



Fifty-odd years of inter-group contact: From hypothesis to integrated theory

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We review 50-odd years of research on Allport's (1954) 'contact hypothesis', to assess progress, problems, and prospects. We chart the progress that has been made in understanding two distinct forms of contact: direct and indirect. We highlight the progress made in understanding the effects of each type of contact, as well as both moderating and mediating factors, and emphasize the multiple impacts of direct contact, especially. We then consider some of the main critiques of inter-group contact, focusing on empirical issues and whether contact impedes social change, and provide a research agenda for the coming years. We conclude that this body of work no longer merits the modest title of 'hypothesis', but fully deserves acknowledgement as an integrated and influential theory.

A celebration of the first 50 years of this journal provides an opportunity to assess progress, problems, and prospects, of research on the 'contact hypothesis'. The idea that positive inter-group contact could be used to promote better inter-group relations and reduce prejudice was definitely 'made in America', initially by the sociologist Robin Williams (1947) and latterly, and most famously, by the social psychologist Gordon Allport (1954). But subsequently, British social psychologists have not only made some of the most significant theoretical and empirical contributions, but also contributed to critiques of the 'contact hypothesis'.¹ The first volume of the journal appeared in 1962, just 6 years after Allport's classic *The Nature of Prejudice*, whose 16th chapter ('The Effect of Contact') contained the systematization of ideas that was to prove so fruitful for later scholars, including many publishing in this journal.

We start by charting the progress that has been made in understanding two distinct forms of contact: direct and indirect, only the first of which was anticipated by Allport. We summarize the current understanding of the impact of each form of contact, and highlight the progress made in understanding both moderating and mediating variables, and the wider impact of contact. We then consider the main critiques of inter-group

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¹We interpret 'British' broadly, rather like treasures in the British Museum, as some of these studies' authors were, for example, Americans, Canadians, Germans, and South Africans working in British universities.

contact, identifying those that we believe are most valid, and showing how some of them have contributed to a better overall understanding of contact, and how others provide a research agenda for the coming years.

Direct contact

Allport's (1954) vision of inter-group contact was based on bringing members of different groups together in *face-to-face encounters* to reduce inter-group hostility. Most importantly, he proposed that direct inter-group contact would be more likely to reduce prejudice if it involved equal status among the participants, cooperation on common goals between groups, and institutional support.

The prejudice-reducing effect of contact is now well-established, with the most convincing evidence accumulated by Pettigrew and Tropp's (2006) monumental meta-analysis of 515 studies (see also Dovidio, Gaertner, & Kawakami, 2003). Pettigrew and Tropp reported not only a highly significant negative relationship between contact and prejudice (mean $r = -.22$, $p < .001$),² but that the effect of contact was greater in samples where contact was structured to meet Allport's optimal contact conditions, and that cross-group friendships were perhaps the most effective form of inter-group contact (see Hamberger & Hewstone, 1997; Pettigrew, 1997). The effect of contact, albeit significant, was, however, weaker for minority-status than majority-status groups. This finding suggests that members of advantaged and disadvantaged groups may construe inter-group interactions differently (see also Hopkins & Kahani-Hopkins, 2006). In particular, members of disadvantaged groups are more likely to anticipate prejudice and discrimination against them from members of dominant groups (Shelton, 2003; Tropp, 2006), and it remains a challenge for contact as an intervention to prove equally effective for both groups.

One limitation of the database for Pettigrew and Tropp's (2006) meta-analysis is that so many studies have been cross-sectional, rather than experimental or longitudinal. However, several longitudinal studies have now been conducted (e.g., Al Ramiah & Hewstone, 2011; Binder *et al.*, 2009; Eller & Abrams, 2004; Levin, van Laar, & Sidanius, 2003; Swart, Hewstone, Christ, & Voci, 2011) that enhance our confidence in the value of contact as a social intervention, while sometimes also reporting self-selection effects, *from attitudes to contact* (see Christ, Hewstone, Tropp, & Wagner, in press, for a recent collection of longitudinal studies of contact; and Christ & Wagner, in press, on methodological issues in longitudinal research). It should be emphasized, however, that the presence of the reverse path (from attitudes to contact) does not pose a threat to the value of contact as an intervention; as long as manipulated contact can be shown to affect attitudes, then the core of the 'contact hypothesis' remains supported.

