

Intergroup Contact and Intergroup Conflict

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Intergroup contact theory is enjoying a renaissance; positive contact does reduce intergroup prejudice, but intergroup contact has generally been studied in relatively benign settings. With a number of countries either still experiencing or having just emerged from periods of pervasive intergroup animosity, contact theory is, nowadays, being put to its most stringent test as contact theorists try to uncover ways in which intergroup conflict can be reduced and reconciliation fostered. This article draws on research conducted at the Oxford Centre for the Study of Intergroup Conflict in countries including South Africa, Northern Ireland, Cyprus, and Bosnia. We report on our efforts to add to the emerging body of literature by (a) exploring the possible roles that direct and extended contact play in (post-) conflict societies; (b) asking when we might—or might not—expect contact to positively affect more demanding outcomes (such as intergroup trust and forgiveness); and (c) by investigating the processes by which contact achieves these outcomes. We then outline a research program that aims to further study both the benefits and limitations of intergroup contact in societies that are immersed in or emerging from protracted intergroup conflict.

Keywords: direct contact, extended contact, prejudice, mediators, moderators

Some of the most violent and long-term conflict takes place between ethnic and religious groups; conflict that, since World War II, has claimed millions of lives (Horowitz, 1985). Even where some sort of peace agreement has been brokered, postconflict societies are fragile,

often characterized by continued distrust, suspicion, resentment, the apportioning of blame, and self-segregation. In this article we review the contributions of the Oxford Centre for the Study of Intergroup Conflict (OCSIC; <http://ocsic.psy.ox.ac.uk>) to understand the role of

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idential Settings” from the Leverhulme Trust. Note on authorship: Ed Cairns’ death deprived us of a valued colleague and a dear friend; he opened the doors of Northern Ireland to many of us for research purposes, and was always especially eager to help students. We are honored to add his name to this paper because he played a fundamental part in so many aspects of the research it reports.

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intergroup contact in prejudice reduction and the resolution of intergroup conflict. In focusing on social-psychological factors, such as intergroup contact, we do not overlook the range of powerful influences that ignite and maintain conflict. Instead, we see intergroup contact as a key factor, and one with immense potential, underlying any attempt at addressing prejudice and more violent types of conflict (see Al Ramiah & Hewstone, 2013).

We organize this article into four main sections. First, we explore the evidence in support of the prejudice-reducing effects of direct, face-to-face intergroup contact, focusing on when (i.e., moderators) and how (i.e., mediators) this happens. Second, we review the evidence for extended contact (an indirect form of contact), again pointing to moderating and mediating mechanisms. Third, we consider the impact of contact on a wide range of dependent measures, or outcomes, that move beyond measures of attitudes; we focus on outcomes of special importance to peace and conflict, specifically trust and forgiveness. Finally, we highlight issues for future studies. Throughout, we highlight the contributions of the work of the OCSIC, especially data dealing with conflict situations, which comes from our longstanding research program on Northern Ireland, and more recently also from Malaysia, South Africa, and Cyprus.

Direct Contact

Gordon Allport (1954) coined the term the *contact hypothesis* and proposed that contact between groups would be more likely to reduce prejudice and improve intergroup relations if four “optimal” conditions were met. First, there should be equal status among the individuals in the contact situation. Second, the situation in which intergroup contact occurs should require cooperation between groups. Third, groups should work toward common goals. Finally, contact should be legitimized through institutional support.

Allport’s (1954) formulation of the contact hypothesis has proven extremely influential and has inspired a great deal of empirical research that tested and extended its basic principles (Brown & Hewstone, 2005; Dovidio, Gaertner, & Kawakami, 2003; Pettigrew & Tropp, 2006, 2008, 2011). This work has used diverse research methods (field studies, lab experiments,

longitudinal surveys), and has had a profound impact on social policy in many countries (see Hewstone, 2009; Tausch, Kenworthy, & Hewstone, 2006, for reviews).

Research Evidence of the Impact of Direct Contact

The prejudice-reducing effect of contact is now well-established, with the most convincing evidence accumulated by Pettigrew and Tropp (2006). Their meta-analysis of 515 studies (including 713 independent samples), based on a total of over 250,000 participants found a highly significant negative relationship between contact and prejudice (mean effect size $r = -.22$, $p < .001$), suggesting that contact is an effective tool for reducing prejudice. More important, the basic contact effect is moderated by various factors including contact setting, target group, dependent measure, and majority versus minority group status. Pettigrew and Tropp (2006) found that contact situations that met Allport’s conditions resulted in greater prejudice reduction than those situations that did not. Notwithstanding, Pettigrew (2008) argued that these conditions should be seen as facilitating rather than essential because, as Pettigrew and Tropp (2006) demonstrated, significant positive (but diminished) contact effects exist even when these conditions are not met. Moreover, the contact-prejudice link is significantly weaker for members of disadvantaged groups ($r = -.18$) than it is for members of dominant groups ($r = -.23$; Tropp & Pettigrew, 2005b; see also Pettigrew & Tropp, 2011). Nevertheless, contact works for minority and majority group members alike. Therefore, it must be emphasized that these moderation effects qualify the *extent* of the contact effect, not its existence. Across all studies, the baseline effect is that contact is associated with reduced prejudice. Put simply, contact works. Later research added that successful contact situations should allow for the development of friendships through meaningful and repeated contact (Davies, Tropp, Aron, Pettigrew, & Wright, 2011).

One limitation of the database for Pettigrew and Tropp’s (2006) impressive meta-analysis is that the majority of the studies (over 70%) were cross-sectional in design, rather than experi-

mental or longitudinal. Cross-sectional studies limit one's ability to draw conclusions about the direction of the causal effect as they do not (a) allow for time between the supposed cause and the effect to pass and/or (b) manipulate the hypothesized causal variable and investigate its effect on an outcome variable(s). However, contemporary evidence is fast accruing that there is, indeed, a reliable effect from contact to reduced prejudice (see [Christ, Hewstone, Tropp, & Wagner, 2012](#)). Only experimental studies of intergroup contact yield unambiguous evidence that manipulated contact as an independent variable can and does cause changes in attitudinal and other dependent variables. However, by allowing an allotted amount of time to pass between data collection waves, longitudinal designs permit stronger causal interpretations than cross-sectional data, and show that under certain conditions contact does indeed lead to generalized attitude change. Several impressive longitudinal studies have recently emerged; these studies illuminate contact processes and enhance our confidence in the value of contact as a social intervention (see [Binder et al., 2009](#); [Christ & Wagner, 2013](#); [Swart, Hewstone, Christ, & Voci, 2011](#)). A further limitation is that many studies have been conducted in rather benign settings (e.g., contact on college campuses); a major thrust of research has been to supply evidence from more demanding settings, especially postconflict situations.

[Hewstone, Tausch, Hughes, and Cairns \(2008\)](#) addressed both these limitations in a recent longitudinal study of Catholics and Protestants in Northern Ireland. This setting can be considered a particularly demanding one for tests of the contact hypothesis as there have been decades of ethnopolitical violence (the so-called "Troubles") and extensive segregation still pervades all aspects of Northern Irish society, most evident in residential, educational, and personal-marital spheres (see [Hewstone et al., 2005](#); [Niens, Cairns, & Hewstone, 2003](#)). The survey covered residents of several mixed and segregated neighborhoods ($N = 404$ respondents who completed surveys at both Time 1 and Time 2, 1 year apart; [Hewstone et al., 2008](#)). They conducted statistical analyses that exploited the fact that they had measures of both contact and bias toward the outgroup at two time points. This allowed comparisons of the path from contact to bias with the reverse path,

from bias to contact. They found that contact at Time 1 had a negative effect on bias at Time 2, but that bias at Time 1 did not affect contact at Time 2; these results are consistent with a causal effect of contact on bias, indicating that contact reduced bias.

