Social Cure Processes Help Lower Intergroup Anxiety Among Neighborhood Residents

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Research in the socialcure tradition shows that groups can reduce members' stress by providing support to cope with challenges, but it has yet to consider how this applies to the anxiety occasioned by outgroups. Research on intergroup contact has extensively examined how reducing intergroup anxiety improves attitudes towards outgroups, but it has yet to examine the role of intragroup support processes in facilitating this. The present article takes the case of residential contact, in which the impact of diversification upon neighborhood cohesion is hotly debated, but the role of neighborhood identification and social support from neighbors in facilitating residential mixing has been largely ignored. Our surveys of two geographically bounded communities in England (n = 310; n = 94) and one in Northern Ireland (n = 206) show that neighborhood identification predicts both well-being and more positive feelings towards outgroups, with both effects occurring via increased intragroup support. In studies 2 and 3, we show that this positive effect on feelings towards the outgroup occurs independently of that of intergroup contact and is further explained by the effect of neighborhood support in reducing intergroup anxiety. This suggests that social-cure processes can improve intergroup attitudes by supporting group members to deal with the stress of intergroup interactions.

KEY WORDS: social cure, intergroup contact, neighborhood identity, residential mixing, intergroup anxiety

As Dovidio noted in his 2013 landmark article, social psychological research on group processes typically focuses either on intragroup dynamics (leadership, influence, cooperation, and support) or on intergroup processes (identity, conflict, and prejudice) but rarely examines the reciprocal

relationships between them (Dovidio, 2013). As a result, the same topic can be investigated at each level without acknowledging the relevance or importance of the other set of contributing factors. One such topic is that of contact between members of different groups, which has largely been examined from an intergroup perspective to the neglect of internal group processes. As we outline below, research on how intragroup support enables group members to cope with stress, including the stress caused by outgroups, has remained distinct from the research on the role of "intergroup anxiety" in perpetuating negative intergroup contact.

In this article, we illustrate the importance of addressing this gap by considering a form of contact for which the interplay of intragroup and intergroup processes is highly consequential: residential mixing. Extensive literature has either focused on the benefits of neighborhood identification or the negative consequences of residential contact and so the potential of intragroup dynamics to help residents cope with mixing has yet to be fully explored. In a series of survey studies, we examine the experiences of residents in three urban neighborhoods (two in England, one in postconflict Northern Ireland) to determine first that neighborhood identification is associated with increased social support and better well-being and second that intragroup support also serves to improve intergroup attitudes through reducing intergroup anxiety.

The "Social Cure" and the Collective Response to Stress

The socialcure approach has reconceptualized how social identities are thought to shape the collective experiences and reactions of group members to threats and challenges (Jetten, Haslam, Haslam, & Branscombe, 2009). Using the transactional model of stress (Lazarus & Folkman, 1984), it proposes that the sharing of a social identity among group members affects both their *primary appraisal* (the recognition of threats in the environment) and their *secondary appraisal* (the evaluation of the ability to cope with threats). In effect social identity forms a "perceptual prism" through which group members perceive and react to their environment (Haslam, Reicher, & Levine, 2012).

The content and meaning of a social identity impacts upon primary appraisal such that, for individuals who identify with the group, events deemed to be identity relevant are experienced in relation to the group's identity. Early studies indicated that job identities shape work-related stress, such that bomb-disposal experts who identified with their occupational group reported their jobs as less stressful than bar work (Haslam, O'Brien, Jetten, Vormedal, & Penna, 2005). This effect has even been shown to impact upon the experience of physical stress: gender salience was found to improve performance on a cold tolerance task under laboratory conditions (Platow et al., 2007), and the reported experiences of ingroup (but not outgroup) members on a mathematics task affected participants' own anxiety levels in their subsequent performance on the test (Haslam et al., 2005).

In terms of secondary appraisal, group processes shape the experience of events as stressful or not by informing group members' assessment of their collective coping ability (Haslam, Jetten, Cruwys, Dingle, & Haslam, 2018; Haslam, Jetten, O'Brien, & Jacobs, 2004). Sharing an identity within the group leads to increased helping and acceptance of assistance as well as enhanced social influence processes, all of which contribute to the "collective efficacy" of the group (Haslam & Reicher, 2006). In effect, group members who perceive that they can call upon the group's resources to deal with threats will experience them as less stressful than those who lack this support. Studies across a range of healthcare, community, educational, and workplace settings (Haslam et al., 2018) all demonstrate that the positive impact of group memberships upon the experience of stress are mediated through these intragroup processes.

Within the broader research on social identities and health, outgroups have been recognized to constitute a particular source of threat and stress, against which ingroups can afford protection. Research with socially marginalized groups has indicated that intragroup support can buffer the impact of stigmatization through shaping coping responses such as stigma resistance (e.g., Crabtree,

Haslam, Postmes, & Haslam, 2010), while perceived discrimination can strengthen minority-group members' identification with the ingroup (e.g., Ramos, Cassidy, Reicher, & Haslam, 2012). The BBC Prison Study showed that under experimental conditions, the ability of prisoners to cope with the stress of their subordinate position (relative to guards) stemmed from their ability to adopt a shared identity and derive support from their group (Haslam & Reicher, 2006).

Beyond the social identity tradition, it has been generally recognized that ingroup support can improve people's ability to cope with the stress of intergroup relations. For example, under experimental conditions, perceptions of ingroup support can directly impact upon primary appraisal, reducing the perceived imminence of outgroup threat (Cesario & Navarrete, 2013). In real-world situations, support from one's family can buffer the effects of discrimination on ethnic minorities by encouraging feelings of being able to cope with serious problems (Mossakowski & Zhang, 2014) and can positively impact upon identity maintenance as well as societal integration (Huijnk, Verkuyten, & Coenders, 2012). In addition, a strong sense of ethnic identity can serve as a "secure base" for minorities to engage with other ethnic groups (Phinney, Jacoby, & Silva, 2007), while in mixed-race educational contexts the presence, consent, and support of other group members facilitates better-quality interactions with the outgroup (King, Magolda, & Massé, 2011). However, the specific processes whereby these forms of intragroup support lead to better intergroup relations remain largely unexplored.

The Stress of Intergroup Contact

Evidence for the fundamental role played by anxiety in intergroup relations has been extensively outlined in social psychological approaches to intergroup encounters (Stephan, 2014). Encounters between opposing groups are typically characterized by anxiety and stress. If the outgroup appears to threaten the resources or the values of the group and is known to evaluate the ingroup negatively, then apprehension and anxiety are likely to frame the intergroup encounter (e.g., Plant & Devine, 2003). If previous relations between the groups are poor, then polarized norms will predispose group members to chronic negative expectations, experiences, and evaluations of intergroup encounters (Marques, Abrams, Paez, & Martinez-Taboada, 1998). These processes are recognized in metastereotyping research which shows that the expectations and views the ingroup has about itself, as derived from the outgroup views of the ingroup, are more consequential for intergroup emotions (Vorauer, Main, & O'Connell, 1998) and understanding of others (Lammers, Gordijn, & Otten, 2008). However, even if previous group relations have not been antagonistic, the intergroup encounter itself has the potential to generate state anxiety (Dovidio, Hebl, Richeson, & Shelton, 2006).

Positive contact reduces these effects by countering the situational aspects of anxiety. In face-to-face contact, familiarity with the outgroup leads to the establishment of norms of intergroup behavior which can reduce uncertainty and increase the predictability of each participants' responses (Stephan, 2014). Better communication and cooperation can reduce misunderstanding and diffuse misapprehensions as to the intentions and goals of the other group (Page-Gould, Mendoza-Denton, & Tropp, 2008). Reviews of the empirical evidence support this view, as anxiety has been found to be a key predictor of prejudice (Plant & Devine, 2003), and anxiety reduction has been identified as a key mediator of the effect of contact on the improvement of intergroup attitudes (Pettigrew & Tropp, 2008).

Can Intragroup Processes Lower Intergroup Anxiety?