Moderators and mediators of direct contact

Significant inroads have been made towards understanding *when* contact is most likely to reduce prejudice (i.e., the moderators of contact effects) as well as *how* contact promotes prejudice reduction (i.e., the mediators of contact effects). Allport's (1954) original work was most influential in identifying variables that moderated the impact of contact on

²This effect size is comparable to those for the inverse relationship between condom use and sexually-transmitted HIV and the relationship between passive smoking and the incidence of lung cancer at work (Al Ramiah & Hewstone, in press).

prejudice, an approach developed by Pettigrew and Tropp's (2006) sophisticated meta-analysis. Hewstone and Brown (Brown & Hewstone, 2005; Hewstone, 1996; Hewstone & Brown, 1986) have, in addition, accumulated evidence that the effects of contact are greater when respective group memberships are salient and/or out-group members are considered typical of their group as a whole (e.g., Van Oudenhoven, Groenewoud, & Hewstone, 1996; for other moderators, see Dhont & van Hiel, 2009; Hodson, 2008; for a review, see Tausch & Hewstone, 2010). The most effective form of contact, however, appears to involve both inter-group *and* interpersonal factors, as when cross-group friends provide optimal contact, while retaining their respective group memberships to promote generalization (see Brown & Hewstone, 2005).

A major development since Allport's (1954) pioneering work is that researchers have moved from merely demonstrating that contact works to showing *how* it works (see Brown & Hewstone, 2005). Although several mediators have been identified (e.g., Barlow, Louis, & Hewstone, 2009; González, Verkuyten, Weesie, & Poppe, 2008; Harwood, Hewstone, Paolini, & Voci, 2005; Swart, Hewstone, Christ, & Voci, 2010; Tausch, Tam, Hewstone, & Kenworthy, 2007; see Brown & Hewstone, 2005, for a review), a meta-analysis specifically on mediators of contact (Pettigrew & Tropp, 2008) finds that, more generally, contact exerts its effect on prejudice reduction both by reducing negative affect (e.g., inter-group anxiety) and by inducing positive affective processes (e.g., empathy and perspective taking). There is less evidence for Allport's (1954) favoured mediator, increased knowledge about the out-group (but see Eller & Abrams, 2004).

Impact of direct contact on multiple outcome variables

While Pettigrew and Tropp's (2006) meta-analysis showed, beyond any doubt, that contact is negatively associated with prejudice, its impact is much wider than that. Recent research has shown that contact is also positively associated with attitude strength (e.g., Christ *et al.*, 2010; Vonofakou, Hewstone, & Voci, 2007), out-group trust (e.g., Tam, Hewstone, Kenworthy, & Cairns, 2009), and forgiveness (e.g., Hewstone, Cairns, Voci, Hamberger, & Niens, 2006; Tam *et al.*, 2007). The effects of contact also go well beyond conscious self-report measures, to impact upon implicit associations (e.g., Aberson & Haag, 2007; Prestwich, Kenworthy, Wilson, & Kwan-Tat, 2008; Tam, Hewstone, Harwood, Voci, & Kenworthy, 2006; Turner, Hewstone, & Voci, 2007a). Further still from self-report measures of attitude, prior positive contact is associated with reduced automatic physiological threat responses to out-group members (Blascovich, Mendes, Hunter, Lickel, & Kowai-Bell, 2001), decreases in cortisol reactivity during inter-group contact (Page-Gould, Mendoza-Denton, & Tropp, 2008), and reduced differences in neural processing of own versus other-race faces (Walker, Silvert, Hewstone, & Nobre, 2008).

