

‘When the walls come tumbling down’: The role of intergroup proximity, threat and contact in shaping attitudes towards the removal of Northern Ireland’s peace walls

John Dixon

(School of Psychology, Open University)

Colin Tredoux

(Department of Psychology, University of Cape Town, and
CLLE, Université de Toulouse, CNRS, UT2J, France)

Brendan Sturgeon

(Institute for Conflict Research)

Bree Hocking

(School of Psychology, Open University)

Gemma Davies

(Lancaster Environment Centre, Lancaster University)

Jonny Huck

(Department of Geography, Manchester University)

Duncan Whyatt

(Lancaster Environment Centre, Lancaster University)

Neil Jarman

(Institute for Conflict Research)

Dominic Bryan

(School of History, Anthropology, Philosophy and Politics, Queen’s University)

* Address correspondence to: John Dixon, School of Psychology, Open University, Walton Hall, Milton Keynes, United Kingdom, MK7 6AA. Email: john.dixon@open.ac.uk

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Abstract

Institutional structures of segregation typically entrench social inequality and sustain wider patterns of intergroup conflict and discrimination. However, initiatives to dismantle such structures may provoke resistance. Executive proposals to dismantle Northern Ireland's peace walls by 2023 provide a compelling case study of the nature of such resistance and may thus provide important clues about how it might be overcome. Drawing on a field survey conducted in north Belfast (n = 488), this research explored the role of physical proximity, realistic and symbolic threat, and past experiences of positive and negative cross-community contact on Catholic and Protestant residents' support for removing the walls. Structural equation modelling suggested that both forms of contact and proximity were significantly related to such support and that these relationships were partially mediated by realistic threat. It also suggested that positive contact moderated the effects of proximity. That is, for residents who had more frequent positive interactions with members of the other community, proximity to a peace wall had a weaker relationship with resistance to their removal than residents who had less frequent contact.

Intergroup segregation is a problem faced by policy makers and urban planners in many historically divided societies. This problem is important because segregation often underpins inequalities in health, wealth, employment and education (e.g. Massey & Fischer, 2000; Orfield & Lee, 2005) and sustains wider patterns of prejudice and conflict (e.g. Pettigrew & Tropp, 2011; Vezzali & Stathi, 2017). However, attempts to create more integrated and inclusive cities face at least two obstacles (cf. Durrheim & Dixon, 2005). First, even when policies to promote desegregation are implemented, residents may act in ways that reproduce intergroup boundaries in new forms or at different socio-spatial scales. Second and related, extant physical and symbolic boundaries may prove difficult to dismantle as attempts to do so provoke resistance amongst local communities.

Northern Ireland Executive (2013) proposals to dismantle Northern Ireland's interface barriers - commonly known as 'peace walls' - by 2023 provide a compelling case study of the nature of such resistance and may thus provide important clues about how it might be overcome. In this society, peace walls are broadly defined as any "...kinds of physical interface barriers that keep communities apart - including walls, gates and security barriers". (Byrne, Gormley-Heenan, Morrow, & Sturgeon, 2015, p.3). The building of peace walls began during Northern Ireland's political conflict (1969-1998) but has continued throughout the peace process. Their ongoing role in maintaining divisions between Catholic and Protestant communities has been emphasized by both academic researchers and policymakers (e.g. Boal, 2002; Boulton, 2014; Byrne, Gormley-Heenan & Robinson, 2012; Donnan & Jarman, 2017). Indeed in 2013, on a state visit to Northern Ireland, no less a figure than Barack Obama urged that the removal of peace walls was essential for the country's political future, issuing the following challenge: "...whether you reach your own outstretched hand across dividing lines, across peace walls, to build trust in a spirit of respect - that's up to you."

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That same year, the Northern Ireland Executive announced ambitious plans to dismantle the over 100 peace walls located in the cities of Belfast, Derry Londonderry, Lurgan, and Portadown by 2023. Conducted around the mid-point of this unfolding process of geopolitical change, the present research had two aims. First, drawing on a field survey conducted with residents living in the north of Belfast, it sought to describe local attitudes to peace wall removal at a critical juncture. Second and more central, it sought to investigate some environmental and psychological factors that may shape such attitudes, notably by exploring the role of residents' physical proximity to peace walls, experiences of negative and positive intergroup contact, and perceptions of intergroup threat.



Figure 1. *Examples of peace wall barriers in north Belfast*

Research context and rationale

Peace walls were first constructed in Belfast in 1969 at the beginning of a period of intensifying sectarian violence known locally as ‘The Troubles’. Located at interface areas¹, early structures were built by the British Army and consisted of relatively makeshift barriers designed to limit conflict between the city’s nationalist communities (mainly comprising Catholic residents) and neighbouring loyalist communities (mainly comprising Protestant residents). These early structures were intended as temporary measures. As ‘The Troubles’ unfolded, however, peace walls proliferated, and many barriers became established as permanent features of the defensive architecture of Belfast, Northern Ireland’s capital city (see Figure 1). In the years following the 1998 Good Friday agreement, which officially brought the era of political violence to an end, peace walls continued to proliferate, with some walls being increased in height and length. A review conducted in 2017 identified 97 structures in Belfast, comprising varying forms of physical barriers (Belfast Interface Project, 2017a). The majority are located in the west and north of the city, where the current research was conducted (see Table 1), and were installed both by the government and by a range of other bodies, most significantly the Northern Ireland Housing Executive (Belfast Interface Project, 2017a, 2012).

Table 1. Types and geographical locations of peace wall barriers in Belfast

Type of Barrier	North Belfast	West Belfast	South Belfast	East Belfast
Mesh fence	11	4	3	2
Steel fence	8	5	2	1
Palisade fence		2	2	
Wall	8	1	2	2
Wall with fence above	2	6	2	4
Wall with gate	3	2		
Gate	6	6		
Buffer with fence/wall	2	4	5	2
Total	40	30	16	11

Adapted from a table presented in Belfast Interface Project (2017a, p.7).

As noted already, peace walls were originally intended as a mechanism for maintaining residents' safety and limiting the negative consequences of intergroup violence. Their rationale was thus framed within a policy context of public security in that they "... were seen to provide safety and security and reduce opportunities for communal violence and disorder" (Byrne et al., 2012, p.10). However, by establishing long-standing structures of segregation between Catholic and Protestant² communities, their unintended, negative consequences have become increasingly apparent in 'post-conflict' Northern Ireland.

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Putting aside the fact they deter economic investment, peace walls have at least three other potentially damaging effects. First, in a society seeking to move beyond sectarianism, they represent an increasingly anachronistic symbol of sectarian division, a tangible sign that segregation remains institutionally supported and normative. As Boulton (2014, p.105) observes, "...whilst the barriers were originally intended to stop violence, in fact they have served to formalise, symbolise, and in some respects heighten, the differences between each side." Second, in a society seeking to promote freedom of movement and sharing of everyday spaces (Northern Ireland Executive Office, 2013), they continue to limit the day to day movements, routines and behaviours of local residents (e.g. see Leonard's (2018) poignant research with Belfast teenagers). Third, in a society seeking to encourage positive relations between historically estranged communities, they act as a deterrent, restricting the forms of cross-community contact that research has repeatedly shown to reduce intergroup prejudice in Northern Ireland and elsewhere (e.g. Hewstone et al., 2006; McKeown & Taylor, 2017; Paolini, Hewstone, Cairns & Voci, 2004). Indeed, around four in ten residents have never interacted with neighbours living on the other side of a peace wall (Byrne et al., 2015).

