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RUNNING HEAD: Intergroup Contact

The Role of Intergroup Contact in the Reduction of Prejudice and the Improvement of
Intergroup Relations

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Violent intergroup conflicts such as the sectarian conflict in Northern Ireland, or the conflict between Israelis and Palestinians in the Middle East, have distinct *psychological* components such as threatened social identities, dehumanising enemy images, and intense security concerns and fear (Bar-Tal, 1990, 2001; Hewstone & Cairns, 2001; Kelman, 1999). These more ‘subjective’ elements of conflict can become independent of the initiating, more ‘objective’, causes of the conflict and contribute to an escalation and continuation of violence even after the initial causes have become irrelevant (Deutsch, 1973; Tajfel & Turner, 1979). Thus, the formal resolution of a conflict is often merely the first step towards peaceful co-existence. To promote peace and mutual trust and to prevent the re-ignition of violence, the parties involved have to engage in reconciliation, a psychological process which requires a change in people’s often well-entrenched beliefs and feelings about the out-group, their in-group, and the relationship between the two (Bar-Tal, 2000a).

In this chapter we will examine the utility of intergroup contact as an intervention that can bring about such psychological change by improving intergroup perceptions, attitudes, and relations. The ‘contact hypothesis’ (Allport, 1954; Williams, 1947), which was originally developed in the context of race relations in the USA in the 1930s and 1940s, is now one of the most widely used psychological principles for the reduction of prejudice and the improvement of intergroup relations (Oskamp & Jones, 2000). The central premise of the contact hypothesis is that prejudice and conflict between opposing groups can be reduced by bringing them together under optimal conditions. It has stimulated an enormous body of

research and its basic tenets have been tested and applied in a wide variety of settings involving a large number of different social groups (see Pettigrew & Tropp, in press).

In this chapter we will discuss the main principles of the contact hypothesis and the theoretical models explaining the effects of contact. We will review the current empirical literature with a particular focus on studies on contact between groups involved in violent conflict, when available. The chapter unfolds in four parts. First, we will give an overview of the kinds of social-psychological phenomena that have typically been investigated as *dependent variables* in contact research and evaluate their relevance for the analysis and resolution of intergroup conflict. Second, we will consider variables that *moderate* the effect of contact on these variables, i.e. the conditions that determine the direction and/or strength of the relationship between contact and intergroup bias (Baron & Kenny, 1986). We will discuss how intergroup contact should ideally be structured and applied in order to be successful in reducing intergroup prejudice. Third, we will introduce a number of theoretical models specifying *how* or *why* contact works and highlight the main *mediating mechanisms*, that is the underlying causal psychological processes, involved. Finally, we will conclude by recognizing difficulties and limitations of contact as a tool to improve intergroup relations and, these caveats notwithstanding, derive a number of practical guidelines for the application of the contact hypothesis in the context of war and conflict resolution.

An Overview of Dependent Measures Used in Contact Research:

What Can Contact Change?

Although the term intergroup conflict subsumes a vast array of (often highly interrelated) phenomena ranging from subtle biases at one extreme to violence and genocide at the other, psychological research has mainly focused on the milder forms of conflict and bias (Hewstone & Cairns, 2001). We will present here the cognitive and affective elements of

conflict that are typically investigated in social psychological research, and discuss the effectiveness of contact as a tool to ameliorate them.

Cognitive Variables

Out-group stereotypes are often considered to be the cognitive bases of prejudice. They consist of mean levels of traits and characteristics ascribed to a group (i.e., the group's central tendency on these traits) and beliefs about the group member's dispersion around that central tendency (i.e., the perceived variability of the group on these traits). Stereotypes lead to a number of cognitive biases, such as biased selection of information (Snyder & Swann, 1978), biased collection of expectancy-confirming evidence (Snyder & Cantor, 1979), biased interpretation of ambiguous events (Duncan, 1976), selective memory for events (Rothbart, Evans, & Fulero, 1979) and biases in attributions for behaviour (Taylor & Jaggi, 1974).

Although most people generally show a tendency to favour their own group over an out-group (Tajfel, 1978), this tendency is particularly pronounced during intergroup conflict. A common feature of conflict between groups is the 'delegitimization' (Bar-Tal, 1990) of the enemy, which refers to the out-group's allocation to an extremely negative social category that is characterized as being beyond morality and acceptability, and which does not deserve humane treatment (see also Opatow, 1995). Two of the most common means of delegitimising an out-group are the ascription of extremely negative and socially unacceptable traits to the out-group (such as 'cruel', 'devious', 'ruthless'), and their depiction as subhuman and animal-like (Bar-Tal, 1990). Because such an 'enemy image' implies that the opponent poses a potential danger to one's in-group, delegitimization of the out-group can lead to a justification of even pre-emptive violent action and a spiral of retributive violence. Moreover, out-groups are often perceived as more homogeneous than in-groups (the out-group homogeneity effect, Quattrone & Jones, 1980). When out-group members are thus seen

as interchangeable, indiscriminate action against any and all out-group members can be more easily rationalized (Park, Judd, & Ryan, 1991).

According to Allport (1954), bringing members of opposing groups together can correct negative out-group stereotypes and thereby improve intergroup relations. However, despite Allport's notion, stereotypes have less often been used as dependent variables in contact research than, for example, attitudes. In Pettigrew and Tropp's (in press) meta-analysis, only 147 of the 1369 tests of the effect of contact on outcome variables involved a direct measure of stereotypes. In these studies, contact with out-group members was generally associated with less negative stereotypes of the out-group as a whole ($d = -.32$). Even fewer studies have measured the effect of contact on the perceived variability of the out-group. There is, however, some evidence from correlational studies showing that the perceived variability of the out-group increases as the quantity of contact increases (e.g. Islam & Hewstone, 1993; Paolini, Hewstone, Cairns, & Voci, in press; Voci & Hewstone, 2003). In addition, Wolsko, Park, Judd, and Bachelor (2003) showed in an experimental study that the perceived variability of the out-group increases insofar as the encountered exemplar disconfirms the stereotype *and* is perceived as typical of the group.

More recently, researchers have paid some empirical attention to the process of dehumanization and its relation to intergroup contact. Leyens and colleagues (2000) have introduced the concept of 'infra-humanization', a tendency to associate uniquely human characteristics (such as intelligence, language, and secondary emotions) more with one's in-group than with out-groups. Focusing in particular on the ascription of emotions, Leyens et al. showed that individuals ascribed primary emotions (such as anger and fear) equally to their in-group and an out-group, but attributed more secondary, uniquely human, emotions (such as guilt and shame) to the in-group than to the out-group. Several studies have now replicated this effect (see Demoulin et al., in press, for a review) and related it to a number of

behavioural consequences such as differential prosocial reactions to in-group vs. out-group members, less conformity toward out-group members and less approach and more avoidance behaviours towards out-group as opposed to in-group members (Vaes, Paladino, Castelli, Leyens, & Giovanazzi, 2003). In a study of Catholics and Protestants in Northern Ireland, Tam, et al. (2004) confirmed this basic infra-humanization effect. Moreover, they showed that the more contact respondents had with members of the out-group, the less they tended to differentiate between the in-group and the out-group with respect to the ascription of secondary emotions.

Another variable relevant to intergroup relations that has both cognitive and affective components is that of intergroup trust. The view of the out-group as dishonest and untrustworthy is a common feature of intergroup perceptions in situations of intergroup conflict (Eidelson & Eidelson, 2003). Distrust of the out-group may often reflect an adaptive assessment based on a history of conflict or the rational recognition of opposing interests. However, perceptions of ill intentions and distrust between groups result in a security dilemma and render cooperation and conflict resolution extremely difficult (Williams & Jesse, 2001). Only very recently have contact researchers used measures of trust as dependent variables. Voci, Hewstone, and Cairns (in prep.) found that intergroup contact was associated with increased trust towards the out-group. In a cross-sectional survey using a representative sample of the Northern Ireland population, they compared the effect of general contact with out-group members and contact with out-group friends on a number of criterion measures including out-group trust. They found that the more out-group contact people reported, especially when this contact was with out-group friends, the more they reported trusting the out-group.

Affective Variables

Although early theoretical work on the contact hypothesis conceptualised cognitive factors as paramount, most studies now focus on affective variables, such as general evaluations of the out-group and emotions towards the out-group, that accompany negative out-group perceptions. In fact, affective variables are more predictive of actual behaviour in intergroup settings than are stereotypes (Talaska, Fiske, & Chaiken, 2003).

Most contact research has focused on general evaluations of out-groups as dependent variables, and has generally found more positive attitudes as contact increased. For example, in their meta-analysis of contact effects, Pettigrew and Tropp (in press) found that contact was generally associated with more positive attitudes towards the out-group (mean $d = .47$). Recently, researchers have shifted their interest from general evaluations to *specific* emotions felt towards an out-group (Smith, 1993). According to Smith, emotions like fear, anger, and disgust are related to specific action tendencies such as flight, fight, and avoidance; their distinction would thus allow for a better prediction of actual behaviour. Two interconnected emotional variables might be of particular importance for conflict resolution: guilt and forgiveness for past deeds and atrocities. The induction of guilt might be relevant for increasing the willingness of the parties involved in conflict to strive towards conflict resolution and reconciliation. Doosje, Branscombe, Spears, and Manstead (1998) showed that collective guilt for harm that has been done to an out-group by the in-group is related to the willingness to compensate the out-group. However, this tendency was weaker for participants who identified highly with the in-group than for participants who identified less with the in-group. Also, according to Cairns (2001), one of the most difficult problems in societies torn apart by ethnic conflict is to face up to the past, forgive, and thereby break the cycle of revenge. Hewstone and colleagues (see Hewstone, Cairns, et al., in press) have recently undertaken an extensive research programme in which they tried to elucidate the concept of forgiveness in the context of this sectarian intergroup conflict in Northern Ireland. In a

number of discussion groups and surveys they found that forgiveness was highly related to collective guilt, trust, perspective-taking, and empathy. Participants who were victims in the conflict, or who lived in violence-prone areas, were less ready to forgive the out-group, but having general contact and especially contact with out-group friends was significantly positively related to the willingness to forgive.