These prejudice-reducing benefits of inter-group contact have been shown to generalize well beyond the original contact setting or the particular out-group exemplar(s) encountered (see Pettigrew & Tropp, 2006). Moreover, contact effects also generalize from experience with a primary out-group to attitudes towards other, *secondary*, out-groups not involved in the contact situation (so-called 'secondary transfer effects' of contact; see Pettigrew, 1997, 2009). Tausch *et al.* (2010) showed, in a series of studies, that such transfer effects can occur longitudinally, are mediated by attitude generalization, occur while controlling for direct contact with the secondary out-groups, and cannot be explained in terms of socially desirable responding.

Indirect contact

Given the practical obstacles to direct inter-group contact posed by segregation or conflict, recent approaches have investigated the effectiveness of less direct forms of contact (for a broader analysis of indirect contact, see Dovidio, Eller, & Hewstone, 2011; Harwood, Hewstone, Hamburger, & Tausch, in press). We consider the evidence for two such forms of indirect contact, namely *extended* contact and *imagined* contact.

Extended contact

'Extended' contact refers to the impact on prejudice of knowing about, or observing, at least one, and preferably more than one, in-group member who has an out-group friend (Wright, Aron, McLaughlin-Volpe, & Ropp, 1997).³ A series of experimental, quasi-experimental, and correlational studies have provided extensive empirical evidence that people knowing about or observing inter-group friendships show less prejudice than those who do not (for a review see Turner, Hewstone, Voci, Paolini, & Christ, 2007b), while controlling for direct contact with out-group members. Extended contact was associated with less prejudice among Catholics and Protestants in Northern Ireland (Paolini, Hewstone, Cairns, & Voci, 2004), and has been applied as a quasi-experimental intervention to reduce prejudice among school children (e.g., Cameron & Rutland, 2006; Cameron, Rutland, Brown, & Douch, 2006). Effects of extended contact are consistently stronger for participants with less experience of direct contact (e.g., Christ *et al.*, 2010; Dhont & Van Hiel, 2011), are not limited to the out-group contacts of one's in-group friends specifically (Tausch, Hewstone, Schmid, Hughes, & Cairns, 2011), appear to be equally strong for members of majority and minority groups (Gómez, Tropp, & Fernández, 2011), and are most strongly mediated by in-group norms (De Tezanos-Pinto, Bratt, & Brown, 2010; Gómez *et al.*, 2011; Turner, Hewstone, Voci, & Vonofakou, 2008).

Imagined contact

Turner, Crisp, and Lambert (2007c) proposed that simply imagining contact with out-group members could improve inter-group attitudes (as shown, originally, by Desforges, Lord, Pugh, Sia, Scarberry & Ratcliff, 1997) and should be *part of* a programme for reducing inter-group bias. Although some scholars are deeply skeptical (e.g., Bigler & Hughes, 2010), an extensive programme of research has found that imagined contact can reduce inter-group bias and improve both explicit and implicit out-group attitudes (Turner & Crisp, 2010; Turner *et al.*, 2007c), enhance intentions to engage in future contact (Crisp & Turner, 2009, in press; Husnu & Crisp, 2010; see Crisp, Husnu, Meleady, Stathi, & Turner, 2011, for review), and even generalize to other out-groups (Harwood, Paolini, Joyce, Rubin, & Arroyo, 2011), with reduced inter-group anxiety as the key mediator. The basic manipulation may, however, have to be enhanced in the case of particularly threatening out-groups (see West, Holmes, & Hewstone, 2011).

³Since Wright *et al.*'s (1997) pioneering paper, the terms 'extended', 'indirect', and 'vicarious' contact have been used interchangeably. However, as we have argued elsewhere (Dovidio *et al.*, 2011; Harwood *et al.*, in press), it is clearer to use the term 'extended' contact to refer to instances of knowing about in-group members with out-group contact; whereas the term 'indirect' contact should be used as an umbrella term that includes extended, imagined, and mediated forms of contact; and 'vicarious' contact is best restricted to instances in which intergroup contact is observed via some form of media.