Addressing such problems, third sector and government initiatives have sought to reduce conflict between communities divided by peace walls and to work towards their removal. Since 1995, for example, the Belfast Interface Project (2017b) has sought to improve the lives of residents living on interface areas by promoting freedom of movement, respect for cultural diversity, and reduction of violence and intimidation. Similarly, in several areas of the city, community groups have collaborated to reduce the negative impacts of peace walls – a striking example being the construction of a gate in September 2011 in the barrier that divides Alexandra Park in the north of Belfast into Catholic and Protestant sections (Figure 2), thus allowing residents to move freely, in theory, through the entire park. Government policymakers have recently tackled the problem of peace walls more directly. As part of the Together: Building a Better Community Strategy, the

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Northern Ireland Executive Office (2013) have boldly pledged to remove them all by 2023. Primary operational responsibility for achieving this objective has been delegated to the Department of Justice and implementation is currently in progress.



Figure 2. *Peace wall barrier with gate in Alexandra Park, north Belfast*

So far, a small number of peace walls have already been successfully removed, including six structures located in north Belfast (Belfast Interface Project, 2017a, p.12), but such progress has been impeded by varying definitional, logistic and political factors (e.g. see Blomquist, 2016; Gormley-Heeney, Morrow & Byrne, 2015). For example, the collapse of the devolved Northern Irish power-sharing Executive and Assembly in January 2017 has made the 2023 deadline for removing the walls increasingly unrealistic. More directly relevant to the present research, progress has also been complicated by evidence that a substantive - and perhaps growing - number of residents may not support wall removal, particularly those living close to interface boundaries. Based on surveys conducted in 2012 (n = 1451) and 2015 (n = 1021), Byrne and colleagues reported that most residents living near interface barriers did not want such barriers 'to come down now'. They also

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found a decline over time in respondents' support for barrier removal in the future (2012: 44%; 2015: 35%) and, correspondingly, an increase in the number of respondents who would simply 'like things left the way they are now' (2012: 22%; 2015: 30%). Protestant residents (44%) were almost twice as likely as Catholic residents (23%) to hold this view.

The present research

If they are to succeed, then government plans to remove the walls clearly require strong and continuing levels of community support; as such, understanding why some residents are resistant to change is an important question. This was the primary objective of the present research. Moving beyond the descriptive focus of most previous work, we sought to explore some environmental, social, and psychological factors that might help to predict residents' support for wall removal, focusing on the role of physical proximity to peace walls, perceptions of realistic and symbolic threat, and past experiences of both positive and negative cross-community contact. More specifically, building on a field survey conducted in north Belfast, we tested a structural model in which physical proximity and contact were treated as predictors of support for dismantling peace walls. We posited that relationship this would occur both directly and indirectly via their association with perceived realistic and symbolic threat (see Figure 3 below). Examining an interaction with potentially important applied implications, we also explored the possibility that both positive and negative contact might moderate the effects of physical proximity to peace walls on residents' resistance to social change.

Proximity to peace walls

We predicted that residents living in closer proximity to interface barriers would be more concerned about the consequences of peace wall removal than those living further afield. More

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specifically, we predicted that proximity to peace walls would be associated with heightened intergroup threat and reduced support for recent government proposals. The rationale for these predictions is twofold.

First, should the walls be removed, proximity might well lead to more frequent intergroup contact between residents located in and around interface boundaries, who live in close propinquity to one another. This idea is supported by research, for example, on the role of both simple (e.g. Robinson, 1980) and functional (e.g. Festinger, Schacter, & Back, 1959) distance in increasing the likelihood of interactions between members of different groups. In so far as residents living nearest interface boundaries may be most concerned about the nature and consequences such interactions, then this may increase their resistance to peace wall removal.

Second and related, living near to sharply defined yet potentially fragile community boundaries may heighten residents' concerns about spatial encroachment and transgression; that is, their sense that others are threatening to 'cross the line' and that 'our' space is in danger of becoming 'their' space (cf. Dixon, 2001; Sibley, 1995). It may also heighten concerns about personal and community safety. In this respect, it is worth highlighting that peace walls in Belfast tend to be concentrated in areas most affected by political conflict during 'The Troubles'. Data on violent deaths occurring between 1966 and 2007 in the city, for instance, suggests that they occurred at a mean distance of 517m from the nearest wall (Mesev, Shirlow & Downs, 2009). Since the official end of 'The Troubles' under the 1998 Good Friday Agreement, communities living near peace walls have also been targeted for ongoing, if less extreme, expressions of sectarian violence, including anti-social behaviour, graffiti and 'recreational rioting' (Jarman, 2001, 2006).

Intergroup threat

Realistic threat is here defined as perceived threats to a group's wealth, opportunity, political power or general welfare, including perceived threats to safety. Given the history of communal

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violence associated with the peace walls in Belfast noted above, the present research focused on the latter form of threat, exploring its role in predicting resistance towards the removal of the walls. On a general level, this idea aligns with psychological research on the role of realistic threat in shaping the broader patterning of intergroup and policy attitudes (see Stephan, Ybarra & Morrison, 2009; Riek, Mania & Gaertner, 2006; Stephan & Renfro, 2016). More specifically, it aligns with a rich tradition of local research that has demonstrated the close relationship between threat and varying practices of urban segregation in Belfast, including, for example, Boal's (1969) classic work on housing segregation, Bairner and Shirlow's (2003) work on use of leisure spaces, Leonard's (2018) work on children's geographies, and Dixon and colleagues' (2019) work on everyday mobility practices. As Shirlow (2003, p.1) has noted: "...the perpetuation of ethno-sectarian conflicts reminds us that, despite the onset of globalisation, cultural 'homogenisation' and mass consumption, the links between ethno-sectarian separation and fear remain central to the logic and explanation of violent enactment and cultural polarisation."

Symbolic threat is here defined as threats to collective systems of belief, values, traditions and worldviews (Stephan et al., 2009). Again, research aligns with the hypothesis that resistance towards the removal of peace walls is associated with this form of threat. Many studies have shown, for example, that urban environments in Belfast convey identity-relevant symbolism, e.g. via the use of Irish language street signs, the hanging of flags, and the painting of kerbstones (e.g., Bryan & Stevenson, 2009; Leonard, 2006; Hocking et al., 2019). Peace walls are arguably one of the most concrete and powerful illustrations of how such symbolism affirms sectarian identities in the city. In signifying the distinction between 'our space' and 'their space', they also signify the distinction between 'us' and 'them'. Moreover, as McAtackney (2018, p.50) points out, the walls provide not just a material but also a conceptual backdrop to other deeply symbolic group processes, such as the construction of community memorials and murals. By implication, their

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removal may be resisted on the grounds that it blurs intergroup boundaries, thereby threatening identity-relevant norms, values and underpinning forms of social categorization.

