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## **Behavioural consequences of imagining intergroup contact with stigmatized outgroups**

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Behavioural consequences of imagining intergroup contact with stigmatized outgroups

Rhiannon N. Turner and Keon West

University of Leeds

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Author Note

We would like to thank Emma Pollard and Harriet Rankin for their assistance with data collection. Correspondence regarding this article should be sent to R. N. Turner at the Institute of Psychological Sciences, University of Leeds, Leeds LS2 9JT, Tel: +44 (0)113 3436686, email [r.n.turner@leeds.ac.uk](mailto:r.n.turner@leeds.ac.uk)

### Abstract

We investigated whether imagining contact with an outgroup member would change intergroup behaviour. Participants who had imagined a positive interaction with an outgroup member or an unspecified stranger were told that they were about to take part in a discussion task with an outgroup member. They were taken to a room and asked to set out two chairs ready for the discussion while the experimenter left, ostensibly to find the other participant. The distance between the two chairs was then measured. Undergraduate students who imagined talking to an obese individual (Experiment 1) or a Muslim individual (Experiment 2) placed the chairs significantly closer than those in the control condition. They also reported more positive feelings and beliefs regarding Muslims. These findings highlight an important practical application of imagined contact: preparing people for successful face-to-face contact.

Intergroup contact is one of the most widely tested (Allport, 1954; Pettigrew & Tropp, 2006) and used (Oskamp & Jones, 2000) psychological interventions for the reduction of prejudice. Recent research has shown that even simply *imagining* contact with an outgroup member can have a range of positive consequences for intergroup relations, including more positive attitudes, less intergroup anxiety, and greater intergroup trust (Husnu & Crisp, 2010a, b; Stathi & Crisp, 2008; Turner, Crisp, & Lambert, 2007a; Turner, West, & Christie, *in press*; West, Holmes, & Hewstone, 2011). Crisp and Turner (2009) argue that one of the main benefits of intergroup contact is that it should help to *prepare* people for face-to-face contact, ensuring that any subsequent interactions are more successful, with further benefits for intergroup relations. To date, however, this prediction has not been tested. Across two studies, we examined the impact of imagined contact on the behaviour of participants who were anticipating contact with an outgroup member.

### Intergroup contact

The contact hypothesis proposed that contact between groups would improve intergroup relations, provided that certain prerequisite conditions are in place: contact should be of equal status, should involve cooperation to achieve common goals, and should be supported by important societal institutions (Allport, 1954). Despite debate over the years regarding the true benefits of contact, a recent meta-analysis of over 500 studies on intergroup contact conducted by Pettigrew and Tropp (2006) found a robust highly significant effect of contact in reducing prejudice. Expanding upon the intergroup contact hypothesis, a number of studies have shown that extended contact - the mere knowledge that ingroup members have friends in the outgroup - can also reduce prejudice

(e.g., Cameron, Rutland, Brown, & Douch, 2006; Turner, Hewstone, Voci & Vonofakou, 2008; Wright, Aron, McLaughlin-Volpe & Ropp (1997)

### Imagined Contact

More recently, Crisp, Turner, and colleagues have argued that *imagining* an intergroup interaction may have similar benefits to direct intergroup contact (see Crisp, Stathi, Turner, & Husnu, 2009; Crisp & Turner, 2009, 2010; Turner et al., 2007a). Mental imagery elicits emotional and motivational responses similar to real experiences (Dadds, Bovbjerg, Redd, & Cutmore, 1997) and neuropsychological studies have shown that mental imagery shares the same neurological basis as perception and employs similar neurological mechanisms as memory, emotion and motor control (Kosslyn, Ganis, & Thompson, 2001). Accordingly, mentally simulating a positive intergroup contact experience activates concepts normally associated with successful interactions with members of other groups (Crisp & Turner, 2009). These can include feeling more comfortable and less apprehensive about the prospect of future contact with the group. In addition, when people imagine intergroup contact they should engage in conscious processes that parallel those involved in direct intergroup contact. They may, for example, actively think about what they would learn about the outgroup member, how they would feel during the interaction, and how this would influence their perceptions of that outgroup member and the outgroup more generally. In turn, this should result in more positive outgroup attitudes, similar to the effects of direct contact.