In terms of the different ways in which contact lowers intergroup anxiety, studies of indirect contact point to the potential role of intragroup dynamics in facilitating the anxiety reduction. Wright, Aron, McLaughlin-Volpe, and Ropp (1997) argue that ingroup members can influence the attitudes

of others by evidencing and modeling positive intergroup contact. Extended contact (having friends who have cross-group friends) has been shown to reduce intergroup anxiety and thereby reduce prejudice (Turner, Hewstone, Voci, & Vonofakou, 2008), while both direct and extended cross-group friendship functions as a general stress-buffering mechanism which reduces intergroup anxiety (Paolini, Hewstone, Cairns, & Voci, 2004).

Elsewhere, the work of contact theorists in examining the role of "common identities" in lowering intergroup anxiety and overcoming division has been widely acknowledged (Gaertner & Dovidio, 2000). From this perspective, the degree to which members of different groups can recategorize themselves as members of a more inclusive, superordinate identity predicts a lessening of intergroup threat, as former outgroup members come to be reclassified as ingroup. However, this work has primarily focused on the cognitive transformation inherent in common ingroup identification, rather than examining the accompanying changes in intragroup processes. Specifically, it has neglected the degree to which supportive intragroup processes can help overcome the polarizing influences of division and opposition.

Our contention is that the ability of groups to reduce the perception of threat and experience of stress through the provision of resources (social-cure effects) should, in principle, allow group members to deal more readily and confidently with the challenges of intergroup encounters by reducing their intergroup anxiety. For empirical evidence to support our contentions, we turn to one particular group in which support from other members is strongly related to well-being and which has the potential to help its members cope with the stress occasioned by intergroup encounters.

Case Study: Neighborhood Identity and Residential Mixing

For most people, neighborhoods (geographically bounded residential communities) are arguably one of the most important social groups impacting upon daily life (Fong, Cruwys, Haslam, & Haslam, 2019; Stevenson, Easterbrook, et al., 2019). The physical structure of neighborhoods offers a range of features which impact upon the identities and the social relations of their inhabitants. In general terms, insofar as neighborhoods constitute a meaningful location, they afford a sense of "place identity" for residents, such that their sense of belonging (or alienation) will affect how they behave within that space (Dixon, Durrheim, & Tredoux, 2005). The simple physical proximity of neighbors gives rise to daily opportunities for interactions which may form the basis for the emergence of meaningful social bonds (Easterbrook & Vignoles, 2015). Likewise, proximity entails a degree of shared interest, as neighbors are affected by the same environmental conditions, including the actions of other neighbors, such that neighbors are both the group cohort and social context for residential life (McNamara, Stevenson, & Muldoon, 2013).

Research into deprived urban neighborhoods in Limerick city in Ireland (McNamara et al., 2013) shows the key importance of these identity processes for residents' well-being. Using a survey methodology, local residents were asked to report their levels of neighborhood identification, their current levels of well-being, and their perceptions of their neighborhood as being able to act together in response to unforeseen challenges. Results indicated a clear relationship between neighborhood identification and well-being which was mediated by the residents' feelings of "collective efficacy" as a neighborhood. These results were replicated in South West England where residents of regeneration areas who identify more strongly with their neighborhood's evidence increased support, well-being, and resilience (Heath, Rabinovich, & Barreto, 2017), and convergent results are apparent in Australia where analysis of a nationally representative sample indicates that neighborhood identification moderates the negative impact of low socioeconomic status on residents' health (Fong et al., 2019).

Given the importance of neighborhood identity to many residents, any challenge to its cohesion can pose a fundamental threat to their health and well-being. One such potential threat is that posed

by the influx of members of other groups to the locale. Across the social sciences, the impact of social diversification on neighborhood cohesion has been hotly debated. As neighborhood social attachments based on similarity and solidarity (bonding capital) are recognized to have a positive impact upon the health and well-being of residents, diversification is argued to undermine these relationships, leading to lower levels of trust, higher levels of anxiety, and less cohesion (Putnam, 2001, 2007). Evidence from large-scale national surveys of neighborhood cohesion show that, on aggregate, increased residential diversification shows an association with reduced social capital (Putnam, 2007).

However, other research has shown that diversity does not have exclusively negative effects and that its impacts vary across different areas. For example, across the United Kingdom, diversity typically has a pronounced negative effect only on socially disadvantaged neighborhoods (Laurence, 2009). Once deprivation is removed from the equation, diversification is often associated with stronger social cohesion, especially in urban areas defined and celebrated for their ethnic diversity (Laurence, 2009; Sturgis, Brunton-Smith, Kuha, & Jackson, 2014). Diversification also affords opportunities for more positive contact between groups and an improvement in intergroup trust and cross-group cohesion or "bridging capital" (Laurence, 2014; Schmid, Tausch, Hewstone, Hughes, & Cairns, 2008) which reduces intergroup anxiety and increases empathy, thereby reducing prejudice. If an individual has preexisting ties with the outgroup, or if an influx of new residents increases these links, the effect will be positive (Laurence, 2014). Only if the resident lacks preexisting links, or fails to make more links with incomers, does diversification lead to social withdrawal and poorer levels of neighborhood trust (Stolle & Harell, 2013).

Absent from this consideration is the potential role of neighborhood identification in *facilitating* intergroup contact. Given that neighborhood identification serves to provide a range of stress-reducing resources, it would seem plausible that this support could reduce anxiety and promote better intergroup relations. Indeed, previous research using both population and local area surveys has shown that neighborhood identification predicts reduced intergroup anxiety and improved intergroup attitudes among residents of Northern Ireland (Stevenson, Easterbrook, et al., 2019), an effect which occurs independently of intergroup contact. However, this work did not examine the specific role of intragroup processes in reducing intergroup anxiety and specifically neglected to examine how intragroup support can play a role in reducing intergroup anxiety.

Accordingly, in this article we examine the neighborhood identity dynamics across three neighborhoods in England (studies 1 and 2) and Northern Ireland (study 3), each selected for its high level of diversity. Using a survey methodology, we explore how the degree to which residents identify with their neighborhood predicts both their well-being and their relations with other ethnic or religious groups within their neighborhoods. Furthermore, we attempt to identify the mediating processes whereby these effects occur. We make the following specific predictions:

H1: In line with the social cure, the level of self-reported neighborhood identification will positively predict residents' well-being, and this effect will occur through the perception of support provided by the group.

H2: Neighborhood identification will also predict better intergroup attitudes, again through the provision of ingroup support (and independently of the effects of intergroup contact).

H3: The improvement in intergroup attitudes occasioned by neighborhood identification will occur through the effect of support in reducing intergroup anxiety.

H4: These effects will pertain over very different neighborhood compositions and intergroup contexts.

Overview of the Current Studies

The general purpose of this research was to examine the mechanisms that could explain the relationships between neighborhood identification and well-being and feelings toward outgroups. We conducted three studies in neighborhoods with variously mixed populations, which have a well-established history and reputation for diversity, to examine the role of neighborhood support and outgroup anxiety. Specifically, in study 1 a preliminary model was tested in Beeston area in Nottingham (United Kingdom), examining the mediating role of neighborhood support in the relationships between neighborhood identification, well-being, and feelings of ethnic majority members toward an outgroup (ethnic minorities). This was to clearly establish the basic finding that the same Social Cure processes underpinning the health benefits of neighborhood identification are also responsible for better attitudes towards outgroup members.

In study 2, a second model was tested in the St Ann's area of Nottingham (United Kingdom), in order to examine the specific role of intergroup anxiety in this process. Here we tested a serial mediation of both neighborhood support and outgroup anxiety in the relations between neighborhood identification, well-being, and feeling of ethnic majority members toward an outgroup (again ethnic minorities). In this model, it was hypothesized that neighborhood identification could predict neighborhood support, that neighborhood support could predict outgroup anxiety, and that outgroup anxiety could predict both well-being and positive feeling toward outgroups.