Positive and negative contact

If physical proximity and intergroup threat fuel resistance to the removal of peace walls, then understanding the factors that shape the effects of these variables becomes important. We posit that residents' experiences of positive and negative forms of inter-community contact represent two such factors and may thus be crucial to interventions to promote social change.

As specified by the 'contact hypothesis' (Allport, 1954), positive contact generally improves intergroup attitudes and prejudice, especially under favourable conditions (see Pettigrew & Tropp, 2011). Evidence suggests that it does so, at least in part, by reducing intergroup threat and anxiety (e.g. Paolini et al., 2004; McKeown & Taylor, 2017). At the same time, positive contact can promote acceptance of broader policies of desegregation in settings such as schools, universities, public housing projects and the military (e.g. Dixon, Durrheim & Tredoux, 2007; Wilner, Walkley & Cook, 1952; Star, Williams and Stouffler, 1949/1958). Developing such work on the interrelations between positive contact, threat and attitudes towards desegregation, we hypothesized that positive contact would be associated with support for peace wall removal and that this relationship would be mediated by perceptions of both realistic and symbolic threat.

By contrast, we hypothesized that negative contact experiences would not only intensify intergroup threat (see also Aberson, 2015; Mähönen & Jasinskaja-Laht, 2016; Stephan et al., 2002), but also, by implication, increase resistance to the peace wall removal process. Indirect support for this idea has been provided by Haywood (2016), who found that negative contact was associated with self-reported outgroup avoidance and that this relationship was partially mediated by intergroup anxiety. Similarly, Meleady & Forder (2018) found that negative contact experiences

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decreased participants' willingness to interact both with members of a 'primary' outgroup (Muslim immigrants to Britain) and with 'secondary' outgroups (e.g. Eastern European and Indian immigrants). They concluded that negative contact is problematic not only because it increases prejudice, but also because it decreases participants' 'future engagement with diversity' (p.1). Although such evidence does not directly address the topic of the present research, namely attitudes towards the removal of material structures of segregation, it has indirect relevance. It suggests negative contact may foster resistance to policies that seek to remove intergroup boundaries such as peace walls and that it may do so because it heightens participants' perceptions of intergroup threat.

The present research, in sum, tested the model represented in Figure 3. This model suggested that physical distance from peace walls and residents' experiences of positive and negative intercommunity contact would shape Belfast residents' levels of support for government policies to dismantle the city's peace walls. It suggested, too, that the effects of these predictors would be partially mediated by perceptions of symbolic and realistic threat.

As the model indicates, we also explored two moderation effects that are of potential applied significance. That is, we explored how proximity and both positive and negative contact might interact to shape resistance to the removal of peace walls. We predicted that for individuals who had frequent positive contact, proximity to a peace wall would have a weaker (i.e. less negative) influence on such resistance than individuals who had less frequent contact. This is because past experiences of positive contact are likely to offset the concerns experienced by residents living near to interface areas, including concerns about the nature and frequency of future intergroup encounters and the potential consequences of others' encroachment into ingroup spaces. Conversely, we predicted that for residents who had frequent past experiences of negative contact, proximity would have a stronger impact on resistance to peace wall removal. This is because such

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experiences are likely to heighten concerns about future intergroup encounters and spatial transgressions amongst residents living close to interface areas.

Positive and negative contact, in sum, were predicted to respectively weaken or strengthen the relationship between the physical distance residents lived from nearest peace wall and their support for peace wall removal. Given that resistance to peace wall removal is currently strongest in the communities whose support the government most needs to secure - i.e. communities living near interface areas - then the moderating role of both kinds of intergroup contact experiences is of potentially considerable applied relevance.

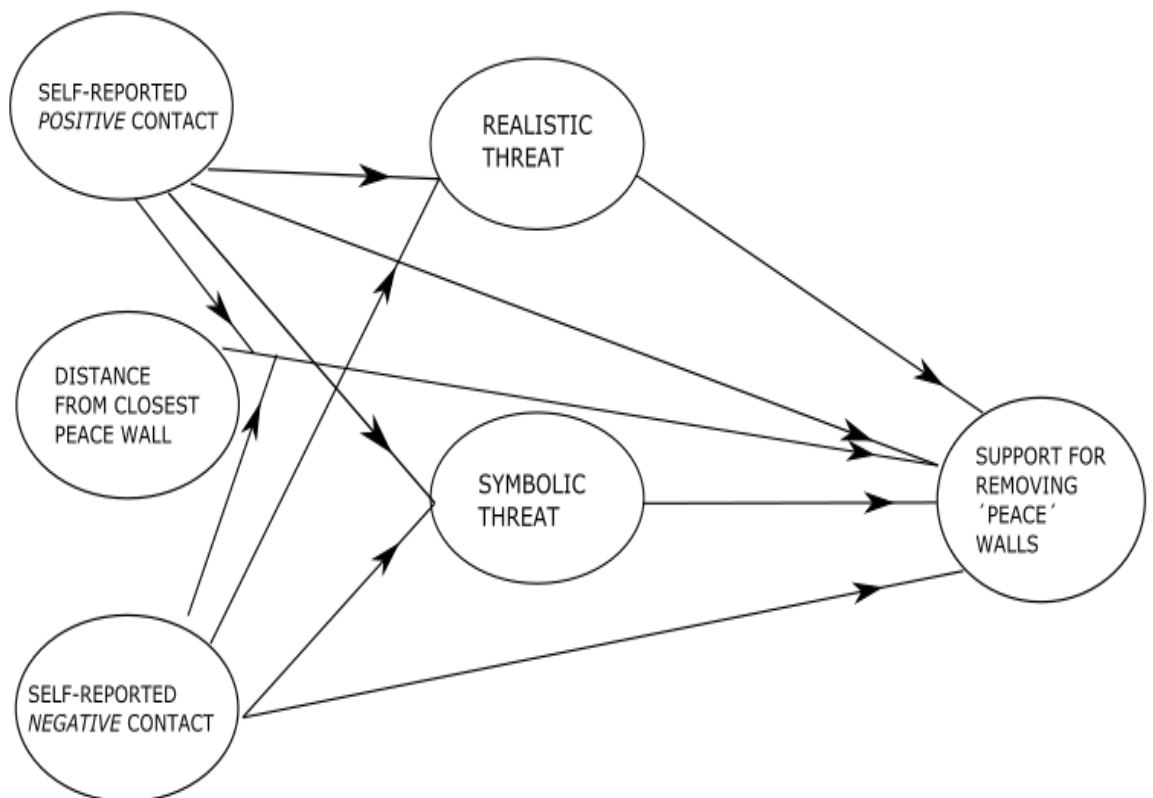


Figure 3. *Proposed model of relations between physical proximity, intergroup contact, threat and support for removing peace walls*

Method

Participants

There are approximately 102,000 residents (Northern Irish Assembly, 2013) living in north Belfast, with roughly equal numbers of self-identified Catholics and Protestants. Respondents were recruited for our survey using door-to-door sampling conducted in communities drawn from across this area of the city, with sampling deliberately including residents living near interface areas as well as more widely (see Figure 4 below). The sample consisted of 242 residents who identified as Catholics and 246 who identified as Protestants. One hundred and ninety-seven residents were men and 291 were women, with a mean age of 44.9 years. Most respondents came from lower socioeconomic brackets in terms of annual household income, with 40% earning less than £10,000 per annum and another 28% earning between £10,000 and £20,000. This reflects the broader demographics of north Belfast, which is one of the most deprived areas of Northern Ireland. Figure 4 presents a GIS map of the locations of participants' homes relative to the locations of north Belfast's peace walls.