Moderators of Direct Contact

As noted earlier, [Pettigrew and Tropp's \(2006\)](#) meta-analysis reported numerous variables that moderated the overall impact of contact on prejudice (see also, [Harwood, Hewstone, Hamburger, & Tausch, 2013](#)). Here we highlight one variable that we have studied extensively, which consistently moderates the impact of direct contact on attitudes and other dependent variables: varying levels of categorization during contact.

Varying levels of categorization during contact. We propose that there are advantages in maintaining intergroup salience during contact, so long as the contact is positive ([Hewstone, 1996](#); [Hewstone & Brown, 1986](#)). If the contact is arranged so that it takes place between ingroup and outgroup members who can be regarded as sufficiently typical or representative of their groups, then the positive changes that occur should generalize to the groups as a whole. Although at first glance this proposal might seem paradoxical, one of the necessary conditions for this to happen is that the group memberships retain some psychological salience. Experimental and correlational studies now provide extensive evidence for this view (see [Brown & Hewstone, 2005](#), for a review).

Mediators of Direct Contact

A major development since [Allport's \(1954\)](#) pioneering work is that researchers have moved from the mere demonstration that contact works, to ask the more demanding question of how or why it works. Sufficient evidence on mediators has accrued to merit extensive coverage in a narrative review ([Brown & Hewstone, 2005](#)) and a meta-analysis specifically of the mediators of contact ([Pettigrew & Tropp, 2008](#)). We consider here three mediators that we believe are of particular relevance in postconflict societies: intergroup anxiety, empathy/perspective-taking, and threats (for other mediators, see [Brown & Hewstone, 2005](#); [Harwood](#)

et al., 2013; Hewstone, 2009; Pettigrew & Tropp, 2008).

Intergroup anxiety. *Intergroup anxiety* refers to the feelings of discomfort and nervousness that arise in intergroup encounters. Stephan and Stephan (1985) argued that intergroup anxiety is generally felt when anticipating future, or experiencing actual, contact with an outgroup member.

Following Islam and Hewstone's (1993) initial demonstration that intergroup anxiety mediated the contact-prejudice relationship for Hindus and Muslims in Bangladesh, a wealth of evidence has been found for intergroup anxiety as the key mediator of the effects of contact on attitudes (for reviews, see Paolini, Hewstone, Voci, Harwood, & Cairns, 2006; Pettigrew & Tropp, 2008). For a true test of mediation, a study needs to measure a predictor (e.g., contact), mediator (e.g., anxiety), and outcome (e.g., attitudes) at every wave of a study with at least three waves, and to show that contact at Wave 1 predicts anxiety at Wave 2, which predicts attitudes at Wave 3, controlling for prior levels of these variables (Cole & Maxwell, 2003). Swart et al. (2011) undertook such a test in South Africa. With 11 official languages, large-scale inequality between White, Black (African), Indian, and Colored (mixed racial heritage) South Africans, and continued distrust and self-segregation (Gibson, 2004), the South African postapartheid context offers a critical test for the value of intergroup contact in post-conflict societies. Demonstrating full longitudinal mediation of contact effects via intergroup anxiety, Swart et al. found that the cross-group friendships that Colored high school students had with White students at Wave 1 predicted lower levels of anxiety at Wave 2 (6 months later), which predicted more positive attitudes at Wave 3 (6 months after that).

If generic contact can reduce prejudice, then it is unsurprising that having cross-group friends is particularly powerful at doing so (Pettigrew, 1998). The potential of cross-group friendships in the context of past violent conflict is shown by two studies of Catholics and Protestants in Northern Ireland undertaken by Paolini, Hewstone, Cairns, and Voci (2004), who found that having cross-group friends was associated with reduced anxiety in samples of both students (Study 1) and adults (Study 2) in the general population.

Empathy. *Empathy* refers to the ability to share and understand another person's feelings. It is a vicarious emotional state that is aroused by observing the feelings and situations of others, and, according to Pettigrew and Tropp's (2008) meta-analysis, has been shown to be a strong and consistent mediator of the contact effect. For purposes of generalization from one outgroup member to the group as a whole, empathy has the advantage of making group membership salient by reminding people of the experiences a person has as a member of an outgroup. In their longitudinal study, Swart et al. (2011) found that cross-group friendships at Time 1 were negatively associated with outgroup prejudice at Time 3 via the mediation of affective empathy (as well as intergroup anxiety) at Time 2.

Group-oriented perceived threats. Intergroup relations are characterized not just by individual-level concerns, such as feeling uncomfortable in intergroup interactions, but by perceptions that the outgroup poses a threat to the ingroup. Intergroup anxiety is thought to be individually oriented because it is the individual who experiences anxiety during intergroup interactions, while realistic and symbolic threats are believed to be group oriented because it is the group that may lose power or have to change its belief system (Stephan & Renfro, 2003). Stephan, Ybarra, and Morrison (2009) emphasized the importance of perceived threats to the ingroup as predictors of prejudice (by distinguishing symbolic threats [e.g., threats to the ingroup's value system, belief system, or worldview] from realistic threats [e.g., threats to the ingroup's political and economic power] as proximal predictors of prejudice). Despite a dearth of studies dealing with contexts of past or present violent conflict, several studies have shown that contact can reduce perceived threat, and that such reductions in threat can act as a mediator in the relationship between contact and attitudes (Stephan & Stephan, 2000). We also have begun to address the importance of threat in several of our own studies.

We have shown that threats are important mediators of the effect of contact in postconflict settings. In a first cross-sectional study of a representative sample of Greek- and Turkish-Cypriots on the Island of Cyprus we found that for both groups the effects of contact (both direct and extended contact, see later) on atti-

tudes toward the outgroup and toward the opening of check points at the border between Northern and Southern Cyprus were mediated by reductions in both realistic and symbolic threat (Psaltis, Hewstone, & Voci, 2012), effects that we are now seeking to replicate with a longitudinal survey (Cakal, Psaltis, & Hewstone, 2013). Second, in a cross-sectional study of Catholic and Protestant students in Northern Ireland, Tausch, Hewstone, Kenworthy, Cairns, and Christ (2007, Study 1) found that whereas the mere quantity of outgroup contact had a direct, positive effect on outgroup attitudes, quality of contact had an indirect effect, and was mediated by reduced symbolic threat and intergroup anxiety. However, threat was only a significant mediator in the relationship between contact and prejudice for those students who identified strongly with their ingroup. For low identifiers, in contrast, it was individual-level concerns, that is, anxiety about interacting with outgroup members, that mediated the relationship between contact and prejudice (see also Tausch, et al., 2007).

Third, Al Ramiah, Hewstone, Little, and Lang (2013; see also Al Ramiah & Hewstone, 2012) conducted a large longitudinal study of the processes through which intergroup contact between ethnic Malays, Chinese, and Indians exerted its effects for participants taking part in a structured National Service intervention program across camps in Malaysia. They found evidence of indirect effects of intergroup contact during the program on outgroup evaluations, which were mediated by symbolic threat for the minority groups rating the majority group, but not for the majority group rating the minority groups. In other words, positive intergroup contact reduced the symbolic threat that minority group members perceived from the majority group, which was associated with more positive evaluations of the majority group. This effect was not seen for the majority group, who held the most political power; for them, symbolic threats were likely to have been less salient (because holding political power enabled the majority group to safeguard their symbolic interests), and thus intergroup contact did not exert its effects through such threat.

