

Influence of segregation versus mixing: Intergroup contact and attitudes among White-British and Asian-British students in high schools in Oldham, England

Miles Hewstone^a, Ananthi Al Ramiah^b, Katharina Schmid^c, Christina Floe^d, Maarten van Zalk^e (University of Osnabrück, Germany), Ralf Wölfer^d, & Rachel New^d

^a University of Oxford, UK & University of Newcastle, NSW, Australia; ^b Independent Scholar; ^c ESADE Business School, Ramon Llull University, Department of People Management and Organisation, Barcelona, Spain; ^d University of Oxford, UK; ^e University of Osnabrück, Germany. Current total word count: 8,725; *Address for correspondence:* Miles Hewstone, miles.hewstone@psy.ox.ac.uk

Abstract

We report findings from three longitudinal studies investigating the extent, quality and consequences of intergroup contact in schools between young Asian-British and White-British secondary (high-school) students. Results provide robust support for Allport's (1954) 'contact hypothesis' in this setting. Specifically, mixing (versus segregation) in high schools does actually promote intergroup contact (although there is still resegregation); and contact improves attitudes and trust towards the outgroup. We conclude that faith schools, to the extent that they are segregated, deprive young people of the opportunity to mix across ethnic and religious lines during the school day; in the absence of positive contact in a safe setting, intergroup contact and especially cross-group friendships are restricted, and positive outgroup attitudes are thwarted.

Keywords

attitudes, intergroup contact, segregation, trust

Introduction

In this article, we report findings regarding the extent, quality and consequences of intergroup contact in schools between young people from different ethnic and religious communities. In the city, and country, where we conducted our research (Oldham, England) segregation in schools (unlike the U.S., for example, prior to the 1954 landmark decision of the Supreme Court to desegregate schools), segregation occurs by choice, not by law; it is *de facto*, not *de jure*. Nonetheless, given widespread residential segregation, schools have perforce reflected the people and communities in their catchment areas. Whether segregated or mixed, schools constitute the social environment in which adolescents spend most of their waking hours, and, when mixed, in which they have the opportunity to meet members of different groups.

The theoretical approach guiding our research is that of 'intergroup contact theory' (Allport, 1954; Brown & Hewstone, 2005; Hewstone, 2009; Hewstone & Swart, 2011; Pettigrew & Tropp, 2011) which argues that positive face-to-face contact between members of different groups, rather than mere coexistence, helps to reduce prejudice and improve intergroup relations. Allport (1954) proposed that contact should occur under so-called 'optimal conditions' if it were to reduce prejudice: equal status among the participants, cooperation on common goals between groups, and institutional support. However, while a meta-analysis of over 500 studies by Pettigrew and Tropp (2006) confirmed that the effect of contact was greater in samples where contact was structured to meet Allport's optimal contact conditions, they found a highly significant negative relationship between contact and prejudice (mean $r = -.22$, $p < .001$), across all studies; thus, the overall effect of contact on prejudice is reliable, and Allport's optimal conditions should be seen as facilitating, rather than necessary. Notwithstanding, intergroup contact theory emphasizes that it is the quality, rather than the mere quantity, of contact that

especially promotes more positive outgroup attitudes and behaviours.

In this article, we focus on three kinds of direct, face-to-face contact: *quantity of contact* (frequency of interaction with outgroup members, e.g., 'How often do you meet/talk to/etc. outgroup members in school?'), *positive quality of contact* (nature of the interaction with outgroup members, e.g., 'How positive is the contact?'), and *cross-group friendship* (being friends with outgroup members, e.g., 'How many close outgroup friends do you have?'). In the final study, we will also report research in which contact was assessed using measures of social networks.

We argue that the school setting is an especially important setting for mixing between ethnic, religious and other social groups for two key reasons (see Wölfer, Hewstone, & Jaspers, in press). First, the structural nature of schools provides regular and systematic opportunities to experience contact. If diverse, the school systematically brings together individuals from different groups, supported and supervised by the school staff who, in theory and guided by government policy, aim to create a positive climate. In this way, intergroup contact experiences in the school setting are more likely to meet the optimal conditions of intergroup contact as defined by Allport (1954) in that students are treated similarly, are encouraged to work together in groups, have a similar goal of mastering the educational challenges, and can experience institutional support for intergroup contact. Second, the literature suggests that intergroup contact is especially effective at school age due to fundamentally important cognitive and psychosocial changes (Rutland, Killen, & Abrams, 2010), a better understanding of group norms (Abrams & Rutland, 2008), the increasing relevance of peers (Brechwald & Prinstein, 2011), and the development of an ethnic self and identity (French, Seidman, Allen, & Aber, 2006). These developing aspects shape intergroup attitudes and 'software' children and adolescents for intergroup contact experiences. Findings of a recent paper support this reasoning, and indicate that

intergroup contact experiences in adolescence are particularly effective, perhaps even necessary, for acquiring favourable intergroup attitudes in adulthood (Wölfer, Schmid, Hewstone, & van Zalk, 2016). This study showed different developmental processes in adolescence and early adulthood, in that intergroup contact positively changed intergroup attitudes in adolescence, but not in early adulthood.

Over a seven-year period, we have had the opportunity to undertake extensive research and amass a wealth of data on the extent, quality and consequences of mixing (what we term *intergroup contact*) between White-British and Asian-British-Muslim students (primarily of Pakistani or Bangladeshi heritage) at state high schools (called in the UK, secondary schools) in the town of Oldham, Greater Manchester (in north-west England).

For this article, we divide our overview of this research project into reports on three large longitudinal studies (i.e., following up the same individuals over time), which together provide a deep understanding of the impact of segregation versus mixing of White-British and Asian-British in English schools and colleges:

1. Study 1: 11-16 year olds in nine existing ethnically-mixed and segregated schools, with data collected at two time points.
2. Study 2: 11-12 year olds in what were at the time the three most ethnically-mixed schools, with data collected at two time points.
3. Study 3: 11-16 year olds at three recently-merged schools, including one school that merged two previously segregated schools (one White-British, the other Asian-British), with data collected at four time points.

Each study provides essential, but comparatively rare, longitudinal data; such data allows us to make more confident causal inferences about the effects of ethnic mixing. We wish to distinguish here between mere desegregation and actual mixing (see also Pettigrew, 1971; Hewstone, 2009, 2015; Pettigrew, 1971), and to make the point that ‘mixed schools’ do not *necessarily* promote actual mixing between members of different groups, who may ‘resegagate’ within the school (see later discussion of resegregation). Some circumstances create opportunities for mixing, by desegregating formerly segregated schools; but unless those opportunities are taken up, we cannot expect to see any impact on prejudice. Integration goes beyond the mere presence of people from different social groups, and denotes an environment where opportunities for contact are taken up, and cross-group friendships are formed and maintained, and where all social groups have the right to live and be accepted as culturally different, but equal groups. In this article, we refer to schools as mixed vs segregated (i.e., without making any assumptions about whether some mixed schools are truly integrated); and we focus on the extent and quality of mixing (*contact*) and its effects. Following the work of Tajfel (1981; Tajfel & Turner, 1979), we speak of ‘ingroups’, which are social groups we belong to, and ‘outgroups’, which are groups we do not belong to. We are concerned here exclusively with attitudes towards ethnic outgroups (which are Asian-British, for White-British students; and White-British, for Asian-British students), and with testing the effects of contact for White-British and Asian-British students separately, and comparing the effect of contact between the two groups.

The underlying theme of our research programme was to test, in English high schools, the ‘contact hypothesis’ (Allport, 1954), the idea that by bringing groups together under positive conditions, one can improve both attitudes towards outgroups and intergroup relations more widely. Although there is extensive support for this idea (see Pettigrew &

Tropp, 2006), it has rarely been tested in English schools. In this article, we focus on three measures of 'contact': (1) Quantity of contact: frequency of interaction with outgroup members (e.g., 'How often do you meet/talk to/etc. [outgroup¹ members] where you live/shop/socialize, etc?'); (2) Quality of contact: nature of the interaction with [outgroup members] (e.g., 'How positive/negative; friendly/unfriendly, etc, is the contact?'); and (3) Cross-group friendship: being friends with [outgroup members] (e.g., 'How many close [outgroup] friends do you have?'). We test the basic idea that an increase in contact is associated with an improvement in intergroup relations.

In this article, our focus is not on new theoretical developments in intergroup contact (which we have reported in many previous articles; see, e.g., Brown & Hewstone, 2005; Hewstone, 2009; Dovidio, Love, Schellhaas, & Hewstone, 2017). Nor is it on the relative merits or demerits of faith schools per se, whose proponents argue that the faith-based ethos experienced by young people who attend such schools can contribute to social cohesion, positively influencing attitudes and behaviour, by promoting more respectful views of others in general, including members of ethnic outgroups, and inculcating values such as love, social justice, and reconciliation (see, e.g., Grace, 2012; Halstead & McLaughlin, 2005). Moreover, even when faith schools are segregated, it cannot simply be argued that faith schools cause social division; separate education may, rather, reflect wider social division and hostility (Gallagher, 2005; Halstead & McLaughlin, 2005). Rather, we assess the evidence for the efficacy of intergroup contact in English schools, and the implications of this for the debate on faith schools. When they are oversubscribed, faith academies in England are permitted to give priority to religious criteria in selecting their students, but at the time of writing there is a 50% cap on the proportion of places they are allowed to allocate in this way. Voluntary-aided and

¹ The specific outgroup (either White-British or Asian-British) is named and replaces the square brackets in the actual surveys; the word "outgroup" is not used in the surveys.

voluntary-controlled faith schools in England are also permitted to select on grounds of religion, but with no limit imposed on the proportion of places they are allowed to allocate on this basis. Among secondary schools, most faith schools in England are Church of England (Anglican; 209) or Roman Catholic (315), although most contemporary debate is focused on Muslim schools, which numbered just 14 in 2017 (House of Commons Library, 2017).