Contact and its critics: An agenda for future research

Critiques of the contact hypothesis have been varied (see Bramel, 2004; Dixon, Durrheim, & Tredoux, 2005; Forbes, 1997; McCauley, 2002). We focus here, first, on empirical issues. We then consider the broader theoretical, practical, and political question of whether attempts to reduce prejudice and improve inter-group relations via inter-group contact may, paradoxically, produce social and psychological changes that diminish the likelihood that members of disadvantaged groups will recognize inequality or become sufficiently motivated to do something about it. For both issues, we consider implications for a future research agenda (see also Al Ramiah & Hewstone, in press b; Pettigrew, 2008; Tausch & Hewstone, 2010; Tausch, Kenworthy, & Hewstone, 2006).

Empirical issues

We agree that contact research, our own included, has relied too heavily on cross-sectional research. However, researchers are increasingly conducting longitudinal studies, sometimes over many waves (e.g., Levin *et al.*, 2003) or multiple interactions (e.g., Shook & Fazio, 2008a,b), and investigating multiple mediators and outcomes (e.g., Swart *et al.*, 2011). As studies include more waves, so they can make use of techniques such as latent growth curve modelling to analyse individual trajectories, that is, changes over time, in contact, and other measures of interest (for illustrations using survey data and diary records, respectively, see Titzmann & Silbereisen, 2009; Shelton, Trail, & West, in press).

However, experiments remain the best method for testing causal hypotheses, and should be at the forefront of future research. We have, for example, begun to conduct comparisons of the impact of direct, extended, and imagined contact in the same experimental design. One area of burgeoning experimental research concerns actual face-to-face interactions between members of different groups, in which researchers take a *relational* approach, studying *meta-perceptions* (e.g., participants not only evaluate an out-group 'target', but also think about 'how the out-group "target" is likely to evaluate them'; e.g., Shelton & Richeson, 2006; Shelton, Richeson, & Vorauer, 2006; West, Shelton, & Trail, 2009). One intriguing discovery of this work is that some interventions (e.g., perspective-taking manipulations) may work better outside actual inter-group interactions (perhaps preparing people for contact), than within them, where they may disrupt the flow of interaction (see Vorauer, Martens, & Sasaki, 2009).

Importantly, these studies need to test whether the effects of contact are long lasting. We are especially interested in the relationship between different types of contact, and whether or not, for example, the experience of indirect contact (extended or imagined) facilitates future direct contact. Relatedly, many studies measure opportunity for contact (e.g., proportion of out-group members), and find that it is associated with actual contact, but that the strength of this association varies across studies, and is never perfect. An important topic for future research is what factors moderate the link between opportunities and actual contact (e.g., individual differences, strength of prejudice, education level; see Pettigrew, Christ, Wagner, & Stellmacher, 2006). Research is also needed on whether contact has an impact on behaviour and not merely attitudinal measures (see McCauley, 2002); this is a challenging issue, because we know that general-level attitudes do not correspond to, and hence typically do not predict, individual-level behaviours (e.g., Fishbein & Ajzen, 1975).

Forbes (1997) wants to know if, and then how, contact that reduces prejudice at the individual level affects collective processes. Investigating effects of contact using

multi-level analysis is an important new development that can best assess its impact at the level of neighbourhoods, schools, and organizations. When multi-level analyses are computed, which separate individual-level from neighbourhood-level effects, it is possible to explore whether contact has different effects at different levels (see Christ & Wagner, *in press*; Wagner, Christ, Pettigrew, Stellemacher, & Wolf, 2006).

Finally, future research must pay more attention to the negative factors operating in some contact situations (Pettigrew, 2008), which poison inter-group relations. A related issue is that of re-segregation, or what Dixon, Tredoux, Durrheim, Finchilescu, and Clack (2008) call the 'micro-ecology of segregation'. Evidence that members of ethnic and racial groups sometimes re-segregate into distinct areas of school and university cafeterias (e.g., Alexander & Tredoux, 2010; Clack, Dixon, & Tredoux, 2005) gives the lie to lazy earlier accounts that equated mere group proportions with face-to-face contact. More work is needed, however, to ascertain the meaning of such spatial segregation (does it indicate out-group avoidance, in-group bias, fear, discomfort?), and whether we can design interventions to promote greater mixing and meaningful inter-group contact. Promising current approaches target negative expectations about cross-group interactions, pointing out that they are inaccurate and biased in favour of the in-group, but can be successfully challenged (Mallett & Wilson, 2010; Mallett, Wilson, & Gilbert, 2008; Shelton & Richeson, 2005).