Finally, in study 3 the model defined in study 2 was tested again a different neighborhood context (Upper Ormeau Road, Belfast). Here we wished to determine if the model would hold for different types of identities in the context of more adversarial intergroup relations (Catholics and Protestants in Northern Ireland). Ethical approval for all studies was granted by the first authors' institution.

Despite their different locations and histories, the three neighborhoods are diverse in terms of ethnic (study 1 and 2) or religious (study 3) groups and are well recognized within their locales for this diversity. Our aim, therefore, is to investigate links between social-cure processes and intergroup anxiety within different neighborhoods in which diversity is likely to be normative.

STUDY 1

Beeston, Nottingham

Beeston is a neighborhood area of 37,000 inhabitants situated 3.4 miles southwest of Nottingham's city center. Beeston is a relatively affluent area, with the majority of its postcodes falling within the lowest four deciles of deprivation on the English Indices of Multiple Deprivation (IMD). The most notable feature of Beeston is that it is home to the campus of the University of Nottingham and shares many of the characteristics of other "university towns," having a large student population, many amenities, and a well-developed transport infrastructure. The university influence is reflected in the ethnic and national diversity of the local population, with 28.8% being foreign born. Given its diverse population, Beeston presents a good starting point for considering the relationship between neighborhood identification, neighborhood cohesion, and attitudes towards ethnic minorities.

Method

Participants

Three hundred and ten participants (39% female; age range = 18–70, $M_{age} = 41.46$, $SD_{age} = 15.51$) who reported belonging to the white British ethnic group took part at the study (Table 1). We noted marital status due to the known association between living alone and social isolation (e.g., Cornwell & Waite, 2009): 70 participants (23%) never married or never registered a same-sex civil partnership,

Table 1. Participant Characteristics for Studies 1–3

	Study 1		Study 2		Study 3	
	N (%)	*M* (*SD*)	*N* (%)	*M* (*SD*)	*N* (%)	*M* (*SD*)
Gender						
Male	120 (39%)		49 (47%)		95 (46%)	
Female	185 (60%)		51 (52%)		111 (54%)	
Other (or prefer not to say)	5 (1%)		1 (1%)			
Age		41.46 (15.51)		42.25 (14.78)		44.70 (14.50)
Relationship status						
Never married or never registered a same-sex civil partnership	70 (23%)		60 (58%)		100 (48%)	
Married/in a same-sex civil partnership	125 (40%)		21 (20%)		80 (39%)	
Separated, but still legally married/in a civil partnership	–		3 (3%)		14 (7%)	
Divorced/civil partnership legally dissolved	15 (5%)		17 (16%)		6 (3%)	
Widowed	2 (1%)		3 (3%)		6 (3%)	
Long-term relationship (but not a marriage/civil partnership)	80 (26%)		–		–	
Other (or not answered)	18 (5%)		–		–	
Length of residence in the area		15.39 (14.73)		12.83 (12.94)		16.62 (16.77)
Employment						
Employed full time	148 (48%)		57 (55%)		123 (60%)	
Employed part time	45 (15%)		12 (12%)		18 (9%)	
Self-employed or freelance	20 (6%)		4 (4%)		14 (7%)	
Unemployed looking for work	6 (2%)		3 (3%)		7 (3%)	
Unemployed not looking for work	7 (2%)		5 (5%)		5 (2%)	
Retired	45 (15%)		10 (10%)		27 (13%)	
Student	26 (8%)		8 (8%)		7 (3%)	
Other	13 (4%)		5 (5%)		5 (2%)	

125 (40%) "married/in a same-sex civil partnership," 2 (1%) "widowed," 80 (26%) "in a long term relationship (but not a marriage/civil partnership)," 15 (5%) "divorced," and 18 (6%) "other" or did not answer. Sixty-two percent were in employment, and 86% had an undergraduate degree or higher as their highest educational qualification.

Procedure

    All residents of the Beeston area in Nottingham were sent an invitation to take part in this research by mail. The letter contained a written explanation of the study and a web link to complete the online survey. Participants who were interested in participating provided their informed consent online. At the end of the questionnaire, participants were offered the opportunity to take part in a prize draw for £500 in vouchers.

Measures

    Demographic questions and the following measures were included in an online questionnaire. To measure neighborhood identification, we adapted the four-item measure of identification by Doosje, Ellemers, and Spears (1995; see Stevenson, Easterbrook, et al., 2019) to ask participants how they

Table 2. Descriptive Statistics and Correlations for Study 1 ($N = 310$)

	M	SD	1	2	3
1. Neighborhood identification	3.31	.83			
2. Neighborhood support	2.56	1.03	.54**		
3.Well-being	3.97	1.03	.32**	.27**	
4. Positivity toward ethnic minorities	71.80	22.46	.25**	.29**	.20**

Note. Correlation significance (two tailed) = *p < .05. **p < .01.

saw themselves in relation to "your local community in the Beeston area" (e.g., "I see myself as a member of my local community," $\alpha = .91$), with a 5-point Likert scale from 1 (*strongly disagree*) to 5 (*strongly agree*). The items of this scale were averaged with a high score that represent higher neighborhood identification. We measured neighborhood support using an adapted version of the four-item measure by Haslam et al. (2005; see Stevenson, Easterbrook, et al., 2019) (e.g., "Do you get the help you need from other people in your local community?," $\alpha = .92$), with a 5-point Likert scale from 1 (*Not at all*) to 5 (*Completely*). The items of this scale were averaged with a high score representing higher neighborhood support. We measured well-being using the WHO5 Well-Being Index (Topp, Østergaard, & Søndergaard, 2015) (e.g., "I have felt calm and relaxed," $\alpha = .88$), with a 6-point Likert scale from 0 (*at no time*) to 5 (*all of the time*). The items of this scale were averaged with a high score that represent higher well-being. We measured positivity towards the outgroup using a feeling thermometer (Turner et al., 2008) ranging 0 to 100 with the label "How do you feel about the Ethnic minority residents living in your local area?," the value reported by the participants was directly used as total score, with a high score that represent more positive attitudes towards the Ethnic minority.
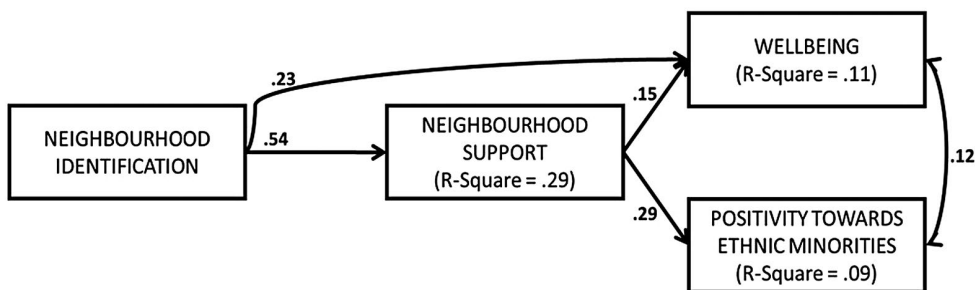
Results

Descriptive statistics and zero-order correlations are displayed in Table 2. As we expected, all the variables were significantly and positively correlated.

We aimed to specify a theoretically informed yet parsimonious model that fitted the data well, and the "lavaan" package of R was used. To achieve this, we followed common practice (Pedhazur, 1997) and first specified a saturated model before respecifying the model by fixing all nonsignificant paths to zero and inspecting the modification indices to investigate whether the fit of the model could be improved by including any additional paths. To account for multivariate nonnormality of the data, we used maximum-likelihood estimation with bootstrapped estimates using 10,000 resamples. The saturated model specified the following paths: from neighborhood identification to neighborhood support, well-being, and positive feeling towards the outgroup; from neighborhood support to well-being and positive feeling towards the outgroup; and a covariance between well-being and positive feeling towards the outgroup.[1] The modification indices did not suggest the fit would be improved by adding any paths, so the final model specified paths from neighborhood identification to neighborhood support and well-being, from neighborhood support to well-being and feelings toward the outgroup, and included a covariance between well-being and positivity towards the outgroup. The

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[1]To investigate whether our theoretical saturated model was a better fit to the data than an alternative model in which the relationships were reversed (so that well-being and positivity towards the outgroup predicts perceived community support, which in turn predicts community identification), we compared the AIC fit statistics of the two models. Lower AICs indicate a better-fitting model. The value for this reversed model was AIC = 5201.41, whereas the value for our theoretical model was AIC = 4441.20, indicating our theoretical model fit the data better than this alternative model.