To summarize, there is ample evidence that contact is related to more positive intergroup perceptions, attitudes, and emotions. In the studies reported above, intergroup contact was consistently associated with less negative (and more humane) out-group stereotypes, greater trust, more positive attitudes, and a greater readiness to forgive. Nonetheless, there is still little direct evidence that contact actually changes behaviour or improves intergroup relations on the societal level. Such a test should ideally involve the measurement of contact at the societal level as well. A study showing that contact can prevent violence between ethnic groups comes from an analysis of Hindu -Muslim relations in India. Varshney (2002) reported that inter-communal networks of civic life such as business associations, professional organisations, and clubs, as well as everyday interactions, promote peace between the communities that can withstand attempts of political parties to polarize the ethnic communities. He compared violence-prone cities to peaceful cities in India and found that the factors that distinguish them are networks of civic life that cut across the two communities. These were more likely to be present in peaceful compared to riot-prone cities. Clearly, though, these intergroup interactions involve more than simply contact per se. The next section explores the conditions that make intergroup contact more or less effective in reducing conflict.

Moderators of Contact Effects: Under What Conditions is Contact Most Effective?

Simple proximity between groups does not have any clear effects on attitudes and there is anecdotal evidence that mixing of ethnic groups can actually *produce* conflict and hostility (see Dixon & Reicher, 1997; Forbes, 1997; M.C. Taylor, 1998; but see Pettigrew & Tropp, in press, below). That contact per se is not the solution to prejudice and intergroup conflict was already acknowledged by Allport (1954), who suggested a number of conditions that ideally should be met for contact to be beneficial. He noted in his influential formulation of the contact hypothesis that:

“Prejudice (unless deeply rooted in the character structure of the individual) may be reduced by equal status contact between minority and majority groups in the pursuit of common goals. The effect is greatly enhanced if this contact is sanctioned by institutional supports (i.e., by law, custom or local atmosphere), and if it is of a sort that leads to the perception of common interests and common humanity between members of the two groups.” (p.281)

It is obvious that these conditions (equal status, cooperation towards a common goal, and institutional support) are incompatible with typical elements of intergroup conflict, such as competition, status differences, and animosity. Allport’s formulation of the contact hypothesis has stimulated a great amount of research and his original contentions have received considerable support. Researchers have since proposed a large number of other ‘moderators’ to the list of conditions. These include a common language, voluntary contact, a prosperous economy (Wagner & Machleit, 1986), and stereotype disconfirmation (Cook, 1978), to mention just a few (see Stephan, 1987, for a review).

No empirical evidence to date points to the superiority of any one condition over the others, and Allport’s original conditions are often confounded, so it is unclear which of the conditions has the strongest effect on attitude change (Riordan, 1978). Pettigrew and Tropp (in press) conclude, on the basis of their meta-analysis, that even unstructured contact has a

small basic positive effect on intergroup attitudes. Allport's proposed optimal contact conditions enhance this basic effect considerably, but given the basic positive effect of contact, these factors should be seen as facilitating rather than as absolutely necessary conditions (see also Pettigrew, 1998). The presence of facilitating conditions has often been termed the 'quality' of contact (Cook & Selltiz, 1955), and recent research has combined both quantity and quality in a multiplicative form as a predictor of prejudice (Voci & Hewstone, 2003).

Only a few studies (5%) in Pettigrew and Tropp's (in press) meta-analysis yielded negative effects of contact on attitudes (e.g., Seefeldt, 1987). Pettigrew and Tropp suggest that for intergroup contact to increase prejudice there must be negative factors operating in the situation – such as high anxiety, threat, and stereotype confirmation. Amir (1969, 1976) concluded in his extensive narrative reviews that the results of contact-based intervention programmes are unfavourable when the situation involves some form of competition, is involuntary, frustrating or tension-laden, or threatens the status of one of the groups.

Below we will give an overview of the most important facilitating conditions and issues surrounding their application. Also, we will stress the importance of the *perception* of these contact conditions and argue that person factors, such as whether participants are members of a low vs. high status group, must be taken into account to apply contact successfully. Finally, we briefly point to the importance of societal factors, which have received less attention than the factors that are directly subject to situational control (Stephan, 1987).

Situational Factors

Allport's original conditions. Power imbalances are often a source of intergroup conflict and intergroup perceptions (Fiske, Cuddy, Glick, & Xu, 2002). Bringing groups together under conditions of *equal status* can in itself disconfirm perceptions about differences between the groups. There is extensive empirical support showing that improved

intergroup attitudes result when contact takes place under conditions of equal status (e.g., Clore, Bray, Itkin, & Murphy, 1978; Cohen & Lotan, 1995; Robinson & Preston, 1976).

The concept of what constitutes equal status is, however, still problematic. Whereas Allport stressed the role of equal status *within* the contact situation, some point to the importance of equal status *coming into* (viz., prior to) the situation (e.g., Brewer & Kramer, 1985). For example, Rabin (1985, cited in Brewer & Miller, 1988) provided experimental evidence that prior external status relations, even when unrelated to the task at hand, had a persistent influence on judgments about others. Riordan (1978) noted that in racist societies equal status contact may be difficult to implement since inequality generally exists in all aspects of society (see also Riordan & Ruggiero, 1980). He also questioned the basis for claimed equal status in contact studies. Maoz (2000) provided an illustration of how power differentials can ‘spill over’ to the contact situation. In structured encounter programs between Jewish and Palestinian teachers he observed that members of the dominant group tended to control the cooperative task (see also Cohen, 1984; Yogev, Ben-Yehoshua, & Alper, 1991). Moreover, even if equal status is achieved in the contact situation, the positive effects of that contact might not easily generalize if large status differentials between the two groups still exist in society (e.g., Minard, 1952; Wade & Wilson, 1971).

Cohen (1982, 1984) suggested that the equal status concept should be reformulated in terms of expectation states. According to Cohen, status can be seen as a basis for generating expectations about the interaction which can become self-fulfilling prophecies and lead members of the high status group to dominate the interaction and members of the low status group to put less effort into the task. Thus, Cohen suggests that an ‘expectation training’ prior to the interaction can be beneficial. Cohen and Roper (1972) for example boosted experimentally the status of the low status group by attributing an especially high level of competence to the black children in their study prior to inter-racial contact. In the context of

conflict resolution in Northern Ireland, Hughes (2003) suggests that this is best done at an intra-community level, for example through single identity projects, where fears and prejudices can be addressed in a secure, non-threatening environment prior to contact.

Allport's notion that the two groups should *cooperate towards a common goal* during the interaction is also highly relevant for conflict resolution because intergroup conflict is often perceived as a zero-sum game by the parties involved (Esses, Jackson, & Armstrong, 1998). Sherif's (1966) Robber's Cave study provided the most impressive demonstration showing that the cooperation towards a common goal could directly counteract intergroup conflict. In this famous experiment a number of boys attending a summer camp were randomly assigned to two groups and over a period of several weeks they engaged in a number of competitive activities that generated overt intergroup conflict. Intergroup contact under neutral, non-competitive conditions did not succeed in ameliorating this conflict. Only after the two groups worked interdependently on a number of superordinate tasks (e.g., repairing the water tank) did intergroup relations improve.

The effectiveness of co-operation has been established in a large number of laboratory experiments (e.g., Brown & Abrams, 1986; Ryan & Kahn, 1975), and has been successfully applied in educational settings in the form of cooperative learning groups (e.g., Aronson, Blaney, Stephan, Sikes, & Sanpp, 1978; Aronson & Patnoe, 1997). However, some important limitations of this strategy should be noted. Firstly, the effectiveness of cooperation towards a common goal in reducing intergroup bias is dependent on the outcome of that endeavour (Blanchard, Adelman, & Cook, 1975). Worchel, Andreoli, and Folger (1977) showed that the failure on a cooperative task can lead to an increase in intergroup bias, in particular if there is a history of competitive intergroup relations. Also, equal levels of task ability should be ensured (Cohen, 1984; Slavin, 1978). Moreover, the distribution of tasks seems to play a role. Based on the assumptions of social identity theory (Tajfel & Turner, 1979), several

authors warned that bringing groups together in a cooperative task under conditions of equal status may produce threat to the distinctiveness of members' separate group identities (e.g., Brown & Wade, 1987; Deschamps & Brown, 1983; Hewstone & Brown, 1986; but see also Marcus-Newhall, Miller, Holtz, & Brewer, 1993). Under such conditions a need to achieve 'positive distinctiveness' could be aroused, which could exacerbate, rather than alleviate, intergroup bias. Thus, to avoid competition, cooperation and equal status should be achieved by letting participants work on different task dimensions which are equally valued.

