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Perceptions as the crucial link?
The mediating role of neighborhood perceptions in the relationship between the neighborhood context and neighborhood cohesion.

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Abstract

This study examines the effects of neighborhood racial in-group size, economic deprivation and the prevalence of crime on neighborhood cohesion among U.S. whites. We explore to what extent residents' perceptions of their neighborhood mediate these macro-micro relationships. We use a recent individual-level data set, the American Social Fabric Study (2012/2013), enriched with contextual-level data from the U.S. Census Bureau (2010) and employ multi-level structural equation models. We show that the racial in-group size is positively related to neighborhood cohesion and that neighborhood cohesion is lower in communities with a high crime rate. Individuals' perceptions of the racial in-group size partly mediate the relationship between the objective racial in-group size and neighborhood cohesion. Residents' perceptions of unsafety from crime also appear to be a mediating factor, not only for the objective crime rate but also for the objective racial in-group size. This is in line with our idea that racial stereotypes link racial minorities to crime whereby neighborhoods with a large non-white population are perceived to be more unsafe. Residents of the same neighborhood differ in how they perceive the degree of economic decay of the neighborhood and this causes them to evaluate neighborhood cohesion differently, however perceptions of neighborhood economic decay do not explain the link between the objective neighborhood context and neighborhood cohesion.

Keywords: neighborhood cohesion; neighborhood effects; racial heterogeneity; economic heterogeneity; crime; neighborhood perceptions.

Introduction

Ongoing immigration to Western countries triggered a heated political and academic debate about the possible threats of racial diversity for the well-being of society. In a widely cited article, Putnam (2007) claimed that diversity in U.S. communities erodes social cohesion both between and within ethnic/racial groups. This paper spurred other research investigating the diversity-cohesion relationship in the United States as well as in Europe (e.g. Stolle, 2008; Letki, 2008; Fieldhouse and Cutts, 2010; Savelkoul, Gesthuizen and Scheepers, 2014). Meta-analyses of the multitude of studies investigating the diversity-cohesion relation pointed out that if a negative effect of racial diversity is found at all, it is more common in the United States than in Europe and it is more consistent for aspects of social cohesion that are spatially bound to the neighborhood, such as trust in neighbors and favorable neighborhood evaluations, than for other social cohesion indicators (Schaeffer, 2014; Van der Meer and Tolsma, 2014). A recent direct replication of Putnam's study on his original dataset shed further doubt on the claimed generic negative consequences of diversity. Even in the United States, diversity appears to be unrelated to social cohesion. The size of the racial in-group, on the other hand, is – at least for whites – positively associated with some indicators of cohesion, such as trust in neighbors (Abascal and Baldassarri, 2015).

Ethnic/racial group sizes are not the only neighborhood characteristics that are being linked to social cohesion. Previous research demonstrated that residents of socioeconomically disadvantaged and crime prone neighborhoods are less likely to display high levels of cohesion than residents of affluent and safe neighborhoods (e.g. Letki, 2008; Laurence and Heath, 2008; Oliver and Mendelberg, 2000). Some authors even show that economic deprivation is much more consistently related to lower levels of social cohesion than the ethnic/racial make-up of the neighborhood (e.g. Fieldhouse and Cutts, 2010). As economic deprivation and crime tend to be highly correlated with ethnic/racial minority density in U.S. neighborhoods (Sampson and Groves 1989; Sampson and Wilson, 1995; Sampson et al. 1997), it is important to assess their influence on social cohesion simultaneously. We use a recent individual-level data set, the American Social Fabric Study (Butts et al., 2014), enriched with contextual-level data from the U.S. Census Bureau (2010) to investigate how the neighborhood racial, economic and crime composition affect neighborhood cohesion within U.S. neighborhoods.

We define social cohesion in this study as "the degree of interconnectedness between individuals that is both a result and cause of public and civic life." (Van der Meer and Tolsma,

2014:460). A distinction can be made between a structural and a cognitive dimension of social cohesion. The latter refers to a set of attitudes and norms that facilitates people's predisposition toward cooperation, participation and a willingness to help, whereas the former refers to the actual behavioral manifestations of these attitudes and norms (Chan et al., 2006). We focus on the cognitive dimension of social cohesion. More specifically, we examine the degree of cohesion that is inherently bound to a specific geographical radius, namely the neighborhood.

Besides uncovering neighborhood effects, we aim to explain them. In this contribution, we focus on individuals' perceptions of the neighborhood as an explanatory mechanism. The neighborhood environment is, besides an invariable physical reality, a social construction (Wong et al., 2012) that is at least as important in explaining the influence of the neighborhood composition on individuals' attitudes and beliefs. This is not to say that the residential context can only be consequential if individuals are aware of it (cf. Wickes et al., 2013; Pickett et al., 2012). People may, for example, have less neighborly contact and subsequently less social cohesion in racially diverse neighborhoods (Vroome et al. 2013; Gundelach and Freitag 2014), even though they are not consciously aware of the fact that they live in a diverse environment. However, people's perceptions of different aspects of the neighborhood environment may serve as one of several links between the objective neighborhood environment and people's attitudes toward the neighborhood community (Ajzen, 2012; Fishbein and Ajzen, 2011; Fishbein, 1963).

We will therefore explore to what extent the impact of the objective neighborhood characteristics (racial in-group size, economic decay and crime) on neighborhood cohesion can be explained by how residents perceive their neighborhood. Previous research has already shown that perceptions of ethnic/racial minority density (e.g. Schaeffer, 2014; Hooghe and Vroome, 2015; Hipp and Wickes, 2016), perceived social disorder (Mirowsky and Ross, 1989; Skogan, 1990) – which is closely related to perceived economic decay – and perceived unsafety from crime (Ross and Jang, 2000) are negatively related to social cohesion for whites. We assess the extent to which these perceptions of the racial, economic and crime composition of the neighborhood can, besides having a direct relation with cohesion, also explain the effects of the objective neighborhood characteristics on cohesion. Newman et al. (2015) showed that the perceived number of immigrants in the neighborhood mediates the impact of the objective number of immigrants on the extent to which people consider immigration a big problem in their community. Other studies have further shown that perceptions of ethnic/racial group sizes are more predictive of individuals' attitudes towards

the ethnic/racial group being estimated than the objective ethnic/racial group size (e.g. Strabac, 2011; Semyonov, Raijman and Gorodzeisky 2008; Sides and Citrin, 2007; Semyonov et al., 2004). We build on these works by examining the broader concept of neighborhood cohesion and by additionally studying perceptions of the economic and crime composition of the neighborhood and the degree to which these perceptions mediate the impact of the objective neighborhood composition on neighborhood cohesion.

This study is not only a replication of other studies investigating the role of the racial composition of the neighborhood in shaping social cohesion. Although such a replication using recent U.S. data is valuable in itself, we aim to bring the field forward, firstly, by investigating the relative importance of the racial in-group size, economic deprivation and the prevalence of crime for neighborhood cohesion and, secondly, by examining the extent to which subjective perceptions of the neighborhood composition explain why the objective neighborhood context affects cohesion. So far, neighborhood perceptions are neglected as a possible explanation for the relationship between the objective neighborhood context and cohesion. To get a better understanding of how individuals' perceptions of the neighborhood mediate contextual neighborhood effects, we employ state-of-the-art multi-level structural equation models (MSE-models, Preacher et al. 2010; 2011).