Figure 1. Model showing the significant paths with standardized estimates from the results of the path analyses of study 1 data ($N = 310$).

final model was an acceptable fit to the data $\chi^2(1) = 4.37; p = .036$, CFI = .98, GFI = 1.00, RMSEA = .10 (95% CI = .00, .23), SRMR = .03.

The results[2] of the model, shown in Figure 1, indicate that neighborhood identification positively predicted neighborhood support ($b = .67$, 95% CIs [.54; .80], $\beta = .54$, $p < .001$) and well-being ($b = .28$, 95% CIs [.10; .46], $\beta = .23$, $p = .002$). Neighborhood support, in turn, predicted well-being ($b = .15$, 95% CIs [.01; .28], $\beta = .15$, $p = .030$) and positivity towards the outgroup ($b = 6.36$, 95% CIs [3.91; 8.76], $\beta = .29$, $p < .001$). Crucially, there was an indirect effect from neighborhood identification to well-being via neighborhood support (indirect = .10, [.01; .19], standardized = .080, $p = .032$) and from neighborhood identification to positivity towards the outgroup via neighborhood support (indirect = 4.25, 95% CIs [2.56; 6.11], standardized = .16, $p < .001$).

Our initial study therefore replicated previous work showing an association between neighborhood identification and well-being, mediated by intragroup support. In addition, it illustrates how these same processes are associated with more positivity towards this outgroup, such that the support gained from identifying with one's neighborhood predicted less antipathy towards the outgroup. However, the study has yet to establish that this reduction in prejudice is associated with the role of neighborhood support upon intergroup anxiety, which constitutes the focus of study 2.

STUDY 2

St Ann's, Nottingham

Method

St Ann's in central Nottingham is a marginalized, deprived urban community of around 19,000 individuals. The area has featured in several classic and recent sociological studies of deprivation in England (e.g., McKenzie, 2015) and has high levels of unemployment and crime. Its postcodes fall within the top 40% of deprived areas on the English IMD with many falling within the top 10%. St Ann's has had a long history of inward migration with waves of Irish, Afro-Caribbean, Asian, and Eastern European migrants. In terms of ethnicity, only 49.6% of the population are white British, with substantial proportions of Asian (15.7%), black (13.9%), non-British white (9.6%), and mixed ethnic (9.8%) groups. Accordingly, it provides a second, complementary site for the investigation of the relationship between neighborhood identification, support, intergroup anxiety, and outgroup attitudes.

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[2]b represents unstandardized coefficient, and β represents standardized coefficient.

Participants

Ninety-four participants (48% female, age range: 19–77 years, M_{age} = 43, SD_{age} = 14.6) who reported belonging to the white ethnic group took part in the study (Table 1). Fifty-three participants (56%) "never married or never registered a same-sex civil partnership"; 20 participants (21%) "married or in a same-sex civil partnership"; 15 participants (16%) "divorced or in a civil partnership that has been legally dissolved"; three participants (3%) were separated, but still legally married or in a civil partnership; and three participants (3%) were widowed. The majority of the sample had an undergraduate degree or higher (43%) and were in employment (55%).

Procedure

We used an identical procedure to study 1, with a link to the online survey distributed by post to all addresses in the St Ann's area of Nottingham.

Measures

We measured neighborhood identification with an adapted version of the Single Item Identification Measure (Postmes, Haslam, & Jans,2013), which read "I identify with the community in the [local] area"), with a 7-point Likert scale from 1 (*do not agree at all*) to 7 (*agree completely*), and with a high score that represent higher neighborhood identification. We used the same measures of neighborhood support (α = .94)**,** well-being (α = .90), and positivity towards the outgroup as we did in study 1. In addition, we employed an adapted version of the intergroup anxiety scale used widely across previous surveys in contact research (e.g., Turner et al., 2008). Using a 7-point scale, respondents indicated the extent to which they would feel the following emotions if they were the only member of their ethnic group in an interaction with people from "other ethnic groups": "comfortable," "nervous," "anxious," "at ease," "safe," and "awkward." The items in this scale were reversed where necessary and the mean computed so that higher scores indicate greater anxiety. The scale showed high reliability (α = .93). Finally, four items measured the quantity and quality of contact with ethnic minorities. These indicators were modified from previous contact research (Tam et al., 2007; Voci & Hewstone, 2003). Respondents indicated the quantity of their contact on two 5-point Likert scales with response options from "never" to "very often" and the quality of their contact on two 7-point scales from unpleasant to pleasant, and from negative to positive. Following previous usage of these scales, their summed totals were multiplied to create a weighted product variable of outgroup contact and missing cases were excluded from the analysis.

Results

Descriptive statistics and zero-order correlations are displayed in Table 3. We followed the same analytic strategy as we did in study 1 and began by specifying a saturated path model using maximum-likelihood estimation with bootstrapped estimates using 10,000 resamples. This model specified the following paths: from neighborhood identification to neighborhood support, outgroup anxiety, well-being, and positive feeling towards the outgroup; from contact with the outgroup to neighborhood support, outgroup anxiety, well-being, and positive feeling towards the outgroup; from neighborhood support to outgroup anxiety, well-being, and positive feeling towards the outgroup; from outgroup anxiety to well-being and positivity towards the outgroup; and a covariance between neighborhood identification and contact with the outgroup, and a covariance between well-being

**Table 3.** Descriptive Statistics and Correlations for Study 2 ($N = 94$)

	M	SD	1	2	3	4	5
1. Neighborhood identification	3.85	1.70					
2. Contact with outgroup	57.85	36.92	.27**				
3. Neighborhood support	3.10	1.73	.65**	.24*			
4. Intergroup anxiety	3.11	1.62	−.38**	−.34**	−.39**		
5. Well-being	3.93	1.21	.24*	.13	.35**	−.28**	
6. Positivity towards ethnic minorities	64.14	25.13	.39**	.26*	.35**	−.48**	.20*

Note. Correlation significance (two tailed) = *p < .05. **p < .01.

and positive feeling towards the outgroup. We then respecified the model by fixing all nonsignificant paths to zero and then examined the modification indices to investigate whether adding any paths to the model would improve the fit of the model to the data. The modification indices suggested adding paths from neighborhood support to outgroup anxiety and from neighborhood identification to positive feelings towards the outgroup. The final model therefore specified the following paths: from neighborhood identification to neighborhood support and positive feeling towards the outgroup, from contact with the outgroup to outgroup anxiety, from neighborhood support to outgroup anxiety and to well-being, and from outgroup anxiety to positive feeling towards the outgroup. This final model, shown in Figure 2, had a good fit to the data $\chi^2(8) = 6.66$; $p = .57$, CFI = 1.00, GFI = .98, RMSEA = .00 (95% CI = .00, .13), SRMR = .05.