The final condition proposed in Allport's (1954) formulation is that of *institutional support*. According to Allport, intergroup contact would be more readily accepted and should have more positive effects if it is explicitly supported by social sanctions of relevant others. There is evidence for the importance of this condition from field research in a number of different settings (Deutsch & Collins, 1951; Landis, Hope, & Day, 1984; Morrison & Herlihy, 1992; Parker, 1968).

Stereotype disconfirmation, cognitive biases, and the problem of generalization. Cook (1978) also stressed that, for contact to be effective, the characteristics of the out-group members with whom contact takes place should disconfirm the prevailing negative stereotypes about that group. This sounds easier than it is. For contact to change negative perceptions of an out-group at least three conditions have to be met: (a) behaviours must be exhibited that clearly disconfirm the stereotype; (b) these disconfirming behaviours must be perceived as such; and (c) they must be attributed to the group as a whole.

Rothbart and John (1985) proposed that the extent to which stereotypical beliefs can be disconfirmed during contact depends on a number of characteristics that are inherent in the trait in question (e.g., whether it has clear behavioural referents)¹, and on the degree to which the structure of the contact situation allows the repeated expression of counter-stereotypical

¹ Rothbart and Park's (1986) research showed that especially 'delegitimizing' traits such as 'devious' that are often ascribed to enemy out-groups are particularly resistant to change.

behaviours. Their research showed that characteristics of the contact situation are correlated with the observation of particular types of behaviours (e.g., extroverted behaviours are more likely to be observed in informal settings compared to formal settings). Thus, to determine which type of contact setting is most likely to promote stereotype change, one has to identify the relevant stereotypical beliefs associated with a group and classify contact settings in terms of their potential for eliciting stereotype-disconfirming behaviours.

Even if the contact setting is structured in a way that permits stereotype-disconfirming behaviours to be exhibited, a number of social-cognitive impediments must be overcome to achieve stereotype change. A number of authors stress that intergroup contact situations are often tinged by stereotypes and prejudices, and that people have a tendency to confirm these expectancies through the operation of a number of cognitive and behavioural biases (Hewstone & Brown, 1986; Neuberg, 1996). These include (a) a tendency to seek prejudice-confirming information and to ignore or discount disconfirming information, (b) a tendency to interpret ambiguous information in prejudice-reinforcing ways, and (c) enacting behaviours that provoke the other to behave in prejudice-affirming ways. According to Neuberg (1996), these biases are reduced by motivating the perceiver to form accurate impressions, to be likable and ingratiating, by motivating the out-group target to challenge the perceiver's stereotypical expectancies, and by providing an environment without stressors and distractions that drain cognitive resources. According to Neuberg, these requirements are most likely to be met under Allport's original contact conditions of cooperative interdependence, equal status, and egalitarian norms. When interactants must cooperate with each other in order to achieve a common aim, they tend to be motivated to form accurate impressions of their partner (Erber & Fiske, 1984). Conditions of equal status and explicit egalitarian norms are likely to promote the same motivations for accuracy in the dominant group, and self-determined self-presentation in the minority group.

Positive contact with a sample of group members who disconfirm stereotypical beliefs of that group does not ensure better intergroup relations in general. Contact may lead to more favourable perceptions of specific individuals, but not necessarily to more favourable perceptions of the out-group as a whole (Cook, 1978). Thus, for contact to improve intergroup relations, its effect has to *generalize* to the entire out-group. The problem of generalization seems to be one of the main shortcomings of the contact hypothesis (see Hewstone & Brown, 1986). There are two related lines of research (social cognitive and intergroup) that suggest how this problem can be overcome.

In their social cognitive analysis of contact, Rothbart and John (1985) point out that, for contact effects to generalize, the encountered out-group member has to be representative of the out-group in order to be associated with the out-group as a whole. The more typical an encountered group member is, the greater the degree of inference from that group member's characteristics to the group as a whole (see also Rothbart & Lewis, 1988). Several experimental studies have demonstrated the role of out-group members' typicality in generalizing the effects of contact (Brown, Vivian, & Hewstone, 1999; Desforges, Lord, Pugh, Sia, & Scarberry, 1991; Wilder, 1984). For example, Wilder (1984, Experiment 1) systematically manipulated both the behaviour (pleasant vs. unpleasant) and the typicality of a member of a rival college in a contact situation. He found that only when the encountered group member behaved in a pleasant way *and* was typical of her group did ratings of the out-group in general become more favourable. Wilder warned, however, that if the out-group is characterized primarily by negative stereotypes, a typical member would need to display some negative characteristics. He suggested that the typicality of the out-group member should be based on characteristics that are independent of the perceiver's in-group (dress, manners, etc.), rather than characteristics that are directly related to the relationship between in-group and out-group (Wilder, 1984, Experiment 2). Furthermore, Wilder (1986) argued

that, if several group members are encountered, they should be typical, but still heterogeneous on other characteristics to avoid subtyping (Hewstone, 1994; Weber & Crocker, 1983).

Another way of making generalization more likely is to remind participants of the encountered individuals' group membership. Hewstone and Brown (1986) argued, on the basis of their intergroup contact model discussed below, that group memberships should be kept salient in the contact situation. There is a large amount of experimental and correlational evidence supporting the moderating role of category salience in the relationship between contact and intergroup bias. For example, Van Oudenhoven, Groenewald, and Hewstone (1996) reported that Dutch students' evaluations of Turkish people in general were more positive after a cooperative interaction with a Turk when his nationality was explicitly mentioned during the interaction than when it was not explicitly mentioned. It made no difference whether the group membership was made salient at the beginning or the end of the interaction. Similarly, category salience during contact was found to be an important moderator in the relationship between contact and attitudes in a number of cross-sectional surveys. Brown et al. (1999) conducted a survey in 6 European countries assessing the amount of contact with other nationalities, the nature of that contact, and how salient the other person's nationality was during the interactions. They found that the more frequent the contact with people from other nationalities was, the more willing were the participants to live in the country in question. This was especially the case when the nationality of the encountered persons was salient during contact. Similar results were reported by Voci and Hewstone (2003) in the context of attitudes towards immigrants in Italy, and by Hewstone, Cairns, Voci, and McLernon (2004), who found that cross-group friendships between Protestant and Catholic teenagers in Northern Ireland were associated with (a) more positive

attitudes towards the out-group, and (b) a greater willingness to forgive the out-group, when participants were aware of their friends' group memberships.

Interpersonal contact and cross-group friendships. Another line of contact research has stressed the importance of intimate interactions (Amir, 1976; Miller, 2002). Cook (1978) suggested that the contact situation should also have 'acquaintance potential' in which personal information about out-group members could be revealed, facilitating their perception as individuals and preventing their being stereotyped as group members. Brewer and Miller (1984) claim that in order to achieve this, the contact situation should be interpersonally oriented (see next section for a more detailed discussion of this theoretical model). A contact situation can become personalized and intimate when participants disclose or reveal intimate personal information to another individual (see Ensari & Miller, 2002; Harwood, Hewstone, Paolini, & Voci, in press; Miller, 2002; for the role of self-disclosure in contact). Such personalized contact would result in group categories being de-emphasised and undermine the cognitive biases typically present in intergroup encounters.

Pettigrew (1997, 1998) stressed that for intergroup contact to be most beneficial, mere acquaintance might not be enough. He argued that contact should be prolonged to allow the development of long-term close *cross-group friendships*. According to Pettigrew, friendship requires the operation of conditions that approach Allport's specifications for optimal contact. Intergroup friendship is likely to involve common goals and repeated equal-status contact in a variety of settings over an extended period. Pettigrew (1997) reported empirical support for the strong negative relationship between cross-group friendships and prejudice using data from seven national probability samples in four European countries (see also Hamberger & Hewstone, 1997). He demonstrated that people who had an out-group friend expressed less subtle and blatant prejudice towards the out-group as a whole, and showed greater support for pro-out-group policies than did people who had an out-group neighbour or co-worker, but not

a friend. Further support for the importance of friendship comes from Pettigrew and Tropp's (in press) meta-analysis. They reported that measures of out-group friendships were a much stronger predictor of reduced prejudice ($d=.55$) than were measures of general intergroup contact ($d=.38$). Consistent with this finding, Hewstone and colleagues (Hewstone et al., in prep.; Voci et al., in prep.) reported the greatest effect of intergroup contact between Catholics and Protestants in Northern Ireland on a number of dependent variables if this contact was with *friends* from the out-group.

New research in the area of cross-group friendship points to the beneficial effect that even *extended* contact can have. The extended contact hypothesis proposes that the mere knowledge that an in-group member has a close relationship with an out-group member can lead to more positive intergroup attitudes (Wright, Aron, McLaughlin-Volpe, & Ropp, 1997). There are three reasons why extended contact may be beneficial. First, Wright et al. suggest that in cases of extended contact, the social categories should be more salient to the observer than to the people directly involved, thus making generalization more likely.

Second, extended contact might be particularly successful in changing intergroup attitudes because it overcomes the problem of intergroup anxiety (Stephan & Stephan, 1985). Intergroup anxiety stems from the expectation of negative consequences for oneself in intergroup encounters. It often occurs when anticipating an interaction or when directly interacting with an out-group member and can lead to a number of information processing biases that can undermine positive contact effects and lead to the avoidance of contact (Greenland & Brown, 1999; Islam & Hewstone, 1993; Stephan & Stephan, 1985). According to Wright et al., extended contact should not be anxiety-provoking because the observer is not personally involved in the interaction. Also, observing or learning about positive interactions of an in-group member with an out-group member may reduce the apprehension about

possible future interactions with out-group members (see Paolini, Hewstone, Cairns, & Voci, in press, discussed below) and may thereby make voluntary contact more likely.