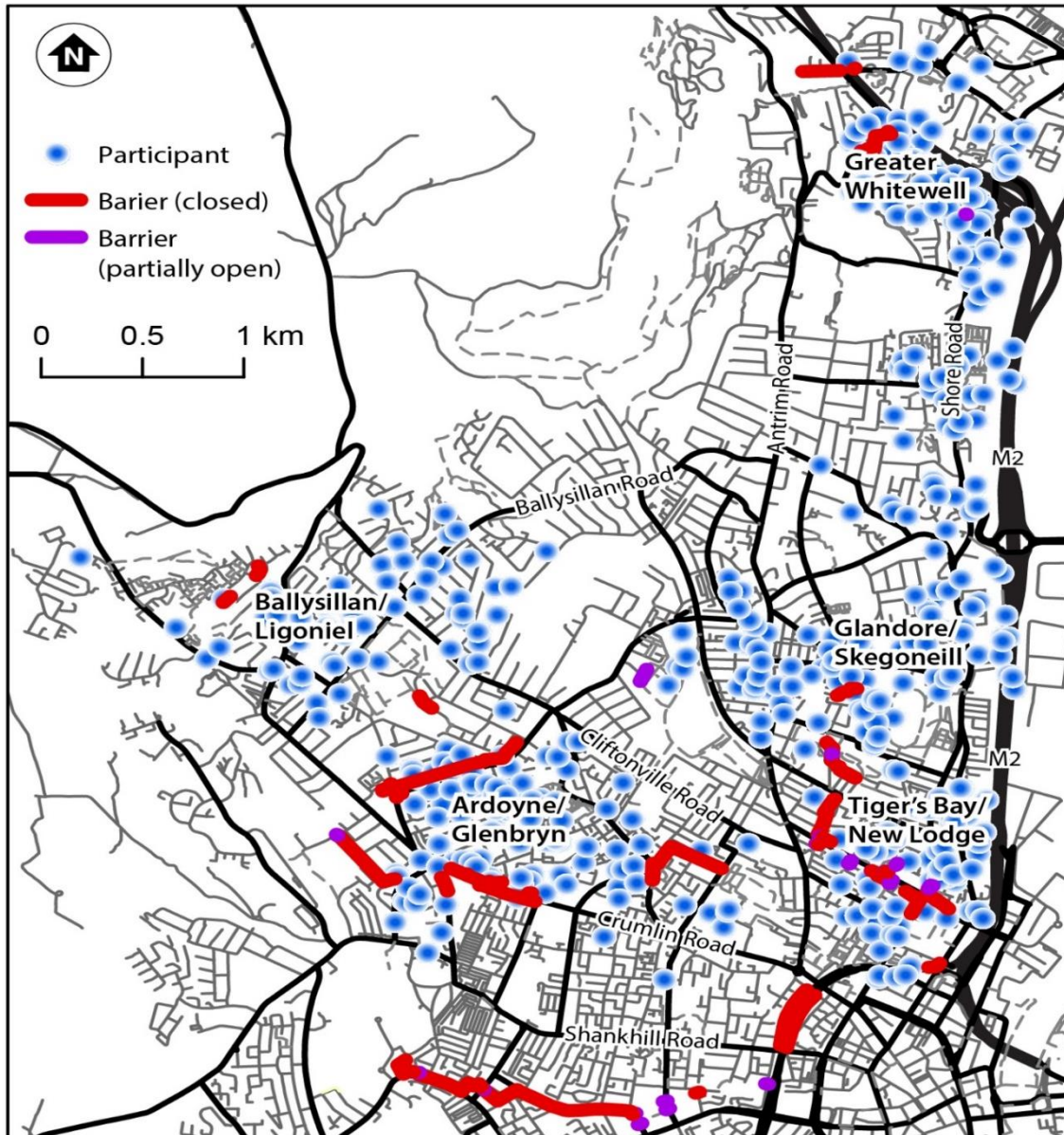


Figure 4 The distribution of peace walls in relation to respondents' homes

Note: This figure has been produced at a scale and resolution that avoids the possibility of locating any individual respondent's home address. The figure also identifies the key interface areas in north Belfast, namely (1) Ballysillan/Ligoniel, (2) Glandore/Skegoneill, (3) Tiger's Bay/New Lodge, (4) Ardoyne/Glenbryn, and (5) Greater Whitewell.

Measures and procedure

Questionnaires were completed in participants' homes, with data collection being undertaken by co-authors x and x (*redacted for blind review*). The questionnaire instrument was

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designed to measure perceptions of realistic and symbolic threat, positive and negative contact experiences, and attitudes towards government proposals to remove peace walls.

Realistic Threat: Adjusting scales used by Schmid et al. (2008) and Schmid and Muldoon (2013), our measure of realistic threat (MacDonald's $\omega = 0.78$) focused on threats to personal safety. To do so, it measured participants' responses to five statements using 5-point Likert scales, e.g. "I worry about being physically attacked by members of the other community" and 'Sometimes in Belfast I am afraid of being identified as a member of my community'.

Symbolic Threat: Again adapting and extending items used by Schmid and Muldoon (2013), our measure of symbolic threat measured participants' responses to five statements on 5-point Likert scales ($\omega = 0.83$), including 'I feel threatened when members of the other community celebrate their cultural traditions' and 'The cultural traditions and values of the other community are no longer a threat to the group identity of my own community' (reverse coded).

Positive contact: Frequency of positive contact experiences was measured using five items ($\omega = 0.93$), each using a 7-point scale ranging from 'Never' to 'Very often'. Items were adapted from previous studies (e.g., Dixon et al., 2010). Items tapped the degree to which respondents experienced intergroup contact as 'welcoming', 'friendly', 'helpful', 'cooperative' and 'positive'.

Negative contact: Frequency of negative contact was similarly measured using five items ($\omega = 0.90$), each employing a 7-point scale ranging from 'Never' to 'Very often'. Items were based on those used in other studies (e.g., Stephan et al., 2000; Barlow et al., 2012). They tapped the degree to which respondents experienced intergroup contact as 'verbally abusive', 'disrespectful', 'unfriendly', 'negative' and involving 'ridicule'.