Although much research has looked at the effects of intergroup contact between majority and minority group members, very little research has examined how, in the presence

of a majority group, intergroup contact between two minority groups can affect their mutual intergroup attitudes. In our study in Malaysia, we found that minority groups viewed one another as competitors for scarce resources (Al Ramiah et al., 2013). Intergroup contact had the effect of reducing perceptions of realistic threat that the minority Chinese believed the minority Indians posed (and vice versa), and this reduced realistic threat was associated with more positive attitudes between the two minority groups.

Extended Contact

Notwithstanding the firm evidence for the impact of direct intergroup contact, it has one significant limitation; it can only be used as an intervention to reduce prejudice when group members have the opportunity for direct, face-to-face contact in the first place. If people do not live in the same neighborhood, attend the same school, or occupy the same workplace as outgroup members, they are unlikely to come into contact with them, let alone develop friendships with them. Given the practical obstacles to direct intergroup contact posed by segregation or outright conflict, recent approaches have investigated the effectiveness of less direct forms of contact (see Dovidio, Eller, & Hewstone, 2011). Extended contact (Turner, Hewstone, Voci, & Vonofakou, 2008; Wright, Aron, & Brody, 2008; Wright, Aron, McLaughlin-Volpe, & Ropp, 1997) is one form of indirect contact; it refers to the knowledge that an individual has of an ingroup member's direct contact with outgroup members, and Wright et al. (1997) proposed that interventions involving extended friendship are more effective and easier to implement than direct friendship.

Research Evidence of the Impact of Extended Contact

Wright et al. (1997) provided both correlational and experimental evidence in support of extended contact. They showed that, when controlling for direct contact, respondents—belonging to either majority or minority groups—who knew at least one ingroup member with a cross-group friend reported weaker outgroup prejudice than did respondents with-

out indirect friends; furthermore, the greater the number of members of the ingroup who were known to have friends in the outgroup, the weaker was the prejudice.

Wright and colleagues (1997) provided carefully considered mechanisms affecting when and how extended contact works. First, to observers of cross-group friendship, the group memberships of those involved are relatively salient; in contrast, the observer may be unacquainted with individual characteristics of the outgroup member, thus increasing the likelihood that his or her behavior is taken as typical or representative of the group. This characteristic of extended contact should facilitate the generalization of positive attitudes from the individuals engaged in direct contact to the views of their respective groups (Brown & Hewstone, 2005; Hewstone & Brown, 1986). Second, Wright et al. proposed four interrelated processes thought to translate the effect of extended contact into more favorable attitudes; these include intergroup anxiety, ingroup and outgroup norms, and inclusion of other in the self. When one is merely observing another ingroup member engaged in contact with an outgroup member, any intergroup anxiety felt about interacting with members of that outgroup (Stephan & Stephan, 1985) should be lower than when one is involved directly in the contact. Observing or knowing about intergroup interactions that go unpunished may also change the perceived ingroup and outgroup norms regarding intergroup interactions. Furthermore, seeing or knowing that an outgroup member has been involved in a positive contact experience with an ingroup member should also lead to a reappraisal of norms as more positive. Last, Wright et al. (1997) contended that extended contact increases perceived overlap between the self and the outgroup, assessed as the extent to which the ingroup member includes the outgroup member in the self (see Aron, Aron, Tudor, & Nelson, 1991). A series of experimental, quasi-experimental, and correlational studies has provided extensive empirical evidence that people knowing about or observing cross-group friendships show less prejudice than those who do not (for reviews, see Turner, Hewstone, Voci, Paolini, & Christ, 2007; Vonofakou et al., 2008), even while controlling for direct contact with outgroup members.

Moderators of Extended Contact

Evidence has accrued for several factors that moderate the impact of extended contact (see Harwood et al., 2013, for a review). Here we will touch briefly on two. First, the negative relationship between extended cross-group friendship and prejudice is consistently stronger for participants with few direct cross-group friends or living in segregated rather than mixed communities (demonstrated by comparing East and West parts of Germany, and mixed and segregated neighborhoods in Northern Ireland; Christ et al., 2010, Studies 1 and 2, respectively). Thus extended contact may be especially useful for those in segregated neighborhoods. Christ et al. (2010) increased confidence in this effect, both by conducting a longitudinal study (using Catholic and Protestant adults in Northern Ireland, Study 2) and by linking extended contact and intentions to help an outgroup member from the other community. Extended contact at the first wave of measurement increased the likelihood that participants would be inclined to help outgroup members 1 year later, and this effect of extended contact was amplified for participants who had little experience of direct contact with outgroup members.

Second, the efficacy of extended contact is moderated by the degree of closeness felt by an ingroup member to other ingroup members known to have outgroup contact. Tausch, Hewstone, Schmid, Hughes, and Cairns (2011) examined the effects of extended contact via different types of ingroup contacts (neighbors, work colleagues, friends, and family members). Results demonstrated that extended contact interacted with closeness of ingroup relationship in predicting outgroup trust. As proposed, extended contact via more intimate ingroup relationships (i.e., friends and family) was more strongly related to outgroup trust than was extended contact via less intimate ingroup relations (i.e., neighbors and work colleagues). Within each level of intimacy, moreover, extended contact was related to outgroup trust only at high levels of rated closeness to ingroup contacts.

Mediators of Extended Contact

When Wright et al. (1997) first outlined the idea of extended contact, they proposed, but did

not test, the four mechanisms that they thought would underlie the prejudice-reducing impact of extended cross-group friendship: reduced intergroup anxiety, more inclusive ingroup and outgroup norms, and increased inclusion of the outgroup in the self.

Paolini et al. (2004) reported the first evidence of how extended contact was mediated in their cross-sectional study in Northern Ireland (see earlier). As well as measuring direct contact with cross-group friends (results reported earlier), participants (Catholic and Protestant students in Study 1) were asked to report the number of ingroup friends they had who had cross-group friends, their experience of intergroup anxiety, their attitudes toward the opposing community, and how variable they perceived the outgroup to be. Structural equation modeling revealed that extended cross-group friendship was associated with lower levels of outgroup prejudice, a relationship that was fully mediated by reduced intergroup anxiety. These findings were replicated in a second study, using a large representative sample of Catholic and Protestant adults.

Turner et al. (2008) later conducted the first complete test of the extended contact hypothesis, testing simultaneously the role of all four mechanisms proposed by Wright and colleagues (1997) in two studies on intergroup contact between young Whites and Southwest Asians in England. Structural equation models indicated that all four mechanisms mediated the relationship between extended cross-group friendship and outgroup attitude, with strongest evidence for the role of norms.

Multiple Impacts of Contact

Contact interventions aim to reduce prejudice and improve intergroup relations. Early work on intergroup contact focused primarily on cognitive (e.g., stereotypes and beliefs) and affective (feelings and emotions) dimensions of prejudice, generally finding greater effects of contact on affective than cognitive components (Tropp & Pettigrew, 2005a). One of the features of our research has been to show that the impact of both direct and extended contact is much wider than that. We have, for example, demonstrated that direct contact is positively associated with attitude strength (Vonofakou, Hewstone, & Voci, 2007; as is extended contact, e.g., Christ

et al., 2010), and that its effects go well beyond conscious self-report measures, to impact on implicit associations (Tam, Hewstone, Harwood, Voci, & Kenworthy, 2006; Turner, Hewstone, & Voci, 2007), thus ruling out a reliance on self-report measures as a threat to the validity of contact research (see also Hewstone, Judd, & Sharp, 2011, for evidence that observer reports validate self-reports of direct contact). We have even shown that contact is associated with reduced differences in neural processing of own versus other-race faces (Walker, Silvert, Hewstone, & Nobre, 2008). Here we highlight briefly two types of impact that we think may be of most interest to readers of this journal: impact on conflict-relevant outcomes, and generalized effects across outgroups.