In investigating the impact of intergroup contact between Asian-British and White-British students in high schools, we focus on answering the following four general questions:

1. Do attitudes relating to trust and liking of other groups differ amongst students in mixed vs segregated schools?
2. Do mixed schools result in more social mixing of different groups or do students remain segregated?
3. Do the attitudes of students who mix with students of other backgrounds differ compared to those of students who remain within their own ethnicities?
4. In specially planned schools designed to merge previously segregated schools, have the attitudes of students changed over time?

All of the research reported in this article was conducted in schools in a single town, Oldham in Greater Manchester, UK. Like many other towns in the Northwest of England, it has a large ethnic minority population from South-West Asia – primarily of Pakistani and Bangladeshi heritage – that was cultivated in the mid- to late-1900s to fill textile factory positions. Since that time, the factory industry has declined, leaving a town with second- and third-generation Asian-British people who, along with the White-British, are facing high unemployment and urban decline, and occupy “marginal spaces in today’s

postindustrial economy” (Phillips, 2006, p. 26). At the time of the 2011 census, Oldham had an Asian population of 22.5% (of which 10% Pakistani British, 7% Bangladeshi British, 5.5% Other Asian-British). Within the town, there is marked residential segregation between the Asian-British and White-British communities, such that Peach (1996) reported that Oldham had the highest level of Pakistani segregation in the whole of the UK. Meanwhile, the last half century has seen concerns grow over immigration and ethnic integration.

In 2001, Oldham (along with two other northern towns, Bradford and Burnley) was the site of serious rioting, which erupted in response to the arrest of young Asian-British men, and involved conflict between Asian-British men and White-British men (including the involvement of the British National Party and the National Front), and the police. This eruption of hostilities has been widely suggested to reflect growing prejudice and tension in such communities, and was suggested, for example, to reflect “manifestations of wider tensions and distrust between the British Muslim and non-Muslim (predominantly White) population across the country” (Phillips, 2004, p.26). With the concerns of self-segregation and interethnic relations brought into the spotlight, the government commissioned a report from the Community Cohesion Review Team to investigate the underlying self-segregation and interethnic tensions (Cantle, 2001). This so-called ‘Cantle Report’ concluded that the Asian-British and White-British residents of the areas that had seen riots led a “series of parallel lives” where intergroup contact was minimal (Cantle, 2001, p. 9). One positive outcome of this report was that there was increased focus on the importance of integrating school students, whose primary and secondary education was largely *de facto* segregated, given the profound residential self-segregation. This led to a bold new initiative, whereby three new ‘merger’ schools were established to promote better social cohesions. Study 3 (below) reports on some of the initial findings of research in these merged schools.

Thus, the main focus of this article is to review three of our own large studies conducted in Oldham to assess the efficacy of intergroup contact between White-British and Asian-British students in English high schools, and to draw out the implications of our findings for the debate on faith schools. To the extent that mixed schools do actually result in more mixing between members of different ethnic and religious groups, resulting in more positive outcomes, these data pose questions for faith schools. Even though faith schools may achieve some laudable aims (e.g., providing a better learning environment for religious or ethnic minorities that face prejudice and discrimination; see Driessen, Agirdag, & Merry, 2016; Flint, 2007; Miller, 2001; Shah, 2012), such schools, when highly segregated, deprive young people of valuable opportunities to mix with ethnic counterparts in a safe, cooperative setting, and thus appear likely to impede social cohesion and prevent young people from developing more positive attitudes towards members of ethnic and religious outgroups.

Study 1: Analysis of nine segregated and mixed high schools in Oldham

At the time our research began in 2010, we were given unique access to all of Oldham's state high schools. These high schools consisted of nine schools that were the focus of our first analyses, and six other schools that were to be merged into three new 'merger schools'. In Study 1 we investigated the nine schools (Studies 2 and 3, respectively, investigated the three most mixed schools, and the three new mergers). For ethical reasons, we do not report any of our findings in relation to specific schools, nor do we identify schools by name (although one school in Study 3, because it constitutes a bold initiative to merge previously White and Asian schools, has been reported in the mass media and is now quite well known). Rather, we make comparisons between different *types of school* (e.g., segregated and mixed).

Ethnic composition of schools

The ethnic composition of the nine schools in 2010 is shown in Table 1. There was one segregated Asian-British (Muslim) school (92% Asian-British); four segregated White-British schools (percentages of White-British ranging between 92 and 99) and four mixed schools whose proportions of Asian-British students ranged from 62% to 7%.

Although our focus here is on high schools, we note below that White-British students from mixed high schools did report more primary-school contact than those from segregated high schools. However, primary schools in Oldham are highly segregated, and even for students in mixed schools, reported contact in primary school was very low.

Table 1: Ethnic composition of the nine Oldham high schools in our sample (2010)

Segregated Asian-British	Segregated White		Mixed	
	School 2	School 3	School 4	School 5
School 1				
92% Asian-British	95% White-British	98% White-British	36% White-British 62% Asian-British	42% White-British 54% Asian-British
	School 6	School 7	School 8	School 9
	99% White-British	92% White-British	74% White-British 23% Asian-British	91% White-British 7% Asian-British

Because there is only one segregated Asian-British school, when we compare segregated versus mixed schools below, we consider only *White-British* schools, to avoid reporting results that could be traced to a single school. We include the data from students in the single segregated Asian-British school only when we report analyses based on all schools. It should be noted that schools may differ on socio-economic (e.g., numbers of children on free school meals; data available from the first author) and educational (e.g., exam performance) dimensions, and not only in their ethnic make-up. Thus, caution should always be exercised in comparing between schools.

Methodological details

We sampled 908 White-British students from four segregated White-British schools and 1000 students (608 White-British, 392 Asian-British) from four mixed schools. Students were aged 11-12 years and were in their first year of high school; approximately 48% of the sample was female. Students completed a survey asking about contact, attitudes towards the other group, and other aspects of community relations at two time points (Wave 1: November 2010; Wave 2: June 2011). Unless otherwise noted, measures use 5-point rating scales, and we followed convention in creating reliable scale scores (i.e., by averaging over multiple items assessing the same construct). When discussing empirical findings (e.g., comparing responses of ethnic groups, or comparing scores across time), these are based on conventional statistical analyses to test for the significance of differences between group means.

Main results are reported in footnotes. These include the ‘effect size’ of any differences. An effect size is a standardized difference between means, or a measure of the association between variables. It provides a means of showing whether a reported effect is not merely ‘statistically significant’ (which can occur with small differences, given sufficiently large samples), but also ‘substantial’ and of practical relevance; it additionally provides a way of comparing variables with different scales.²