Theoretical framework

Direct effects of the neighborhood context

Researchers have long focused on explaining how the social and structural composition of neighborhoods affect pro-social attitudes (e.g. trust) and behavior (e.g. volunteering) of individuals (cf. Sharkey and Faber, 2014). The focus has mainly been on the extent to which the racial and economic composition of the neighborhood influence neighborhood cohesion. In the related literature studying social disorder, the prevalence of crime in the environment also takes a prominent position as an explanatory factor. In line with these research traditions, the aim of this study is to identify the role of the racial in-group size, economic deprivation and the prevalence of crime in the community in shaping neighborhood cohesion in U.S. neighborhoods.

The constrict proposition stating that "…people living in ethnically diverse settings appear to 'hunker down' – that is, to pull in like a turtle" (Putnam, 2007:149) has recently been called into question. Review studies showed that the ethnic/racial composition of one's living environment plays a much more common role in eroding cohesion in the United States

than in Europe and that such an eroding influence is much more consistent for dimensions of social cohesion that are directly related to the neighborhood environment (Schaeffer, 2014; Van der Meer and Tolsma, 2014). A replication of Putnam´s study, using the same data, further demonstrated that the racial in-group size – and not racial diversity per se – is associated with trust in neighbors, but only for whites (Abascal and Baldassarri, 2015). Whites living among other whites experience more trust than whites living among non-whites. Thus, the constrict proposition is much less generic than claimed by Putnam (2007), as it only seems to hold under specific circumstances. If an association between the ethnic/racial composition of the living environment and social cohesion is to be expected at all, it is most likely to be found between the racial in-group size within the neighborhood and neighborhood cohesion among whites in the United States. Using a recent dataset (Butts et al., 2014), we are able to examine whether – under these specific circumstances – one could speak of a consistent relationship.

To correctly assess the positive association between the racial in-group size and neighborhood cohesion, it is imperative to guard against spuriousness by accounting for other factors that could plausibly explain the observed relationship (Portes and Vickstrom, 2011). As economic deprivation and crime tend to be highly correlated with ethnic/racial minority density in U.S. neighborhoods (Sampson and Groves 1989; Sampson and Wilson, 1995; Sampson et al. 1997), these are neighborhood characteristics that need to be controlled for.

The negative association between economic deprivation and social cohesion seems to be quite universal. Residents of more disadvantaged neighborhoods are less likely to display high levels of social cohesion than residents of more affluent neighborhoods (e.g. Letki, 2008; Laurence and Heath, 2008). For the United States, Fieldhouse and Cutts (2010) demonstrated that the eroding effect of neighborhood poverty is more than four times larger than the eroding effect of the neighborhood racial composition. Abascal and Baldassari (2015) further showed that, whereas poor economic condition are negatively related to a wide range of indicators of trust, from trust in neighbors to intergroup trust, and even generalized trust, for whites, blacks and Hispanics, a large ethnic/racial out-group is only negatively associated with racially or locally bounded indicators of trust for whites.

According to Oliver and Mendelberg (2000, p. 576), exposure to crime "…leads to a constellation of negative psychological states which are experienced by residents: feelings of anxiety and fear, alienation from neighbors, lack of trust in others, and suspicion toward out-groups in general". In neighborhood studies conducted outside of the United States the empirical evidence for this hypothesis is rather mixed: some studies find a negative effect of

crime (e.g. Laurence and Heath, 2008; Schaeffer, 2014; Sturgis et al., 2010) whereas others do not (e.g. Dinesen and Sønderskov, 2015; Scheepers, Schmeets and Pelzer, 2013). In the United States, on the other hand, living in high crime communities does seem to quite consistently erode social cohesion (Fieldhouse and Cutts, 2010; Putnam, 2007).

Mediating effects of the perceived neighborhood context

If theoretical mechanisms for the possible effects of living in a neighborhood with a large non-white (i.e. non-coethnic) population were paid attention to in previous research, scholars focused on the contact mechanism, derived from macro-structural theories of intergroup relations (Blau, 1977) and contact theory (Allport, 1954), and on the threat mechanism, derived from conflict theory (Blalock, 1967; Quillian, 1995).

The contact theory states that an increase in contact opportunity in neighborhoods with a large ethnic/racial out-group leads to an increase in intergroup contact (Blau, 1977; Wagner et al., 2006; Martinovic, 2013). This tends to foster interethnic tolerance (Allport, 1954; Pettigrew, 1998; Brown and Hewstone, 2005; Pettigrew and Tropp, 2011), which in turn stimulates interethnic/interracial social cohesion. As the contact mechanism proposes a positive impact of a large ethnic/racial out-group for (at least intergroup) social cohesion, it is not suitable to further our understanding of the negative association between a large racial out-group size and neighborhood cohesion for whites in the United States. Moreover, the contact mechanism is essentially an intergroup explanation, whereas we aim to explain neighborhood cohesion over and above racial division lines. This also holds for the threat mechanism stating that competition with members of the ethnic/racial out-group over economic and cultural resources (cf. Blalock, 1967; Bobo, 1999) in neighborhoods with a large ethnic/racial out-group are said to increase threat, which in turn could be harmful for intergroup social cohesion. Moreover, the empirical link between the neighborhood context and feelings of threat are found to be inconclusive (e.g. Savelkoul et al., 2015), also dismissing threat as a mediating factor between the neighborhood context and neighborhood cohesion.

We aim to further knowledge about the relationship between the composition of the neighborhood and social cohesion by looking at another mechanism: individuals' perceptions of the neighborhood context. The actual racial composition captures the structural aspect of the neighborhood environment. The perceived composition of the neighborhood does not necessarily coincide with the objective situation (Weden et al., 2008). Individuals' racial contexts are, besides an invariable physical reality, social constructions (Wong et al., 2012)

that are at least as important in explaining the influence of the neighborhood composition on individuals' attitudes toward neighborhood environment. As the actual neighborhood composition constitutes part of the basis upon which individuals shape their perceptions about the neighborhood (Aneshensel and Sucoff, 1996), these perceptions could function as pathways linking the actual racial composition of the neighborhood to neighborhood cohesion (Wen et al., 2006). The perceived racial composition of the neighborhood might even more accurately capture the way in which individuals are exposed to, experience and interact with their neighborhood (Weden et al., 2008). We therefore expect that the impact of the actual number of whites on neighborhood cohesion at least partly runs through the perceived number of whites.

As individuals' perceptions of the neighborhood are not restricted to the racial composition of the neighborhood, we also examine to what extent the degree of economic deprivation is explained by the perceived degree of economic decay and to what extent the impact of the actual crime rate is explained by the perceived unsafety from crime. Moreover, we will go one step further and additionally investigate whether also cross-pathways between the objective and perceived neighborhood composition exist. For instance, the actual size of the racial in-group in the neighborhood may not only be related to the perceived racial in-group size but also to perceptions of economic decay and unsafety.

Historically and structurally induced inequality in affluence between whites and non-whites has given rise to stereotypes linking poverty to racial minority groups (Quillian and Pager, 2001). These racial stereotypes may contribute to the perception that there are greater numbers of non-whites (and consequently smaller numbers of whites) in economically deprived neighborhoods. Conversely these stereotypes could also induce the perception of a neighborhood being deprived as a consequence of the presence of a sizeable number of non-whites (Quillian, 1995). Existing research in the United States has also shown that a strong perceptual association between race and crime exists, beyond any actual association between the two (Quillian and Pager, 2010). The objective number of non-whites is positively associated with individuals' overestimation of crime rates (e.g. Pickett et al., 2012; Skogan, 1995). Because of these racial stereotypes linking racial minorities to crime, perceptions of the racial out-group size (i.e. a smaller number of whites) may be higher in high crime communities and perceptions of unsafety from crime may be higher in neighborhoods with a sizeable non-white population. Previous studies have similarly shown that people link economic decay to crime and feelings of unsafety and vice versa (e.g. Ross and Mirowsky, 2001).