Conflict-Relevant Outcomes

Research on conflict resolution has stressed the importance of intergroup trust and forgiveness as “stepping stones” to reconciliation (Hewstone et al., 2008) that are often difficult to cultivate in postconflict societies (Paolini, Hewstone, & Cairns, 2007; Tam, Hewstone, Kenworthy, & Cairns, 2009).

Trust can be seen as a psychological means to overcome uncertainty by making benign assumptions about other people’s behavior (Kolllock, 1994), and it can be very broadly defined as a positive bias in the processing of imperfect information (Yamagishi & Yamagishi, 1994). Intergroup trust is an important component of the reconciliation process, in part, because trusting members of the outgroup to work collaboratively with the ingroup promotes positive expectations of the outgroup (Tam et al., 2009).

It has been consistently found that positive intergroup contact is associated with reduced prejudice between Catholic and Protestant students and adults (e.g., Hewstone, Cairns, Voci, Hamberger, & Niens, 2006; Tausch, Tam, Hewstone, Kenworthy, & Cairns, 2007). Outgroup trust mediated the relationship between intergroup contact and willingness for intergroup interactions and avoidant or hostile action tendencies (Tam et al., 2009), such that those who had more intergroup contact were more trusting of the outgroup, which was associated with a greater willingness for intergroup interactions and reduced avoidant or hostile action tendencies. Research in Northern Ireland also has

found positive effects of extended contact on intergroup trust (Tam et al., 2009; Tausch et al., 2011).

Forgiveness is an emotional state that permits the relationship between the conflicting parties to move forward after a transgression (Cairns, Tam, Hewstone, & Niens, 2005). Research has shown that intergroup contact is associated with greater trust and forgiveness, even among respondents who have personally been affected by intergroup violence (e.g., those deeply affected by years of ethnopolitical violence in Northern Ireland; Hewstone et al., 2006; Tam et al., 2007), and that forgiveness is related to health outcomes (e.g., mild psychiatric morbidity; Myers, Hewstone, Cairns, & 2009).

More recently, together with Ed Cairns, we explored new psychological mechanisms associated with postconflict reconciliation in Northern Ireland, focusing on collective guilt, and both cognitive and affective components of empathy (see Myers, 2009). In three cross-sectional studies of Catholic and Protestant stu-

dents in Northern Ireland, we investigated mediators of the relationship between two predictors—intergroup contact (in the form of cross-group friendship) and ingroup identification—and two outcomes—intergroup forgiveness (Study 1) and outgroup trust (Studies 1 to 3). Overall, these three studies found that more cross-group friendships and lower ingroup identification were associated with greater intergroup forgiveness and outgroup trust and, moreover, these relationships were mediated by collective guilt, perspective-taking, and empathic affect. The third study was the largest (217 Northern Irish students—114 Catholics, 103 Protestants—mean age 21.04 years, $SD = 4.63$), and included all the relevant constructs we considered in the research. Figure 1 shows the structural equation model with latent variables and fit statistics for the final model, which fit the data well and better than alternative models which varied the causal order of putative predictors, mediators, and outcomes.

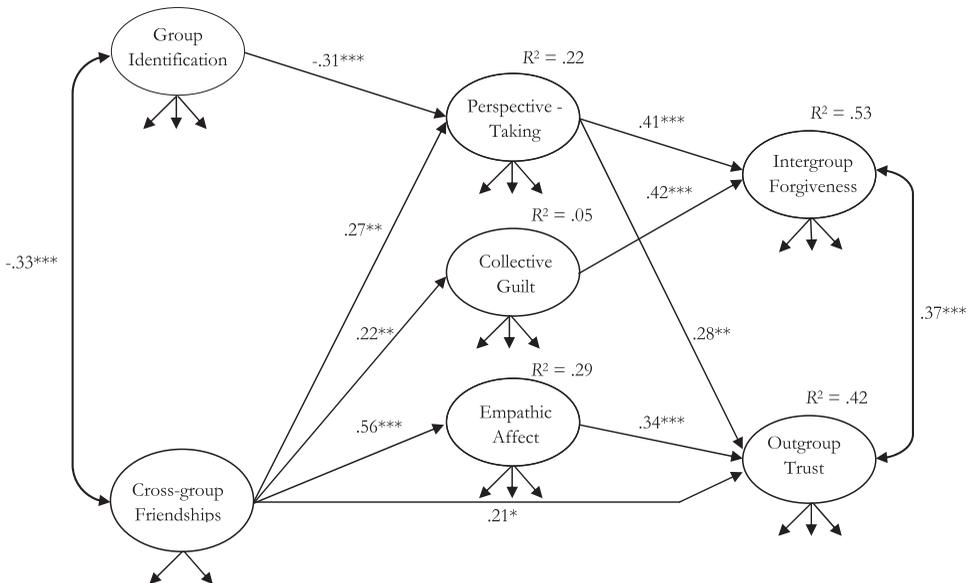


Figure 1. Structural equation model illustrating the effects of cross-group friendship and group identification on intergroup forgiveness and outgroup trust, showing mediation via collective guilt, perspective-taking and empathic affect. Model fit: $\chi^2(154, N = 217) = 198.05, p = .01; \chi^2/df = 1.29$; comparative fit index = .98; root mean square error of approximation = .04. Standardized path coefficients are shown. Only significant paths and correlations are reported in the figure. Additional latent correlations (ϕ) not depicted in the figure: perspective-taking—collective guilt: $\phi = .24^*$, perspective-taking—empathic affect: $\phi = .26^{**}$, collective guilt—empathic affect: $\phi = .44^{***}$. * $p < .05$. ** $p < .01$. *** $p < .001$.

From Figure 1 it can be seen that cross-group friendship was associated with greater collective guilt ($\beta = .22, p < .01$) that, in turn, was associated with higher levels of intergroup forgiveness ($\beta = .42, p < .001$). Moreover, cross-group friendship directly predicted greater outgroup trust ($\beta = .21, p < .05$). Cross-group friendship was also associated with higher levels of perspective-taking ($\beta = .27, p < .01$), whereas group identification was negatively associated with perspective-taking ($\beta = -.31, p < .001$). In turn, perspective-taking was associated with higher levels of both intergroup forgiveness ($\beta = .41, p < .001$) and outgroup trust ($\beta = .28, p < .01$). The results also showed that cross-group friendship was positively associated with empathic affect ($\beta = .56, p < .001$), which, in turn, was positively associated with outgroup trust ($\beta = .34, p < .001$). The paths between group identification and empathic affect ($\beta = .08, p = .21$), and empathic affect and intergroup forgiveness ($\beta = .11, p = .17$), were not statistically significant. As expected, a negative correlation was also found between cross-group friendship and group identification ($\varphi = -.33, p < .001$). There was a positive correlation between collective guilt and perspective-taking ($\varphi = .24, p < .05$), collective guilt and empathic affect ($\varphi = .44, p < .001$), perspective-taking and empathic affect ($\varphi = .26, p < .01$), and intergroup forgiveness and outgroup trust ($\varphi = .37, p < .001$). The model accounted for 5% of the variance in collective guilt, 22% of the variance in perspective-taking, 29% of the variance in empathic affect, 53% of the variance in intergroup forgiveness, and 42% of the variance in outgroup trust. These results suggest that, in terms of reconciliation initiatives, perspective-taking may be more effective for facilitating intergroup forgiveness, whereas both perspective-taking and empathic affect are effective for building outgroup trust.