Main findings: contact, attitudes and trust

Contact measures

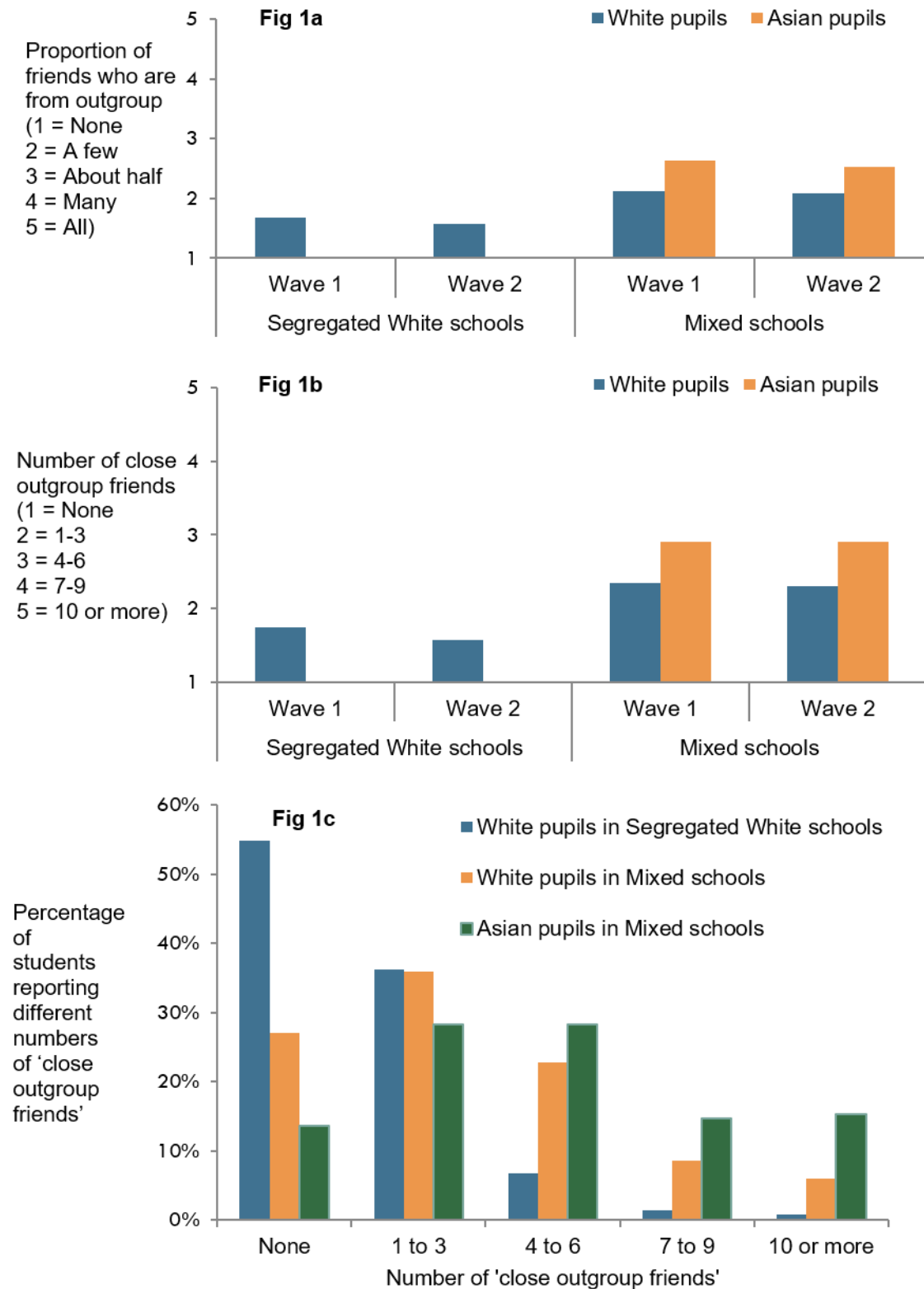
² We compared means using analyses of variance (ANOVAs), which test for the statistical significance of any differences (* = $p < .05$, ** = $p < .01$, and *** = $p < .001$). For effect sizes, we follow the convention that *small* effects ($d = 0.2$) should be distinguished from *medium* effects ($d = 0.5$) and *large* effects ($d \geq 0.8$). We report the key statistical results in footnotes.

We first compared contact between the two ethnic groups in mixed schools, and then also between the White-British students at the two types of school (segregated or mixed). We measured contact by asking students about the proportion of their friends who are from the outgroup ('About how many of your friends are from [the outgroup]?'), and their number of close outgroup friends ('In numbers, how many close friends do you have who are from [the outgroup]?'), preceded by the information that, 'A friend is a person whom you know, like and trust.'). Response options and scoring are shown in Figures 1 and 2 below.

Figures 1a and 1b show that Asian-British students in mixed schools had both a higher proportion of outgroup friends and a greater number of close outgroup friends than did White-British students in mixed schools at both waves. White-British students in mixed schools also reported both a higher proportion of outgroup friends and a greater number of close outgroup friends than did White-British students in segregated schools at both waves.³

³ For Asian-British vs White-British in Mixed schools: proportion of outgroup friends: W1: $F = 70.91, p < .001, d = .55$; W2: $F = 53.69, p < .001, d = .47$; number of close friends: W1: $F = 52.51, p < .001, d = .47$; W2: $F = 62.70, p < .001, d = .51$. For White-British in mixed vs segregated schools: proportion of outgroup friends: W1: $F = 85.15, p < .001, d = .48$; W2: $F = 143.96, p < .001, d = .63$; number of close friends: W1: $F = 135.47, p < .001, d = .61$; W2: $F = 237.47, p < .001, d = .81$.

Figure 1: Proportion of friends who are from outgroup (1a), Number of close outgroup friends (1b), and Percentage of students reporting different numbers of 'close outgroup friends' (1c)



We found that over 50% of White-British students in segregated schools have no

outgroup friends, while about 40% of students in mixed schools (combining across White-British and Asian-British students) reported having more than four close outgroup friends (see Figure 1c). White-British students in segregated schools had a very low proportion of outgroup friends. For White-British students in mixed schools, the proportion of Asian-British friends was, as would be expected, higher in the two schools with fewer White-British and more Asian-British students, than in the two schools with over 80% White-British students. For Asian-British students in mixed schools, as expected, the number of White-British friends rose steadily as the proportion of White-British students in the school increased. Our point here is not, in any sense, to say that the mixed schools are ‘better’ than the segregated ones; nor are we interested in whether students in the mixed schools have the number of outgroup friends that they would be expected to, given the proportion of students from each ethnic group in each school. Rather, given that students in mixed schools sometimes ‘resegregate’ (Schofield, 1977; i.e., fail to take up opportunities for mixing; see below), we merely provide robust empirical evidence that students in the mixed schools *are mixing*.

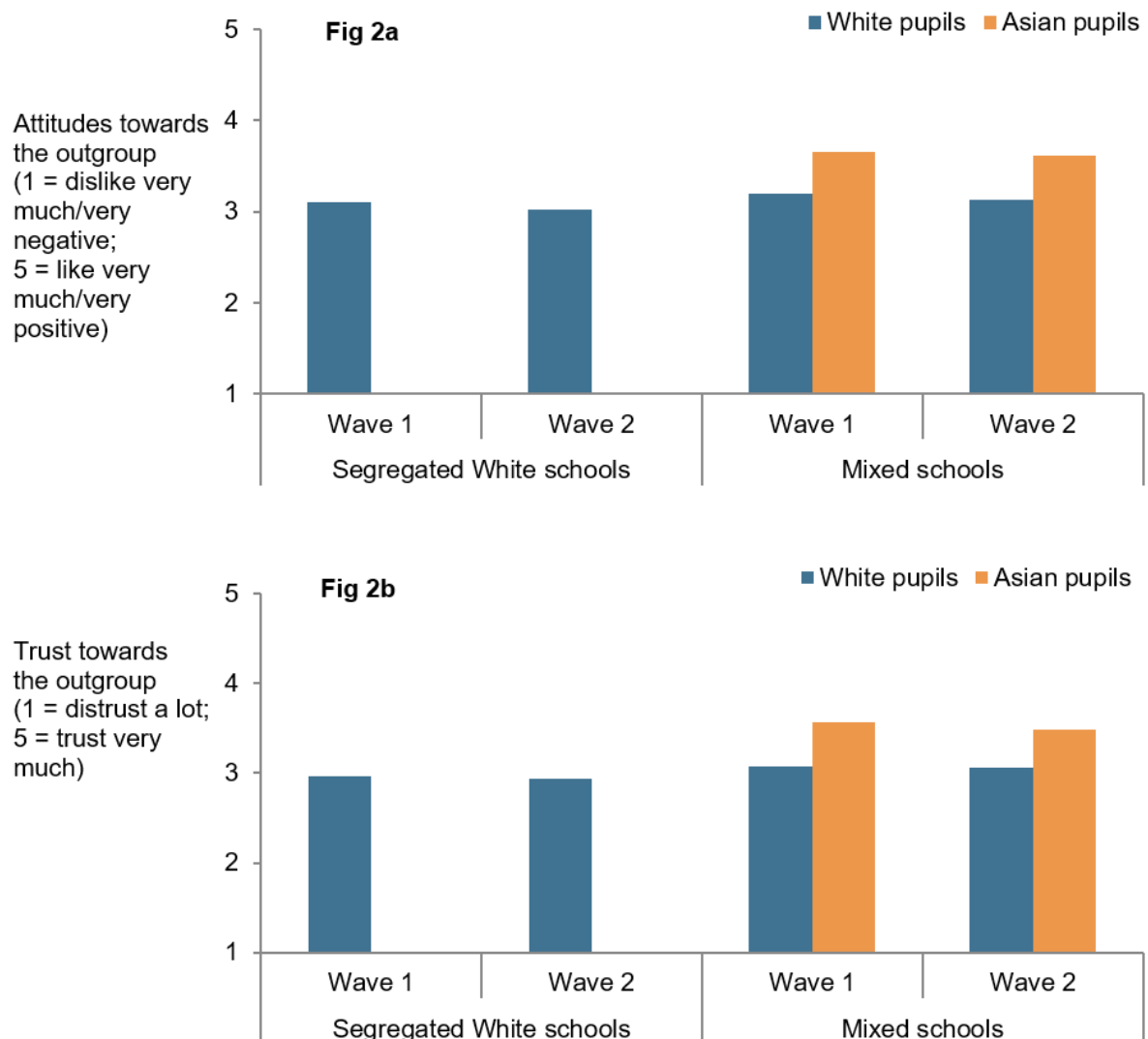
Attitudes and trust measures

We assessed attitudes with two items (‘How positive or negative do you feel about people who are [from the outgroup]?’, and ‘How much do you like or dislike people who are [from the outgroup]?’), and trust with two further items (‘Do you trust people from the following groups to treat you well?’, and ‘Do you trust people from the following groups to be fair to you?’). Scores were averaged across the two items for each construct;⁴ response options and scoring are shown in Figures 2a and 2b below.