Individuals' perceptions of their neighborhoods consist of much more than just the actual neighborhood composition. Previous studies have shown that, even though individuals' perceptions of the ethnic/racial out-group size are not totally disjoined from reality (Strabac, 2011), they vary substantially between individuals (e.g. Alba et al., 2005; Herda, 2010). Similarly, perceptions of crime rates vary substantially among residents of the same neighborhood, notwithstanding that, on average, these estimates are clearly associated with the actual crime rates (Hipp, 2013). People living in the same neighborhood may also perceive their residential environment differently (Harding et al., 2011), because perceptions are partly shaped by social position (Sampson, 2012). Variation in perceptions are found between men and woman, younger and older people, lower and higher educated individuals (Sigelman and Niemi, 2001; Wilcox et al., 2003; Ferraro, 1995). Any mediation by the perceived neighborhood context of the association between the objective neighborhood context and neighborhood cohesion can, however, only occur at the neighborhood level (Hofmann, 2002). This is because the actual racial, economic and crime composition only vary between neighborhoods and not between individuals within the same neighborhood. In this contribution we therefore separate neighborhood perceptions in a between-level (i.e. neighborhood level) and a within-level (i.e. individual level) when testing for mediation. This mediation framework is visualized in Figure 1. This figure shows how individuals' perceptions of the neighborhood operate on both the individual level and the neighborhood level and how these perceptions could possibly explain the relationship between the objective neighborhood characteristics and neighborhood cohesion.

<<Figure 1 about here>>

Data and Measures

This study uses individual-level data from the American Social Fabric Study (ASFS, Butts et al., 2014).[i] The ASFS study population consists of adult, non-institutionalized residents of the western United States. We use three components of the ASFS that each comprise a distinct but overlapping geographic area in the Western United States: a spatially stratified sample of the southern California region, a population sample of the city of Los Angeles, and a spatially stratified sample of the western part of the continental United States. The design of the ASFS ensures variation in characteristics of local areal units (neighborhoods) making it thus

perfectly suited to estimate neighborhood effects, and test explanations thereof. Recruitment of respondents was conducted by postal mail and the data was collected via a web-based survey between April 2012 and January 2013. The overall response rate was 19.3%, which is similar to other postal recruitment and online surveys conducted at the time of this study (Messer and Dillman, 2011). Following Smith et al. (2015), we account for several socio-demographic characteristics (i.e. age, gender, education, labor market position, income, marital status, having children and religiosity) to control for a possible response bias. In total, 3370 respondents completed the survey (southern California component N=1106, Los Angeles component N=221, western US component N=2043). To control for possible differences between the components, we also include a variable indicating the component in which respondents participated into our explanatory analyses. The individual-level data from the ASFS were enriched with census tract level data from the US Census Bureau 2010. We focus on whites only, because the number of non-whites in our data is too small to account for differential effects across racial groups. We therefore deleted listwise 483 respondents who did not identify as white (N=384) or did not wish to disclose their race (N=99).

Dependent variable

We measure neighborhood social cohesion, as a latent variable. By including five indicators of neighborhood social cohesion, we acknowledge appreciate the complexity of the phenomenon under study. The estimated MSE-models combine a confirmatory factor model capturing the latent variables with a path analysis modeling the relations between the variables. Building on previous research studying social cohesion (cf. Wickes et al., 2013; Laurence, 2011; Letki, 2008; Sampson et al., 1997), we use the following five indicators. First, 'How strongly do you agree that people in this neighborhood can be trusted?'. Second, 'How strongly do you agree that people in this neighborhood share the same values?'. Third, 'How strongly do you agree that this is a close-knit neighborhood?'. Fourth, 'How strongly do you agree that people around here are willing to help their neighbors?'. Fifth, 'How strongly do you agree that people in this neighborhood generally get along with each other?'. The answer categories to these five item are '1. Strongly disagree', '2. Disagree', '3. Neither disagree nor agree', '4. Agree', '5. Strongly Agree'.

Perceptions of the neighborhood.

We measure individuals' perceptions of the racial composition of the neighborhood with the following item: 'In your neighborhood, what percentage of the residents are the same

racial/ethnic group as you?. The answer categories to this item are: 0-9%, 10-19%, 20-29%, 30-39%, 40-49%, 50-59%, 60-69%, 70-79%, 80-89%, 90-100%. We use the minimum values of these ten categories.[ii] As we only examine whites, this measure refers to the perceived number of whites in the neighborhood. We recode these estimations to proportions for reasons of interpretability.

Individuals' perceptions of the degree of economic decay is measured as a latent variable based on three (observed) indicators. First, 'To what extent are litter and trash a problem in your neighborhood?'. Second, 'To what extent are rundown housing/buildings a problem in your neighborhood?'. Third, 'To what extent is vacant housing a problem in your neighborhood?'. The answer categories to these items are: '1. Not at all a problem', '2. Only somewhat of a problem', '3. Somewhat serious problem', '4. Very serious problem'.

The perception of the prevalence of crime is also measured as a latent variable based on three items. First, 'How safe do you think your neighborhood is from crime?'. Second, 'How safe is it to walk alone in your neighborhood during the daytime?'. Third, 'How safe is it to walk alone in your neighborhood after dark?'. The answer categories to these items are: '1. Very unsafe', '2. Somewhat safe', '3. Neither unsafe nor safe', '4. Somewhat safe, Very safe'. We recoded these items so that a higher score reflects more perceived unsafety from crime.

In line with the expectancy-value theory (Ajzen, 2012; Fishbein and Ajzen, 2011), we assume that these neighborhood perceptions represent the information people have about the residential environment, and consequently precede the formation of people's attitudes toward this environment (i.e. the formation of neighborhood cohesion). We can unfortunately not empirically rule out the reverse causality pathway, because we only have cross-sectional data to our availability.

Neighborhood variables

We measure the racial composition of the neighborhood as the proportion of whites (i.e. racial in-group).

Economic deprivation is measured with the average yearly household income within the neighborhood in 10,000$. We multiplied the average yearly household income by -1 so that a higher score on this indicator corresponds to a higher degree of economic deprivation. Both the objective and the perceived measure of the economic neighborhood composition refer to deprivation – instead of affluence – in the neighborhood.

As crime data is not readily available at the tract level and is difficult and very time-consuming to collect from specific agencies, we only have crime data at the tract level for 23% of our tracts. These data are retrieved from crime reports of local police departments (cf. Boessen et al., 2016). For the other tracts, we have to rely on data from crime reports at the city level.[iii] We measured the prevalence of crime as the square root of the summed rate of assaults, murders, robberies, burglaries, larcenies and motor vehicle thefts (per 100,000 people a year). For people in more rural areas, or in very small towns, their own city often does not report crime data. In those cases, we followed Boessen et al. (2016) and located the 3 closest cities, and created a weighted average based on inverse distance to the person for the crime rates of those cities.[iv]

Control variables

We control for known determinants of social cohesion and of neighborhood perceptions, as a means to make sure that the found (neighborhood) context effects are in reality not just composition effects. We include age in years and a dummy for gender. We measure education using a categorical variable with the following answer categories: 'less than high school', 'high school', 'some college credit', and 'college degree or higher'. We furthermore include labor market position as a categorical variable with the following answer categories: 'employed', 'unemployed', 'retired', and 'other'. We measure income by including respondents' reported last year's income before taxes in 10,000$. Two dummies are included measuring whether respondents have a spouse or a partner and whether respondents have children. To measure religiosity, we include church attendance as a continuous variable; 1 'More than once a week', 2 'Once a week', 'Almost every week', 'Once or twice a month', 'Several times a year', 'few times a year', 'Never'.