Peace wall attitudes: Attitudes towards government proposals to remove peace walls were measured using three items ($\omega = .85$), each employing a 5-point Likert scale. These items asked participants assess their level of agreement to following statements: 'I support government

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proposals to remove interface barriers', 'It is too soon to remove interface barriers in Belfast'

(reverse scored), and 'Interface barriers are a thing of the past and the government is right to target their removal'. Higher scores indicated greater support for the removal of peace walls

Physical proximity to the nearest peace wall: Residents' physical proximity to the nearest peace wall was derived by estimating the shortest linear distance in metres from each participant's residential dwelling to the closest peace wall structure. To do so, we constructed a GIS map that captured, as spatial coordinates, both the locations of participants' dwellings and the locations of all known peace walls in north Belfast, as indicated in Figure 4 above. Examination of the distribution linear distances showed that it was positively skewed, and we thus log-transformed it for use in further analyses. The transformation was effective at removing skewness.

Results

Descriptive statistics

The descriptive statistics of the scale variables used in the structural equation model are shown as Table 2. These are unit-weighted representations of the scale variables and thus approximations of the latent variables in the structural model (we selected scale items for the unit-weighted representations after evaluating the measurement component of the structural model). Table 3 presents the correlations between these latent variables, which were generated from the structural equation model rather than from unit-weighted variables. Note that data for the 'Distance from the closest peace wall' variable are expressed in natural log units.

The descriptive statistics presented in Table 2 are broken down by community, a potentially key variable differentiating participants in our study. As this table demonstrates, both Catholic and Protestant respondents reported experiencing positive intergroup contact more frequently than negative intergroup contact. Moreover, for both communities, mean levels of support for removal

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of peace walls fell just above the mid-point of the 5-point scale, with higher scores indicating more support. Since this scale was constructed specifically for this study, we also show the distributions of responses of the three individual items in Figure 5, again broken down by community. This figure suggests that Catholic and Protestant respondents held relatively similar attitudes towards peace wall removal, though Catholics tended to be somewhat more favourable across all three items. For example, 50% of Catholics either Agreed or Strongly Agreed with statement ‘The government are right to remove walls’, with 24% either Disagreeing or Strongly Disagreeing with this statement. Correspondingly, 39% of Protestants either Agreed or Strongly Agreed with this statement, with 28% either Disagreeing or Strongly Disagreeing.

Table 2. *Descriptive statistics for self-reported contact, threat and support for removal of peace walls*

	Protestant				Catholic			
	n	mean	sd	range	n	mean	sd	range
Distance from closest peace wall (natural log units)	245	5.63	1.09	6.19	241	5.29	0.96	8.12
Realistic threat	246	2.67	0.97	4	241	2.94	0.93	6
Symbolic threat	244	2.58	0.87	4	242	3.02	0.96	5
Positive contact	242	5.44	1.73	6	242	5.17	1.76	7
Negative contact	237	2.39	1.54	6	236	2.61	1.54	7
Support for removal of peace walls	246	3.16	1.09	4	239	3.35	1.03	5

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Table 3. *Intercorrelations of latent variables*

	Distance	Realistic threat	Symbolic threat	Positive contact	Negative contact	Support for removal
Distance from closest peace wall	1.00					
Realistic threat	-0.20	1.00				
Symbolic threat	-0.13	0.60	1.00			
Positive contact	0.15	-0.32	-0.30	1.00		
Negative contact	-0.15	0.55	0.22	-0.23	1.00	
Support for removal of peace walls	0.23	-0.47	-0.32	0.36	-0.26	1.00

p < .01 for all correlations in the table

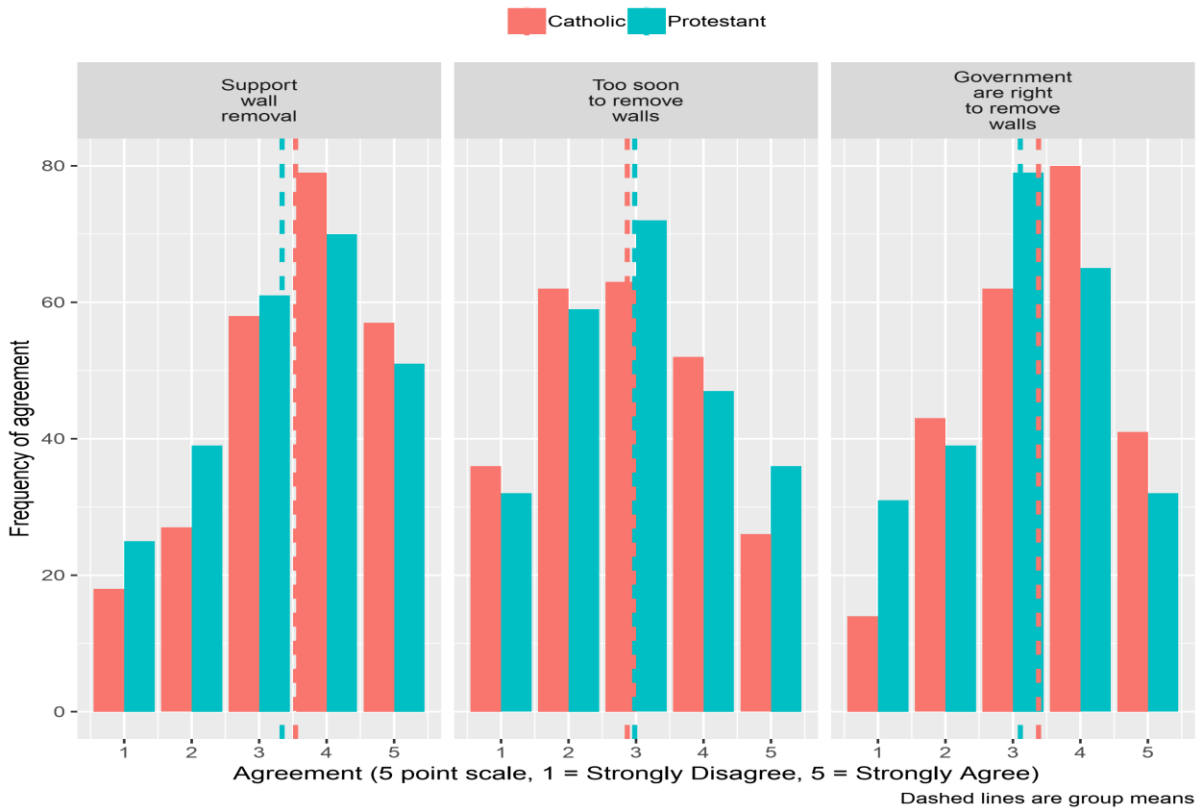


Figure 5. *Distributions of responses on scale items measuring support for removal of peace walls*

Structural Equation Model of interrelations between distance, contact, threat and support for removal of peace walls

As Figure 3 indicates, we specified a structural equation model that proposed directional relationships between predictor and outcome variables, using support for the removal of peace walls as the key outcome variable. We tested this theoretical model with an SEM (Structural Equation Model), using the Statistical Programming language R and the Lavaan Package (Rosseel, 2012).