Finally, if cross-group friendship is generally discouraged by other in-group members, then observing or knowing that an in-group member actually has an out-group friend can change perceived in-group norms. This should be especially the case when the in-group member is representative of one's group.

Wright et al. (1997) provide impressive evidence from survey and experimental studies showing that extended contact can have beneficial effects on intergroup attitudes for both majority and minority group members, even after a number of other relevant variables, such as direct friendships with out-group members and dispositional variables related to prejudice, are controlled for. They found that those people knowing about, or observing, intergroup friendships showed less prejudice than those participants who did not. A practical application of this idea was tested by Liebkind and McAlister (1999), who evaluated an educational intervention that was applied in a number of schools in Finland. The intervention employed role models who discussed real-life stories of friendships between Finnish people and foreigners. Students exposed to this programme showed significantly less prejudice than did students in a control group. That contact can work indirectly via prominent out-group members (e.g., politicians) who are merely encountered indirectly was demonstrated by Hajnal (2001). He showed that in the United States, White respondents' experience with a Black mayor led to decreased racial tension, greater racial sympathy, and increased support for black representation. However, this effect occurred not among white Republicans, suggesting that person factors may be important moderators that have to be taken into account in contact research.

Person factors

The conditions under which contact will reduce intergroup bias should not be regarded as objective features of the situation itself, but rather as conditions that can be perceived differently by different people (Pettigrew & Tropp, in press; Wilder, 1986). A number of such person variables have been proposed in the literature (e.g., Pettigrew, 1998; Stephan, 1987), but they have been less prevalent in recent research. In the following section we will briefly introduce a number of inter-individual differences that may be relevant for the success of contact interventions. We will also point out a number of differences between members of low-status and high-status groups in perceptions of the contact situation. Although many person variables are not subject to manipulation, knowledge of how person variables influence the success of contact interventions may be important, since it could aid in the selection of suitable participants and contact conditions and activities or, if necessary, the preparation of participants before the intervention (Cohen, 1982; Maoz, 2002; Schwarzwald, Hoffman & Rotem, 1988).

Individual Differences. Stephan (1987) identifies a number of person factors that seem to be relevant for the success of contact interventions. Demographic variables seem to play a role, such that positive change is more likely with better educated, higher social class, and younger individuals (Williams, 1964). With respect to age, however, Maoz (2002) noted, in an evaluation of planned contact interventions between Jews and Arabs in Israeli schools, that there is considerable variation in the actual interaction between different age groups. Programmes targeted at high school students and adults were characterized by a much higher level of actual interaction, whereas programmes targeted at pre-school to fourth grade children and especially programmes targeted at fifth to ninth graders showed a lower extent of interaction. Maoz suggests that the range of possible activities, as well as differences in cognitive and emotional capabilities between the different age groups, could account for this finding.

Maoz (2003) looked at the role of *political affiliation* as a moderator of contact effects. He compared the attitudes of Israeli ‘doves’ and ‘hawks’ concerning intergroup encounters, and with the Palestinians in general. He found that although ‘hawks’ were less motivated to participate in structured encounter programs with Palestinians and had more negative attitudes towards Palestinians before the intervention than did ‘doves’, they showed, probably due to a ceiling effect for ‘doves’, greater positive attitude change in response to the intervention.

Also, a number of *personality traits* were investigated as potential moderators of contact effects. Results show that high self-esteem, adherence to the Protestant work ethic, and low authoritarianism, as well as high competence in task-relevant skills, all seem to be beneficial (see Stephan, 1987, for a review).

The question of person factors is related to the *selection of participants* for intervention programmes, so that change can be maximal both at the individual and the societal level. Interventions employing contact have been applied in a variety of different settings involving different age groups (ranging from pre-school children to adults) and different types of group representatives. Pettigrew (1971) argued that contact should take place between high status representatives of the groups, to ensure maximum disconfirmation of low-status group stereotypes. However, such an approach poses problems for generalization and might even backfire (see Hewstone & Brown, 1986). In the context of conflict resolution, Rouhana and Kelman (1994) suggest that change at the level of individuals should be fed back into the political debate and decision making of the two parties. They suggest that participants should be close enough to the centres of power to have some influence on political decision making and public opinion. They should enjoy credibility and should represent the mainstream in their own societies. Participants in their interactive problem solving workshop (and in the other workshops conducted by Kelman and

colleagues) were unofficial but politically highly influential Palestinians and Israelis such as academics and former politicians.

The selection of participants for contact interventions has not, however, been systematically addressed, and this should clearly be a subject of future studies in the applied field. One question that has received attention, however, is that of the prejudice level of participants. Allport (1954) noted that contact can be beneficial unless prejudice is deeply rooted in the participant's personality, suggesting that highly prejudiced participants may be unaffected by contact interventions. Recent research supported the notion that interventions with highly motivated participants who are less prejudiced may be more successful than interventions with more prejudiced participants. Esses and Dovidio (2002) showed that people with more negative attitudes tend to avoid contact with out-group members and Plant and Devine (2001) demonstrated that interventions can have 'backlash' effects for more prejudiced, less internally motivated participants. Nevertheless, Maoz's (2003) results (see above) suggest that more prejudiced participants could benefit the most from an intervention, once motivated to participate. Similarly, Pettigrew and Tropp (in press) report that the effect sizes in the relationship between contact and prejudice are greater when participants have little choice concerning whether to participate in the intervention.

The *number of participants* could also play a role in the success of interventions. Hewstone (1996) suggests that, because groups tend to be more competitive than individuals (e.g., Insko, Schopler, Hoyle, Dardis, & Graetz, 1990), contact between two people who act as representatives of their respective groups could be more beneficial than having groups of people interact. The number of participants may be an important moderator of contact effects. There is research showing that, in small groups, balanced ratios of in-group to out-group members are beneficial (Amir, 1976; Gonzales, 1979; cited in Stephan, 1987); however, in large groups such as schools they are not (e.g., Hallinan & Smith, 1985).

Group Status. Finally, the status that one's groups has in society can affect the effect of contact on attitudes. Pettigrew and Tropp (in press) found in their meta-analysis that the positive relationship between contact and attitudes was significantly weaker for members of low-status, as compared to members of high-status groups. According to Pettigrew and Tropp, this result suggests that members of low- and high-status groups subjectively experience intergroup contact in different ways, even when the contact situation is objectively structured to maximize positive intergroup outcomes.

Members of low-status and high-status groups bring different expectations and motivations into the contact situation and construe it in different ways (Devine, Evett, & Vasquez-Suson, 1996). For example, there is experimental evidence showing that members of low status groups are less likely to cooperate with a higher status group and less likely to form a unified group representation in a superordinate goal condition (Seta, Seta, & Culver, 2000). This can undermine attempts to change intergroup attitudes through cooperative contact and should be taken into account when designing interventions to reduce group conflicts, which are often accompanied by status differences (but see Hyers & Swim, 1998).

Societal Factors

Contact situations are always embedded in socio-political contexts, which can influence the amount of contact that is possible and shape the perception and implementation of facilitating conditions (Pettigrew, 1998; see above). Stephan's (1987) model of intergroup contact proposes that societal factors, such as social stratification, historical relations between the groups, current relations and events, as well as socialisation practices, have an impact on both situation and person factors. However, he admits that very little is known about where and why contact occurs in society and how societal factors shape the situational contexts in

which contact occurs. Such knowledge could help in finding means of intervention in the social system that will have an optimally positive effect on intergroup relations.

In a study on the effect of mixed neighbourhoods during South African Apartheid, Russel (1961, cited in Pettigrew, 1998) showed that societal norms of discrimination severely constrained the positive impact of contact (see also Hughes, 2001, for an illustration in the Northern Irish context). By contrast, Pettigrew (1998) suggests that “when a society embraces intergroup harmony, equal-status contact between groups is no longer subversive. Normative support makes attainment of other optimal conditions far easier” (p.79).

For an analysis of social contextual strategies to reduce prejudice and improve intergroup relations we refer to M.C. Taylor (2000), who discusses the importance of residential desegregation and measures to increase employment equity, as well as the role of institutional leadership, political discourse, and media-framing of policy-relevant topics in determining public opinion.

How does contact work? Theoretical Models and Psychological Mediators

The initial formulation of the contact hypothesis was atheoretical; it grew out of the empirical research available in the 1940s and never explicitly specified the ‘driving forces’ behind its effect on attitudes. Research testing this hypothesis focused initially on the optimal conditions under which contact should take place, but recent work has focused more on the mediating psychological mechanisms behind the well established effect of contact on attitudes. Understanding *how* or *why* contact works is important because knowledge of psychological mediators can enable us to design optimal interventions that aim specifically at these processes. Also, because the optimal conditions for intergroup contact may often be difficult to achieve, such knowledge can help to identify alternative or supplementary interventions with similar psychological effects. Below we will give an overview of the

cognitive and affective mechanisms of attitude change that have been proposed and tested thus far in the contact literature.