Lastly, we include a dummy for the sample in which the respondents have participated. On the contextual level we control for the degree of rurality of the respondents' environment by including the natural logarithm of the population size within a radius of 20 miles.

Working sample and Missing values

We have to account for missing data at the individual level. Besides the descriptive statistics, the percentage of missing values for each individual-level variable are displayed in Table 1. The percentage of missing values ranges from 0.243% for the variable measuring education (N=7) to 6.037% for the variable measuring the perceived proportion of whites in the neighborhood (N=174). We replaced the missing values through multiple imputation (MI)

using Bayesian analyses in Mplus 7.2 (Muthén and Muthén, 1998-2012; Rubin, 1987; Schafer, 1997). We included all individual-level variables in the imputation procedure[v]. As an alternative procedure, we listwise deleted missing values. This alternative procedure led the similar results (available upon request). Our final sample consists of 2,882 individuals living in 1,162 neighborhoods. The neighborhoods are, on average, inhabited by 2.5 respondents. In 458 neighborhoods two or more respondents reside and in 98 neighborhoods five or more respondents reside, which is sufficient to correctly estimate the regression coefficients and the variance components, as well as the corresponding standard errors (Maas and Hox, 2005). The remaining 704 neighbourhoods are inhabited by only 1 respondent.

<< Table 1 about here >>

Methods

Because our respondents are nested in neighborhoods, we employ multilevel modeling. We wish to test how neighborhood perceptions mediate the relationship between the objective neighborhood context and neighborhood social cohesion. As our explanatory variables – the racial, economic and crime composition – only vary between neighborhoods and not between individuals within the same neighborhood, variation in these explanatory variables cannot explain differences between individuals within the same neighborhood (Hofmann, 2002). Mediation of the association between the neighborhood context and neighborhood cohesion can only occur at neighborhood level (or so-called between-level). Traditional multilevel modeling approaches fail to account for this fact, and may therefore produce conflated or biased estimates of the indirect effects (Preacher et al. 2010; 2011). Therefore, we estimated our models within a framework of multilevel structural equation modeling (MSE-model) in Mplus 7.2 (Muthén and Muthén, 1998-2012). In our tables, we use as cutoff level of significance $p<0.05$. For our directional hypotheses we use one-tailed tests, in all other instances two-tailed tests.

Results

The focus of this article is on understanding the relationship between the actual racial, economic and crime composition and neighborhood cohesion, and on uncovering to what

extent this relationship is mediated by perceptions of the racial, economic and crime composition. First, we estimate a model in which the actual neighborhood characteristics explain neighborhood cohesion (Model 1; direct effects), already controlling for possible composition effects.[vi] Second, we estimate models in which we include the three perceived neighborhood characteristics one-by-one as mediators (Models 2-4; indirect effects), as a means to assess which objective neighborhood characteristic is explained away by which individual-level neighborhood perception. Third, we include the three perceived neighborhood characteristics simultaneously (Model 5; indirect effects). This concerns the structural part of the MSE-models.

Before going into the substantial interpretation of the structural part, we consider the fit indices and the measurement part (i.e. confirmatory factor analysis, CFA) of these models (respectively Table 2 and 3). For all models the RMSEA, a measure of absolute fit, is below the cut-off point of 0.06 for acceptable fit (Hu and Bentler, 1999), namely ranging from 0.024 to 0.039. The Standardized Root Mean Square Residual (SRMR), another measure of absolute fit, is the only fit statistic that is provided for the between part (i.e. the neighborhood) and the within part (i.e. the individuals) of the model separately. Values of the SRMR below 0.08 are considered acceptable (Hu and Bentler, 1999). We note that for the between-part the SRMR is somewhat higher, namely ranging from 0.095 and 0.152. To ensure that miss-specified models are not accepted, the Comparative Fit Index (CFI) and the Tucker Lewis Index or Non-normed Fit Index (TLI), both measure of incremental fit, should be around 0.95 (Hu and Bentler, 1999). The CFI for the models range from 0.925 to 0.982 indicating acceptable fit, whereas the TLI is somewhat lower, namely ranging from 0.890 and 0.975 respectively (for overview see: Table 2).

Table 3 shows the measurement part of Model 1 and Model 5 for the latent variables: neighborhood cohesion, perceived economic decay and perceived unsafety from crime.[vii] The indicators of the latent variables – measured variables – are all significant in the confirmatory factor analysis constituting the measurement part of the MSE-models. For the full model, the minimum standardized factor loading (not shown) for neighborhood cohesion on the within level is 0.705 and 0.874 on the between level. For perceived economic decay, the minimum standardized factor loading on the within level is 0.481 and 0.789 on the between level. The minimum standardized factor loading for perceived unsafety from crime is on the within level 0.610 and 0.896 on the between level. Both the significance of the indicators and the standardized factor loadings indicate that the observed variables contribute both on the within as well as on the between level to their respective latent construct.[viii]

<< Table 2 & 3 about here >>

Structural Model: Direct effects of the Neighborhood Context

The variance component model (in notes below Table 4) tells us that the variance in whites' neighborhood cohesion on the between level (i.e. the neighborhood level) is 8% for the null-model. The inclusion of the actual racial, economic and crime composition of the neighborhoods decreases the variance on the neighborhood level by 77% (from 0.044 to 0.010 model without controls not shown). These three characteristics of the neighborhood thus seem to explain (between-level) variation in neighborhood cohesion fairly well.

In Model 1 (Table 4), we investigate whether the objective racial, economic and crime composition of the neighborhood are related to neighborhood cohesion (results for control variables can be found in Table A1). As expected, the size of the racial in-group in the neighborhood is significantly related to social cohesion (b=0.491, se=0.107). In contrast to our theoretical expectations, we find that economic deprivation is not associated with neighborhood cohesion. The prevalence of crime in the community is related to neighborhood cohesion; the higher the number of crimes in the neighborhood, the lower the degree of cohesion (b=-0.057, se=0.018). Comparing the standardized coefficients of the size of the racial in-group and the crime rate, we note that the association between in-group size and neighborhood cohesion is about twice as strong as the association between crime rate and neighborhood cohesion (beta: 0.623 and -0.333 respectively, not shown).

<< Table 4 & 5 about here >>

Structural Model: Mediating effects of Perceived neighborhood context

Both on the between-level and the within-level the perceived number of whites is positively related to neighborhood cohesion. This implies that variation between neighborhoods in the perceived in-group size (b=1.844, se=0.857; Model 2, Table 4) as well as variation between individuals in the perceived in-group size within neighborhoods (b=0.596, se=0.079; Model 2, Table 4) explains neighborhood cohesion. Furthermore, we note that the between-neighborhood variation in perceived racial in-group size mediates the association between the actual in-group size and neighborhood cohesion. After including the perceived in-group size, the direct effect of the actual in-group size turns insignificant (b=-0.262, se=0.349; Model 2,

Table 4) and more importantly, the indirect effect is significant (b=0.769, se=0.369; Model 2, Table 4).

Model 3 shows that perceived economic decay only explains variation in neighborhood cohesion between individuals (b=-0.338, se=0.038; Model 3, Table 4) and not between neighborhoods (b=-0.351, se=0.373; Model 3, Table 4). As mediation of the relationship between the objective neighborhood characteristics and neighborhood cohesion can only take place at the between-level, we can conclude that perceived economic decay does not function as a mediating factor. Table 5 shows that, besides the actual degree of economic deprivation, the objective size of the in-group is also related to perceived economic decay: whites perceive, on average, more economic decay in neighborhoods in which less other whites reside (b=-0.414, se=0.084, Model 3, Table 5).