Secondary Transfer Effects

Recent research has demonstrated the increased potential of intergroup contact by showing that contact effects generalize from encounters with one outgroup to attitudes toward other outgroups outside that contact situation (what Pettigrew, 2009, calls the “secondary transfer effect”). Strongest evidence for this effect, and

its underlying process, comes from a series of four studies (three cross-sectional and one longitudinal, using large samples of adult respondents) that was conducted in different real-world settings, including two postconflict locations, Cyprus (Study 1) and Northern Ireland (Studies 2 and 4; Tausch et al., 2010). Contact between Greek-Cypriots and Turkish-Cypriots in Cyprus was not only associated with more positive attitudes to the respective Cypriot outgroup, but also generalized to views of the outgroup on the mainland (e.g., Greeks in Greece or Turks in Turkey, who are key political players in this conflict). Likewise, positive contact between Catholics and Protestants in Northern Ireland generalized to more positive attitudes toward ethnic minorities even after controlling for contact with ethnic minorities. Tausch et al. (2010) provided evidence that the secondary transfer effect can be explained through attitude generalization, which is the process whereby attitudes that one has about one attitude object generalize to other, related attitude objects. It was found that attitude to the primary outgroup acted as the mediator of the relationship between positive contact with the primary outgroup and reduced prejudice toward the secondary outgroup (see also Lolliot et al., 2013).

We consider the South African context as a vital setting for future research aimed at exploring and understanding the secondary transfer effect of intergroup contact because positive, high-quality intergroup contact experiences (e.g., cross-group friendships) remain rare (while self-segregation persists; Gibson, 2004) despite South Africa’s overall “superdiversity” (see Vertovec, 2007). If positive intergroup contact experiences are few and far between, then it becomes imperative that when such contacts do occur, they have the broadest possible impact on group-based prejudice. To this end, we found substantial evidence for the secondary transfer effect of contact and the mediating process of attitude generalization in an independent three-wave longitudinal study (see Lolliot, 2013). In 6-month intervals we asked White South African secondary school students about their contact with and attitudes toward Colored, Black, and Indian South Africans, as well as African immigrants.

Longitudinal structural equation models with latent variables showed strong evidence for the

secondary transfer effect of contact, indicating that the process of attitude generalization played a central role in transferring the positive effects of contact with the primary outgroup to attitudes toward the secondary outgroups. In other words, in some instances, contact with a primary outgroup (e.g., Black South Africans) at Time 1 (and Time 2) was directly associated with more favorable attitudes toward secondary outgroups (e.g., Indian South Africans) at Time 2 (and Time 3, respectively). In other instances, contact with a primary outgroup (e.g., Colored South Africans) at Time 1 was associated with more favorable attitudes toward the primary outgroup at Time 2, which, in turn, was associated with more favorable attitudes toward the secondary outgroup (e.g., African immigrants) at Time 3. The longitudinal nature of the study allowed us to control for autoregressive effects—the effect that a variable has on itself at later time points—as well as previous contact with the secondary outgroups, thus providing the most comprehensive analysis to date of the secondary transfer effect of contact.

We also found substantial evidence for the causal relationship from contact with a primary outgroup to improved attitudes toward a secondary outgroup. We did not, however, find evidence for the reverse causal relationship (i.e., that less prejudiced people seek contact with a wider range of outgroups), providing further evidence of contact as a prejudice-reducing mechanism.

Issues for Current and Future Research

Critiques of the contact hypothesis have been varied (e.g., Dixon, Durrheim, & Tredoux, 2005; Forbes, 1997), and we do not have space to readdress those critiques here (see Al Ramiah & Hewstone, *in press*; Hewstone, 2009; Tausch & Hewstone, 2010; Tausch et al., 2006). Instead, we highlight five issues where we think future research is very much needed, especially if it is to benefit scholars of peace and conflict. They form the focus of current and planned future research at the OCSIC.

First, we acknowledge that contact research, our own included, has relied too heavily on cross-sectional research. More longitudinal studies are needed, preferably over several waves, and investigating multiple mediators and outcomes (some of our own research is some-

thing of a model here; see Swart et al., 2011). However, experiments remain essential, because they are the best method for testing causal hypotheses.

Second, future research needs to clarify what the effects of contact are. As noted, researchers have demonstrated the wealth of impacts that contact can have. But most research has focused on, at best, relatively short-term changes in attitudinal outcomes. More work needs to be done demonstrating long-lasting change, and whether contact has an impact on behavior too.

Third, to study intergroup contact in naturally occurring contexts in which it may be most interesting (e.g., neighborhoods, schools, organizations), more research needs to exploit the power of multilevel analysis. When multilevel analyses are computed, it is possible to explore whether contact has different effects at different levels because the analysis is able to separate individual-level from neighborhood-level effects (see Christ & Wagner, 2013; Wagner, Christ, Pettigrew, Stellmacher, & Wolf, 2006). As Green and Seher (2003) pointed out, contact research remains largely focused on individual-level variables, and more work needs to be done to incorporate societal-level processes into models of conflict reduction. The danger of focusing purely on the individual is that it treats group-level and individual-level phenomena as independent (Tausch et al., 2006), and thus while intergroup contact may lessen individuals' prejudiced opinions and anxieties about certain groups, it may do little to reduce actual conflicts between groups that are based on competition (Forbes, 1997).

Fourth, future research must pay more attention to the negative factors operating in some contact situations (Pettigrew, 2008), which poison intergroup relations, as well as the effects of intergroup contact in especially demanding (i.e., nonoptimal) settings. There is no doubt that positive contact is associated with reduced prejudice (Pettigrew & Tropp, 2006), but recent (e.g., Schmid, Tausch, Hewstone, Hughes, & Cairns, 2008) and current research has shown that diverse or mixed settings (e.g., schools, or neighborhoods) typically expose people to greater frequency of negative as well as positive contact. The risk is that such mixed settings may increase prejudice because the negative contact undermines the positive effects of contact. Preliminary evidence indicates that nega-

tive contact increases the perceived salience of outgroup identity (Paolini, Harwood, & Rubin, 2010), which may lead to stronger generalization of negative contact effects (Brown & Hewstone, 2005), and, at least in correlational studies, has stronger effects on outgroup attitudes than does positive contact (Barlow et al., 2012). Hence, research is needed to study the consequences of positive and negative contact experiences for future interactions (e.g., whether prior positive contact inoculates against subsequent negative contact, and/or whether prior negative contact undermines the potential of positive contact). Postapartheid South Africa has witnessed growing tensions between South Africans and African immigrants, leading to wide-spread conflict. Most recent South African research has explored the role of intergroup contact in relations between Black South Africans and African foreigners living in impoverished townships (Swart & Hewstone, 2012). Results showed that even under less than ideal settings, intergroup contact, affective empathy, and perspective-taking play an important role in reducing prejudice toward foreigners.

Finally, as Wagner and Hewstone (2012) noted, few studies have analyzed the effects of prevalence contact on postviolence intergroup perceptions and behaviors, but the evidence available is instructive. Biro, Ajdukovic, Corkalo, Djipa, Milin, and Weinstein (2004) reported survey research in Bosnia-Herzegovina and Croatia that included items asking about prevalence contact (cross-group friendships), and positive as well as negative experiences with the outgroup. Although the study was not intended to test for contact effects, the results show that prevalence positive intergroup contact increased readiness for reconciliation after the war, whereas negative contact experiences before the eruption of violence reduced respondents' readiness for reconciliation.