Cognitive mechanisms

Cognitive mechanisms by which contact is presumed to reduce intergroup bias include the acquisition of knowledge about the out-group, reappraisal of the in-group, cognitive dissonance mechanisms following attitude-inconsistent behaviour, and changes in the cognitive representation of the groups. Theoretical models and empirical support for each of these processes will be described below.

Increasing knowledge: Learning about the out-group, reappraising the in-group, and learning new behaviour

One of the oldest hypotheses in intergroup relations, and the rationale for the positive effect of contact put forward by Allport (1954) and other early researchers in this area, was that negative stereotypes and unfavourable attitudes towards an out-group are due to a lack of information or to the existence of erroneous information about that group. Consequently, contact situations provide an opportunity to learn more about the other group and to correct one's fallacious assumptions. Several explanations for why greater knowledge about the out-group can improve intergroup relations have been put forward. Partly, the rationale is that more knowledge about an out-group will reveal similarities and thus lead to liking (Byrne, 1961; Pettigrew, 1998). More recently, however, the importance of knowing about *differences* between groups has also been stressed in the literature (Wolsko, Park, Judd, & Wittenbrink, 2000). Also, increased knowledge can undermine stereotyping by creating new, non-stereotypical associations with the group. Greater knowledge can reduce uncertainty about how to interact with others and can thus reduce avoidance, as well as discomfort in interactions. In addition, providing information about the historical background of a group

can lead to the recognition of injustice. In conflict situations, it might be especially important to learn about the other group's identity concerns and fears for security and survival (see Kelman, 1979, for an illustration in the Israel-Palestinian context). However, the role of different types of knowledge has not been investigated yet.

Stephan and Stephan (1984) investigated the role that increased knowledge about the out-group plays as a mediating mechanism in the relationship between contact and prejudice. They provided evidence for a moderate mediating effect of knowledge in the context of Mexican-American relations. Also, Eller and Abrams (2004) and Tausch, Singh, Ghosh, Hewstone & Biswas (2004) show that knowledge about the out-group partially mediates the relationship between contact and attitudes in the context of Mexican-American relations and Hindu-Muslim relations in India, respectively. Nevertheless, Pettigrew and Tropp (in press) state that although contact does increase knowledge of the out-group, this process mediates only about one percent of contact's reduction in prejudice in the few samples permitting the test.

Contact may also change people's views of their own group. It may lead to what Pettigrew (1997, 1998) refers to as 'reappraisal' of the in-group in a way that in-group norms, customs, and lifestyles are no longer considered to be the only acceptable ways to manage the social world. Changing views about one's own group may be quite important in the resolution of conflict because in situations of intergroup conflict people tend to idealise and victimise their in-group and blame the out-group (Bar-Tal, 2000a). Successful conflict resolution, however, requires both sides to admit some responsibility. Pettigrew (1997) reported that greater contact with minority groups was related to less positive views of the in-group. However, to date there is no evidence for a mediating role of ingroup reappraisal (see Eller & Abrams, 2003, 2004).

Pettigrew (1998) suggests that contact could also act as a benign form of behaviour modification. Through contact, new and alternative behaviours towards out-group members

are learned and this, in turn, can change people's attitudes by (a) setting new norms, or (b) cognitive dissonance reduction, which serves to justify the attitude-inconsistent behaviour (Brewer & Miller, 1988). There is recent empirical support that behavioural change does, in fact, partially mediate the relationship between contact and attitudes (Eller & Abrams, 2003, 2004).

Different Levels of Social Categorization

Three different theoretical models specifying the processes by which intergroup contact may operate were proposed in the 1980s (*de*categorization, Brewer & Miller, 1984; *re*categorization, Gaertner, Mann, Murrell, & Dovidio, 1989, and categorization, Hewstone & Brown, 1986). All three models are based on the social categorization approach as represented by social identity theory (Tajfel & Turner, 1979) and self-categorization theory (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987); however, they make different predictions as to when and how intergroup contact improves attitudes. In this section we will briefly outline these models, summarize the empirical evidence in favour of them and discuss a number of suggestions that have been made to reconcile and integrate these different approaches.

The basic premises of the social categorization approach that are relevant here are that (a) individuals organize their social world on the basis of categorical distinctions, and (b) membership in social categories has self-relevance and carries affective and emotional significance. The salience of a group membership results in intergroup differentiation and intragroup assimilation which will usually be accompanied in-group favouring biases in the service of a more positive social identity. The first two models of intergroup contact we will discuss (*de*categorization and *re*categorization) thus argue that intergroup relations can be improved by reducing the salience of the original social categories. However, the third model

(categorization), points out the problems related to such an approach and argues explicitly for keeping social categorizations salient.

Decategorization. One theoretical perspective on intergroup contact argues that contact can reduce bias by reducing the salience of intergroup boundaries, that is, through *decategorization*. According to this perspective, interpersonal contact can individuate members of the out-group by revealing variations in their characteristics and opinions (Wilder, 1986), or by the exchange of intimate personal information which leads to personalization of the encountered out-group members (Brewer & Miller, 1984). Brewer and Miller argue that the attention to idiosyncratic information about each individual in the contact situation would be accompanied by less attention to category-based stereotypical information. The repeated utilization of individual, as opposed to category-based, information should in turn reduce the usefulness of the category in future interactions and hence lead to the elimination of negative out-group stereotypes.

Empirical support for this model comes from a number of experimental studies (e.g., Bettencourt, Brewer, Croak, & Miller, 1992; Miller, Brewer, & Edwards, 1985) in which experimentally created groups are brought together to work cooperatively on a task. The participants in these studies were typically instructed either to focus on each other's personal characteristics (person-oriented condition) or to focus on the task at hand (task-oriented condition). After the completion of the task, participants were asked to allocate rewards to members of their team and to out-group members that were unknown to them. A consistent finding is that participants in the person-oriented condition show less bias in the allocation of rewards for both the team members and the unknown out-group members, which confirms some degree of generalization of contact effects. However, a recent study (Bettencourt, Charlton, & Kernahan, 1997) demonstrated that the beneficial effects of personalized contact

may be restricted to members of majority groups. In this study, members of the minority group showed more bias in the person-oriented condition than in the task-oriented condition.

Recategorization. An alternative approach tries to reduce intergroup bias not by eliminating categories altogether, but by influencing the way in which group members conceive of group boundaries. The Common In-group Identity Model (Gaertner, Mann, Murrell, & Dovidio, 1989) proposes that intergroup bias and conflict can be reduced by factors that transform group member's cognitive representations of their group memberships from two groups ('Us' and 'Them') to one inclusive social entity ('We'). This *recategorization* should redirect the cognitive and motivational processes that produce positive feelings toward in-group members to the former out-group members who are now included in the more inclusive one-group representation.

Gaertner, Dovidio and colleagues provide both experimental and correlational evidence showing that a more inclusive group representation can mediate the effect of intergroup contact on intergroup bias. For example, Gaertner, Mann, Dovidio, Murrell, and Pomare (1990) tested the idea that cooperation between groups increased positive intergroup attitudes because it changed member's group representations to a more inclusive common identity. They manipulated independently (a) participants' representation of the aggregate as one or two groups (through seating arrangements), and (b) the presence or absence of cooperative interaction. In the absence of cooperation, participants who were induced to feel like one group reported more favourable evaluations of the out-group than participants who were induced to feel like two groups. The introduction of cooperation also led to more favourable evaluations of out-group members and this effect was mediated by a one-group representation. This result was conceptually replicated in a number of correlational studies in more naturalistic settings (e.g., Gaertner, Rust, Dovidio, Bachman & Anastasio, 1996). These showed that the favourable contact conditions (perceptions of cooperative interdependence,

interaction, equal status, and supportive norms) reliably (but weakly) predicted more inclusive group representations and that these, in turn, mediated the relationship between contact and intergroup bias.

Categorization. The empirical evidence for the approaches discussed above notwithstanding, they host a number of problems. For example, Hewstone (1996, see also Hewstone & Brown, 1986) points out that the individuation of encountered group members as proposed by the decategorization model may inhibit generalization. Individuating information can distance the encountered group member from the out-group itself and may lead to subtyping of that individual (Rothbart & John, 1985; Scarberry, Radcliff, Lord, Lanicek, & Desforges, 1997; Weber & Crocker, 1983). Also, it seems unlikely that the creation of a superordinate identity as suggested by the recategorization approach will overcome powerful ethnic and racial categorizations. There may be strong resistance to changes in category boundaries, especially when the groups are engaged in deadly hostilities, or when they differ in size, power, or status (Brewer & Gaertner, 2000). Minority group members may be particularly reluctant to accept a superordinate identity that is dominated by the majority group (Simon, Aufderheide & Kampmeier, 2001).

Hewstone and Brown (1986) put forward a theoretical viewpoint that differs sharply from the decategorization and recategorization approaches discussed above. First, in direct contrast to the decategorization approach, they (based on Brown & Turner, 1981) propose that contact must be defined as an *intergroup* encounter, not an *interpersonal* encounter, in order to achieve generalization of contact effects to the out-group as a whole and improve intergroup relations. Thus, they suggest that group affiliations should be salient during the encounter. Second, they recommend that, in order to maintain social identities and positive distinctiveness, but to avoid intergroup comparisons in the interaction, the contact situation be structured so that members of the respective groups have distinct but complementary roles

to contribute towards the achievement of a common goal. Mutual superiorities and inferiorities should be recognised and equally valued, which could be achieved by ensuring that the in-group and the out-group are rated on independent dimensions (Mummendey & Schreiber, 1984). Thus, this approach does not seek to change the original category structure, but the level of interdependence between the two groups from negative to positive. Both the role of category salience in the generalization of contact effects and the advantage of letting participants work at different task dimensions have been supported in a number of experimental and correlational studies (Brown et al., 1999; Brown & Wade, 1987; Deschamps & Brown, 1983; Van Oudenhoven et al., 1995, see previous section).