The results of the model, shown in Figure 2, indicate that neighborhood identification positively predicted neighborhood support ($b = .66$, 95% CIs [.53; .78], $\beta = .65$, $p < .001$) and positivity towards the outgroup ($b = 3.64$, 95% CIs [1.03; 6.16], $\beta = .25$, $p = .005$). Contact with the outgroup negatively predicted outgroup anxiety ($b = −.01$, 95% CIs [−.02; −.01], $\beta = −.27$, $p = .001$). Neighborhood support positively predicted well-being ($b = .24$, 95% CIs [.10; .38], $\beta = .35$, $p = .001$) and negatively predict outgroup anxiety ($b = −.30$, 95% CIs [−.48; −.12], $\beta = −.32$, $p = .001$). Outgroup anxiety negatively predicted positivity towards the outgroup ($b = −5.99$, 95% CIs [−9.19; −2.72], $\beta = −.39$, $p < .001$). There were indirect effects from neighborhood identification to well-being via neighborhood support (indirect = .16, 95% CIs [.07; .26], standardized = .23, $p = .001$), from neighborhood identification to positivity towards the outgroup via neighborhood support and outgroup anxiety (indirect = 1.19, 95% CIs [.31; 2.49, standardized = .08, $p = .03$), from neighborhood identification to outgroup anxiety via neighborhood support (indirect = −.20, 95% CIs [−.32; −.08], standardized = −.21, $p = .001$), and from contact with the outgroup to positivity towards the outgroup via outgroup anxiety (indirect = .07, 95% CIs [.02; .14], standardized = .10, $p = .02$).

Our second study therefore replicates the first in that neighborhood identification and the support from neighbors are associated with both well-being and positive feelings towards outgroups. In addition, we show that these effects are mediated through associated reductions in intergroup anxiety (and occur separately to the anxiety-reducing effects of intergroup contact). In line with our theoretical predictions then, intragroup support appears to provide residents with resilience to the stress occasioned by intergroup encounters and is associated with positive intergroup attitudes. Moreover, there appears to be a direct effect of neighborhood identification upon positivity towards the outgroup which bears further consideration. However, once more we need to determine whether these effects are contingent upon the locale of Nottingham, the specific set of intergroup relations examined here, or whether this might reflect a more generic dynamic of residential mixing. In study 3, we therefore turn to the religious division of Northern Ireland to examine if this pattern holds within a postconflict situation.
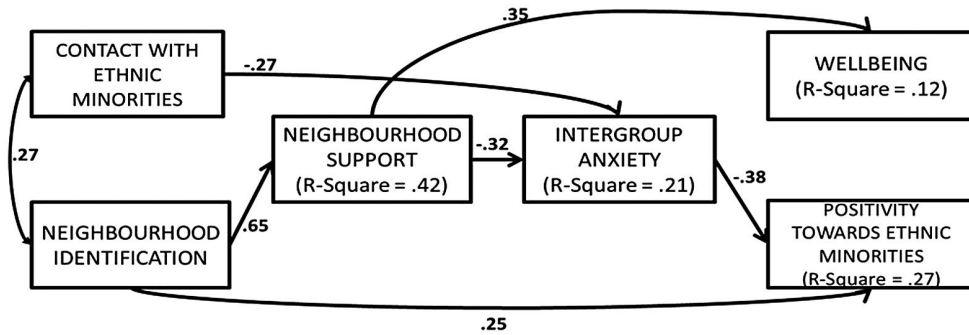
Figure 2. Model showing the significant paths with standardized estimates from the path analyses of study 2 data ($N = 94$).

STUDY 3

Upper Ormeau Road, Belfast

The Upper Ormeau Road area of South Belfast is an area of around 10,000 inhabitants located near to the student area of Queen's University Belfast. It is an area comprising large social-housing developments as well as affluent suburbs, but it is characterized by good amenities and is well served by the local transport system. Historically, the Ormeau Road has been divided into the Catholic Lower Ormeau Road and the Protestant Upper Ormeau Road areas, and during the 1990s, the bridge dividing the two formed a flashpoint for confrontations between Protestant Orange Order Marchers and local Catholic protestors. Since that era, the Upper Ormeau Road area has become increasingly diverse, developing a reputation for being a shared community between Catholics and Protestants. As such it forms an ideal location for our third investigation of the relationship between neighborhood identification, neighborhood support, and intergroup anxiety, this time examining a different form of intergroup attitudes: those towards religious outgroups.

Method

Participants

Two hundred and six participants (54% Female, Age 22–84, $M_{age} = 44.42$, $SD_{age} = 14.49$) took part in the study (Table 1). Sixty-nine percent of the sample were brought up as Roman Catholics and 31% as Protestants. One hundred participants (48%) were never married or never registered a same-sex civil partnership, 80 participants (39%) were married or in a same-sex civil partnership, 14 participants (7%) separated, but still legally married/in a civil partnership, six participants (3%) were divorced or civil partnership has been legally dissolved, and other six participants were widowed (3%). Sixty percent were in employment, and 65% had an undergraduate degree or higher.

Procedure

We used the same procedure as we did in study 2, with a link to the online survey distributed by post to all addresses in the Upper Ormeau Road area of Belfast, Northern Ireland.

Table 4. Descriptive Statistics and Correlations for Study 3 ($N = 206$)

	M	SD	α	1	2	3	4	5
1. Neighborhood identification	4.89	1.70	–					
2. Contact with outgroup	71.61	41.88	–	.27**				
3. Neighborhood support	4.24	1.54	.98	.60**	.36**			
4. Intergroup anxiety	2.61	1.32	.87	−.12	−.13	−.25**		
5. Well-being	4.41	1.05	.87	.22**	.04	.22**	−.10	
6. Positivity toward religious outgroup	74.19	24.69	–	.28**	.49**	.28**	−.41**	.15*

Note. Correlation significance (two tailed) = *p < .05. **p < .01.

*Measures*

We included the same measures of neighborhood identification, neighborhood support ($\alpha = .98$), intergroup anxiety ($\alpha = .87$), and well-being ($\alpha = .87$) as we did in study 2, but we adapted the measure of positivity towards the outgroup to refer to religious outgroup residents in the local area, with a high score that represent more positive attitudes.

Results

Descriptive statistics and zero-order correlations are displayed in Table 4. We followed the same analytic strategy as we did for studies 1 and 2 and first specified a saturated path model using maximum-likelihood estimation with bootstrapped estimates using 10,000 resamples. This model specified the following paths: from neighborhood identification to neighborhood support, outgroup anxiety, well-being, and positive feeling towards the outgroup; from contact with outgroup to neighborhood support, outgroup anxiety, well-being, and positive feeling towards the outgroup; from neighborhood support to outgroup anxiety, well-being, and positive feeling towards the outgroup; from outgroup anxiety to well-being and positivity towards the outgroup; and a covariance between neighborhood identification and contact with outgroup, and a covariance between well-being and positive feeling towards the outgroup. We then respecified the model by fixing all nonsignificant paths to zero and then examined the modification indices to investigate whether adding any additional paths would increase the fit of the model to the data. The modification indices suggested adding a path from neighborhood identification to well-being, so the final model specified the following paths: from neighborhood identification to neighborhood support and well-being, from contact with outgroup to neighborhood support, and positive feeling towards the outgroup, from neighborhood support to outgroup anxiety, and from outgroup anxiety to positivity towards the outgroup. This final model, shown in Figure 3, had an excellent fit to the data: $\chi^2(8) = 8.39$; $p = .40$, CFI = .99, GFI = .99, RMSEA = .02 (95% CI = .00, .09), SRMR = .04.

