.164	.040	.003	.0003	.208	.052
	(.153)		(.319)		(.181)	
Employed	**.452****	.110	.110	.009	**.531****	.132
	(.163)		(.316)		(.180)	
Number of children	**.114***	.028	.092	.008	.123**	.031
	(.052)		(.097)		(.062)	
Length of residence	**.017****	.004	.015	.001	**.018****	.004
	(.007)		(.021)		(.008)	
Black	**-1.721****	-.367	---		---	
	(.247)					
Anti-Integration	**-1.231***	-.303	-2.00	-.168	**-1.37***	-.341
	(.717)		(1.447)		(.816)	
Interracial contact	.116	.029	.388	.036	.021	.005
	(.194)		(.443)		(.211)	
Perceptions of neighborhood problems	**-.724***	-.178	-.050	-.004	**-1.021****	-.254
	(.326)		(.354)		(.408)	
Neighborhood-Level						
Median years of school	**.357****	.088	-.140	-.012	**.442****	.110
	(.081)		(.224)		(.099)	
Racial heterogeneity	**3.088****	.760	**5.877****	.493	2.144	.534
	(1.065)		(1.858)		(1.765)	
Informal social interaction	.574	.141	**3.709***	.311	-.085	-.021
	(.927)		(1.887)		(.901)	
Associational membership	.081	.020	**1.212***	.102	-.212	-.053
	(.427)		(.701)		(.413)	
Constant	-5.407	---	-5.338		-5.598	
	(1.134)		(2.259)		(1.405)	
Number obs	902	Pr(y=1)	364	Pr(y=1)	538	Pr(y=1)
Number of clusters (nhbrhds)	55	.439	55	.092	55	.533
F	7.91**		2.90**		3.33**	

Models estimated with Stata's survey logit procedure, with marginal effects computed after svylogit. Entries are logit coefficients and robust standard errors, adjusted for clustering on neighborhood in parentheses. In adjacent columns are the corresponding transformed probabilities (dy/dx), which indicate the change in Pr (Y=1) for a unit change in X when X is set at its mean (for dichotomous independent variables, it for a discrete change in X from 0 to 1. *p < .05, ** p < .01, one-tailed test.

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Endnotes

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[2] See Yamagishi and Yamagishi (1994) on distinctions between general trust and knowledge-based trust and Uslaner (2002) for further empirical investigations.
[3] Most studies that employ counties, metropolitan areas or municipalities as the contextual unit of analysis also rely on national samples and typically face the problem of having too few respondents within contexts.
[4] These figures represent the total number of respondents in these neighborhoods, including Asians, Hispanics and other racial/ethnic groups.
[5] For our analysis, we drop neighborhoods that did not have at least three respondents.
[6] The SCBS survey allowed for a third response, "depends," which we folded into the "can't be too sure" category. Only 209 respondents from our sample chose this option. However, to ensure that the results were not affected by this coding decision, we also estimated all of our models using the original 3-category specification (with ordered probit models). The results did not change.
[7] The relationship holds also without the social interaction variables at the neighborhood level.
[8] This variable measures the perception the respondent has about the ethnic and racial background of other members in his/her association. We coded non-members as if they did not have any experience with diversity; the coding is 0 "all the same" 1 "few others" 2 "some" 3 "most" 4 "all are different"
[9] Formal group memberships measured as a dummy or accumulative scale were not significant at the individual level either.