⁴ For White-British students, the reliability score for the averaged measure of attitudes towards the outgroup at Wave 1 was .81 and at Wave 2 was .80, while the reliability score for trust towards the outgroup at Wave 1 was .77 and at Wave 2 was .81. For Asian-British students, the reliability score for attitudes towards the outgroup at Wave 1 was .76 and at Wave 2 was .74, while the reliability score for trust towards the outgroup at Wave 1 was .76 and at Wave 2 was .80.

As shown in Figure 2a, Asian-British students in mixed schools had more positive outgroup attitudes and more outgroup trust than did White-British students at both waves. White-British students in mixed schools reported similar outgroup attitudes to White-British students in segregated schools at Wave 1, but more positive attitudes at Wave 2, though the effect is small. Figure 2b shows that White-British students in mixed schools also reported higher levels of trust than White-British students in segregated schools at both waves.⁵

Figure 2: Attitudes (2a) and trust (2b) towards the outgroup



⁵ For Asian-British vs White-British in mixed schools: attitudes: W1: $F = 56.19$, $p < .001$, $d = .49$; W2: $F = 69.16$, $p < .001$, $d = .53$; trust: W1: $F = 63.61$, $p < .001$, $d = .52$; W2: $F = 44.42$, $p < .001$, $d = .43$. For White-British in mixed vs segregated schools: attitudes: W1: $F = 3.42$, $p = .06$, $d = .10$; W2: $F = 4.63$, $p < .05$, $d = .11$; trust: W1: $F = 4.69$, $p < .05$, $d = .11$; W2: $F = 5.63$, $p < .05$, $d = .12$.

Does contact predict attitudes over time?

The direction of causality implied by the contact hypothesis is quite clear: more positive contact should, over time, lead to more positive outgroup attitudes. The reverse effect may also be found, due to self-selection (e.g., those with prejudice avoid contact; while those with more liberal attitudes may seek it out). As we demonstrate below, we find evidence of contact predicting attitudes, and of the reciprocal relationship from attitudes to contact.

We computed a series of longitudinal analyses to explore these effects across Waves 1 and 2 (W1, W2).⁶ Figure 3 shows a cross-lagged model, i.e., a model testing the paths from contact (with outgroup friends) to attitudes, and *vice versa*, for White-British students in segregated schools.⁷

We also report how much of the variance (as a percentage) in the measure assessed at Wave 2 is explained by the variables assessed at Wave 1. According to the contact hypothesis, contact at Wave 1 should predict attitudes measured at Wave 2. We find that proportion of Asian-British friends at Wave 1 significantly predicted attitudes at Wave 2 (explaining 13% of the variation in outgroup attitudes), while attitudes at Wave 1 significantly predicted proportion of outgroup friends at Wave 2 (explaining 20% of the variance in proportion of outgroup friends). We were able to equate the two paths,

⁶ In these analyses, we are dealing with *residualized scores* at W2. These analyses do not measure change in terms of W2 minus W1, but rather the W2 variable (e.g., Wave 2 friendship) is regressed on the Wave 1 variable (Wave 1 friendship), so we are predicting the residual component of the Wave 2 variable. Analytic methods using change scores and the regressor variable method (i.e., the method we have used) are computationally equivalent in many cases.

⁷ To reiterate: we are interested in the degree to which W1 friendship predicts W2 attitude, controlling for W1 attitude. This is not dissimilar from measuring how W1 friendship predicts change in attitudes from Waves 1 to 2; because when we say that W1 friendship predicts W2 attitudes, we are actually talking about the *residualized* W2 attitudes, which is similar to change in attitudes. We control for self-selection by simultaneously modelling the reciprocal path from wave 1 attitudes to wave 2 contact.

indicating that they are statistically equivalent,⁸ meaning that in this data set the effect from-contact-to-attitudes was of the same size as the reverse path from-attitudes-to-contact. This demonstrates that even after the self-selection effect has been accounted for, the path from contact to attitudes remained statistically significant.

Figure 3: The relationship between outgroup friends and attitudes for White-British students in segregated White-British schools (Note. We include autoregressive paths from Time 1 to 2, not shown in the figures, and also controlled for the covariances of constructs within each time point).⁹

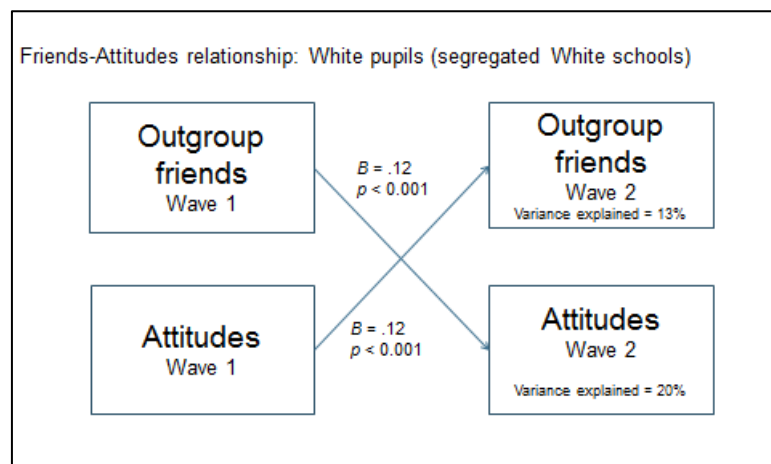


Figure 3 shows B coefficients, which are unstandardized regression coefficients. This means they measure the amount of change in one variable that is associated with that in another variable (while controlling for all other variables). For example, the coefficient of 0.12 for outgroup friends at Wave 1 predicting attitudes at Wave 2 means that as the score for outgroup friends increased by 1, the attitudes score increased (on average) by 0.12 (as noted above, outgroup friends and attitudes are measured on scales between 1

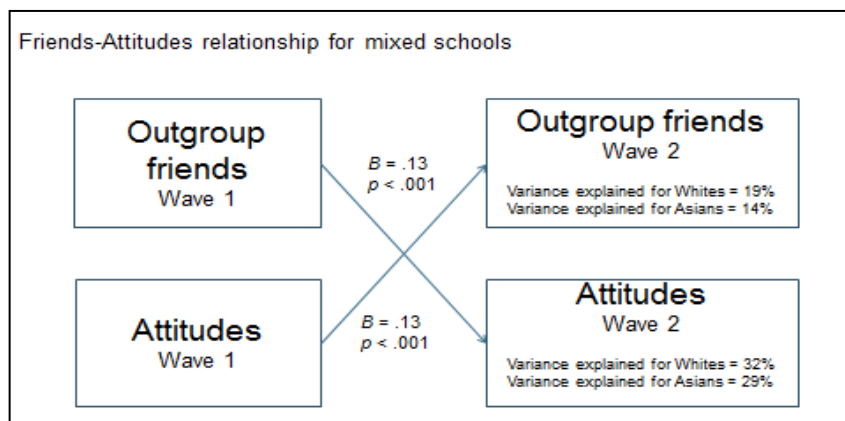
⁸ $\beta = .12$. $p < .001$ for both. β coefficients are standardized regression coefficients; see explanation of regression coefficients above – here, as one variable increases by 1 standard deviation, the other increases by 0.12 of a standard deviation.

⁹ In our multigroup models, we tested statistical significance using the standard procedure in MPlus, which is the statistical package we used to analyse our data. MPlus constrains the relevant paths both within and across groups simultaneously. This allows us to test whether the relevant paths are equivalent to one another within each group and between groups.

and 5¹⁰). This analysis controls for prior levels of attitudes, and shows that those who have more friends at wave 1 have more positive attitudes at wave 2.

Figure 4 shows a similar cross-lagged model, testing the paths from proportion of outgroup friends to attitudes, and vice versa, for Asian-British and White-British students in mixed schools. It shows that the paths for proportion of outgroup friends-to-attitude and the reverse could be equated for Asian-British and for White-British students (indicating that the respective paths were statistically equivalent).

Figure 4: Relationship between outgroup friends and attitudes for mixed schools (White-British and Asian-British students combined) (Note. We include autoregressive paths from Time 1 to 2, not shown in the figures, and also controlled for the covariances of constructs within each time point).



Note: The coefficients are the same for Asian-British and White-British.

Study 2: Analysis of the three most mixed high schools in Oldham

In a second study, we focused on the three most mixed schools, each of which had at least 20% Asian-British minority students (see **Error! Reference source not found.** above).

Methodological details

We sampled 257 White-British and 312 Asian-British from three mixed schools. Students again completed a survey asking about contact, attitudes towards the other group, and other aspects of community relations at two time points (Wave 1: November 2011; Wave 2: June 2012). Students were aged 11-12 years, and were in their first year of high school; approximately 49% of the sample was female.