Both on the within-level and the between-level perceived unsafety from crime is negatively related to neighborhood cohesion. This implies that variation between individuals in perceived unsafety from crime (b=-0.695, se=0.0.041; Model 4, Table 4) as well as variation between neighborhoods in perceived unsafety from crime (b=-0.976, se=0.214; Model 4, Table 4) explain neighborhood cohesion. Furthermore, we note that the between-neighborhood variation in perceived unsafety from crime mediates the association between the actual crime rate and neighborhood cohesion (b=-0.075, se=0.025; Model 4, Table 4). Perceived unsafety also mediates the relationships between the in-group size and neighborhood cohesion (b=0.746, se=0.168).

In model 5 we include the three perceptions of the neighborhood environment simultaneously. Especially the effect sizes of perceptions of the racial in-group size and of economic decay reduce. On the within level, the association between the perceived racial, economic and crime composition of the neighborhood and neighborhood cohesion do remain significant (b=0.267, se=0.089; b=-0.148, se=0.038; b=-0.612, se=0.046 respectively). At the between level, these perception no longer reach significance and standard errors of the estimates have increased considerably. This may be the result of the relatively strong correlation between the three neighborhood perceptions. The correlation between the perceived in-group size and perceived decay is -0.478; between the perceived in-group size and perceived unsafety is -0.751; and between perceived decay and perceived unsafety is 0.76.

Additional analyses for the impact of neighborhood deprivation

Previous research has consistently shown a negative relationship between living in an economic deprived neighborhood and social cohesion (e.g. Fieldhouse and Cutts 2010; Letki,

2008; Laurence and Heath, 2008). It is therefore worthwhile to investigate why we did not observe this negative association.

Additional analyses, in which we examined the objective neighborhood effects on every indicator of neighborhood cohesion separately, showed that economic deprivation is unrelated to three indicators of our latent variable neighborhood cohesion: 'close-knit', 'getting along' and 'help' and negatively and significantly related to the other two indicators: 'trust' and 'same values'. Even though the factor analysis has indicated that the five indicators of neighborhood social cohesion tap into a single latent variable and the model fit measures do not improve when using two latent variables, we decided to perform an additional MSE-analysis in which we separate the original dependent variable into two latent dependent variables (Table A3). In this additional analysis, the dependent variable 'neighborhood cohesive norms' is captured by 'trust' and 'same values' and the second dependent variable, attitudes towards 'neighborhood cohesive behavior', is captured by 'close-knit', 'getting along' and 'informal help'.

In line with previous research, economic deprivation is negatively related to neighborhood cohesive norms (b=-0.011, se=0.005; Model 1, Table A3), but it is unrelated to neighborhood cohesive behavior (b=-0.007, se=0.005; Model 1, Table A3). The effects of in-group size and the crime rate are similar for both latent measures of cohesion, and similar to the found effects for the single latent measure of social cohesion (Model 2; Table 4). In line with our previous results, perceived economic decay did neither mediate the relationship between neighborhood deprivation and cohesive norms nor the relationship between economic deprivation and neighborhood cohesive behavior (not shown).

Conclusion

In this study our purpose was to investigate how the racial, economic and crime composition of the neighborhood is related to neighborhood social cohesion among whites in the United States. Moreover, we aimed to uncover to what extent these relations run through individuals' perceptions of the racial, economic, and crime composition of their neighborhood. Whereas much of the previous research has relied on single item measures of cohesion, we appreciated the multidimensionality of the concept and measured social cohesion with five items.

We find that whites living in neighborhoods with other whites experience, on average, more neighborhood social cohesion than whites living in neighborhoods with more non-

whites. Besides living among whites, our results suggest that, for whites, living in low crime communities also facilitates neighborhood cohesion. The association between the number of whites and neighborhood cohesion is twice as strong as the association between the prevalence of crime in the community and neighborhood cohesion.

Our second aim was to examine the extent to which individuals' perceptions of the neighborhood explain the relationship between the ethnic, economic, and crime composition and neighborhood cohesion. Perceived racial in-group size mediates the relationship between the actual racial in-group size and neighborhood cohesion. Perceived unsafety from crime appears to be an important mediating factor. Not only for the objective crime rate but also for the objective racial in-group size. Cross-pathways thus seem to play a role in explaining the influence of the objective neighborhood context and neighborhood cohesion. Racial stereotypes linking racial minorities to crime may explain why neighborhoods with a large non-white population are perceived to be more unsafe from crime. Higher feelings of unsafety in these neighborhoods subsequently erode whites' sense of cohesion. Future research could test this theoretical mechanism directly by including measures of racial stereotypes into the explanatory model.

We observed that economic deprivation is only negatively associated with neighborhood cohesive norms and not with neighborhood cohesive behavior. This demonstrates the role of the economic composition in explaining cohesion depends on which dimensions of cohesion one looks at, even if these dimensions are part of the same latent concept. Perceived economic decay does not mediate the relationship between the objective neighborhood context and neighborhood cohesion. Perceived economic decay does account for variation in neighborhood cohesion norms and behavior, but between individuals of the same neighborhood and not, on average, between neighborhoods.

Apart from the mediational role of neighborhood perceptions, our study provides insights into how these perceptions come about. Perceptions of the size of the racial in-group, economic decay and crime rate are shaped by other characteristics than the corresponding objective neighborhood characteristics alone. Whites are less likely to perceive economic decay when they live among other whites. Moreover, whites perceive more whites in their neighborhood when they live in low crime communities, even after we take into account the actual size of the white population. These findings add to the body of literature explaining neighborhood perceptions by underlining that these perceptions are based on more than the reality of a person's neighborhood.

Notwithstanding the contributions our study makes to the field, there are also some limitations that need to be acknowledged. For some respondents there may have been a mismatch between our measure of perceived ingroup size and the objective ingroup size, i.e. the group size of racially whites. Respondents who think of themselves as *racially* white may have answered the question about perceived ingroup size – 'In your neighborhood, what percentage of the residents are the same *racial/ethnic* group as you?' – on the basis of their *ethnicity.* We therefore have most likely underestimated the relationship between objective ingroup size and perceptions of ingroup size. Second, the observed negative impact of crime on neighborhood cohesion is possibly an underestimation as well, because the prevalence of crime is measured for the majority of respondents at the city level. But despite of our inability to account for existing variation in crime rates between all neighborhoods within cities, we already demonstrate a clear negative relationship between crime and neighborhood cohesion. Third, addressing possible differential neighborhood effects across different racial groups was beyond the scope of the present contribution. As such, in order to make more generic claims about the extent to which perceptions of the neighborhood mediate the relation between the neighborhood and neighborhood cohesion, a promising direction for future studies therefore would be to take into account different racial groups. Fourth, given that we had to rely on cross-sectional data, we have to be cautious in making too strong causal interpretations. Future research using longitudinal data would be better equipped to deal with both selective residential mobility into neighborhoods and reverse causality between neighborhood perceptions and neighborhood cohesion. Future research could furthermore include, besides measures of perceived economic decay, broader measures of perceived economic deprivation, such as perceived percent of low income residents, perceived school quality, perceived number of jobs in the neighbourhood. Including such additional items could possibly uncover a clearer mediation path.