Nevertheless, this approach is not without its own difficulties and limitations. Making category memberships salient may reinforce stereotypes and perceptions of group differences and lead to greater in-group bias (Mullen, Brown, & Smith, 1992) and probably to greater perceiver biases in the contact situation (Neuberg, 1996). The overemphasis on group memberships may also have a negative effect on intergroup relations because it can lead to intergroup anxiety and thus risks the generalization of negative information to the out-group as a whole (Brown et al., 1999; Greenland & Brown, 1999; Islam & Hewstone, 1993; Stephan & Stephan, 1985).

Integration of theoretical models. There is extensive evidence for each of the three theoretical models and all of them have their respective advantages and disadvantages. Hewstone, Rubin and Willis (2002) argue that rather than viewing these approaches as competing positions, they should be seen as complementary. Several attempts to integrate the different approaches have been made.

Miller (2002) suggests that although the decategorization and categorization approaches seem contradictory at first sight, they can be combined in order to overcome their respective limitations (see also Hewstone, 1996; Stephenson, 1981). He argues that

personalized contact does not preclude the salience of social categories; these different types of contact are in fact orthogonal and can be manipulated simultaneously. In an experimental study Ensari and Miller (2002, Study 1) varied whether contact with an out-group member was personalized or impersonal (through a manipulation of self-disclosure), and whether the encountered group member was a typical or an atypical representative of their group.

Participants in the personalized condition evaluated unknown out-group members more favourably than did participants in the impersonal condition, but only in the typical condition, suggesting that personalization and typicality work together in producing generalized positive contact effects. In a second experiment, Ensari and Miller also manipulated the salience² of social categories. Similarly to study 1, personalized contact led to generalized positive effects in the typical condition, regardless of whether the out-group member's group membership was made salient. In the atypical condition, however, personalized contact effects generalized only when the category was made salient. Taken together, these results suggest that personalized contact leads to generalized effects when the encountered group member is a typical representative of the out-group, thus conceptually replicating results by Wilder (1984) and Brown et al. (1999, Study 1) who stress the role of typicality in the generalization of contact effects. In addition, keeping group membership salient during contact does not seem to add anything when the encountered group member is typical, but can ensure generalized effects when the encountered individuals are atypical of their group.

Brewer (1996) and Gaertner et al. (1996) advocate that a stable social categorization that overcomes some of the problems of the decategorization and recategorization approaches mentioned above could involve the salience of a superordinate level of categorization that simultaneously preserves subordinate differentiation. Brewer suggests the cross-cutting of roles in the cooperative task, for example, work groups consisting of representatives of each

² *Typicality* of an individual is her level of representativeness or fit to the category itself, whereas *category salience* is the degree to which a perceiver is aware that the individual is a member of a social group or category, independent of her fit to that category.

of the groups (see also Brewer & Miller, 1988) as an effective measure to reduce in-group bias and bring about more differentiated out-group representations without having to give up cherished social identities. There is some empirical evidence in favour of such a strategy using experimentally created groups (Marcus-Newhall et al., 1993; but see Hewstone & Brown, 1986, above), although it is not clear how real social groups with a history of conflict and status differentials would react to such an approach.

Gaertner et al. (1996) suggest that a *dual* identity approach, where members of groups maintain both the original in-group – out-group distinction *and* a superordinate identity, can be beneficial in certain contexts. For example, in their study in a multi-ethnic high school, Gaertner et al. (1996) found that the minority students' perception of the school as consisting of different groups that were part of the same team was related to reduced affective bias. Similarly, Gonzales (2000) found that the dual identity model was effective for members of a numerical minority; however, it was not successful for majority group members.

These results are in line with findings on the benefits of a pluralistic integration of ethnic minorities in society, which was frequently shown to be the preferred and most beneficial strategy of minority group members (Berry, Kim, Minde, & Mok, 1987; Gaertner et al., 1996; Gonzalez, 2000; LaFromboise, Coleman, & Gerton, 1993), over an assimilation or segregation strategy (Berry, 1984). Nonetheless, the dual identity approach is also not without its problems, as empirical studies on the in-group projection model prove. For example, Wenzel, Mummendey, Weber, and Waldzus (2003) demonstrated that participants tend to perceive their own subgroup as more prototypical of the superordinate group than is the out-group and that this 'projection' effect is associated with negative attitudes towards the out-group.

Finally, Pettigrew (1998) tried to integrate these different theoretical perspectives into a three-stage longitudinal model. Because initial intergroup interactions are often formal and

characterized by anxiety and discomfort, he suggested that decategorization should optimally happen first. Individuated contact would reduce the initial anxiety and threat, and lead to interpersonal liking. The social categories should be made salient in the next step in order to achieve generalization of positive affect to the out-group as a whole. Pettigrew proposes that recategorization may happen at a later stage, and may lead to a maximum reduction in prejudice. Brewer and Gaertner (2001) note that the order in which these processes unfold may, however, depend upon the specific features of the contact situation, e.g., whether contact emphasises group-on-group interaction or interaction among individuals (see also Gaertner, Dovidio, Banker, et al., 2000). For example, categorization may emerge frequently during cooperative contact between groups to neutralize threats to the original identities.

Affective mechanisms

Recently the role of affect has received belated theoretical attention. Affective processes seem to be more predictive of behaviour than are cognitive variables (Stangor, Sullivan, & Ford, 1991; Talaska et al., 2003), and they also seem to play a greater role in the contact process than do cognitive factors (Pettigrew, 1998; Pettigrew & Tropp, in press). More positive intergroup relations can result from both the reduction of negative affective processes assumed to be operative in intergroup relations and encounters, as well as the induction of positive affect that leads to greater liking of the out-group. It is important to consider positive and negative affective processes separately as they are not necessarily negatively related (Cacioppo & Berntson, 2001).

Reducing Negative Affect: An Anxiety and Threat Reduction Mechanism

One of the most widely researched mediating mechanisms in the relationship between contact and prejudice is what Stephan and Stephan (1985) refer to as ‘intergroup anxiety’.

Intergroup anxiety is a negative affective process that is integral to the contact situation (see Greenland & Brown, 1999), and is experienced when anticipating future, or expecting actual, contact with an out-group member. According to Stephan and Stephan, intergroup anxiety stems from the expectation of negative consequences for oneself in intergroup interactions, such as embarrassment, rejection, discrimination, or misunderstanding. Antecedents of intergroup anxiety may be minimal previous contact with members of the out-group, negative out-group stereotypes, a history of intergroup conflict, large status differentials, or a high ratio of out-group to in-group members. It is associated with a narrowed focus of attention (Stephan & Stephan, 1985) and thus a reduced impact of stereotype-disconfirming information (Wilder, 1993; Wilder & Shapiro, 1989); it is also related to more homogeneous out-group perceptions and more negative out-group attitudes in general (Islam & Hewstone, 1993). Thus, intergroup anxiety can undermine the positive effects of contact or lead to avoidance of contact altogether.

There is mounting empirical evidence that positive intergroup contact is associated with reduced intergroup anxiety and that reduced anxiety mediates the positive relationship between contact and intergroup attitudes (Greenland & Brown, 1999; Voci & Hewstone, 2003). On the basis of their meta-analytic findings, Pettigrew and Tropp (in press) estimate that approximately 21% of the effect of contact on the reduction of prejudice is mediated by reduced anxiety.

Furthermore, it seems to be particularly the *quality*, not the mere quantity, of the contact that is responsible for this effect, as Islam and Hewstone's (1993) results on contact between Hindus and Muslims in Bangladesh suggest. In this study, the more the contact was perceived as equal, voluntary, pleasant, intimate, and cooperative, the less anxiety was reported by participants.

A reduction in anxiety has also been reported to be the mediating mechanism in the relationship between both direct and extended (Wright et al., 1997) cross-group friendships and measures of prejudice and perceived group variability. In two surveys of Catholic and Protestant students and members of the general population in Northern Ireland, Paolini et al. (in press) found that people, who had friends from the other community or who knew in-group members who had friends from the other community, were less prejudiced and perceived more variability in the out-group than people who had no direct or indirect experience with out-group friends. Paolini et al. showed that both of these effects were mediated by a reduction in intergroup anxiety.

Whereas intergroup anxiety is certainly an important factor in explaining the effect of contact on intergroup attitudes, recent work additionally emphasizes the importance of perceptions of threats to the in-group as predictors of prejudice (Stephan, Boniecki, Bettencourt, Ervin, & Jackson, 2000; Stephan & Renfro, 2003; Stephan & Stephan, 2000). Stephan and colleagues distinguish *realistic threats* (threats to the welfare of the in-group, including threats to the in-group's political and economic power, as well as the physical wellbeing of its members) from *symbolic threats* (threats to the in-group's value system, belief system, or worldview, and involving threats to language, religion, ideology, and morality) as proximal predictors of prejudice. To date, only a few studies have assessed the potential role of contact in ameliorating perceived threats and their mediating role in the relationship between contact and attitudes. Stephan and Stephan (2000) present some empirical support for the role of symbolic threat as a mediator in the relationship between intergroup contact between Americans and Mexicans and intergroup attitudes. Kenworthy, Hewstone, Cairns & Voci (2004) found that quality of cross-community contact in Northern Ireland was associated with more positive attitudes and that this effect was fully mediated by a reduction in perceived symbolic threats posed by the out-group. Similarly, Tausch,

Hewstone and Voci (2003) found symbolic threat to mediate the relationship between contact and stereotypes in a study of intergroup contact between Hindus and Muslims in India.