We have recently collected two sets of data that support, and extend, these findings. First, in Cyprus, we collected data from Greek- and Turkish-Cypriot former inhabitants (over a thousand of each) of mixed villages on the island (of over 150 such villages, almost none remain). For both groups we could show that past contact (before the conflict) positively predicted outgroup trust via present-day levels of contact and negatively via current perceived threat (Psaltis, Cakal, & Hewstone, 2013). In a

smaller study of 409 Bosnian adults affected by the conflict there in the 1990s, we again showed the role of past contact (Hadziomanovic, Hewstone, Cakal, & Voci, 2013). Past contact predicted present contact, which was directly associated with greater trust, forgiveness, and lower social distance, but also with higher symptoms of posttraumatic stress disorder (PTSD), toward the Serbian outgroup. However, present contact also indirectly predicted reductions in both PTSD and morbidity via increased forgiveness and reduced social distance. Both these recent studies had to rely on retrospective reports, which we acknowledge are a weak form of data, but it is hard to imagine ever having such data from current conflicts at their height or, better still, in a prospective design.

Conclusions

We have reviewed the work of the OCSIC demonstrating the impact of both direct and extended contact on intergroup conflict, and showing en route our growing understanding of moderators and mediators of the effect of contact on a wide range of outcomes. We highlighted conflict-relevant outcomes (e.g., trust and forgiveness) and secondary transfer effects from one outgroup to other outgroups. We also have identified some limitations of contact work, and identified the need for more future work on longitudinal and multilevel processes, durable impacts of contact, and the effects of contact in demanding (i.e., nonoptimal) settings. We can reflect with some satisfaction on our work to date, but with regard to the study of intergroup contact in relation to intergroup conflict (and not merely the milder issue of prejudice), the future needs to be longer than the past.

References

- Allport, G. W. (1954). *The nature of prejudice*. Reading, MA: Addison Wesley.
- Al Ramiah, A., & Hewstone, M. (2012). "Rallying around the flag": Can an intergroup contact intervention promote national unity? *British Journal of Social Psychology*, *51*, 239–256. doi:10.1111/j.2044-8309.2011.02041.x
- Al Ramiah, A., & Hewstone, M. (2013). Intergroup contact as a tool for reducing, resolving and preventing intergroup conflict: Evidence, limitations, and potential. *American Psychologist*, *68*, 527–542. doi:10.1037/a0032603