The first step tested the measurement model with a confirmatory factor analysis. The measurement model is not shown explicitly in Figure 3 but can be derived from the previous description of our measurement items. The measurement model fitted the data quite well, as judged by standard fit measurements (e.g. RMSEA = 0.052 (90% CI = 0.046 to 0.058), SRMR = 0.045, CFI = 0.95), but we found a number of high standardized residual values, especially for a symbolic threat item and a realistic threat item. These residuals were likely due to covariances of error terms across factors. Therefore, we decided to remove them from the scales instead of adding correlated error terms between the factors. There were also high residual values within the realistic threat scale for one item and also for the negative and positive contact scales (one item each), and we thus allowed these items to be correlated within factors. The former practice is recommended against unless there is solid a priori evidence for it, and the latter practice is generally considered more acceptable (e.g., Kline, 2015, p. 455).

This significantly improved the model, eliminating high residuals and improving absolute and relative fit indices (e.g. RMSEA = 0.036 (90% CI = 0.029 to 0.043), sRMR = 0.037, CFI = 0.98). A formal test of the initial measurement model against the refined measurement model showed a significant difference and a significant reduction of the AIC index ($\chi^2_{diff} = 239$, $df_{diff} = 46$, $p < .001$;

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$\Delta AIC = -3070$). The test of fitting the Chi-square model to the saturated model showed that there was potential for improvement ($\chi^2 = 315.30$, $df = 192$, $p < 0.001$), but with such a high number of degrees of freedom, the test is likely to be very sensitive.

We then fitted the complete model (measurement plus regression component) to the data and found very good agreement in terms of the standard indices (RMSEA = 0.035 (90% CI = 0.029 to 0.041), sRMR = 0.038, CFI = 0.98)³. Since the structural model proposed interactions, we tested them formally by comparison to the same model, but without the interaction term. We obtained a significant difference for the interaction of positive contact and physical distance from the closest peace wall ($\chi^2_{diff} = 10.7$, $df_{diff} = 1$, $p < 0.002$; AIC = -8), but not for negative contact. The final model is shown in Figure 6. The coefficients given in the model are standardized bootstrap coefficients (1000 replications). We present the detailed results for the complete model as additional material to be archived with this article.

As Figure 6 clearly shows, several indirect effects are potentially present in the model. We focused on the indirect effects of positive and negative contact through realistic threat on support for the removal of peace walls. Figure 6 shows the indirect effects and indicates that the mediation of negative contact by realistic threat was particularly strong ($\beta = -0.20$, 95% CI = -0.29; -0.11). The effect of positive contact through realistic threat was less strong, but also statistically significant ($\beta = 0.08$, 95% CI = 0.03; 0.14). We formally tested the contribution of these two indirect effects to the overall model by comparing them with an alternate model in which all indirect effects were eliminated (by setting the coefficients associating positive and negative contact with realistic threat to zero). The model of indirect effects was significantly better, as a hierarchical test shows: $\chi^2_{diff} = 136$, $df_{diff} = 2$, $p < .001$.

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Model Fit: RMSEA = .035 (90% CI = .029, .041) CFI = .98 SRMR = .04 Chi-square = 480.33 df = 301

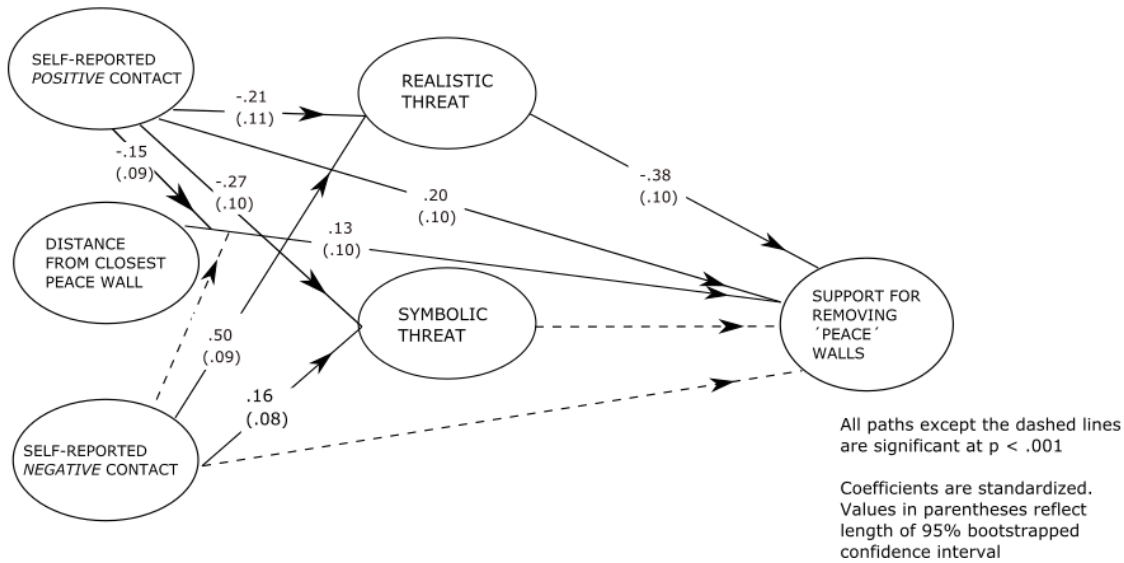


Figure 6. *Empirical fit of structural equation model of the associations between contact, threat, distance, and support for removing the peace walls in North Belfast*

Note: To simplify presentation, the measurement model is not shown.

Moderation by community membership

Community membership is a potentially important moderator variable for our structural equation model, especially as some research suggests that Protestant residents of Belfast are more opposed to the removal of peace walls than Catholic residents (Byrne et al., 2015), possibly reflecting concerns over the growing movement Catholic residents into historically Protestant neighbourhoods in Belfast. We therefore conducted a group analysis of the model shown in Figure 6, using community membership as the grouping variable.

We tested the invariance of the measurements as a preliminary step, using the R *semTools* package (Jorgensen, Pornprasertmanit, Schoemann, & Rosseel, 2018). Our tests showed non-significant χ^2_{diff} statistics for configural and loading invariance, but we did find significant statistics for intercepts and means. However, the corresponding changes in cfi values were very low for each

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step in the sequence (max $\Delta cfi = .007$; see Cheung & Rensvold, 2002, who argue that values smaller than .01 are small, and likely of little consequence). We concluded that the measurement model fit was sufficiently good for each of the subgroups, and comparable.