In line with their predictions, Turner and colleagues (2007a) found that young participants who imagined talking to an elderly person subsequently reported less intergroup bias than participants who imagined an outdoor scene. Moreover, straight male

participants who imagined talking to gay man subsequently evaluated gay men more positively and were less anxious about interacting with gay men in the future. Subsequent research found similar effects of imagined contact on attitudes toward people of different ethnicities and nationalities (Husnu & Crisp 2010b; Stathi & Crisp, 2008) people of different religions (Turner & Crisp, 2010; Husnu & Crisp, 2010a) and even people with certain mental disorders (West et al., 2011).

Two elements have been identified as necessary for successful imagined contact. First, participants must imagine an intergroup *interaction*: just thinking about an outgroup member without any simulated interaction does not have the same positive effects on attitudes (Crisp et al., 2009; Turner et al., 2007a). Second, the imagined scenario must have a positive tone: the increased effectiveness of positive imagined contact, relative to neutral imagined contact, has been demonstrated experimentally (Stathi & Crisp, 2008, Experiment 1; West et al., 2011, Experiments 3 & 4). A number of alternative explanations for the effects of imagined contact have been ruled out, including cognitive load, stereotype priming (Turner et al., 2007a), demand characteristics (Turner & Crisp, 2010) and generalized positive affect (Stathi & Crisp, 2008).

#### Imagined contact and intergroup behaviour

There is impressive evidence regarding the effect of imagined contact on attitudes (e.g., Stathi & Crisp, 2008; Turner & Crisp, 2010; Turner et al., 2007a, 2010; *in press*; West et al., 2011), but the ultimate goal of imagined contact is an improvement in intergroup relations, a change in how people *behave* towards members of other groups. Crisp and Turner (2009) argued that one of the key benefits of imagined contact is that it might help to *prepare* people for direct intergroup contact. That is, it could make people

more likely to seek out interactions with outgroup members in the future, and more likely to behave in a positive and relaxed manner when such interactions arise. Below we outline the case for this prediction.

There is considerable evidence that affective responses, such as feelings of threat and anxiety, play a significant role during intergroup encounters (Dovidio, Hebl, Richeson, & Shelton, 2006; Hebl, Tickle, & Heatherton, 2000). These negative emotions are thought to arise as a consequence of expectations of rejection, discrimination, or discomfort during cross-group interactions (Plant & Devine, 2003; Stephan & Stephan, 1985). While people tend to be effective at monitoring and controlling their explicit attitudes and verbal behaviours, they are less skilled at monitoring and controlling affective reactions, which may “leak out” through nonverbal channels (Dovidio et al., 2006; Ekman, Friesen, & O’Sullivan, 1988).

Demonstrating this, Trawalter and Richeson (2008) had White participants interact with either another White participant or a Black participant. They then filmed these interactions and had independent raters code them for behavioural indicators of anxiety such as facial rigidity and increased social distance. They found that participants in an intergroup encounter showed significantly more anxiety behaviours than those interacting with an ingroup member. Similarly, Dovidio et al. (1997) noted that people fidget more, blink excessively, and avert eye gaze during intergroup encounters. This is problematic because people are hyper-vigilant for signs of rejection during intergroup encounters, and are particularly likely to interpret anxiety behaviours as signs of unfriendliness (Devine & Vasquez, 1998; Dovidio & Johnson, 2005). Imagined contact, however, reduces intergroup anxiety (e.g., Husnu & Crisp, 2010a; Turner et al., 2007a; *in*

*press*), and should therefore reduce the prevalence of anxiety-induced non-verbal behaviours which lead to perceptions of mutual dislike, resulting in a more positive intergroup encounter.