- Al Ramiah, A., Hewstone, M., Little, T., & Lang, K. (2013). The influence of status on the relationship between intergroup contact, threat, and prejudice in the context of a nation-building intervention in Malaysia. *Journal of Conflict Resolution*. Advanced online publication.
- Aron, A., Aron, E. N., Tudor, M., & Nelson, G. (1991). Close relationships as including the other in the self. *Journal of Personality and Social Psychology*, *57*, 792–807.
- Barlow, F. K., Paolini, S., Pedersen, A., Hornsey, M. J., Radke, H. R. M., Harwood, J., . . . Sibley, C. G. (2012). The contact caveat: Negative contact predicts increased prejudice more than positive contact predicts reduced prejudice. *Personality and Social Psychology Bulletin*, *38*, 1629–1643. doi:10.1177/0146167212457953
- Binder, J., Zagefka, H., Brown, R., Funke, F., Kessler, T., Mummendey, A., . . . Leyens, J.-P. (2009). Does contact reduce prejudice or does prejudice reduce contact? A longitudinal test of the contact hypothesis among majority and minority groups in three European countries. *Journal of Personality and Social Psychology*, *96*, 843–856. doi:10.1037/a0013470
- Biro, M., Ajdukovic, D., Corkalo, D., Djipa, D., Milin, P., & Weinstein, H. M. (2004). Attitudes towards justice and social reconstruction in Bosnia and Herzegovina and Croatia. In E. Stover & H. M. Weinstein (Eds.), *My neighbor, my enemy: Justice in the aftermath of mass atrocity* (pp. 183–205). Cambridge, England: Cambridge University Press. doi:10.1017/CBO9780511720352.013
- Brown, R., & Hewstone, M. (2005). An integrated theory of intergroup contact. In M. Zanna (Ed.), *Advances in experimental social psychology* (pp. 255–343). San Diego, CA: Academic Press.
- Cairns, E., Tam, T., Hewstone, M., & Niens, U. (2005). Intergroup forgiveness and intergroup conflict: Northern Ireland, a case study. In E. L. Worthington Jr. (Ed.), *Handbook of forgiveness* (pp. 461–476). London, England: Routledge.
- Cakal, H., Psaltis, C., & Hewstone, M. (2013). *Effect of intergroup contact on outgroup attitudes in Cyprus: Longitudinal evidence*. Manuscript in preparation, Universities of Oxford and Cyprus.
- Christ, O., Hewstone, M., Tausch, N., Wagner, U., Voci, A., Hughes, J., & Cairns, E. (2010). Direct contact as a moderator of extended contact effects: Cross-sectional and longitudinal impact on outgroup attitudes, behavioral intentions, and attitude certainty. *Personality and Social Psychology Bulletin*, *36*, 1662–1674. doi:10.1177/014616721038696
- Christ, O., Hewstone, M., Tropp, L. R., & Wagner, U. (2012). Longitudinal studies of intergroup contact: Special section. *British Journal of Social Psychology*, *51*, 219–329.
- Christ, O., & Wagner, U. (2013). Methodological issues in the study of intergroup contact. In G. Hodson & M. Hewstone (Eds.), *Advances in intergroup contact* (pp. 233–261). London, England: Psychology Press.
- Cole, D. A., & Maxwell, S. E. (2003). Testing mediational models with longitudinal data: Questions and tips in the use of structural equation modeling. *Journal of Abnormal Psychology*, *112*, 558–577. doi:10.1037/0021-843X.112.4.558
- Davies, K., Tropp, L. R., 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. doi:10.1177/1088868311411103
- Dixon, J., Durrheim, K., & Tredoux, C. (2005). Beyond the optimal contact strategy: A reality check for the contact hypothesis. *American Psychologist*, *60*, 697–711. doi:10.1037/0003-066X.60.7.697
- Dovidio, J. F., Eller, A., & Hewstone, M. (2011). Improving intergroup relations through direct, extended and other forms of indirect contact. *Group Processes & Intergroup Relations*, *14*, 147–160. doi:10.1177/1368430210390555
- Dovidio, J. F., Gaertner, S. L., & Kawakami, K. (2003). Intergroup contact: The past, present, and the future. *Group Processes & Intergroup Relations*, *6*, 5–21. doi:10.1177/1368430203006001009
- Forbes, H. D. (1997). *Ethnic conflict: Commerce, culture, and the contact hypothesis*. New Haven, CT: Yale University Press.
- Gibson, J. L. (2004). *Overcoming apartheid: Can truth reconcile a divided nation?* New York, NY: Russell Sage Foundation. doi:10.1080/0258934042000280698
- Green, D. P., & Seher, R. L. (2003). What role does prejudice play in ethnic conflict. *Annual Review of Political Science*, *6*, 509–531. doi:10.1146/annurev.polisci.6.121901.085642
- Hadziosmanovic, E., Hewstone, M., Cakal, H., & Voci, A. (2013). *Effect of pre-conflict and post-conflict contact on post-traumatic stress and psychiatric morbidity in Bosnia*. Manuscript in preparation, Universities of Nottingham and Oxford.
- Harwood, J., Hewstone, M., Hamburger, Y., & Tausch, N. (2013). Intergroup contact: An integration of social psychological and communication perspectives. In C. Salomon (Ed.), *Communication yearbook* (pp. 55–102). London, England: Routledge.
- Hewstone, M. (1996). Contact and categorization: Social psychological interventions to change intergroup relations. In C. N. Macrae, C. Stangor, & M. Hewstone (Eds.), *Stereotypes and stereotyping* (pp. 323–368). New York, NY: Guilford Press.
- 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., & Brown, R. (1986). Contact is not enough: An intergroup perspective on the “contact hypothesis”. In M. Hewstone & R. Brown (Eds.), *Contact and conflict in intergroup encounters* (pp. 1–44). Oxford, England: Blackwell.
- Hewstone, M., Cairns, E., Voci, A., Hamberger, J., & Niens, U. (2006). Intergroup contact, forgiveness, and experience of “The Troubles” in Northern Ireland. *Journal of Social Issues*, 62, 99–120. doi:10.1111/j.1540-4560.2006.00441.x
- Hewstone, M., Cairns, E., Voci, A., Paolini, S., McLernon, F., Crisp, R., . . . Craig, J. (2005). Intergroup contact in a divided society: Challenging segregation in Northern Ireland. In D. Abrams, J. M. Marques, & M. Hogg (Eds.), *The social psychology of inclusion and exclusion* (pp. 265–292). Philadelphia, PA: Psychology Press.
- Hewstone, M., Judd, C. M., & Sharp, M. (2011). Do observer ratings validate self-reports of intergroup contact?: A round-robin analysis. *Journal of Experimental Social Psychology*, 47, 599–609. doi:10.1016/j.jesp.2010.12.014
- Hewstone, M., Kenworthy, J. B., Cairns, E., Tausch, N., Hughes, J., Tam, T., . . . Pinder, C. (2008). Stepping stones to reconciliation in Northern Ireland: Intergroup contact, forgiveness and trust. In A. Nadler, T. Malloy, & J. D. Fisher (Eds.), *The social psychology of inter-group reconciliation* (pp. 199–226). New York, NY: Oxford University Press. doi:10.1093/acprof:oso/9780195300314.003.0010
- Hewstone, M., Tausch, N., Hughes, J., & Cairns, E. (2008). *Can contact promote better relations? Evidence from mixed and segregated areas of Belfast* (Report to the Community Relations Unit, Northern Ireland). Retrieved from <http://www.ofmdfmi.gov.uk/grpubs>
- Horowitz, D. L. (1985). *Ethnic groups in conflict*. Berkeley: University of California Press.
- Islam, M. R., & Hewstone, M. (1993). Dimensions of contact as predictors of intergroup anxiety, perceived out-group variability, and out-group attitude: An integrative model. *Personality and Social Psychology Bulletin*, 19, 700–710. doi:10.1177/0146167293196005
- Kollock, P. (1994). The emergence of exchange structures: An experimental study of uncertainty, commitment, and trust. *American Journal of Sociology*, 100, 313–345. doi:10.1086/230539
- Lolliot, S. (2013). *The secondary transfer effect of contact*. Unpublished dissertation, University of Oxford.
- Lolliot, S., Schmid, K., Hewstone, M., Al Ramiah, A., Tausch, N., & Swart, H. (2013). Generalized effects of intergroup contact: The secondary transfer effect. In G. Hodson & M. Hewstone (Eds.), *Advances in intergroup contact* (pp. 81–112). London, England: Psychology Press.
- Myers, E. (2009). *Social-psychological aspects of intergroup conflict and reconciliation in Northern Ireland: The role of trust and forgiveness*. Unpublished dissertation, University of Oxford.
- Myers, E., Hewstone, M., & Cairns, E. (2009). Impact of conflict on mental health in Northern Ireland: The mediating role of intergroup forgiveness and collective guilt. *Political Psychology*, 30, 269–290. doi:10.1111/j.1467-9221.2008.00691.x
- Niens, U., Cairns, E., & Hewstone, M. (2003). Contact and conflict in Northern Ireland. In O. Hargie & D. Dickson (Eds.), *Researching The Troubles: Social science perspectives on the Northern Ireland conflict* (pp. 123–140). Edinburgh, Scotland: Mainstream.
- Paolini, S., Harwood, J., & Rubin, M. (2010). Negative intergroup contact makes group memberships salient: Explaining why intergroup conflict endures. *Personality and Social Psychology Bulletin*, 36, 1723–1738. doi:10.1177/0146167210388667
- Paolini, S., Hewstone, M., & Cairns, E. (2007). Direct and indirect intergroup friendship effects: Testing the moderating role of the affective-cognitive bases of prejudice. *Personality and Social Psychology Bulletin*, 33, 1406–1420. doi:10.1177/0146167207304788
- Paolini, S., Hewstone, M., Cairns, E., & Voci, A. (2004). Effects of direct and indirect cross-group friendships on judgments of Catholics and Protestants in Northern Ireland: The mediating role of an anxiety reduction mechanism. *Personality and Social Psychology Bulletin*, 30, 770–786. doi:10.1177/0146167203262848
- Paolini, S., Hewstone, M., Voci, A., Harwood, J., & Cairns, E. (2006). Intergroup contact and the promotion of intergroup harmony: The influence of intergroup emotions. In R. Brown & D. Capozza (Eds.), *Social identities: Motivational, emotional, and cultural influences* (pp. 209–238). Hove, England: Psychology Press.
- Pettigrew, T. F. (1998). Intergroup contact theory. *Annual Review of Psychology*, 49, 65–85. doi:10.1146/annurev.psych.49.1.65
- Pettigrew, T. F. (2008). Future directions for intergroup contact theory and research. *International Journal of Intercultural Relations*, 32, 187–199. doi:10.1016/j.ijintrel.2007.12.002
- Pettigrew, T. F. (2009). Secondary transfer effect of contact: Do intergroup contact effects spread to noncontacted outgroups? *Social Psychology*, 40, 55–65. doi:10.1027/1864-9335.40.2.55
- Pettigrew, T. F., & Tropp, L. R. (2006). A meta-analytic test of intergroup contact theory. *Journal of Personality and Social Psychology*, 90, 751–783. doi:10.1037/0022-3514.90.5.751