We also conducted a test of equivalence of regression coefficients across the groups, for which we found a significant χ^2_{diff} (21.7, $df = 8$, $p < .006$). On inspection, we found some differences. The path between negative contact and symbolic threat was not significant, and weak, for the Protestant group ($\beta = .01$, $p > .88$), and strong and significant for the Catholic group ($\beta = .26$, $b = 0.19$, $SE_b = .05$, $p < .001$)⁴. These differences are minor, given that the rest of a quite complex model (over 70 parameters) matches well. We thus conclude that community membership did not substantively moderate the model presented in Figure 6.

Moderation of the relationship between physical distance and support for peace wall removal by contact

As evident in our proposed structural model (see Figure 3 above) and as discussed in the above results section, we posited that negative and positive contact might interact with our distance variable to shape respondents' support for removal of peace walls. The moderation by negative contact was not significant. However, the direct effect of distance of respondents' house location from the closest peace wall on support for removing the peace walls was indeed significantly moderated by positive contact ($b = -.11$, $SE = .05$, $t = -2.54$, $df = 1, 475$, $p < .011$).

In order to understand this effect, we constructed Figure 7 below, which depicts the moderating relationship in terms of the unit scaled variables, rather than the latent variables, and also by breaking the positive contact variable into tertiles. The figure shows that support for removing the peace walls is differentially dependent on distance from the closest peace wall across varying degrees of positive contact. It indicates that residents living close to peace wall tend to be

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more supportive of their removal when they have also experienced high levels of positive, inter-community contact. We broke the interaction down with a trend analysis for the tertile split shown in the Figure, using the R package *emmeans* (Lenth, 2019), and found regression coefficients for each of the trends, as follows: (low contact $b = .37$, $SE = .08$; medium contact $b = .07$, $SE = .08$; high contact $b = .10$, $SE = .08$). Tukey corrected pairwise comparisons of the coefficients showed that the low contact condition was significantly greater than both of the other contact conditions (low – medium $t(440) = 2.73$, $p < .019$; low – high $t(440) = 2.38$, $p < .047$), but the medium contact and high contact conditions did not differ significantly ($t(440) = -.34$, $p > .93$).

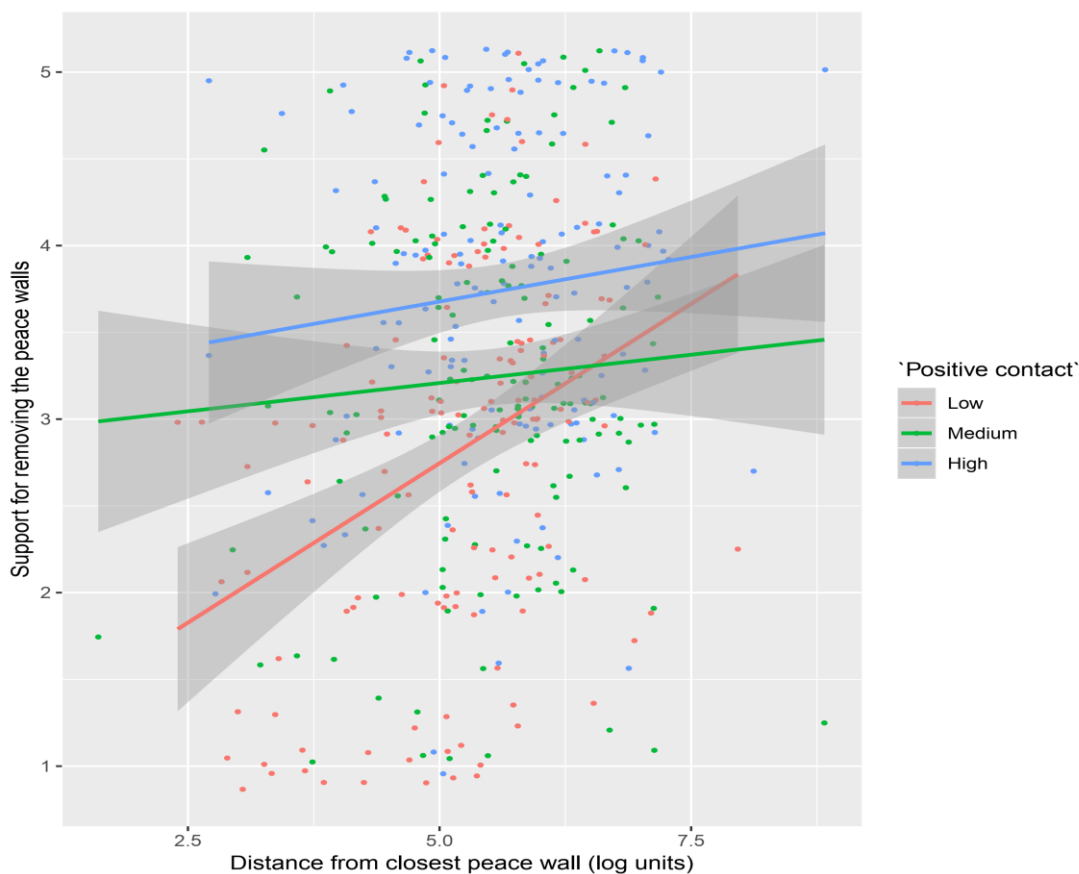


Figure 7. *Moderation of the relationship between distance and support for removing the peace walls by degree of positive contact.*

Note: The shaded areas surrounding the lines are 95% confidence intervals.

Discussion

In their 2013 *Together: Building a United Community Strategy*, the Northern Ireland Executive Office announced that:

“Removing interface barriers and other structures of division will send out an important message that our society is continuing on its journey from conflict and segregation to peace and reconciliation, but more importantly will bring community benefits. The elimination of these physical reminders is necessary in progressing as a community and facilitating the reconciliation that has been prevented for so long through division (p.63-64).”

However admirable this strategy is in principle, recent research has suggested that in practice: (1) substantive numbers of residents living in communities most affected by peace walls have lingering reservations about their removal (Byrne et al., 2012) and (2) those reservations may be increasing rather than decreasing over time (Byrne et al., 2015). As the Northern Ireland Foundation (2019) have recently observed, “For those who live near a peace wall, the barriers have been normalised in their mindsets; these residents aren’t clamouring to bring them down. The hope is that one day the walls will come down, but most are sceptical about the promises made in Stormont⁵ to eliminate them all by 2023.”

The present research has investigated some factors that may help to explain why many residents who live near peace walls are not currently ‘clamouring’ for their removal and, as important, how policymakers might gain their support in the coming years. Four key themes are worth underlining in this respect.

First, as other researchers have highlighted (Byrne et al., 2012), proximity matters. Participants living closer to peace walls hold more negative attitudes towards their removal. Given the history of

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peace walls as a mechanism for regulating intercommunity conflict (e.g. Boulton, 2014), the idea that residents living in their shadow would be more cautious about their removal makes sense. If such removal were to occur, after all, then residents living on or near interfaces may be disproportionately exposed to new forms of intergroup encounters and potential 'boundary transgressions' (Dixon, 2001), with members of the 'other' community being brought into new forms of socio-spatial and psychological immediacy.