Does inter-group contact promote, or even restrict, social change?

Critics of contact research (e.g., Dixon *et al.*, 2005; Forbes, 1997) have argued that, although promoting more tolerant and egalitarian societies is an important goal of contact interventions, the literature still has little to say about how inter-group contact might ultimately affect societal change. Moreover, changes in out-group attitudes due to contact do not necessarily promote change in the ideological beliefs that sustain group inequality (e.g., Dixon, Durrheim, & Tredoux, 2007).

Relatedly, several scholars have fairly recently pointed out that well-meaning contact may, unwittingly, have the undesired effect of weakening minority members' motivation to engage in collective action aimed at reducing inter-group inequalities (see Dixon *et al.*, 2007; Saguy, Tausch, Dovidio, & Pratto, 2009; Wright, 2001; Wright & Lubensky, 2008). Contact research, while focusing on improving majority group members' inter-group attitudes via greater mixing, should not focus exclusively on prejudice as the main problem of inter-group relations in historically divided and unequal societies. Approaches focused more on social change emphasize structural inequalities and power differences between groups, and factors that inhibit, or encourage, mass mobilization and collective action as legitimate forms of social protest by minority group members, which also oppose societal inequality.

A challenge for future research on inter-group contact is to ensure that contact does not promote more positive inter-group relations at the cost of blunting legitimate protest. In this respect, it should not be forgotten, however, that majority members' contact with minority members may encourage them to take the perspective of the disadvantaged out-group and become its allies (Mallett, Huntsinger, Sinclair, & Swim, 2008; see also Jeffries & Ransford, 1969). One approach that may work is to emphasize commonalities between groups, while at the same time addressing unjust group inequalities during contact; this may result in greater prejudice reduction for members of disadvantaged groups (cf. Tropp & Pettigrew, 2005), without diverting attention away from group inequality (Saguy *et al.*, 2009).

Clearly, this will be a key area for future research, requiring us to consider how our discipline conceives of the nature of inter-group discrimination, what model of social change we should adopt, and what the longer-term political consequences of our theoretical standpoint as well as our research results are. Prejudice among majority group members is not the sole, or even necessarily the main, problem of inter-group relations between members of majority and minority groups of unequal status and power, and we need to address the advantages and any disadvantages of inter-group contact, for members of majority and minority groups, with an open mind.

Conclusions

The study of inter-group contact, like the *British Journal of Social Psychology*, has come a long way in 50-odd years. As Pettigrew and Tropp (2005, p. 271) point out, ‘Allport’s formulation specified neither the processes involved in inter-group contact’s effects nor how these effects generalize to other situations, the entire out-group, and other out-groups not involved in the contact (Pettigrew, 1998). Indeed, these omissions help to explain why he called it a “hypothesis” and not a “theory”’.

In view of the fact that all these ‘omissions’ have now been rectified, we think it is high time that this body of work was acknowledged as a fully-fledged *theory* (Hewstone, 2009). There is plenty of work still to be done, and with British social psychology proving a breeding ground for willing workers, the future looks bright. Although the British Government’s Report of the Commission on Integration and Cohesion, *Our Shared Future* (2007), acknowledged the importance of this work, most social psychologists still feel that the policy impact of our research is less than it deserves to be, and we trail behind sociology, politics, and especially economics. We believe, however, that if we can wed elegant experimental studies to multi-level and longitudinal survey research, then this body of work will grow in importance: a testament to the fact that theory-driven social psychology does matter, not just in the laboratory, but also in the school, the neighbourhood, and the society at large.

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