Main findings: contact and attitudes

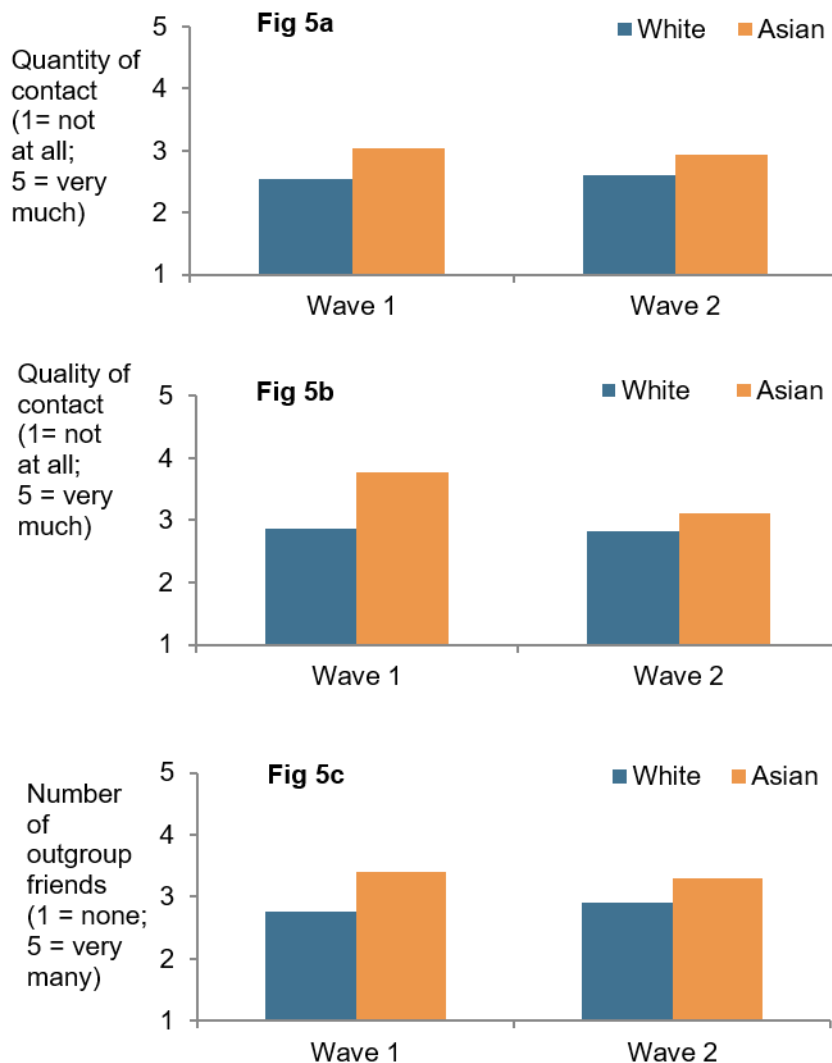
We assessed contact with three measures. First, we measured quantity of contact with two items ('How often do you chat with young [outgroup] people?', and 'How often do you "hang out" with young [outgroup] people?'). Second, we measured quality of contact with three items ('In general, when I spend time with [outgroup] students...1. it feels like we cooperate, like we're on the same team; 2. it feels like we are equals, like we are treated the same; 3. it feels close, like with good friends and family'). Response options and scoring are shown in Figure 5a-b, below. Scores were averaged across the items for each of the two constructs.¹¹ Third, we measured number of outgroup friends ('Please think about your friends right now. How many of them are from [the outgroup]?'). Response options and scoring are shown in Figure 5c below.

¹¹ For White-British students, the reliability score for the averaged measure of quantity of contact with the outgroup at Wave 1 was .70 and at Wave 2 was .83, while the reliability score for quality of contact with the outgroup at Wave 1 was .87 and at Wave 2 was .88. For Asian-British students, the reliability score for quantity of contact with the outgroup at Wave 1 was .57 and at Wave 2 was .82, while the reliability score for quality of contact with the outgroup at Wave 1 was .88 and at Wave 2 was .88.

Figure 5a-c shows the mean levels for White-British and Asian-British students on the three measures of contact. Asian-British students' scores exceeded those of White-British students on all contact measures at both waves; however, Asian-British students showed a reduction in quality of contact over time. It should also be noted that Asian-British are always in the minority, hence they have more opportunity for contact than White-British (which explains quantity of contact and number of friends, but not their higher reported *quality* of contact).¹²

¹² Quantity of contact: W1: $F = 25.75$, $p < .001$, $d = .43$; W2: $F = 14.97$, $p < .001$, $d = .33$; quality of contact: W1: $F = 76.82$, $p < .001$, $d = .74$; W2: $F = 9.61$, $p < .01$, $d = .26$; number of outgroup friends: W1: $F = 33.02$, $p < .001$, $d = .48$; W2: $F = 16.21$, $p < .001$, $d = .34$; interest in making outgroup friends: W1: $F = 79.84$, $p < .001$, $d = .75$; W2: $F = 23.74$, $p < .001$, $d = .41$.

Figure 5: Quantity (5a) and Quality (5b) of contact, and Number of outgroup friends (5c) in the three most mixed schools

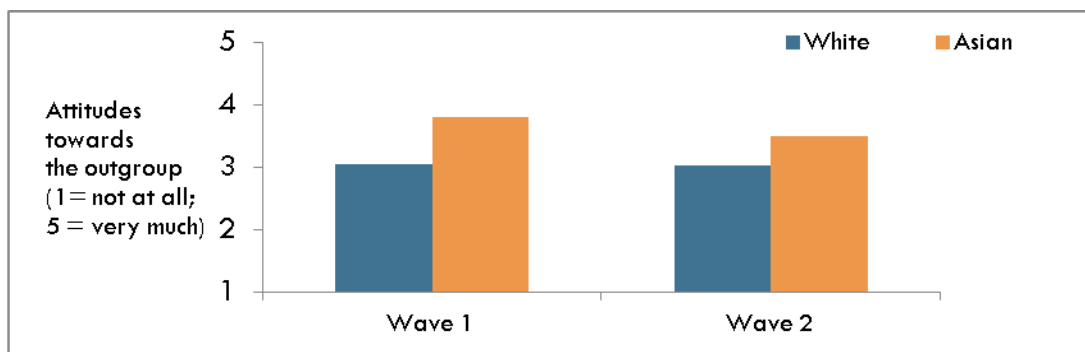


We measured attitudes with two items ('How much do you like [the outgroup]?', and 'How warm do you feel towards [the outgroup]?'). Scores were averaged across the two items¹³; response options and scoring are shown in Figure 6 below. Figure 6 shows the mean outgroup attitudes of White-British and Asian-British students at Waves 1 and 2. Asian-British had a more positive attitude towards the outgroup, but showed a small but significant reduction in positive outgroup attitudes over time.¹⁴

¹³ For White-British students, the reliability score for the averaged measure of attitudes towards the outgroup at Wave 1 was .77 and at Wave 2 was .73. For Asian-British students, the reliability score for attitude towards the outgroup at Wave 1 was .73 and at Wave 2 was .77.

¹⁴ Attitudes towards the outgroup: W1: $F = 61.71$, $p < .001$, $d = .66$; W2: $F = 61.71$, $p < .001$, $d = .45$.

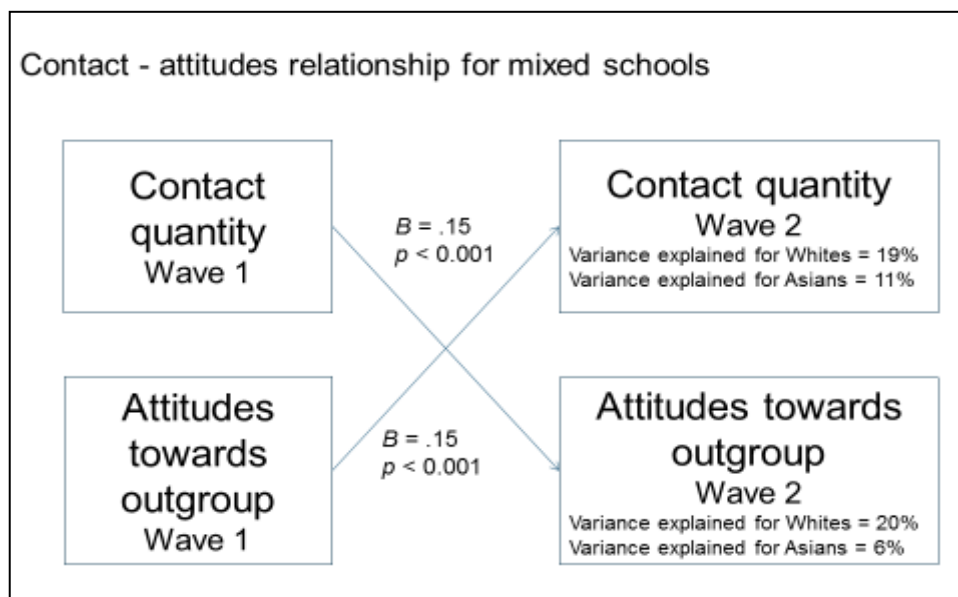
Figure 6: Attitudes towards the outgroup in the three most mixed schools



Relationship between contact and attitudes

Figure 7 shows results of a cross-lagged analysis, which finds that contact at Wave 1 significantly predicts attitudes at Wave 2 and *vice versa*. Both paths are statistically significant and equivalent, indicating the presence of both a self-selection and a contact effect, as explained above. To recap, people who initially had higher quality outgroup contact had more positive outgroup attitudes over time than people who had initially lower quality outgroup contact, even after accounting for the finding that their more positive attitudes were associated with them seeking out contact. In other words, we see across this study and the one presented above, evidence that suggests a reciprocal process, where greater contact promotes better attitudes, and better attitudes promote greater contact.