The results of the model, shown in Figure 3, indicate that neighborhood identification positively predicted neighborhood support ($b = .49$, 95% CIs [.37; .61], $\beta = .54$, $p < .001$) and well-being ($b = .12$; 95% CIs [.03; .21], $\beta = .20$, $p = .010$). Contact with outgroup positively predicted neighborhood support ($b = .01$; 95% CIs [.01; .01], $\beta = .21$, $p < .001$), and positive feeling towards the outgroup ($b = .26$; 95% CIs [.19; .32], $\beta = .44$, $p < .001$). Neighborhood support negatively predicted outgroup anxiety ($b = −.20$, 95% CIs [−.32; −.08], $\beta = −.23$, $p = .002$). Outgroup anxiety negatively predicted positivity towards the outgroup ($b = −6.42$, 95% CIs [−8.69; −4.08], $\beta = −.35$, $p < .001$). There were also indirect effects from neighborhood identification to outgroup anxiety via neighborhood support (indirect = −.10, 95% CIs [−.16; −.04], standardized = −.13, $p = .003$), from neighborhood identification to positivity towards the outgroup via neighborhood support and outgroup anxiety
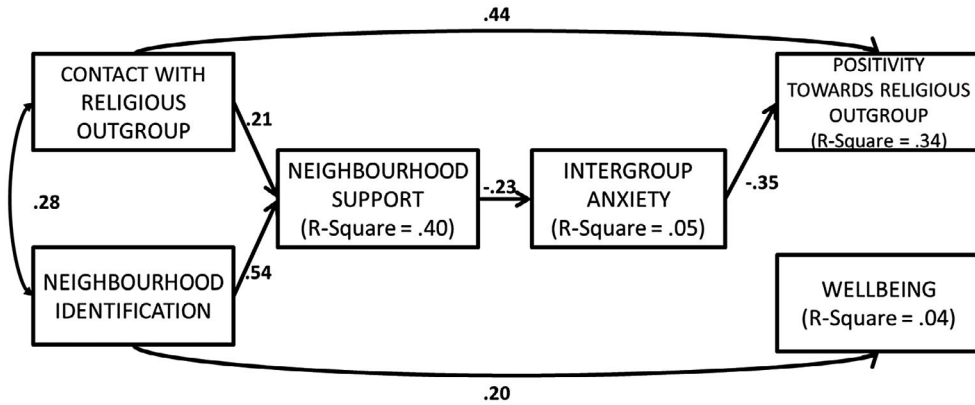
Figure 3. Model showing significant paths with standardized estimates from the path analyses of study 3 data ($N = 206$).

(indirect = .63, 95% CIs [.20; 1.17], standardized = .04, $p = .012$), from contact with outgroup to out-group anxiety via neighborhood support (indirect = −.01, 95% CIs [−.01; −.01], standardized = −.05, $p = .026$), from contact with outgroup to positivity towards the outgroup via neighborhood sup-port and outgroup anxiety (indirect = .01, 95% CIs [.01; .02], standardized = .02, $p = .042$), and from neighborhood support to positivity towards the outgroup via outgroup anxiety (indirect = 1.28, 95% CIs [.43; 2.28], standardized = .08, $p = .007$). As a further examination of the role of religion, the equality of the model regressions across both religious groups was evaluated. Specifically, we compared the final unconstrained model across religious groups (Roman Catholic and Protestants) with a nested model in which path-regression coefficients of the final model were constrained to be invariant across religious group. The fit indices of the constrained model, $\chi^2(22) = 35.39$, $p = .04$, CFI = .94; RMSEA = .08 (90% CI = .02–.12), did not significantly differ from the unconstrained model, $\chi^2(16) = 28.78$, $p = .03$, CFI = .95; RMSEA = .09 (90% CI = .03–.14), indicating measure-ment equivalence across religious groups ($\Delta\chi^2(6) = 6.61$, $p = .36$; ΔCFI < .01).

Once more then, we replicate the basic social-cure relationship between neighborhood iden-tification and support upon well-being and show that this pathway also predicts positivity towards outgroups. In addition, we replicate the finding of the mediating role of intergroup anxiety, such that the increased support from one's neighbors flowing from increased neighborhood identification is associated with intergroup anxiety and positive intergroup affect. This time though we see that con-tact is associated with increased support, and indeed the indirect effect of contact upon intergroup anxiety occurs via intragroup support. We take from this that mixing may also serve to elicit support from outgroup neighbors. Finally, we note again the direct effect of neighborhood identification on intergroup attitudes separate to that mediated by support and anxiety. All of these effects pertain to religious outgroups brought together by postconflict residential desegregation. As such, this evi-dences the robust nature of the paradigm across contrasting contexts.

Discussion

Integrating the analysis of intragroup processes with the understanding of intergroup relations is an important emerging field within social and political psychology (Dovidio, 2013; Stevenson, Easterbrook, et al., 2019) and one which promises to shed light on the ability of group members to deal with the challenges of intergroup contact. The ability of neighborhoods to cope with diversity is one such challenge. While many studies have charted the positive or negative consequences of diversity upon local geographical areas, few have considered neighborhoods as social groups which

actively cope with diversification. The present studies suggest one way of reconceptualizing this issue: to examine how social-cure processes within diverse neighborhoods contribute to positive intergroup relations as well as to well-being of their residents. Our results, from across very different neighborhoods in both England and Northern Ireland, suggest a robust relationship between neighborhood identification and intergroup attitudes, mediated by the predicted processes of neighborhood support (studies 1, 2, and 3) and reduced intergroup anxiety (studies 2 and 3).

Our first contribution to the background literature then is to replicate previous studies of social-cure processes in neighborhood settings (Fong et al., 2019; Heath et al., 2017; McNamara et al., 2013). Across all three neighborhoods, neighborhood identification predicted self-reported well-being, and this association was mediated through perceived ingroup support from fellow residents. This classic social-cure pattern attests to the robust nature of the paradigm, but also to the fundamental importance of neighborhood in everyday life. As we have argued elsewhere (Stevenson, Easterbrook, et al., 2019; Stevenson, McNamara, et al., 2019), neighborhood social-cure processes play an important role in providing residents with a sense of identity and resilience to collectively deal with challenges. Our current findings build upon this work to show that this pattern holds across neighborhoods of very different ethno-political and soci-economic compositions.

Our second contribution is to demonstrate a similarly robust relationship between neighborhood identification and outgroup attitudes across this range of diverse neighborhoods. While previous research has shown the relationship between neighborhood identification and attitudes towards religious outgroup members in Northern Ireland (Stevenson, Easterbrook, et al., 2019), this effect is now replicated both within (study 3) and outside of this postconflict environment (studies 1 and 2). Notably the effect is transferable across different outgroups, being applicable to neighborhoods dealing with ethnic diversity within the English neighborhoods in study 1 and 2 as well as religious diversity in study 3. Across all three studies, this effect was mediated by the perception of social support from neighbors, confirming that this outcome is the result of the same social-cure processes as are responsible for the well-being effect. Moreover, our work shed further light on the effect of support on positivity towards outgroups through an associated lowering of intergroup anxiety. Thus, while previous research has shown that social-cure processes can provide resilience to the negative effects of outgroup discrimination and exclusion (e.g., Crabtree et al., 2010), our research shows that they can also potentially serve to improve intergroup attitudes.

There are several theoretical implications of this work. For contact theory, it demonstrates the need to more fully consider the relationship between intragroup processes and intergroup encounters in understandings of evolving intergroup dynamics. Where intragroup processes have previously been considered in relation to the impact of group norms and intragroup friendships on intergroup relations, the results have been insightful (Paolini et al., 2004; Turner et al., 2008). Here we show that intragroup support processes can positively shape intergroup relations and that this relationship can occur independently to the effects of intergroup contact.

For social-cure research, our findings illustrate the need to focus on the specific forms of stress encountered by different groups. Intergroup anxiety takes a very particular form, being physically located and associated with precise forms of cognitive burdens, interactional challenges and attitudinal and behavioral outcomes (Greenland et al., 2003; Stephan, 2014). Refining the social-cure approach to consider the specifics of these kinds of interactional challenge may lend specificity to the predictions of the theoretical approach. Also, while much social-cure research focuses on social support as the main route to improved well-being, the results of studies 2 and 3 suggest that neighborhood identification may have other, direct impacts upon well-being. Simply feeling part of a neighborhood may have well-being benefits beyond accessing social support.

We also note the variation in neighborhood identification across our three samples. The mean and standard deviation of neighborhood identification were considerably lower in study 1 than the other two studies. Study 1 was conducted in Beeston, a relatively affluent area of Nottingham

that hosts the University of Nottingham. The transient nature of student populations could explain the uniformly lower neighborhood identification here. The affluence of the area may impact upon neighborhood identification as high socioeconomic status is associated with more independent and individualistic orientations (Piff, Stancato, Martinez, Kraus, & Keltner, 2012). Neighborhood identification was highest in study 3, conducted in Upper Ormeau Road, Belfast. The unique historical identity of the area as one of the first socially and economically successful mixed neighborhoods may explain why neighborhood identification is relatively high there. Future research should investigate these possibilities.