Recent research with self-report measures has hinted at the potential benefits of imagined contact for behaviour. Turner et al. (*in press*) found that participants who imagined contact with asylum seekers (Study 1) and gay people (Study 2) subsequently reported approach behavioural tendencies, a greater desire to find out more about outgroup members and get to know them. Similarly, Husnu and Crisp (2010b) found, in Cyprus, a context defined by extremely low levels of direct contact, that Turkish Cypriot participants who repeatedly imagined positive contact with Greek Cypriots subsequently reported greater intentions to engage in future contact with members of that group (see also Husnu & Crisp, 2010a).

The dependent measures used in these studies do not, however, constitute behaviour, only an *intention* or *desire* to behave in a particular way. In addition, as self-reported measures, they are very explicit. That is, participants are able to deliberate over, and chose the attitude they will report. These kinds of attitudes tend to be more predictive of verbal responses during intergroup contact (Dovidio et al., 1997; 2002). However, it is one's *non-verbal* responses during intergroup contact that are thought to be particularly predictive of how an individual is perceived by outgroup members, and which are therefore likely to have the greatest impact on the success of the intergroup encounter (Dovidio et al., 2006). In the current research, we therefore investigate the effect of imagined contact with two stigmatized outgroups, obese people and Muslims, on a simple assessment of non-verbal behaviour in an intergroup context.



### Experiment 1

In Experiment 1, we tested the hypothesis that imagining intergroup contact with an obese individual would increase people's willingness to sit closer to an unknown outgroup member (an obese participant) during an anticipated interaction. Overweight individuals are often perceived as lazy, socially inept, unhappy, ugly, and stupid (Puhl & Brownell, 2001; Puhl & Latner, 2007). This negative attitude toward the overweight, or *weight stigma*, has profound consequences including increased vulnerability to depression and anxiety, and decreased self-esteem (Puhl & Latner, 2007). Moreover, weight stigma leads to discrimination. Overweight children are victimized, verbally abused, and bullied or aggressed against, whereas overweight adults are denied employment, given lower wages, refused job promotion or college admission, and deprived of healthcare (Puhl, Andreyeva, & Brownell, 2008; Puhl & Brownell, 2001; Puhl & Latner, 2007). Hebl and Mannix (2003) found that even non-overweight people were judged more negatively merely for being in close proximity to an overweight person. Weight discrimination has increased by 66% in the past decade in the United States, and is now at least as prevalent as racial discrimination and, in some case, more prevalent than gender or age discrimination (Andreyeva, Puhl, & Brownell, 2008; Puhl et al., 2008). The root of discriminatory practices, weight stigma, needs to be tackled. We propose and test the idea that imagined contact reduces weight stigma, changing behaviour towards the obese.

## Method

### *Participants*

Fifty undergraduate students at the University of Leeds, 35 female and 15 male, aged between 18 and 21, were randomly allocated to either the imagined contact condition or a control condition.

### *Procedure*

Participants were informed that they would be taking part in two short studies, one involving imagining an interaction with a stranger, and another involving a discussion task with another participant. For the imagination part of the study, we created two sets of instructions, designed to either invoke participants' imagination of a detailed interaction with an outgroup member, or their imagination of an encounter with an unspecified individual. Participants assigned to the *imagined contact condition* were asked: "I would like you to spend the next 2 minutes imagining yourself meeting someone who is obese for the first time. Imagine that the interaction is relaxed, positive, and comfortable." In the *control condition*, participants were asked: "I would like you to spend the next 2 minutes imagining yourself meeting a stranger for the first time. Imagine that the interaction is relaxed, positive, and comfortable." Participants in both conditions were given two minutes to imagine the scenario, before being asked to "Write down as many things as you can about the interaction you just imagined". This was designed to reinforce the effect of the imagery task.