Second, attitudes towards peace wall removal are also shaped by residents' experiences of positive and negative contact. Positive contact seems to encourage support for removal, and this is because such contact diminishes perceptions of realistic threat. Complementing its well-documented role in reducing intergroup prejudice (e.g. Pettigrew & Tropp, 2011), then, positive contact may also foster willingness to dismantle material structures of segregation. Negative contact works in the opposite direction. This kind of contact seems to discourage support for peace wall removal and, again, this is partly because it intensifies perceptions of realistic threat. For this reason, negative contact experiences may also reinforce material structures of segregation in historically divided cities such as Belfast, as well as encouraging wider patterns of intergroup avoidance (e.g. see Meleady & Forder, 2018).

Third, realistic threat proved to be a more important predictor of resistance to peace wall removal than symbolic threat in our study. That is, when evaluating policies to bring down interface barriers, people seem more concerned with personal safety than with threats to their identities, values, world views or ways of life. In making sense of this result, we would highlight the specific historical and policy context of peace wall removal, which explicitly cues issues of safety and security. As previous work has shown, the relative significance of symbolic and realistic threat for specific policy attitudes may vary depending, for example, on cultural context, local norms and the

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nature of social categories and relationships (e.g. see Stephan, Ybarra & Morrison, 2009; Riek, Mania & Gaertner, 2006; Stephan & Renfro, 2016).

Finally, our research has applied implications. On a general level, our results suggest that the development of systematic interventions to diminish realistic threat and increase perceptions of community safety are central to implementation of the Northern Irish Executive's peace walls initiative. More specifically, they suggest that interventions designed to cultivate regular, positive interactions between communities divided by peace walls must underpin social change, especially if the quality of such contact can be aligned with the facilitating conditions recommended in the contact literature (e.g. normative support and equality of status; see Pettigrew & Tropp, 2011). On the one hand, by reducing intergroup threat, such interventions may improve residents' attitudes towards peace wall removal. On the other hand, as our moderation analysis has shown, such programs also have the potential to offset the powerful role of proximity in shaping such attitudes. What this analysis suggests (see Figure 7), for instance, is that residents living near peace walls may hold relatively positive attitudes towards their removal providing that they also experience frequent positive contact across community lines.

Unfortunately, the converse is also true. If such residents experience little positive contact with neighbours on the other side of a barrier, then the impact of distance on residents' resistance to peace wall removal is likely to be exacerbated. Moreover, overtly negative contact experiences have the potential to undermine any benefits of positive contact by intensifying realistic threat, even if such experiences occur more rarely (see also Barlow et al., 2012). For this reason, implementation of peace wall initiatives should be complemented by measures designed to monitor and reduce negative encounters between communities living in interface areas. Such encounters have been a recurring problem in the past (e.g. see Jarman, 2001, 2006).

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In sum, although our findings suggest that positive contact can attenuate the effect of proximity on resistance to peace wall removal, they also suggest that residents living closest to the peace walls generally have the worst contact profile (most negative, least positive), experience the most threat, and are the least supportive of removal. Understanding why this is case and what can be done to reduce negative contact experiences, increase positive contact experiences, and ameliorate threat amongst residents of interface communities remains an urgent challenge for local policymakers.

Limitations and future directions

In conclusion, we will discuss some limitations of our research and then flag some potential directions for further research. To begin with, our research comprises a cross-sectional survey and obviously this limits our capacity to make causal claims. For example, in the present study we have explored the role of contact in moderating the relationship between proximity and attitudes towards the removal of peace walls; however, it would be equally plausible to explore the reverse relationship, treating contact as an independent variable and proximity as a moderator. Similarly, it is likely that the relationship between contact and intergroup threat is bi-directional and historically shifting in a divided city such as Belfast. Consequently, their interrelations with attitudes towards peace walls may be more complex than our structural model implies.

Second, our research has focused on the attitudes of a convenience sample of residents living an area of Belfast that suffered particularly heavily from sectarian violence during 'The Troubles' (McKittrick et al., 2001). For this reason, we would advocate caution when generalizing our findings to other contexts where policymakers are seeking to dismantle material structures of segregation. For example, the present research suggested that realistic but not symbolic threat was associated with resistance to social change. However, this may well reflect the historical and ideological

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circumstances in which peace walls were installed in north Belfast, as well as the broader ethnopolitics of fear that characterizes urban segregation in Belfast (Bairner & Shirlow, 2003; Shirlow, 2003). In other contexts, the desire to preserve intergroup barriers may primarily reflect a drive to maintain symbolic and status related divisions rather than, for example, concerns over personal or collective safety. This is a matter for further research.

Notwithstanding the need for caution when generalising our findings to other contexts, we would argue equally that our Belfast case study highlights issues that are comparatively neglected in the social psychological literature. First, it demonstrates the need to understand better the relationship between intergroup contact, threat and territorial boundary maintenance at the interface between divided communities. This is a topic that has not, to our knowledge, been the focus of much psychological research. It has the potential to produce novel work at the intersection between social and environmental psychology and to enrich related work on, for example, on the effects of living in mixed versus segregated spaces (e.g. Schmid et al., 2008). Second, our research suggests that understanding the experiences of those living in proximity to interface boundaries may be particularly important – not least because members of such communities are likely to form the vanguard of both social change and resistance to social change. That is, such experiences reveal how the embodied and spatial location of residents within the human geography of the city may affect not only their opportunities for intergroup contact, but also the broader patterning of their intergroup and environmental attitudes. Third, and in the local context crucial, the potential dismantling of Northern Ireland's network of peace walls raises some important questions that future research will soon need to address. If the walls come tumbling down, then how will this shape the everyday behaviours of hitherto divided communities in places such as north Belfast? Will residents opt to use pathways, spaces and facilities that were formerly located on the other side of the wall or will they act as though the barriers are still intact? Will the

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removal of material barriers foster positive forms of social interaction between neighbouring communities or will intergroup avoidance either persist or re-emerge in new forms?

Footnotes

1. In Northern Ireland, the term 'interface' refers to residential zones in which Nationalist neighbourhoods and Unionist neighbourhoods meet. Sometimes such zones are demarcated by material boundaries, i.e. peace walls.
2. We use the terms 'Protestant' and 'Catholic' to describe the broad identities of ethno-political groups and not as a specific reference to religion.
3. The comparative test to the Chi-square statistic for the saturated model showed again that there was potential for improvement ($\chi^2 = 480.33$, $df = 301$, $p < 0.001$). The residual analysis showed a few slightly higher values than one would expect from a model with so many parameters, correcting for multiple inference. However, this seemed to us to be a small deviation, all things considered.
4. We note, in passing, that the relationship between negative contact and symbolic threat for Catholic respondents may reflect wider struggles over the symbolic landscape of Belfast. For Catholic residents, for example, negative contact experiences may be bound up in longstanding disputes over routes taken by loyalist parades during the so-called 'Marching Season'.
5. Stormont is a term used locally to refer to the Northern Irish Government and Assembly.

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