However, it must be borne in mind that the studies reported here have several limitations which require further research to be undertaken to extend the applicability of their findings. First, the method of self-report survey format as applied to intergroup contact has some inherent limitations in terms of self-selection and closed-response options (Dixon et al., 2005). Given the sensitive nature of issues of prejudice and social exclusion, a triangulation of methods including interview and observational methods might provide reassurance as to the validity of the findings.

A second limitation is that the neighborhoods were selected to be diverse and indeed defined by diversity. In the same manner as Laurence (2009) found that neighborhoods in London which had reputations for diversity thrived in response to increased mixing, our results suggest that neighborhoods who already see themselves as diverse may be predisposed to integrating new members. Certainly, in study 3, the finding that intergroup contact is associated with increased social support from neighbors points to an integrated, united neighborhood. The counterimplication of this finding is that other neighborhoods which do not see themselves as defined by diversity may not share these processes. Future research needs to determine how social-cure processes serve to shape attitudes to outgroups in neighborhoods with different norms of diversity as well as to examine how different social divisions, for example those between private, rented, and social-housing residents are impacted by these processes.

Third, we note the small sample size, especially in study 2, which may have led to our studies being underpowered. Although collecting data from deprived neighborhoods can be challenging and result in small sample sizes, future studies could try to obtain higher response rates to ensure the results are robust. Likewise, in relation to study 3, future research could perhaps examine if the model holds for the two ethno-political groupings in Northern Ireland, something our current sample size did not afford. A final limitation is the cross-sectional nature of all three studies. Future research comprising longitudinal and experimental designs would provide stronger evidence for the models proposed here.

These caveats aside, the practical and policy implications of the work are manifold. Over the past decades, regional, national, and international mobility has resulted in unprecedented levels of residential diversification across the world. While the impact on different types of neighborhoods vary greatly, still there is general principle to be garnered from the present findings: as neighborhoods operate to improve the well-being of their residents by providing a milieu of support (and insofar as the neighborhood is characterized by norms of diversity), we expect that neighborhood identification will facilitate integration. In turn, we expect that selecting neighborhoods which high levels of identification as well as diversity for the relocation of immigrants will be more conducive to integration than selecting homogeneous areas of low cohesion which may experience greater levels of threat from incomers (Laurence, 2009; Stevenson, McNamara, et al., 2019). Our results suggest that ethnic diversification needs to be managed by local government who need to support diversifying neighborhoods with resources designed to enhance their local identities and protect their well-being, so that residents can more effectively cope with contact.

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REFERENCES

Cesario, J., & Navarrete, C. D. (2013). Perceptual bias in threat distance: The critical roles of in-group support and target evaluations in defensive threat regulation. *Social Psychological and Personality Science, 5,* 12–17. https://doi.org/10.1177/1948550613485605

Cornwell, E. Y., & Waite, L. J. (2009). Social disconnectedness, perceived isolation, and health among older adults. *Journal of Health and Social Behavior, 50*(1), 31–48. https://doi.org/10.1177/002214650905000103

Crabtree, J. W., Haslam, S. A., Postmes, T., & Haslam, C. (2010). Mental health support groups, stigma, and self-esteem: Positive and negative implications of group identification. *Journal of Social Issues, 66*(3), 553–569. https://doi.org/10.1111/j.1540-4560.2010.01662.x

Dixon, J., Durrheim, K., & Tredoux, C. (2005). Beyond the optimal contact strategy: A reality check for the contact hypothesis. *American Psychologist, 60,* 697–711. https://doi.org/10.1037/0003-066X.60.7.697

Dovidio, J. F. (2013). Bridging intragroup processes and intergroup relations: Needing the twain to meet. *British Journal of Social Psychology, 52*(1), 1–24. https://doi.org/10.1111/bjso.12026

Dovidio, J. F., Hebl, M., Richeson, J. A., & Shelton, J. N. (2006). Nonverbal communication, race, and intergroup interaction. In V. Manusov & M. L. Patterson (Eds.), *The Sage handbook of nonverbal communication* (pp. 481–500). London, United Kingdom: Sage.

Doosje, B., Ellemers, N., & Spears, R. (1995). Perceived intragroup variability as a function of group status and identification. *Journal of Experimental Social Psychology, 31,* 410–436. https://doi.org/10.1006/jesp.1995.1018.

Easterbrook, M. J., & Vignoles, V. L. (2015). When friendship formation goes down the toilet: Design features of shared accommodation influence interpersonal bonds and well-being. *British Journal of Social Psychology, 54*(1), 125–139. https://doi.org/10.1111/bjso.12062

Fong, P., Cruwys, T., Haslam, C., & Haslam, S. A. (2019). Neighbourhood identification and mental health: How social identification moderates the relationship between socioeconomic disadvantage and health. *Journal of Environmental Psychology, 61,* 101–114. https://doi.org/10.1016/j.jenvp.2018.12.006

Gaertner, S. L., & Dovidio, J. F. (2000). *Reducing intergroup bias: The common ingroup identity model*. New York, NY, US: Psychology Press.

Greenland, K., Xenias, D., & Maio, G. (2012). Intergroup anxiety from the self and other: Evidence from self-report, physiological effects, and real interactions. *European Journal of Social Psychology, 42*(2), 150–163. https://doi.org/10.1002/ejsp.867.

Haslam, C., Jetten, J., Cruwys, T., Dingle, G., & Haslam, S. A. (2018). *The new psychology of health: Unlocking the social cure*. London, United Kingdom: Routledge.

Haslam, S. A., Jetten, J., O'Brien, A., & Jacobs, A. (2004). Social identity, social influence, and reactions to potentially stressful tasks: Support for the self-categorization model of stress. *Stress and Health, 20,* 3–9. https://doi.org/10.1002/smi.995

Haslam, S. A., O'Brien, A., Jetten, J., Vormedal, K., & Penna, S. (2005). Taking the strain: Social identity, social support, and the experience of stress. *British Journal of Social Psychology, 44*(3), 355–370. https://doi.org/10.1348/014466605X37468

Haslam, S. A., & Reicher, S. (2006). Stressing the group: Social identity and the unfolding dynamics of responses to stress. *Journal of Applied Psychology, 91,* 1037–1052. https://doi.org/10.1037/0021-9010.91.5.1037

Haslam, S. A., Reicher, S. D., & Levine, M. (2012). When other people are heaven, when other people are hell: How social identity determines the nature and impact of social support. In J. Jetten, C. Haslam, & S. A. Haslam (Eds.), *The social cure: Identity, health, and well-being* (pp. 157–174). East Sussex, United Kingdom: Psychology Press.

Heath, S. C., Rabinovich, A., & Barreto, M. (2017). Putting identity into the community: Exploring the social dynamics of urban regeneration. *European Journal of Social Psychology, 47*(7), 855–866. https://doi.org/10.1002/ejsp.2296

Huijnk, W., Verkuyten, M., & Coenders, M. (2012). Family life and acculturation attitudes: A study among four immigrant groups in the Netherlands. *Journal of Ethnic and Migration Studies, 38*(4), 555–575. https://doi.org/10.1080/1369183X.2012.659117

Jetten, J., Haslam, C., Haslam, S. A., & Branscombe, N. R. (2009). The social cure. *Scientific American Mind, 20*(5), 26–33. https://doi.org/10.1038/scientificamericanmind0909-26

King, P. M., Magolda, M. B. B., & Massé, J. C. (2011). Maximizing learning from engaging across difference: The role of anxiety and meaning making. *Equity & Excellence in Education, 44*(4), 468–487. https://doi.org/10.1080/10665 684.2011.608600

Lammers, J., Gordijn, E. H., & Otten, S. (2008). Looking through the eyes of the powerful. *Journal of Experimental Social Psychology, 44*(5), 1229–1238.