After completing this task, participants were told that, as part of the second study, they would now be meeting with an obese individual to discuss how obesity is perceived in today's society. The experimenter took each participant to a room, which was locked,

with the lights off, and a stack of chairs in the corner. Upon entering the room, and turning on the light, the experimenter said: “I’m just going to get Emily who you’ll be chatting to, do you mind grabbing a couple of chairs for the two of you? I’ll be back in a minute”. While they were waiting, participants were given a short questionnaire to complete to provide demographic information, to indicate what they thought the aim of the study was, and to indicate whether they were at all suspicious about the purposes of the study. No participant indicated any suspicion of the hypotheses of the study. Finally, the experimenter re-entered the room and explained to the participant that the experiment had ended. Participants were fully debriefed, thanked, and shown out of the room.

Unbeknownst to the participant, the final measure of intergroup attitudes was a behavioural measure: the distance the participant placed between the two chairs in centimetres, measured after the participant left. This measure (i.e., delineating the seating distance between oneself and an outgroup member) has been used in intergroup research for some time (see Mehrabian, 1968; Word, Zanna & Cooper, 1974), as a behavioural measure of intergroup attitudes (e.g., Norman et al., 2010; Word et al., 1974), a useful predictor of other measures of intergroup attitudes, such as IAT scores (Kawakami, Phillips, Steele & Dovidio, 2007), and a sign of physical immediacy (Kawakami et al., 2007; Norman et al., 2010; see also Vohs, Mead, and Goode (2006).

## Results

To determine whether imagining intergroup contact with an obese person resulted in reduced social distance on the behavioural measure, we conducted a planned t-test. This analysis revealed that participants who believed that they were about to have an interaction with an obese person placed the chairs closer together (distance between

chairs in cm  $M = 40.10$ ,  $SD = 19.29$ ) than those in the control condition,  $M = 50.14$ ,  $SD = 15.29$ ,  $t(48) = 2.23$ ,  $p = .03$ . That is, they demonstrated less social distance behaviour.

## Experiment 2

In Experiment 1 we found that imagined contact results in more positive behaviour towards the outgroup: they positioned themselves closer to where they believed an outgroup member would shortly be seated for an interaction. We carried out a second study for several reasons.

First, we wanted to see whether this effect with imagined contact towards obese people would generalize to a second stigmatized group: Muslims. There are 1.6 million Muslims in the UK (2.8% of the British population), making it the largest minority religious group in the country. Unfortunately, there has been an increase in Islamophobia in the UK in recent years, exacerbated by the terrorist attacks of September 11 2001 in New York and Washington, and July 7 2005 in London, thought to be carried out by a Muslim extremist group (Fekete, 2004; MORI, 2003; Poynting & Mason, 2007; Strabac, 2008). In the month following the London bombings, for example, there was a six-fold increase in religious hate crimes against Muslims in the London area (BBC Online, 2005a). There is also an enduring negative stereotype about Muslims in the UK that they do not want to integrate with other sections of the community (BBC Online 2005b; Fekete, 2004). Countering negative attitudes towards the Muslim community in the UK is therefore a critical and pressing social issue. Turner and Crisp (2010) found that imagined contact reduced explicit and implicit prejudice against Muslims but, to date, no one has considered whether imagined contact can influence behavioural reactions towards Muslims.

Second, an attitude is typically defined as “a relatively enduring organization of *beliefs, feelings, and behavioural* tendencies towards socially significant objects, groups, events or symbols” (Hogg & Vaughan 2005, p150, italics added). In Experiment 1, however, we only considered the behavioural aspect of attitudes. An additional aim of our second experiment was to examine whether imagined contact might affect all three components of attitudes. We therefore added measures of *feelings* and *beliefs* about the outgroup.

## Method

### *Participants*

Forty-one undergraduate students who identified themselves as not being Muslim, 39 female and 2 male, aged between 18 and 26, were randomly assigned to the imagined contact condition or the control condition.