Figure 7: Relationship between contact and attitudes for mixed schools



Note: Coefficients were the same for White-British and Asian-British. Classroom contact and outside-school contact are measured on scales between 1 and 5. (See explanation of B coefficients above.)

Study 3: Evaluation of school mergers as a social intervention to promote social cohesion

The data reported in this section come from a rare 'natural experiment' that we were given the opportunity to study. Having been given access to all state high schools in Oldham, we were then given the opportunity to follow three planned mergers between existing schools, each involving a move to a new location. These mergers were planned for a variety of reasons, including the desire to integrate largely separate schools for each community, following the serious ethnic disturbances in 2001 described earlier in the article (see Cattle, 2001, 2006). In the most dramatic case, a White school and an Asian school were to be merged, and we had the unique opportunity to assess contact and attitudes pre- and post-merger with a series of surveys over five years.

In each case, the new school was located in a new building on a new site, which was occupied in 2012. School 1 would be a merger of a segregated Asian-British (86%) and a segregated White-British (93%) school; School 2 would merge two Catholic schools, a segregated White-British school (98%), and a mixed (55% Asian-British) school; and School 3 would merge two segregated White-British schools (85 and 90%); in fact, School 3 subsequently attracted an increased proportion of ethnic minority students.

Methodological details

We collected data from three year groups (Years 7, 8 and 9 at the start of the study, 2010). Students in the three year groups were aged 11-12, 12-13, and 13-14 years, respectively) before the move to each new school site (a time we term 'pre-merger') in June 2012. We obtained samples in each original school and then followed these cohorts over subsequent years at each of the three new schools (i.e., 'post-merger'). It is inevitable, especially when following up the same respondents over several years, that some data will be missing. This can arise due to respondents not completing the full survey and respondents' absence during one or more waves of data collection. We first examined whether the patterns of missing data (i.e., respondents with scores compared to respondents without scores at the points of data collection) affected the estimation of missing values in the analyses; there was no significant bias in this estimation. We then dealt with the missing data in a conventional manner by applying a missing data estimation algorithm; however, some students had to be excluded, because they did not provide enough information to have their missing data estimated by full information maximum likelihood (FIML).

Because the 'ethnic merger' at School 1 represents the major social intervention, we are most interested in results there. However, it is of great interest to compare School 1 findings with data from the other two merger schools. Those schools underwent the same merger process over the same period of time, and thus can serve as control groups for the more radical ethnic merger adopted in the case of School 1, where a school comprised very largely of students drawn from one ethnic group is merged with a school comprised of students drawn almost exclusively from a different ethnic group. The data from this study are being prepared for another publication, so, unlike the previous studies reported, we will not present actual data, but, rather, report on general trends in the findings.

Main findings

We analysed longitudinal data from pre-merger to post-merger, using the same survey items to assess the main constructs of quality of intergroup contact and outgroup attitudes. We summarize key findings from these measures first, followed by results of additional research in School 1 only, using observational research in the school cafeteria at lunch time, and analyses of social networks based on friendships.

We first compared the three schools across multiple measures, and found that there were no systematic differences between Schools 2 and 3, but that these two differed systematically from School 1. We therefore focused our main analyses on comparing results in a school that was ethnically balanced after the merger (School 1), compared with two schools that were still ethnically imbalanced after the merger (Schools 2 & 3).

In the case of both contact quality and attitudes, we had available separate measures for both ingroup and outgroup. We expected to find that the quality of contact with ingroup

members was rated higher than contact with outgroup members, and that attitudes towards the ingroup would be more positive than attitudes towards the outgroup. We indeed found this to be the case for both Asian-British and White-British students at the outset. However, over time in School 1 there was a significant decrease in the rated difference between both ingroup and outgroup contact quality and attitudes; thus, the rated quality of outgroup contact (and attitudes towards the outgroup) became closer to ingroup contact (and attitudes towards the ingroup) over the course of the study. In the other two schools, however, the difference increased over time.

In the broader literature on intergroup contact generally, great emphasis is placed on the value of making cross-group friends, which is the most effective form of contact (Davies et al., 2011). In School 1, over the course of the study we found a marked drop in the proportion of students who reported having no friends from the ethnic outgroup.

Comparison with the other two schools should be done with caution here, because the sample size for Asian-British students becomes very small in some cases (either at a specific wave, or in a specific school); bearing this caveat in mind, the reduction in the number of students with no outgroup friends was smaller in the less balanced schools.

To provide a more nuanced assessment of integration in the most dramatic of the mergers (School 1), we also studied both seating patterns (when students were free to sit where, and with whom, they wished at lunch time in the school cafeteria) and friendship choices (used to study social networks). In our previous work, we have reported segregation in cafeteria seating choice at lunchtime (albeit in Oldham's sixth form college; see Al Ramiah, Schmid, Hewstone, & Floe, 2014). This pattern follows the well-documented principle of homophily, whereby "birds of a feather flock together" (McPherson, Smith-Lovin, & Cook, 2001), or people sit with and spend time with similar

others (with 'similarity' based on criteria including ethnicity, gender, and physical appearance).

We made observations at three different time points during the lunch break (see Floe, 2016). We did this to sample all 'sittings' of lunch, which was separated into year groups (Years 7-8, Years 9-10 and Year 11 students (aged, respectively, 11-13, 13-14, and 14-15); and we did this at two points in the school year (January 2014 and July 2014). We focused our analysis on the ethnic and gender composition of the discrete, clearly identifiable 'social units' in which students interacted during lunch break. (A social unit is identified as a small group of people clearly interacting with each other, even if, sometimes, some of them might be sitting at adjoining tables, rather than all at the same table.)

We found evidence of high levels of self-segregation in seating patterns; students self-segregated by gender and, to a significantly greater degree, by ethnicity. However, there was a significant increase in ethnic integration between waves, particularly for the older years (who have been in the school longer). Thus these observational data reveal the phenomenon of *resegregation*¹⁵ (Schofield, 1997), based on the sociological concept of *homophily*: within the ostensibly mixed school, aimed at promoting mixing, students have effectively segregated themselves once again, thereby limiting mixing. Yet, while resegregation remains an issue, and may be a difficult one to overcome in such settings (see Al Ramiah et al., 2014), the data do at least show some progress towards increased mixing over time.

¹⁵ We think of segregated contexts as those within which people have no *opportunities* to mix with ethnically dissimilar others, as opposed to desegregated contexts in which they do. We use the terminology of resegregation, because here we have investigated desegregated contexts in which people choose to segregate themselves (self-segregation) into ethnically homogeneous groupings.

We turn next to social network data. Much of the data we have reported so far indicates that mixing does take place, where the opportunity is provided, that contact increases over time, and that it has a positive impact on measures such as attitudes. However, it is important not to be overly optimistic. We therefore wished to ask how closely integrated Asian-British and White-British students were, by asking whether they were integrated into each other's *social networks*. Previous research has reported that such social networks, based on a small number of one's best friends, tend to be segregated (Windzio & Bicer, 2013).

Social networks were assessed very simply by asking respondents to list up to ten closest friends from their year group. We assessed social networks of all students in Year 7 (aged 11-12 years) in January 2014 of their first year at the school. We also repeated this process over two further time points (July 2014 and July 2015), following the same students as they went into Year 8 (aged 12-13 years). We then used Social Network Analysis to plot a network of all the links or 'ties' between students in the same year group. Among other things, such networks show the extent to which a network is clustered as a function of, for example, the ethnic and gender characteristics of those who make up the network (e.g., students in a year group). One of the most useful aspects of data generated by this kind of analysis is that it shows *reciprocal* friendships. It might, for example, be relatively easy for a White-British or Asian-British student to say (e.g., in response to the self-report items we used in Studies 1 and 2), "Yes, I have [outgroup] friends" or even to nominate "Mohammed" or "Michael" as one such friend. But social network analysis requires that Mohammed nominates Michael and *vice versa* if it is to count as a reciprocal friendship.

We found two distinct clusters of Asian-British students, separated into Asian-British females and Asian-British males. In contrast, the cluster for White-British students was much more integrated by gender. Links between the two Asian-British and the White-British clusters, our main focus, were, however, relatively few. White-British students reported more Asian-British friends in July 2014, and even more in July 2015; Asian-British students' outgroup friends were initially higher and then remained roughly the same over time, and this may perhaps indicate that Asian-British students consider White-British students to be their friends earlier than this is reciprocated by White-British students. When looking at reciprocal ties only, both White-British and Asian-British students showed a slight increase over time in their number of outgroup friends. Nonetheless, the social network analysis shows that students primarily had friends of the same ethnic group as themselves.