However, in this study the main predictor of affective prejudice – realistic threat – was not related to contact between the two groups.

Increasing Positive Affect: Generating Affective Ties and Inducing Empathy

In close relationships, the other person is cognitively included in the concept of self and due to this inclusion he or she receives the same positive affect and treatment as the self: one feels empathy for them, takes pride in their achievements, and shares resources with them (Aron, Aron, Tudor, & Nelson, 1991). There is some experimental evidence showing that in-group members, but not out-group members, are also automatically included in the cognitive representation of the self (Smith & Henry, 1996). They receive all of the advantages associated with inclusion, whereas out-group members do not. Thus, prejudice towards an out-group could simply be due to the lack of positive affect that is felt for the self and associated in-group members (see also Brewer, 2001; Cadinu & Rothbart, 1996; Otten & Moskowitz, 2000).

Pettigrew (1998) proposed that contact, especially intimate contact or contact with friends, can reduce prejudice by generating such affective ties with the out-group. Wright et al. (1997) also suggested the generation of affective ties as a mechanism by which extended contact can translate into more positive attitudes towards the out-group as a whole. However, Wright et al.'s empirical test of the mediating role of this process yielded only mixed support. Eller and Abrams (2004), however, provided such evidence from a longitudinal study showing that affective ties (operationalized as inclusion of the other in the self; Aron et al., 1991) partially mediate the relationship between contact and attitudes.

There is more empirical support for the role of *empathy* in the reduction of bias. Empathy can be broadly defined as reactions of one individual to the experiences of another. Research has shown that empathy has beneficial effects on attitudes and behaviour, such as helping (see Stephan & Finlay, 1999). Batson, Polycarpou, Harmon-Jones et al. (1997), for example, demonstrated the effect of empathy induction on attitudes towards stigmatized groups. When instructed to focus on the other person's feelings (high empathy condition) while listening to an interview with a member of a stigmatized group, participants exhibited more positive attitudes to the stigmatized group as a whole than when focusing on the problem in question (low empathy condition). Similar effects of empathy induction were obtained by Finlay and Stephan (2000) in a study of Whites' attitudes towards Blacks. Tam, Hewstone, and Voci (2003) showed, in a cross-sectional survey involving Catholic and Protestant students in Northern Ireland, that empathy does, in fact, partially mediate the relationship between contact and attitudes towards the out-group.

The effect of contact on attitudes can also, in part, be attributed to greater ability to take the out-group's perspective. Being able to understand another person's perspective is often referred to as the cognitive facet of empathy (Davis, 1983). It involves imagining how another person perceives their situation and how they might feel as a result. Galinsky and Moskowitz (2000) demonstrated that perspective-taking can undermine both explicit and implicit stereotyping. In addition, according to Stephan and Finlay (1999), perspective-taking may reduce perceptions of dissimilarity and feelings of threat and lead to mutual understanding, as well as an awareness of common humanity between members of opposing groups. Taking the other group's perspective can teach people about the other group's concerns, attributional patterns, and worldviews and thus make out-group members seem less alien and threatening. But does contact with out-group members lead to greater perspective taking? To date, there is only evidence from cross-sectional studies supporting this view. For

example, Craig, Cairns, Hewstone, and Voci (2002) showed, in a survey in Northern Ireland, that increased contact with people from the rival community is associated with a greater willingness to take the other community's perspective on the conflict. In this study, greater perspective taking mediates the relationship between contact and intergroup bias; it made a unique contribution in predicting prejudice, trust, and forgiveness over and above anxiety as an affective mediating variable.

Certainly, all of the mediating mechanisms that we have discussed above may play a role in the relationship of contact and intergroup relations. The relative importance of each depends on the given situation and the groups involved (see, for example, Stephan & Stephan, 2000, on the differential role of symbolic and realistic threats for majority and minority group members). From the empirical evidence presented above, it seems that 'hot' processes are very important in intergroup conflict. The different mediating processes, however, have not been tested against each other in different settings of conflict. There is some evidence that different mediating mechanisms make unique contributions in the reduction of intergroup bias (e.g., anxiety reduction and increased perspective taking; Craig et al., 2002; see also Harwood et al., in press), but more systematic research is needed to predict which mediating mechanisms work under which conditions. Knowing which psychological processes are driving the effect of contact on attitudes and intergroup relations in a given context could help in the design and implementation of optimal interventions that specifically target the most important processes.

Applying Intergroup Contact Research in the Field: Limitations and Practical Recommendations

Major criticisms and limitations of contact research

The research reviewed above suggests that contact can be a significant tool in the process of conflict resolution. Yet, before we make practical suggestions for the successful application of intergroup contact in this field, we discuss a number of criticisms and limitations of the contact hypothesis and the research supporting it.

Direction of causality. Even though the contact hypothesis is implicitly longitudinal, most studies on the effect of contact on prejudice employ cross-sectional surveys. Cross-sectional studies cannot rule out the possibility of a selection bias, namely, that prejudiced people are less likely to engage in intergroup contact. This problem has been addressed in four different ways: by statistically testing more sophisticated models, by assessing the effect of contact in situations where participants were given no choice whether to participate, in a limited number of longitudinal studies, and experimentally.

Pettigrew (1997) used a non-recursive structural equation model and tested both directions of causality: from contact to attitudes and from attitudes to contact. He found that both paths were significant, and that the path from contact to attitudes ($\beta = -.156$) was somewhat greater than the path from attitudes to contact ($\beta = -.113$). Similar results were reported by Powers and Ellison (1995) who used endogenous switching regression models to test the reverse path. Hewstone et al. (in prep.) also tested both paths and found only the path from contact to prejudice, but not the path from prejudice to contact, to be significant.

In their meta-analysis, Pettigrew and Tropp (in press) examined the effect of contact on attitudes in situations where participants were given no choice as to whether or not to engage in intergroup contact. These studies yielded by far the largest effect sizes between contact and attitudes ($d = -.58$, compared to $d = -.43$ in studies where participants had the choice whether to participate). Pettigrew and Tropp argued that this effect could be due to greater variability in initial prejudice levels, less constraint by ceiling effects, and greater cognitive dissonance.

The problem of causality has also been addressed in a few longitudinal studies. For example, Levin, van Laar, and Sidanius (2003) collected data from college students over a period of 5 years. Their results indicate that students who exhibited more intergroup anxiety and less favourable ethnic attitudes in their first year were less likely to have out-group friends during their second and third years of college. Nevertheless, those students with more outgroup friends in years two and three had more positive attitudes and were less anxious in year five, even after their prior attitudes, friendships, and a number of relevant background variables were controlled for. Notably, both causal paths were equally strong. Similarly, Eller and Abrams (2003) found supporting evidence for both causal directions.

Finally, there are numerous experiments which support the causal effect of contact on prejudice (e.g., Wilder, 1984; Wolsko et al., 2003) Thus, given the available empirical evidence, the most plausible answer to the question of causality seems to be the operation of a bi-directional or cumulative process, in which contact reduces prejudice, which in turn makes more contact more likely (Pettigrew, 1997).

Lack of behavioural measures and focus on individual-level variables. The decisive goal of conflict resolution is to promote changes at the level of societies. However, studies on the effectiveness of contact in improving intergroup relations typically focus on individual cognitions and feelings as dependent variables (McCauley, 2003). The link between individual-level and societal-level processes has not yet been clearly made and, according to Green and Seher (2003), there seems to be a disjuncture between the social psychological literature on prejudice and the macro-political literature on ethnic conflict. It appears as though there is an underlying assumption in the contact literature that societal-level intergroup relations are simply the sum of individual-level beliefs and feelings. There are two problems with this assumption, however.

First, changes in cognitions and feelings do not imply changes in behaviour. Behaviours are constrained by habits, perceived social norms and control, and given social structures (Ajzen, 1988); whereas contact may change someone's attitudes towards an out-group, other pressures that determine behaviour may have stronger effects (see, for example, McCauley's illustration of the so called 're-entry' problem, that participants of diversity workshops face when returning to their old environments; see also Church, 1982, on sojourner adjustment).

The second problem with this assumption is that intergroup conflict is characterized by beliefs and feelings that exist at a *group* level (Bar-Tal, 2000b); individual-level prejudice may be of minor importance for intergroup conflict. Since group-level beliefs and feelings are consensually and repeatedly validated by other ingroup members, they might be more difficult to change than beliefs and feelings on the individual level. Hence, although contact may change individuals' prejudiced opinions and unjustified anxieties about certain groups, actual conflicts between groups that are based on clashing interests might be unaffected by contact (Forbes, 1997, see also Tausch et al., 2003, above). Group-level and individual-level phenomena might be independent, so that the change in individual beliefs might not necessarily be accompanied by societal change (Eidelson & Eidelson, 2003; Hewstone, 1996). Therefore, to reduce intergroup conflict, contact must take place between groups, not individuals (Sherif, 1966). Some authors have addressed this issue theoretically (Hewstone, 1996; Hewstone & Brown, 1986), but (short-term) individual level outcome variables still dominate in contact research (but see Braddock, 1985; Greenblatt & Willie, 1980 for examples of 'societal measures' such as job placements of minority members).