Our findings underline the conclusion of Abascal and Baldassarri (2015) that "the collective preoccupation with diversity may have placed undue blame on nonwhites and immigrants, overlooking long-standing bias on the part of the dominant group" (p. 724). The priority for researchers and policy makers should perhaps thus not be only on racial diversity and its alleged harmful influence on cohesion, but also on how the size of specific ethnic/racial groups combined with stereotypes on these groups affect cohesion. Furthermore, given that we showed that perceived unsafety mediates the harmful effects of living among non-whites and living in a high crime community, policy makers should be imbued with a

sense of urgency not only to increase safety but also to stimulate projects aimed at reducing perceptions of unsafety that are disjoint from reality.

Notes

[i] The data and the study codebook can be downloaded from the following link: http://lakshmi.calit2.uci.edu/ncasd/?page_id=194.

[ii] Unfortunately we do not have exact estimates of the perceived ingroup size. Operationalizing perceived ingroup size by using the midpoint values instead of the minimum values of each category led to substantially similar findings (results available upon request).

[iii] An additional analysis showed that aggregating all tract level variables to the city level leads to similar results (not shown).

[iv] In an additional analysis we included a dummy for the cases for which we use this 3-nearest-cities approach, which was never significant.

[v] For three tracts, in which five respondent resided, we did not have contextual information as it covered a sparsely populated area in national forest, park and recreation are. We deleted these cases.

[vi] The coefficients for the neighborhood characteristics in the model without control variables are similar to the ones presented.

[vii] As the measurement part of the other models are substantially similar to the ones presented, we decided to present the measurement part of Model 1 which included only the objective neighborhood characteristics and Model 5 which includes all the perceived neighborhood characteristics.

[viii] As an additional reliability analysis, we assessed the convergent validity of the three latent variables on the basis of the Cronbach's alpha and the corrected item-to-total correlations (on 1-level). The Cronbach's alpha for neighborhood social cohesion is 0.88, with item-to-total correlations ranging from 0.68 to 0.74. For perceived economic decay, the Cronbach's alpha is 0.74, with item-to-total correlations ranging from 0.45 to 0.67. The Cronbach's alpha for perceived unsafety from crime is 0.72, with item-to-total correlations ranging from 0.50 to 0.64.

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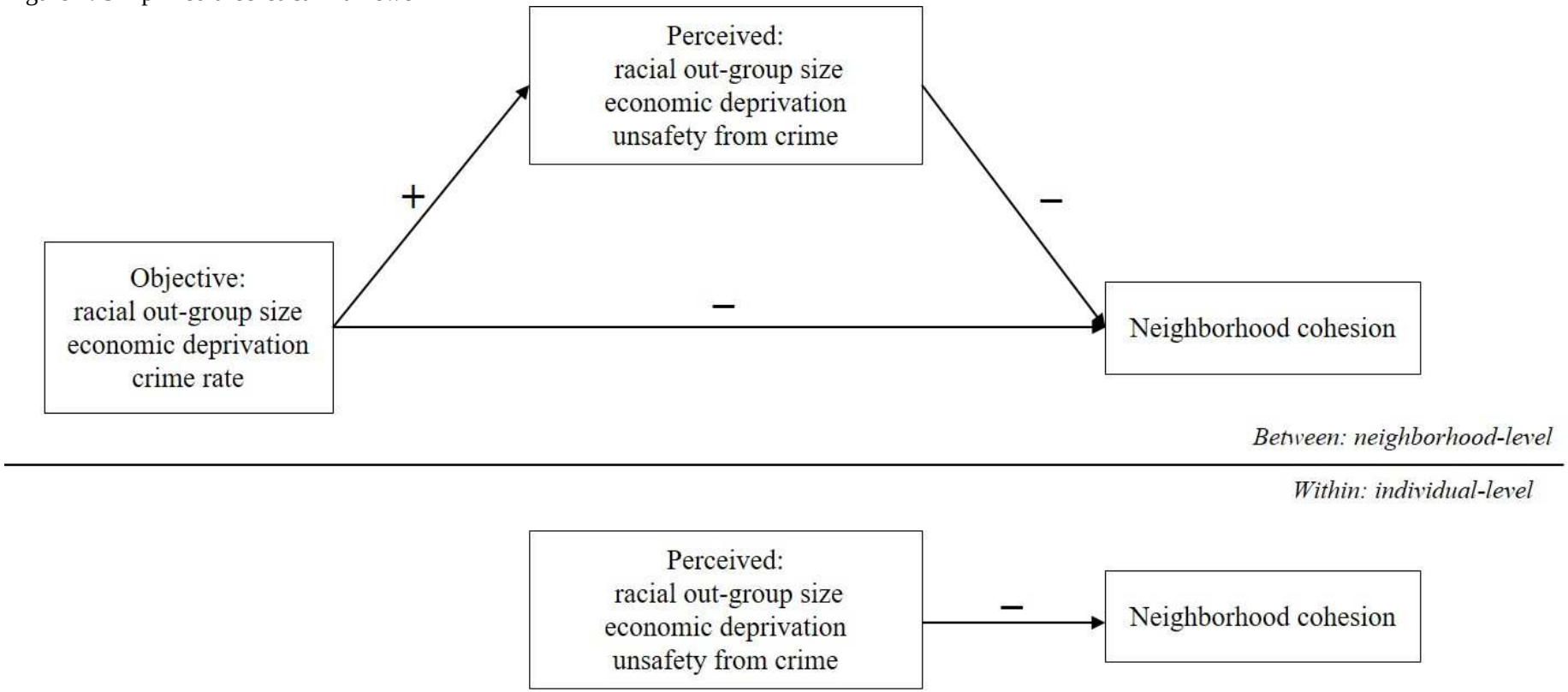
Figure 1. Simplified theoretical framework[1]



[1] To display the theoretical expectations as parsimonious as possible, we refer to ethnic out-group size in this table, instead of to ethnic in-group size.

Table 1. Descriptive Statistics

	Mean/ Prop.	SD	Min	Max	% missing
Contextual-level characteristics					
Proportion of Whites	0.712	0.221	0.000	1.000	0
Average household income per year / 10,000	6.691	3.036	2.022	48.169	0
Crimes per 100,000 people a year	25.770	11.034	3.972	117.400	0
Population size	4001	2269	36	36880	0
Individual-level characteristics					
Neighborhood cohesion					
Trust in neighbors	3.906	0.937	1	5	5.031
Same values	3.534	0.987	1	5	5.517
Close-knit neighborhood	3.328	1.091	1	5	5.274
Informal help is given	4.082	0.878	1	5	5.448
Neighbors get along well	3.922	0.781	1	5	5.482
Perceived proportion whites	0.686	0.259	0	0.900	6.037
Perceived economic decay					
Trash/Litter problem	1.574	0.698	1	4	5.170
Rundown houses problem	1.573	0.748	1	4	5.725
Vacant housing problem	1.423	0.695	1	4	5.725
Perceived unsafety from crime					
Neighborhood safe from crime	1.747	0.910	1	5	5.100
Safe to walk daytime	1.230	0.677	1	5	5.309
Safe to walk after dark	1.680	0.981	1	5	5.552
Age	55.530	15.180	18	97	1.214
Gender (Ref: female)	0.562		0	1	0.312
Income (in 10,000$)	7.112	5.369	1	22.5	3.643
Education (less than high school)	0.046		0	1	
Education (high school)	0.142		0	1	
Education (some college credits)	0.301		0	1	
Education (college degree or higher)	0.507		0	1	
Education (missing values)					0.243
Labor market position (employed)	0.496		0	1	
Labor market position (unemployed)	0.102		0	1	
Labor market position (retired)	0.311		0	1	
Labor market position (other)	0.089		0	1	
Labor market position (missing values)					0.833
Spouse (Ref: no spouse)	0.759		0	1	1.076
Child (Ref: no child)	0.784		0	1	1.318
Church attendance	2.902	2.166	1	8	0.902
Sample wave (Ref: Southern	0.318		0	1	

California)			
Sample wave (Los Angeles region	0.034	0	1
Sample wave (Western US)	0.657	0	1

Sources: ASFS (2012-2013); US Census Bureau (2010).
$N_{individual}$ = 2,882; $N_{neighborhood}$ = 1,162.