General Discussion

The three studies reported provide robust evidence for the 'contact hypothesis' (Allport, 1954) from English high schools. Against a recent history of riots in this community, our research shows that bringing together Asian-British and White-British students under positive conditions, being educated in the same school and with normative support (emphasized by Allport, 1954) for this co-education from teachers and the local education authority has positive outcomes. Specifically, mixing versus segregation in secondary education does actually promote intergroup contact, although there remains evidence of resegregation (Schofield, 1977), and improves attitudes and trust towards the outgroup. These findings add to the extensive support for intergroup contact (see Pettigrew & Tropp, 2006); but we emphasize here the novelty of such evidence from English high schools, its value for promoting social cohesion at a time when social cohesion is challenged by forces including concerns about terrorism and Brexit, and its relevance for

the debate on faith schools. We summarize the main findings, acknowledge some limitations of the research, and draw out its implications for the debate on faith schools.

We can summarize the main findings of our extensive research programme by answering the four broad questions we posed at the outset. We arrived at these answers by studying varying aspects of intergroup contact between individuals belonging to different groups (especially its *quality* and the extent of *cross-group friendships*), and how this related to outcome measures including outgroup attitudes, and trust.

1. Do attitudes relating to trust and attitudes towards other groups differ amongst students in mixed vs segregated schools? Studies 1 and 2 found that both Asian-British and White-British students in mixed schools expressed more positive attitudes and higher levels of trust towards outgroup students than those in segregated schools. Although responses of White-British students in mixed schools were quite positive across a range of variables, Asian-British students in mixed schools had even higher quality contact and a greater proportion of outgroup friends than White-British students. White-British students in mixed schools had better quality contact, and a greater proportion of outgroup friends, than White-British students in segregated schools. Given that students in mixed schools sometimes 'resegregate' (i.e., fail to take up opportunities for mixing; Schofield, 1977), these findings confirm that students in the mixed schools *did mix* and made outgroup friends. Over a seven-month period, White-British students improved their attitudes, and the quality of contact increased by the second Wave. Changes over time were fewer for Asian-British students, who are already more exposed to the outgroup. Analyses demonstrated that, even after accounting for self-selection, contact led over time to more positive outgroup attitudes. *Thus, there was consistent evidence that attitudes relating to trust and*

tolerance of other groups differ amongst White-British students in mixed vs segregated schools. Attitudes were more positive and, as would be expected, mixing was more frequent in mixed than segregated schools.

2. Do mixed schools result in more social mixing of different groups or do students remain segregated? Studies 1 and 2 found that a much greater proportion of White-British students in segregated than mixed schools reported having no close outgroup friends towards the end of their first year of high school. White-British students at mixed schools had more cross-group friendships than those at segregated schools at both waves. Within mixed schools, Asian-British students had a higher proportion of outgroup friends and number of close outgroup friends than White-British students in the same schools. Mixing was most evident in the three most-mixed schools in Oldham. In these schools, Asian-British students had greater quantity and quality of contact, and more outgroup friends, than their White-British counterparts. They also had more positive attitudes towards the outgroup. In the most-mixed schools, students who had outgroup contact showed an improvement in outgroup attitudes, even after accounting for self-selection. These findings suggest a reciprocal process, in which greater contact promotes better attitudes, and better attitudes promote greater contact. Contact research has long acknowledged the possibility of reciprocal causal paths that predict contact from attitudes and vice versa (see Pettigrew & Tropp, 2006), and the contact–prejudice relationship should be seen as bidirectional – a dynamic, reciprocal process (Eller & Abrams, 2003). This in no way limits the value of intergroup contact as a social intervention, for which all that matters is that the path *from* contact *to* outgroup attitudes must remain statistically significant even after the reverse causal path has been accounted for. Rather, this finding underscores the viable role of contact in improving outgroup evaluations overall, notwithstanding the acknowledged evidence for self-selection bias. *Thus, mixed schools do result in more*

social mixing between ethnic groups over time, and mixing is reliably associated with more positive views of the outgroup.

3. Do the attitudes of students who mix with students from other backgrounds differ compared to those of students who remain within their own ethnicities? There was clear evidence from Studies 1 and 2 that those who engage in positive contact had more positive attitudes, but, as just noted, there was also evidence for a reciprocal effect. Students who had more positive contact experiences with outgroup members also tended to show more positive attitudes, as well as more trust, towards the outgroup as a whole. *Thus, attitudes of students who mix with students from other backgrounds were more positive compared to those who remain within their own ethnicities.*
4. In specially planned schools designed to merge previously segregated schools, have the attitudes of students changed over time? Study 3 found that in the planned merger between a former predominantly White-British and a predominantly Asian-British school at School 1 the rated quality of outgroup contact became, over time, closer to that of ingroup contact. Thus mixing with the outgroup felt more like mixing with the ingroup, over time. Outgroup attitudes also moved closer to ingroup attitudes over the course of the study. In the other two schools, however, the difference between ingroup and outgroup ratings (of both contact quality and attitudes) increased over time. At School 1 there was, over the course of the study, a significant reduction in the number of students with no outgroup friends; this reduction was smaller in the other two, less balanced schools. Notwithstanding the robust longitudinal evidence for attitude change as a result of the ethnic school merger, complementary evidence from School 1 only, based on systematic observations (of seating in the school cafeteria) and on friendship networks, revealed room for greater progress towards full integration within the school. Students self-segregated at

lunchtimes strongly by ethnicity; and even though there was a significant increase in mixed seating over several months, resegregation (Schofield, 1977) was still evident at the end of the study. Social network analysis showed that the vast majority of students' friends were from the same ethnic group as themselves. *Thus, in merger schools, students' attitudes did improve over time, and there was consistent evidence of greater improvement in the ethnic merger school, but we acknowledge that there remains room for improvement in reducing resegregation.*

We have sought to make this research as robust as possible, including measuring key constructs with multiple items, conducting longitudinal research, and using sophisticated analytic techniques. These achievements themselves are not insubstantial. Pettigrew and Tropp's (2006) meta-analysis, for example, reports only a handful of longitudinal studies (a situation that has improved with more recent research; see the later meta-analysis on cross-group friendships, by Davies et al., 2011). Notwithstanding, the research has some obvious limitations. First, the research is, evidently, all based on schools in one English town, and deals only with White-British and Asian-British high-school students. Thus, caution should be exercised before generalizing from these findings to the effects of school segregation versus mixing on other groups, or in other countries. However, we wish to emphasize that our specific focus was to study these issues among precisely these groups, and in England, in view of the challenges faced by their community, and other similar communities, especially in the north of England. Second, we have focused exclusively on contact within schools. This is not surprising, given the residential segregation we have alluded to, which led us to believe that within-school contact should be the primary focus of our work. Nonetheless, we also collected some data about contact outside school, and whether in-school contact might promote it, but for reasons of space this is not reported here.

Overall, our data confirms that contact plays a significant role in reducing prejudice and promoting more positive intergroup relations. We do not, however, wish to (in the words of an anonymous reviewer) appear too ‘evangelical’ in our support for contact. Several studies have demonstrated that minority members who have experienced the most intergroup contact are in general more reluctant to protest for change, and argued that contact can have a ‘sedative effect’ (for a review see Becker & Tausch, 2015). From this perspective, contact ‘sedates’ minority members, making them less able to perceive and challenge inequality. While we acknowledge the importance of not allowing intergroup contact to have this unintended consequence, there are reasons to be cautious about an over-hasty argument against the value of intergroup contact in general (Pettigrew & Hewstone, 2017). For example, intergroup contact also improves the attitudes of members of the advantaged group toward both the disadvantaged group and intergroup policies aimed at promoting equality; and intergroup contact can also heighten a disadvantaged group’s sense of group relative deprivation, rather than inevitably having a sedating effect.

These findings, overall, suggest that faith schools, to the extent that they involve high levels of segregation, are a barrier to integration, even if they might achieve other positive goals for their students from religious and ethnic minorities (Driessen et al., 2016). In writing this, we acknowledge that some faith schools are more diverse in terms of their ethnic and religious composition than others (indeed, this was the case in one of the pre-merger Roman Catholic faith schools we studied), and we emphasize that we are not drawing attention to schools of any particular faith. We are concerned primarily with a characteristic of *some* faith schools, namely segregation and the consequent absence of even the possibility of intergroup contact in school; it is this characteristic that we can conclude is detrimental to preparing the young students in these schools, when they are

highly segregated, for a life in an increasingly diverse society, even if there are other features of these schools that may benefit their students in this regard (see Driessen et al., 2016; Flint, 2007; Grace, 2012; Halstead & McLaughlin, 2005; Miller, 2001; Shah, 2012).

Segregated schools, including some faith schools, deprive young people of the opportunity to mix across ethnic and religious lines during the school day, which is the most significant period in which they can mix socially for five out of seven days a week. Without that contact in a setting with supportive norms for mixing, which is typically of sufficient quality to promote cross-group friendships, the path towards positive outgroup attitudes will be impeded, if not blocked completely.