Laurence, J. (2009). The effect of ethnic diversity and community disadvantage on social cohesion: A multi-level analysis of social capital and interethnic relations in UK communities. *European Sociological Review, 27*(1), 70–89. https://doi.org/10.1093/esr/jcp057

Laurence, J. (2014). Reconciling the contact and threat hypotheses: Does ethnic diversity strengthen or weaken community inter-ethnic relations? *Ethnic and Racial Studies, 37*(8), 1328–1349. https://doi.org/10.1080/01419870.2013.788727

Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York, NY: Springer.

Marques, J., Abrams, D., Paez, D., & Martinez-Taboada, C. (1998). The role of categorization and in-group norms in judgments of groups and their members. *Journal of Personality and Social Psychology, 75*(4), 976–988. https://doi.org/10.1037/0022-3514.75.4.976

McKenzie, L. (2015). *Getting by: Estates, class and culture in austerity Britain*. London, United Kingdom: Policy Press.

McNamara, N., Stevenson, C., & Muldoon, O. T. (2013). Community identity as resource and context: A mixed method investigation of coping and collective action in a disadvantaged community. *European Journal of Social Psychology, 43*(5), 393–403. https://doi.org/10.1002/ejsp.1953

Mossakowski, K. N., & Zhang, W. (2014). Does social support buffer the stress of discrimination and reduce psychological distress among Asian Americans? *Social Psychology Quarterly, 77*(3), 273–295. https://doi.org/10.1177/0190272514 534271

Page-Gould, E., Mendoza-Denton, R., & Tropp, L. R. (2008). With a little help from my cross-group friend: Reducing anxiety in intergroup contexts through cross-group friendship. *Journal of Personality and Social Psychology, 95,* 1080–1094. https://doi.org/10.1037/0022-3514.95.5.1080

Paolini, S., Hewstone, M., Cairns, E., & Voci, A. (2004). Effects of direct and indirect cross-group friendships on judgments of Catholics and Protestants in Northern Ireland: The mediating role of an anxiety reduction mechanism. *Personality and Social Psychology Bulletin, 30*(6), 770–786. https://doi.org/10.1177/0146167203262848

Pedhazur, E. J. (1997). *Multiple regression in behavioral research* (3rd ed.). Fort Worth, TX: Harcourt Brace College.

Pettigrew, T. F., & Tropp, L. R. (2008). How does intergroup contact reduce prejudice? Meta-analytic tests of three mediators. *European Journal of Social Psychology, 38,* 922–934. https://doi.org/10.1002/ejsp.504

Phinney, J. S., Jacoby, B., & Silva, C. (2007). Positive intergroup attitudes: The role of ethnic identity. *International Journal of Behavioral Development, 31*(5), 478–490. https://doi.org/10.1177/0165025407081466

Piff, P. K., Stancato, D. M., Martinez, A. G., Kraus, M. W., & Keltner, D. (2012). Class, chaos, and the construction of community. *Journal of Personality and Social Psychology, 103*(6), 949–962. https://doi.org/10.1037/a0029673

Plant, E. A., & Devine, P. G. (2003). The antecedents and implications of interracial anxiety. *Personality and Social Psychology Bulletin, 29*(6), 790–801. https://doi.org/10.1177/0146167203029006011

Platow, M. J., Voudouris, N. J., Gilford, N., Jamieson, R., Najdovski, L., Papaleo, N., … Terry, L. (2007). In-group reassurance in a pain setting produces lower levels of physiological arousal: Direct support for a self-categorization analysis of social influence. *European Journal of Social Psychology, 37,* 649–660. https://doi.org/10.1002/ejsp.381

Postmes, T., Haslam, S. A., & Jans, L. (2013). A single-item measure of social identification:Reliability, validity, and utility. *British Journal of Social Psychology, 52*(4), 597–617. https://doi.org/10.1111/bjso.12006.

Putnam, R. D. (2001). *Bowling alone: The collapse and revival of American community*. London, United Kingdom: Simon and Schuster.

Putnam, R. D. (2007). E pluribus unum: Diversity and community in the twenty-first century the 2006 Johan Skytte Prize Lecture. *Scandinavian Political Studies, 30*(2), 137–174. https://doi.org/10.1111/j.1467-9477.2007.00176.x

Ramos, M. R., Cassidy, C., Reicher, S., & Haslam, S. A. (2012). A longitudinal investigation of the rejection–identification hypothesis. *British Journal of Social Psychology, 51*(4), 642–660. https://doi.org/10.1111/j.2044-8309.2011.02029.x

Schmid, K., Tausch, N., Hewstone, M., Hughes, J., & Cairns, E. (2008). The effects of living in segregated vs. mixed areas in Northern Ireland: A simultaneous analysis of contact and threat effects in the context of micro-level neighbourhoods. *International Journal of Conflict and Violence, 2*(1), 56–71. https://doi.org/10.4119/UNIBI/ijcv.27

Stephan, W. G. (2014). Intergroup anxiety theory, research, and practice. *Personality and Social Psychology Review, 18*(3), 239–255. https://doi.org/10.1177/1088868314530518

Stevenson, C., Easterbrook, M. J., Harkin, L., McNamara, N., Kellezi, B., & Shuttleworth, I. (2019). Neighbourhood identity helps residents cope with residential diversification: Contact in increasingly mixed neighbourhoods of Northern Ireland. *Political Psychology, 40*(2), 227–295. https://doi.org/10.1111/pops.12510

Stevenson, C., McNamara, N., Easterbrook, M. J., Kellezi, B., Shuttleworth, I., & Hyden, D. (2019). Re-identifying residential mixing: Emergent identity dynamics between incomers and existing residents in a mixed neighbourhood in Northern Ireland. *European Journal of Social Psychology, 49*(2), 413–428. https://doi.org/10.1002/ejsp.2529

Stolle, D., & Harell, A. (2013). Social capital and ethno-racial diversity: Learning to trust in an immigrant society. *Political Studies, 61*(1), 42–66. https://doi.org/10.1111/j.1467-9248.2012.00969.x

Sturgis, P., Brunton-Smith, I., Kuha, J., & Jackson, J. (2014). Ethnic diversity, segregation and the social cohesion of neighbourhoods in London. *Ethnic and Racial Studies, 37*(8), 1286–1309. https://doi.org/10.1080/01419870.2013.831932

Tam, T., Hewstone, M., Cairns, E., Tausch, N., Maio, G., & Kenworthy, J. (2007). The impact of intergroup emotions on forgiveness in Northern Ireland. *Group Processes & Intergroup Relations, 10*(1), 119–136. https://doi.org/10.1177/1368430207071345.

Topp, C. W., Østergaard, S. D., Søndergaard, S., & Bech, P. (2015). The WHO-5 well-being index: A systematic review of the literature. *Psychotherapy and Psychosomatics, 84*(3), 167–176. https://doi.org/10.1159/000376585.

Turner, R. N., Hewstone, M., Voci, A., & Vonofakou, C. (2008). A test of the extended intergroup contact hypothesis: The mediating role of intergroup anxiety, perceived ingroup and outgroup norms, and inclusion of the outgroup in the self. *Journal of Personality and Social Psychology, 95,* 843–860. https://doi.org/10.1037/a0011434

Voci, A., & Hewstone, M. (2003). Intergroup contact and prejudice toward immigrants in Italy: The mediational role of anxiety and the moderational role of group salience. *Group Processes & Intergroup Relations, 6*(1), 37–54. https://doi.org/10.1177/1368430203006001011

Vorauer, J. D., Main, K. J., & O'Connell, G. B. (1998). How do individuals expect to be viewed by members of lower status groups? Content and implications of meta-stereotypes. *Journal of Personality and Social Psychology, 75*(4), 917–937. https://doi.org/10.1037/0022-3514.75.4.917

Wright, S. C., Aron, A., McLaughlin-Volpe, T., & Ropp, S. A. (1997). The extended contact effect: Knowledge of cross-group friendships and prejudice. *Journal of Personality and Social Psychology, 73*(1), 73. https://doi.org/10.1037/0022-3514.73.1.73