However, more optimistically, Ben-Ari and Amir (1986) suggest that:

“it may be safely assumed that if intergroup relations at the micro-level deteriorate, this may create an atmosphere conducive to negative developments at the political

macro-level. Likewise, if and when changes do occur in the macro-domain, the earlier changes at the micro-level will make an important contribution to the softening of the transfer from a state of segregation and hostility to a state of coexistence and peace.”
(p.57)

Ethical Concerns. Rubin and Lannutti (2001) mention a number of ethical concerns that have to be considered before applying contact-based intervention programmes in situations of intergroup conflict. They argue that if positive affect between members of opposing groups is the primary outcome of the encounter, it might give participants a false sense of conflict resolution and delude them into forgetting that the underlying socio-political conflict is far less tractable than are interpersonal relationships. Positive interpersonal affect may also impair negotiators’ abilities to bargain forcefully enough for their group’s interests. They also point out that intergroup contact activities are designed primarily to modify the beliefs of members of the dominant culture and do little to assist minority members.³

Towards an Application of the Contact Hypothesis

Elements of the contact hypothesis have been widely applied in a number of eclectic interventions aimed at reducing prejudice and improving intergroup relations. These include ethnically integrated schooling, cooperative learning groups, bilingual education in schools (Aboud & Levy, 2000; Johnson & Johnson, 2000), intergroup encounters between Jews and Arabs of various age groups in Israel (Bargal & Bar, 1994; Maoz, 2002), interactive problem solving workshops with high ranking Israeli and Palestinian participants (Rouhana & Kelman, 1994), and community relations work in Northern Ireland (see Hughes, 2001), to mention just a few.

³ Without denying the validity of this last point, the defence of prior researchers would presumably be that the focus on dominant group members’ prejudices is justified by its greater impact on society.

However, Levy Paluck and Green (2003) conclude, from an extensive review and methodological critique of the literature on interventions programmes that, in general, practice is not informed by empirical research. Also, the empirical evaluation of intergroup bias practice seems does not seem rigorous enough. They claim that still little is known about the reduction of intergroup bias in real world interventions. The same seems to be true for experimental studies on contact specifically. Most of these studies were conducted in the laboratory, sometimes using artificial groups, and it is not clear yet how these findings generalize to the field of conflict resolution. Studies in settings of actual intergroup conflict are often confined to survey methods.

Below, we summarize the main research findings reported in this chapter in the form of a 10-point practical guide on how to apply the contact hypothesis in interventions to improve intergroup relations. Nonetheless, we agree with Levy Paluck and Green (2003) that the question of how to apply the contact hypothesis successfully outside the laboratory in interventions aimed at the resolution of intergroup conflict is still an open issue that needs to be answered empirically.

- (1) Members of the two groups should be brought together under conditions of *equal status*. Differential status that already exists in societies may be difficult to shield, especially when they are based on conspicuous category membership cues. A number of authors (Cohen, 1982, 1984; Riordan & Ruggiero, 1980) suggest preparation of participants to alter their expectations which would otherwise influence the interaction. This preparation may take the form of cueing expectations of equality with respect to task competence, for example.
- (2) Activities should involve some form of *cooperation towards a common goal*. As indicated by Sherif's (1966) findings, a number of such tasks may be required. There are differing views on role assignment during cooperation, however. Some suggest

clear mutual differentiation, with each group taking a separate task towards the goal. Others propose that roles should cross-cut category boundaries. We note that the positive effects of cross-cutting roles have been investigated mainly with minimal groups.

- (3) Although there is very little research examining participant selection in interventions, we cautiously suggest that participants should be typical members of their groups, and if possible, high profile representatives (e.g., politicians, community leaders, etc.) who can pass on positive experiences to larger numbers of their group members (see also point 7).
- (4) *Personalized contact* can be achieved by interactions that allow for, or encourage, self-disclosure of intimate information; this engenders trust. Similarly, the interactions might promote self-other social comparisons that cross category boundaries; this leads to heightened perceptions of interpersonal similarity, which can generalize to the entire outgroup. Personalized contact seems to be effective in reducing intergroup anxiety.
- (5) In order for the positive effects of contact to generalize to the out-group as a whole, the encountered individuals should be *typical* of their group. Also, an *explicit linkage* between the participants and their group should be made. This should be done after an initial period of primarily interpersonal contact, so as to avoid the anxiety and competition associated with interactions that are characterized by salient group memberships. Ideally, a balance will be struck between disconfirming stereotypes and retaining the typicality, or representativeness, of the individuals in the contact situation.
- (6) The main *psychological processes* behind the beneficial effects of contact should be more explicitly targeted. Activities and discussions should facilitate perspective-

taking and empathy, allow for and promote the creation of positive affective ties with out-group members, reduce anxiety, and reverse fallacious assumptions of threat to the in-group. Activities should also focus on similarities in values and positively interdependent goals and mutually distinct social identities.

- (7) Contact interventions should exploit *public role models* who have a close relationship with an out-group member. Because intergroup anxiety can be reduced via extended contact, such exemplary relationships should be presented to participants before actual contact. In addition to alleviating anxiety, negative expectations are likely to be positively altered, and contact may be sought more voluntarily.
- (8) For lasting results, contact should be *repeated and prolonged*. There is support from experimental studies showing that repeated contact results in greater attitude change than a single contact session (Wilder & Thompson, 1980). Repeated contact would also allow for the consolidation of changed attitudes and behaviours and the development of cross-group friendships. If attitude change through contact is an iterative and cumulative process that involves different stages, as suggested by Pettigrew (1997, 1998), interventions should take place repeatedly over a period of time, and involve activities that aim at the important psychological mechanisms discussed above: decategorization, categorization, and recategorization. It may also be beneficial to induce positive contact in a variety of settings and contexts to maximize generalization to other situations; these settings should not be too different from every-day situations, so that the 're-entry' problem is avoided.
- (9) We strongly recommend a rigorous *evaluation of intervention programs*. This should preferably assess actual levels of interaction (see Maoz, 2002), and be longitudinal or involve control groups, to determine causality. Ideally, individual-level outcome measures, such as attitudes and emotions, should be supplemented by behavioural

measures (e.g., helping, aggression, etc.) and societal indicators of success. For example, is there evidence that ethnic minorities are better integrated in society after a large-scale intervention? Are there any changes in the level of violence in areas with greater contact opportunities? Furthermore, the relative effectiveness of contact conditions and elements of interventions should be tested, and potential mediators of the effect of contact on outcome variables should be assessed. The identification of relevant mediators, which might be different for different groups and in different contexts, can serve to further fine tune contact-based interventions. Also, meta-analysis can provide a reflective process – a window on how the process itself is performing.

- (10) Contact alone is no solution for intergroup conflict. It has to be supplemented by other interventions, supported by policies, and embedded in societal change. Policy developments should include macro-level changes such as reducing or eliminating social hierarchies via laws, regulations, and norms that affect human interaction (e.g., desegregation, equal employment opportunities, etc.) and public opinion (see Oskamp, 2000). In sum, policies should address the realistic, tangible, bases of social conflict.

Conclusion

From the criticisms mentioned above it should be clear that it is quite unrealistic to expect a reduction in hostility and conflict simply by promoting more contact among individuals. However, it is also unwarranted to dismiss intergroup contact as a tool for improving intergroup relations. Despite its limitations we are convinced that intergroup contact can play an important role in conflict resolution. However, the promotion of intergroup contact should be preceded, accompanied, or succeeded by other societal changes.

We conclude this chapter with an anecdotal example of a successful state-led programme to promote peace between conflicting groups (Varshney, 2002). In the town of Bhiwandi in India, which was infamous for Hindu-Muslim riots in the 1970s and 1980s, the local police took the initiative in putting an end to riots and encouraging communication between the two communities. The key to their initiative was to build Hindu-Muslim contacts in an organized way, around common issues of concern. They put together neighbourhood committees for the whole of the town, which were under police supervision. Since the town was highly segregated, each committee covered two adjacent neighbourhoods and consisted of an equal number of Hindus and Muslims. The representatives were highly respected individuals in their neighbourhood and had no criminal record. These committees met once weekly, and daily in times of tension, to discuss matters of mutual concern. At times of communal tensions, such as during the nationwide mobilization for the destruction of the Baburi Mosque 1988-91, the committees undertook the task of patrolling the streets at night and tried to suppress rumours, which would usually have led to communal riots, on the spot.

This programme is a good example of successful intergroup contact that included many of the facilitating conditions that we discussed above. The contact was prolonged, under equal status conditions; the participants worked together towards a common goal (communal peace), and the programme was supported by an official authority. Bhiwandi has since been peaceful and has even withstood the worst period of post-partition violence in 1992. According to Varshney (2002), it seems that these organized inter-communal contacts provided the town with “a strong immune system to deal with communal shocks” (p. 295).

We believe such success stories (and we have referred to extensive empirical evidence in this chapter) underline the importance of intergroup contact in resolving intergroup conflict. As an intervention, intergroup contact cannot possibly deal with all the problems posed by intergroup conflict, but it is difficult to imagine successful reduction of intergroup

conflict *without* sustained, positive contact between members of the two previously competing groups.

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