Acknowledgements

We take this opportunity to thank three people who have encouraged and facilitated our research in schools from its inception: Jayne Clarke, Alun Francis, and Des Herlihy. We thank the teachers and students at all the schools we visited in Oldham, as well as the Local Education Authority, for their help in collecting the data. We also thank two anonymous reviewers and Andrew Mason for their helpful comments on an earlier version of this paper.

Declaration of Funding

The research described in this article was funded by grants on 'Ethno-religious diversity and trust in residential and educational settings' from The Leverhulme Trust, and by the Department for Education.

Declaration of Conflicting Interests

None

References

- Abrams, D., & Rutland, A. (2008). The development of subjective group dynamics. In S. R. Levy & M. Killen (Eds.), *Intergroup attitudes and relations in childhood through adulthood* (pp. 47-65). New York: Oxford University Press.
- Allport, G. W. (1954). *The nature of prejudice*. Reading, MA: Addison-Wesley.
- Al Ramiah, A., Schmid, K., Hewstone, M., & Floe, C. (2014). Why are all the White (Asian) kids sitting together in the cafeteria? Resegregation and the role of intergroup attributions and norms. *British Journal of Social Psychology*, 54, 100-124.
- Becker, J., & Tausch, N. (2015). A dynamic model of engagement in normative and non-normative collective action: Psychological antecedents, consequences, and barriers. *European Review of Social Psychology*, 26, 43-92.
- Brechwald, W. A., & Prinstein, M. J. (2011). Beyond homophily: A decade of advances in understanding peer influence processes. *Journal of Research on Adolescence*, 21, 166-179.
- Cantle, T. (2001). *Community cohesion: A report of the independent review*. London: Home Office.
- Cantle, T. (2006). Parallel lives. *Index on Censorship*, 35, 85-90.
- Davies, K., Tropp, L., Aron, A., & Pettigrew, T. F., & Wright, S. C. (2011). Cross-group friendships and intergroup attitudes: A meta-analytic review. *Personality and Social Psychology Review*, 15, 332-351.
- Dovidio, J. F., Love, A., Schellhaas, F. M., & Hewstone, M. (2017). Reducing intergroup bias through intergroup contact: Twenty years of progress and future directions. *Group Processes & Intergroup Relations*, 20, 606-620.
- Driessen, G., Agirdag, O., & Merry, M. (2016). The gross and net effects of primary school denomination on pupil performance. *Educational Review*, 68, 466-480.
- Eller, A., & Abrams, D. (2003). "Gringos" in Mexico: Cross-sectional and longitudinal

effects of language school-promoted contact on intergroup bias. *Group Processes & Intergroup Relations*, 6, 55–75.

Flint, J. (2007). Faith schools, multiculturalism and community cohesion: Muslim and Roman Catholic state schools in England and Scotland. *Policy and Politics*, 35, 251-268.

Floe, C. E. (2016). *Contact and self-segregation in ethnically diverse schools: A multi-methodological approach*. Unpublished doctoral dissertation, University of Oxford, UK.

French S. E., Seidman E., Allen L., & Aber J. L. (2006). The development of ethnic identity during adolescence. *Developmental Psychology*, 42, 1-10.

Gallagher, T. (2005) Balancing difference and the common good: lessons from a post-conflict society. *Compare: A Journal of Comparative and International Education*, 35, 429-442.

Grace, G. (2012) Faith schools: Democracy, human rights and social cohesion. *Policy Futures in Education*, 10, 500-506.

Hewstone, M. (2009). Living apart, living together? The role of intergroup contact in social integration. *Proceedings of the British Academy*, 162, 243-300.

Hewstone, M. (2015). Consequences of diversity for social cohesion and prejudice: the missing dimension of intergroup contact. *Journal of Social Issues*, 71, 417-438.

House of Commons Library (2017). *Faith schools in England: FAQs*. Briefing paper, Number 06972, 13 March.

Kline, R. (2016). *Principles and practice of structural equation modelling*. New York: The Guilford Press (pp 151-245).

Little, T. (2013). *Longitudinal structural equation modeling*. London, UK: The Guilford Press.

McPherson, M., Smith-Lovin, L., & Cook, J. M. (2001). Birds of a feather: Homophily in social networks. *Annual Review of Sociology*, 27, 415-444.

Meredith, W., & Tisak, J. (1990). Latent curve analysis. *Psychometrika*, 55, 107-122.

Miller, H. (2001). Meeting the challenge: The Jewish schooling phenomenon in the UK. *Oxford Review of Education*, 27, 501-513.

Muthén et al., (2003). Muthén, L. K., & Muthén, B. O. (1998-2018). Mplus User's Guide. Sixth Edition. Los Angeles, CA: Muthén & Muthén

Peach, C. (1996). Does Britain have ghettos? *Transactions of the Institute of British Geographers*, 21, 216-235.

Pettigrew, T. F. (1971). *Racially separate or together?* New York, NY: McGraw Hill.

Pettigrew, T. F., & Hewstone, M. (2017). The single factor fallacy: Implications of missing critical variables from an analysis of intergroup contact theory. *Social Issues and Policy Review*, 11, 8-37.

Pettigrew, T. F., & Tropp, L. R. (2006). A meta-analytical test of the intergroup contact theory. *Journal of Personality and Social Psychology*, 90, 751–783.

Pettigrew, T. F., & Tropp, L. R. (2011). *When groups meet: The dynamics of intergroup contact*. Hove, E. Sussex & New York, New York: Psychology Press.

Phillips, D. (2006). Parallel lives? Challenging discourses of British Muslim self-segregation. *Environment and Planning D: Society And Space*, 24, 25-40.

Rutland, A., Killen, M., & Abrams, D. (2010). A new social-cognitive developmental perspective on prejudice: The interplay between morality and group identity. *Perspectives on Psychological Science*, 5, 280-291.

Schofield, J. W. (1997). Resegregation. In C. A. Grant & G. Ladson Billings (Eds.), *Dictionary of multicultural education* (pp. 234-235). Phoenix, AZ: Oryx Press.

Shah, S. (2012) Muslim schools in secular societies: persistence or resistance!

British Journal of Religious Education, 34, 51-65.

Tajfel, H. (1981). *Human groups and social categories: Studies in social*

Psychology. Cambridge: Cambridge University Press.

Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W.

G. Austin & S. Worchel (Eds.), *The psychology of intergroup relations* (pp. 33–48).

Monterey, CA: Brooks/Cole.

The Guardian (2018). Faith schools. What they teach and how they are inspected.

Saturday 3 March.

Windzio, M., & Bicer, E. (2013). Are we just friends? Immigrant integration into high-

and low-cost social networks. *Rationality & Society*, 25, 123-145.

Wölfer, R., Hewstone, M., & Jaspers, E. (in press). Social contact and interethnic

attitudes: The importance of contact experiences in schools. In F. Kalter, J. O. Jonsson,

A. F. Heath, & F. van Tubergen (Eds.). *Growing up in diverse Europe: Integration and the*

lives of minority and majority youth in England, Germany, the Netherlands and Sweden.

London, UK: Proceedings of the British Academy.

Wölfer, R., Schmid, K., Hewstone, M., & van Zalk, M. (2016). Developmental

dynamics of intergroup contact and intergroup attitudes: Long-term effects in

adolescence and early adulthood. *Child Development*, 87, 1466–1478.

Author biography

Miles Hewstone is Professor of Social Psychology and Public Policy at the University of Oxford, and Global Innovation Chair for Social Conflict and Cohesion, University of Newcastle, Australia. He has published widely in the field of social psychology, focusing on prejudice and stereotyping, intergroup contact, the reduction of intergroup conflict, sectarianism in Northern Ireland, and segregation and integration.

Ananthi Al Ramiah is a social psychologist with a PhD from Oxford. Her work has focused on the study of intergroup (specifically interethnic and interreligious) diversity and conflict prevention, discrimination, intergroup contact and compromise and most recently, religious extremism. Formerly an assistant professor at Yale-NUS College in Singapore, she is currently based in Kuala Lumpur, Malaysia and works as an independent scholar and academic consultant.

Katharina Schmid is an Associate Professor in Organizational Behaviour at ESADE Business School, Ramon Llull University, Spain. Her research interests lie broadly in social identity and multiple categorization processes, prejudice, stereotyping and conflict management, and diversity and intergroup relations. She holds a PhD in Social Psychology.

Christina Floe completed her doctorate at the University of Oxford, in which she studied seating patterns and social networks in schools; she is now an independent scholar.

Maarten van Zalk is head of the Department of Developmental Psychology at Osnabrück University, Germany. He has published in the fields of developmental, clinical, and social psychology. His work focuses on lifespan development of personality traits, intra- and intergroup relationships, online and offline social networks, internalising and externalising problem behaviour, and prejudice toward refugees and immigrants.

Ralf Wölfer is an Associate Professor of Social Psychology at the University of Oxford. His main research combines social and developmental psychology in order to gain a better understanding how social relationships form behaviour and vice versa with a specific focus on aggressive behaviour, including ostracism, bullying, and intergroup conflict.

Rachel New is Research Coordinator for the Oxford Centre for the Study of Intergroup Conflict, University of Oxford.