### *Procedure*

The instructions were identical to Experiment 1 except in the following ways. First, the imagined contact task referred to a Muslim person. Second, following the imagination task, participants were told that they would be having a short interaction with a Muslim participant, ‘Ayesha’, to discuss Islamophobia in the UK and why it has arisen. Finally, participants also completed a short questionnaire immediately after the imagination task. The questionnaire contained two attitude measures. To measure the *cognitive (belief) component of outgroup attitude*, participants were asked to list “12 characteristics that describe the typical Muslim”. Participants were then asked to rate how positive each of these traits was, (-2 = *very negative trait*, +2 = *very positive trait*). The sum of participants score across these 12 items reflected how positive their beliefs

regarding Muslims are. To measure the *affective (feeling) component of outgroup attitude*, participants completed a feeling thermometer measure, in which they were asked to indicate on a scale of 0 to 100 how positive they felt towards Muslims in general (Haddock, Zanna, and Esses, 1993). As in Experiment 1, no participant indicated any suspicion of the hypotheses of the study.

### Results

First, we examined the relationships among the three components of attitudes. While the affective and cognitive component of attitudes were correlated with one another,  $r = .41$ ,  $p < .01$ , the affective and the cognitive component were, as expected, negatively with the behavioural measure. However, in both cases, the correlations were far from significant: affective – behavioural components:  $r = -.19$ ,  $p = .24$ ; cognitive – behavioural components:  $r = -.11$ ,  $p = .50$ .

To determine whether participants who imagined interacting with a Muslim person would be more positive towards the outgroup in terms of the affective, cognitive, and behavioural components of attitudes, we computed a series of planned t-tests, with imagined contact condition (imagined contact vs. control) as the independent variable. Participants in the imagined contact condition reported more positive *beliefs* regarding the character traits held by the typical Muslim ( $M = 5.95$ ,  $SD = 5.07$ ) than those in the control condition,  $M = 2.70$ ,  $SD = 3.36$ ,  $t(39) = -2.47$ ,  $p = .021$ . They also reported more positive *feelings* about Muslims ( $M = 72.38$ ,  $SD = 12.90$ ) than those in the control condition,  $M = 59.60$ ,  $SD = 518.96$ ,  $t(39) = -2.51$ ,  $p = .017$ . Finally, participants in the imagined contact condition *behaved* more positively towards the outgroup, choosing to

sit closer to their outgroup interaction partner ( $M = 73.52$ ,  $SD = 24.89$ ) than those in the control condition,  $M = 89.85$ ,  $SD = 14.12$ ,  $t(39) = 2.57$ ,  $p = .014$ .

### General Discussion

Across two experiments we found that participants who imagined intergroup contact with a member of a stigmatized group subsequently exhibited more positive non-verbal behaviour when anticipating an intergroup encounter. Specifically, they showed less social distance behaviour when choosing where to sit for an imminent interaction with an outgroup member. In Experiment 1, undergraduate students who were asked to imagine contact with an obese person subsequently sat closer to where they believed that an obese person would be sitting for a discussion. In Experiment 2, non-Muslim undergraduate students who were asked to imagine contact with a Muslim individual subsequently were more positive in terms of their feelings, beliefs, and behaviour towards Muslims. Below we discuss these findings in terms of their implications, potential limitations, and suggested avenues for future research.

### Implications

Theorists have argued that the ultimate goal of imagined contact is to help prepare people for direct contact by changing how people behave towards members of other groups (e.g., Crisp & Turner, 2009; Turner et al., *in press*). This research provides initial evidence that this goal can be realized. We demonstrated, for the first time, that imagined contact not only leads to more positive outgroup attitudes, but also changes non-verbal behaviour when anticipating intergroup contact.

Past research has shown that while people tend to be successful at controlling explicit behaviour, such as the verbal content of their speech in order to behave in a

pleasant manner, they struggle to hide anxiety which tends to be displayed through non-verbal behaviour (Dovidio & Johnson, 2005; Richeson & Shelton, 2005). Unfortunately, it is this non-verbal behaviour that tends to affect the perceptions of the interaction partner, leading them to believe that they are disliked (Dovidio et al., 2006). Clearly this has negative implications for intergroup relations. However, the current findings suggest that imagined contact helps to prepare people for intergroup contact by changing their subtle, non-verbal behaviour towards the outgroup, as indicated by their social distance prior to an expected intergroup encounter.