Table 2. Fit measures for the MSE-models

	Model 1	Model 2	Model 3	Model 4	Model 5
RMSEA	0.024	0.024	0.029	0.040	0.039
SRMR (within)	0.011	0.011	0.020	0.028	0.032
SRMR (between)	0.095	0.101	0.120	0.148	0.152
CFI	0.982	0.981	0.966	0.938	0.925
TLI	0.975	0.971	0.952	0.913	0.890

Sources: ASFS (2012-2013); US Census Bureau (2010).
$N_{individual}$ = 2,882; $N_{neighborhood}$ = 1,162.

Table 3. Measurement part of the MSE-models (unstandardized)

	Model 1			Model 5		
	B	Se	Sig	B	Se	Sig
Between						
cohesion.by trust	1	(0)	*	1	(0)	*
cohesion.by samevalues	0.556	(0.127)	*	0.605	(0.627)	*
cohesion.by closeknit	1.017	(0.165)	*	0.869	(0.933)	*
cohesion.by informhelp	0.848	(0.127)	*	0.796	(0.725)	*
cohesion.by getalong	0.306	(0.086)	*	0.359	(0.361)	*
ecodepr.by rundown				1	(0)	*
ecodepr.by vacant				0.813	(0.091)	*
ecodepr.by litter				0.977	(0.360)	*
crime.by safecrime				1	(0)	*
crime.by safeday				0.288	(0.097)	*
crime.by safenight				0.692	(0.124)	*
Within						
cohesion.by trust	1	(0)	*	1	(0)	*
cohesion.by samevalues	1.089	(0.035)	*	1.064	(0.059)	*
cohesion.by closeknit	1.103	(0.039)	*	1.098	(0.081)	*
cohesion.by informhelp	1.046	(0.031)	*	1.022	(0.065)	*
cohesion.by getalong	0.760	(0.025)	*	0.768	(0.028)	*
ecodepr.by rundown				1	(0)	*
ecodepr.by vacant				0.758	(0.037)	*
ecodepr.by litter				0.520	(0.035)	*
crime.by safecrime				1	(0)	*
crime.by safeday				0.810	(0.096)	*
crime.by safenight				1.406	(0.160)	*

Sources: ASFS (2012-2013); US Census Bureau (2010).
Notes: Regression coefficients with standard errors between parentheses.
Significance level: * $p<0.05$ (two-tailed).
$N_{individual} = 2,882$; $N_{neighborhood} = 1,162$.

Table 4. Effects on Neighborhood cohesion from the MSEM models

	M1			M2			M3			M4			M5		
	B	Se	Sig	B	Se	Sig	B	Se	Sig	B	Se	Sig	B	Se	Sig
Between-level															
% In-group	0.491	(0.107)	*	-0.262	(0.349)		0.388	(0.156)	*	-0.211	(0.158)		-0.093	(4.648)	
Eco. deprivation	-0.003	(0.007)		-0.010	(0.008)		0.005	(0.009)		0.004	(0.008)		0.000	(0.073)	
Crime rate	-0.057	(0.018)	*	-0.044	(0.019)	*	-0.053	(0.019)	*	0.013	(0.026)		0.020	(0.211)	
Perceived % in-group				1.844	(0.857)	*							-0.345	(19.186)	
Perceived eco. decay							-0.351	(0.373)					0.215	(2.232)	
Perceived safety from crime										-0.976	(0.214)	*	-1.138	(5.404)	
Indirect effect of % In-group:															
Perceived % in-group				0.769	(0.369)	*							-0.146	(8.145)	
Perceived eco. decay							0.145	(0.169)					-0.088	(0.927)	
Perceived unsafety from crime										0.746	(0.168)	*	0.890	(4.286)	
Indirect effect of Eco. Decay:															
Perceived % in-group				0.006	(0.004)								-0.001	(0.063)	
Perceived eco. decay							-0.009	(0.009)					0.005	(0.054)	
Perceived unsafety from crime										-0.009	(0.007)		-0.009	(0.036)	
Indirect effect of Crime rate:															
Perceived % in-group				-0.011	(0.009)								0.002	(0.135)	
Perceived eco. decay							-0.006	(0.007)					0.004	(0.045)	
Perceived unsafety from crime										-0.075	(0.025)	*	-0.087	(0.425)	
Within-level															
Perceived % in-group				0.596	(0.079)	*							0.267	(0.089)	*

Perceived eco. decay							-0.338	(0.038)	*				-0.148	(0.038)	*
Perceived unsafety from crime										-0.695	(0.041)	*	-0.612	(0.046)	*
Variance (within)	0.474	(0.030)	*	0.458	(0.029)	*	0.432	(0.028)	*	0.350	(0.024)	*	0.334	(0.023)	*
Variance (between)	0.010	(0.011)		0.002	(0.011)		0.010	(0.011)		-0.001	(0.027)		-0.002	(0.023)	

Sources: ASFS (2012-2013); US Census Bureau (2010).

Notes: Regression coefficients with standard errors between parentheses.

Significance level: * $p<0.05$ (one-tailed).

$N_{individual}$ = 2,882; $N_{neighborhood}$ = 1,162. The variables 'racial in-group size', 'economic deprivation', 'crime rate', 'age', 'income' are grand mean centred.

The variance components of the empty model: $variance_{within}$: b=0.507; se=0.032 and $variance_{between:}$ b = 0.044; se=0.014.

Table 5. Effects on Perceived neighborhood composition from the MSEM models

	M2			M3			M4			M5								
	Perceived % in-group			Perceived eco. decay			Perceived unsafety from crime			Perceived % in-group			Perceived eco. decay			Perceived unsafety from crime		
	B	Se	Sig	B	Se	Sig	B	Se	Sig	B	Se	Sig	B	Se	Sig	B	Se	Sig
Between-level																		
% In-group	0.417	(0.029)	*	-0.414	(0.084)	*	-0.764	(0.114)	*	0.422	(0.043)	*	-0.407	(0.078)	*	-0.782	(0.114)	*
Eco. deprivation	0.003	(0.002)	*	0.026	(0.005)	*	0.009	(0.006)		0.003	(0.002)		0.025	(0.007)	*	0.008	(0.009)	
Crime rate	-0.006	(0.004)		0.018	(0.014)		0.077	(0.019)	*	-0.007	(0.006)		0.018	(0.018)		0.077	(0.035)	*
Variance (within)	0.049	(0.002)	*	0.371	(0.030)	*	0.254	(0.039)	*	0.049	(0.003)	*	0.359	(0.030)	*	0.257	(0.045)	*
Variance (between)	0.002	(0.001)	*	0.031	(0.015)	*	0.039	(0.021)		0.003	(0.001)	*	0.029	(0.018)		0.051	(0.041)	

Sources: ASFS (2012-2013); US Census Bureau (2010).
Notes: Regression coefficients with standard errors between parentheses.
Significance level: * $p<0.05$ (one-tailed).
$N_{individual} = 2,882$; $N_{neighborhood} = 1,162$.