- Pettigrew, T. F., & Tropp, L. R. (2008). How does intergroup contact reduce prejudice? Meta-analytic tests of three mediators. *European Journal of Social Psychology, 38*, 922–934. doi:10.1002/ejsp.504
- Pettigrew, T. F., & Tropp, L. R. (2011). *When groups meet: The dynamics of intergroup contact*. Hove, East Sussex, UK: Psychology Press.
- Psaltis, C., Cakal, H., & Hewstone, M. (2013). *Effect of pre-conflict and post-conflict contact on outgroup trust in mixed and segregated villages in Cyprus*. Manuscript in preparation, Universities of Cyprus and Oxford.
- Psaltis, C., Hewstone, M., & Voci, A. (2012). *Effect of intergroup contact on outgroup attitudes in Cyprus: Cross-sectional evidence*. Manuscript in preparation, Universities of Cyprus and Oxford.
- Schmid, K., Tausch, N., Hewstone, M., Hughes, J., & Cairns, E. (2008). The effects of living in segregated vs. mixed areas in Northern Ireland: A simultaneous analysis of contact and threat effects in the context of micro-level neighbourhoods. *International Journal of Conflict and Violence, 2*, 56–71.
- Stephan, W. G., & Renfro, C. L. (2003). The role of threat in intergroup relations. In D. M. Mackie & E. R. Smith (Eds.), *From prejudice to intergroup emotions: Differentiated reactions to social groups* (pp. 191–207). New York, NY: Psychology Press.
- Stephan, W. G., & Stephan, C. W. (1985). Intergroup anxiety. *Journal of Social Issues, 41*, 157–175. doi:10.1111/j.1540-4560.1985.tb01134.x
- Stephan, W. G., & Stephan, C. W. (2000). An integrated threat theory of prejudice. In S. Oskamp (Ed.) *Reducing prejudice and discrimination* (pp. 23–46). Mahwah, NJ: Erlbaum.
- Stephan, W. G., Ybarra, O., & Morrison, K. R. (2009). Intergroup threat theory. In T. D. Nelson (Ed.), *Handbook of prejudice* (pp. 43–59). Mahwah, NJ: Erlbaum.
- Swart, H., & Hewstone, M. (2012, June). *Contact and anti-immigrant prejudice in the South African Context: Cross-sectional and multi-level analyses*. Paper presented at the 2012 biennial SPSSI conference, Charlotte, NC.
- Swart, H., Hewstone, M., Christ, O., & Voci, A. (2011). Affective mediators of intergroup contact: A three-wave longitudinal study in South Africa. *Journal of Personality and Social Psychology, 101*, 1221–1238. doi:10.1037/a0024450
- Tam, T., Hewstone, M., Cairns, E., Tausch, N., Maio, G., & Kenworthy, J. (2007). The impact of intergroup emotions on forgiveness in Northern Ireland. *Group Processes & Intergroup Relations, 10*, 119–135. doi:10.1177/1368430207071345
- Tam, T., Hewstone, M., Harwood, J., Voci, A., & Kenworthy, J. (2006). Intergroup contact and grandparent-grandchild communication: The effects of self-disclosure on implicit and explicit biases against older people. *Group Processes & Intergroup Relations, 9*, 413–429. doi:10.1177/1368430206064642
- Tam, T., Hewstone, M., Kenworthy, J., & Cairns, E. (2009). Intergroup trust in Northern Ireland. *Personality and Social Psychology Bulletin, 35*, 45–59. doi:10.1177/0146167208325004
- Tausch, N., Hewstone, M., Kenworthy, J. B., Cairns, E., & Christ, O. (2007). Cross-community contact, perceived status differences, and intergroup attitudes in Northern Ireland: The mediating roles of individual-level versus group-level threats and the moderating role of social identification. *Political Psychology, 28*, 53–68. doi:10.1111/j.1467-9221.2007.00551.x
- Tausch, N., Hewstone, M., Kenworthy, J. B., Psaltis, C., Schmid, K., Popan, J. R., . . . Hughes, J. (2010). Secondary transfer effects of intergroup contact: Alternative accounts and underlying processes. *Journal of Personality and Social Psychology, 99*, 282–302. doi:10.1037/a0018553
- Tausch, N., Hewstone, M., Schmid, K., Hughes, J., & Cairns, E. (2011). Extended contact effects as a function of closeness of relationship with ingroup contacts. *Group Processes & Intergroup Relations, 14*, 239–254. doi:10.1177/1368430210390534
- Tausch, N., & Hewstone, N. (2010). Intergroup contact and prejudice. In J. F. Dovidio, M. Hewstone, P. Glick, & V. M. Esses (Eds.), *The Sage handbook of prejudice, stereotyping, and discrimination* (pp. 544–560). Newburg Park, CA: Sage. doi:10.4135/9781446200919.n33
- Tausch, N., Kenworthy, J., & Hewstone, M. (2006). The contribution of intergroup contact to the reduction of intergroup conflict. In M. Fitzduff & C. E. Stout (Eds.), *The psychology of global conflicts: From war to peace* (Vol. 2, pp. 67–108). New York, NY: Praeger.
- Tausch, N., Tam, T., Hewstone, M., Kenworthy, J., & Cairns, E. (2007). Individual-level and group-level mediators of contact effects in Northern Ireland: The moderating role of social identification. *British Journal of Social Psychology, 46*, 541–556. doi:10.1348/014466606X155150
- Tropp, L. R., & Pettigrew, T. F. (2005a). Differential relationships between intergroup contact and affective and cognitive dimensions of prejudice. *Personality and Social Psychology Bulletin, 31*, 1145–1158. doi:10.1177/0146167205274854
- Tropp, L. R., & Pettigrew, T. F. (2005b). Relationships between intergroup contact and prejudice among minority and majority status groups. *Psychological Science, 16*, 951–957. doi:10.1111/j.1467-9280.2005.01643.x
- Turner, R. N., Hewstone, M., & Voci, A. (2007). Reducing explicit and implicit outgroup prejudice via direct and extended contact: The mediating

- role of self-disclosure and intergroup anxiety. *Journal of Personality and Social Psychology*, 93, 369–388. doi:10.1037/0022-3514.93.3.369
- Turner, R. N., Hewstone, M., Voci, A., Paolini, S., & Christ, O. (2007). Reducing prejudice via direct and extended cross-group friendship. *European Review of Social Psychology*, 18, 212–255. doi:10.1080/10463280701680297
- Turner, R. N., Hewstone, M., Voci, A., & Vonofakou, C. (2008). A test of the extended intergroup contact hypothesis: The mediating role of intergroup anxiety, perceived ingroup and outgroup norms, and inclusion of the outgroup in the self. *Journal of Personality and Social Psychology*, 95, 843–860. doi:10.1037/a0011434
- Vertovec, S. (2007). Super-diversity and its implications. *Ethnic and Racial Studies*, 30, 1024–1054. doi:10.1080/01419870701599465
- Vonofakou, C., Hewstone, M., & Voci, A. (2007). Contact with out-group friends as a predictor of meta-attitudinal strength and accessibility of attitudes towards gay men. *Journal of Personality and Social Psychology*, 92, 804–820. doi:10.1037/0022-3514.92.5.804
- Vonofakou, C., Hewstone, M., Voci, A., Paolini, S., Turner, R. N., Tausch, N. T., . . . Cairns, E. (2008). The impact of direct and extended cross-group friendships on improving intergroup relations. In U. Wagner, L. Tropp, G. Finchilescu, & C. Tredoux (Eds.), *Emerging research directions for improving intergroup relations—Building on the legacy of Thomas F. Pettigrew* (pp. 107–123). Oxford, England: Blackwell.
- Wagner, U., Christ, O., Pettigrew, T. F., Stellmacher, J., & Wolf, C. (2006). Prejudice and minority proportion: Contact instead of threat effects. *Social Psychology Quarterly*, 69, 380–390. doi:10.1177/019027250606900406
- Wagner, U., & Hewstone, M. (2012). Intergroup contact. In L. R. Tropp (Ed.), *The Oxford handbook of intergroup conflict* (pp. 193–209). Oxford, England: Oxford Library of Psychology. doi:10.1093/oxfordhb/9780199747672.013.0012
- Walker, P. M., Silvert, L., Hewstone, M., & Nobre, A. C. (2008). Social contact and other-race face processing in the human brain. *Social Cognitive and Affective Neuroscience*, 3, 16–25. doi:10.1093/scan/nsm035
- Wright, S. C., Aron, A., & Brody, S. M. (2008). Extended contact and including others in the self: Building on the Allport/Pettigrew legacy. In U. Wagner, L. Tropp, G. Finchilescu, & C. Tredoux (Eds.), *Emerging research directions for improving intergroup relations—Building on the legacy of Thomas F. Pettigrew* (pp. 143–159). Oxford, England: Blackwell. doi:10.1002/9781444303117.ch10
- Wright, S. C., Aron, A., McLaughlin-Volpe, T., & Ropp, S. A. (1997). The extended contact effect: Knowledge of cross-group friendships and prejudice. *Journal of Personality and Social Psychology*, 73, 73–90. doi:10.1037/0022-3514.73.1.73
- Yamagishi, T., & Yamagishi, M. (1994). Trust and commitment in the United States and Japan. *Motivation and Emotion*, 18, 129–166. doi:10.1007/BF02249397