Table A1. Effects of controls on Neighborhood cohesion from the MSEM models

	M1			M2			M3			M4			M5		
	B	Se	Sig	B	Se	Sig	B	Se	Sig	B	Se	Sig	B	Se	Sig
Between-level															
Population size	-0.096	(0.027)	*	-0.085	(0.029)	*	-0.125	(0.039)	*	-0.071	(0.035)	*	-0.052	(0.282)	
Within-level															
Age	0.004	(0.001)	*	0.002	(0.001)		0.003	(0.001)	*	0.003	(0.001)	*	0.003	(0.001)	
Gender (Ref: female)	0.019	(0.030)		0.031	(0.030)		-0.030	(0.029)		-0.031	(0.028)		-0.030	(0.027)	
Income	0.006	(0.003)		0.004	(0.003)		0.003	(0.003)		0.000	(0.003)		-0.002	(0.003)	
Education (Ref: < high school)															
Education (high school)	0.018	(0.088)		0.008	(0.085)		0.057	(0.084)		-0.088	(0.080)		-0.068	(0.085)	
Education (some college)	0.074	(0.085)		0.063	(0.081)		0.067	(0.079)		-0.104	(0.077)		-0.096	(0.078)	
Education (college graduate)	0.052	(0.086)		0.038	(0.083)		0.051	(0.080)		-0.145	(0.078)		-0.134	(0.080)	
Labor market (Ref: employed)															
Labor market (unemployed)	-0.168	(0.052)	*	-0.158	(0.050)	*	-0.163	(0.050)	*	-0.095	(0.047)		-0.096	(0.046)	
Labor market (retired)	-0.017	(0.042)		-0.019	(0.040)		-0.037	(0.040)		0.009	(0.038)		-0.005	(0.037)	
Labor market (other)	-0.056	(0.054)		-0.044	(0.052)		-0.048	(0.052)		-0.004	(0.047)		-0.001	(0.045)	
Spouse? (Ref: no spouse)	0.061	(0.036)		0.042	(0.035)		0.065	(0.035)		0.054	(0.034)		0.048	(0.033)	
Child? (Ref: no child)	0.140	(0.036)	*	0.137	(0.035)	*	0.131	(0.037)	*	0.105	(0.036)	*	0.103	(0.035)	*
Church attendance	0.046	(0.007)	*	0.046	(0.006)	*	0.044	(0.007)	*	0.043	(0.006)	*	0.042	(0.006)	*
Sample (Ref: SoCal)															
Sample (Los Angeles region)	-0.170	(0.074)		-0.142	(0.074)		-0.193	(0.074)	*	-0.001	(0.069)		-0.012	(0.106)	
Sample (Western US)	0.131	(0.033)	*	0.094	(0.033)	*	0.127	(0.034)	*	0.085	(0.034)		0.073	(0.052)	

Sources: ASFS (2012-2013); US Census Bureau (2010).
Notes: Regression coefficients with standard errors between parentheses.
Significance level: *p<0.05 (two-tailed).
$N_{individual}$ = 2,882; $N_{neighborhood}$ = 1,162.

Table A2. Effects of controls on Perceived neighborhood composition from the MSEM models

	M2			M3			M4			M5								
	Perceived % in-group			Perceived eco. decay			Perceived unsafety from crime			Perceived % in-group			Perceived eco. decay			Perceived unsafety from crime		
	B	Se	Sig	B	Se	Sig	B	Se	Sig	B	Se	Sig	B	Se	Sig	B	Se	Sig
Between-level																		
Population size	-0.008	(0.008)		-0.071	(0.025)	*	0.041	(0.034)		-0.009	(0.009)		-0.062	(0.029)		0.044	(0.037)	
Within-level																		
Age	0.002	(0.000)	*	-0.001	(0.002)		-0.001	(0.001)		0.002	(0.001)	*	-0.001	(0.002)		-0.001	(0.001)	
Gender (Ref: female)	-0.020	(0.009)		-0.071	(0.028)		-0.062	(0.024)	*	-0.020	(0.017)		-0.069	(0.028)		-0.064	(0.025)	
Income	0.003	(0.001)	*	-0.009	(0.003)	*	-0.009	(0.002)	*	0.003	(0.001)		-0.009	(0.003)	*	-0.009	(0.003)	*
Education (Ref: < high school)																		
Education (high school)	0.029	(0.030)		0.107	(0.077)		-0.089	(0.075)		0.029	(0.099)		0.117	(0.083)		-0.097	(0.086)	
Education (some college)	0.032	(0.029)		-0.026	(0.070)		-0.196	(0.072)	*	0.032	(0.099)		-0.019	(0.077)		-0.205	(0.082)	
Education (college graduate)	0.037	(0.029)		-0.002	(0.071)		-0.217	(0.075)	*	0.037	(0.101)		0.006	(0.078)		-0.226	(0.083)	*
Labor market (Ref: employed)																		
Labor market (unemployed)	-0.017	(0.019)		0.010	(0.051)		0.119	(0.048)		-0.018	(0.025)		0.014	(0.051)		0.118	(0.049)	
Labor market (retired)	0.004	(0.014)		-0.060	(0.039)		0.049	(0.033)		0.004	(0.021)		-0.058	(0.038)		0.048	(0.033)	
Labor market (other)	-0.022	(0.017)		0.024	(0.050)		0.089	(0.044)		-0.021	(0.023)		0.024	(0.050)		0.090	(0.046)	
Spouse? (Ref: no spouse)	0.033	(0.012)	*	0.016	(0.036)		-0.003	(0.030)		0.033	(0.017)		0.013	(0.038)		-0.003	(0.032)	
Child? (Ref: no child)	0.002	(0.011)		-0.034	(0.039)		-0.037	(0.031)		0.002	(0.023)		-0.031	(0.038)		-0.037	(0.033)	
Church attendance	-0.001	(0.002)		-0.007	(0.006)		-0.003	(0.005)		-0.001	(0.003)		-0.006	(0.007)		-0.003	(0.007)	

Sample (Ref: SoCal)													
Sample (Los Angeles region)	-0.062	(0.032)		-0.064	(0.081)	0.250	(0.071)	*	-0.056	(0.035)	-0.085	0.084	0.253	(0.087)	*
Sample (Western US)	0.048	(0.014)	*	0.019	(0.041)	-0.040	(0.034)		0.048	(0.025)	0.012	0.048	-0.031	(0.056)	

Sources: ASFS (2012-2013); US Census Bureau (2010).
Notes: Regression coefficients with standard errors between parentheses.
Significance level: * $p<0.05$ (two-tailed).
$N_{individual} = 2,882$; $N_{neighborhood} = 1,162$.

Table A3. Results from the MSE-models: two latent variables for social cohesion

	Model 1					
	Neighborhood cohesive norms			Attitudes towards neighborhood cohesive behavior		
	B	Se	Sig	B	Se	Sig
Between-level						
% In-group	0.498	(0.105)	*	0.488	(0.102)	*
Eco. deprivation	-0.011	(0.005)	*	0.007	(0.005)	
Crime rate	-0.047	(0.021)	*	-0.064	(0.021)	*
Variance (within)	0.479	(0.032)	*	0.590	(0.032)	*
Variance (between)	0.008	(0.017)		0.009	(0.016)	

Sources: ASFS (2012-2013); US Census Bureau (2010).
Notes: Regression coefficients with standard errors between parentheses.
Significance level: * $p<0.05$ (one-tailed).
$N_{individual} = 2,882$; $N_{neighborhood} = 1,162$.
Results for control variables are available upon request.