The implications of these findings for intergroup relations are potentially far-reaching. Following imagined contact, participants' should be perceived as more friendly by an outgroup interaction partner as a result of their more positive non-verbal behaviour. Research on interpersonal relations suggests that positive behaviour during dyadic interactions tends to be reciprocated: for example, people like, and trust, those who like and trust them (Petty & Mirels, 1981). Thus, the interaction partner would be likely to respond to the participant in a friendly manner, resulting in a more pleasant intergroup encounter. Participants who experience a successful interaction are not only likely to hold positive outgroup attitudes, but they may also be more likely to capitalize on any future opportunities for intergroup contact that come their way.

The current research is also the first to demonstrate that imagined contact affects all three components of intergroup attitudes: cognitive, affective, *and* behavioural, further demonstrating its power as an intervention to reduce prejudice. In addition, we considered the impact of imagined contact on a new target group: people who are obese,



demonstrating that the imagined contact effect can be widely generalize even to highly stigmatized groups to whom it is often seen as acceptable to display prejudice towards.

### Limitations and Future Research

While we assessed participants behaviour as they *anticipated* an intergroup encounter, participants did not actually *take part* in an encounter with an outgroup member. Nonetheless, participants *believed* that they would be meeting an outgroup member in a few moments time. Indeed, no participants reporting suspicion while waiting to take part in the anticipated interaction. We therefore believe that the findings provide an accurate reflection of how participants would behave in the presence of an outgroup member. Moreover, past research has suggested that social distance from an outgroup member during an interaction influences perceptions of liking (Dovidio et al., 2006) and is predictive of other non-verbal behaviours (Word et al., 1974). First impressions count, and if an individual arrives to a meeting with an outgroup member to discover them sat at close proximity (versus at a distance), this will give an instant impression of friendliness (versus unfriendliness) that may well affect the course of the interaction.

Even though imagined contact positively affected cognitive, affective, and behavioural measures of intergroup attitude in Experiment 2, the cognitive and affective measures were not correlated with the behavioural measures. However, given that our cognitive and affective measures were explicit, while our behavioural measure was implicit, the lack of correlation between the measures is not surprising. Implicit and explicit attitudes influence behavior in different ways: the former primarily predict deliberative forms of behavior, which people can monitor, and control, while the latter

predict behaviors that occur outside of awareness or control (see Dovidio et al., 2007). Our findings were in line with previous research that showed that implicit, but not explicit attitudes, primarily predict implicit nonverbal behaviours toward outgroup members (Dovidio, Kawakami, Johnson, Johnson & Howard, 1997) including seating distance (McConnell & Leibold, 2001).

Another potential concern with imagined contact is that significant results may simply reflect demand characteristics. However, this issue has been extensively dealt with in previous imagined contact research (see Crisp et al., 2009). In particular, Turner and Crisp (2010) demonstrated that imagined contact improves *implicit* attitude toward older adults and Muslims, ruling out demand characteristics as a possible explanation for the effects of imagined contact. Furthermore, it seems unlikely that participants would guess that they would be evaluated based on the distance between two chairs.

Finally, the effects of imagined contact on outgroup attitudes are unlikely to be as strong or enduring as face-to-face contact (e.g., Crisp & Turner, 2009; 2010). This is because direct experiences are thought to produce stronger attitudes on an issue than indirect experiences (Fazio, Powell, & Herr, 1983; Stangor, Sullivan, & Ford, 1991). The current study, however, gives us cause for optimism. If imagined contact is used prior to actual contact, and can change behaviour during *subsequent* direct intergroup encounters, the more positive intergroup experiences that occur are likely to result not only in further positive attitude change, but also in the development of stronger and more enduring attitudes based on this direct experience.

In order to extend our understanding of the effect of imagined contact on behaviour, future research might focus on the impact of imagined contact on verbal and

non-verbal behaviour during the full course of an interaction between participants from two different groups. It is also important to examine whether changes in behaviour have a knock-on effect for participants' subsequent intergroup attitudes.

### Conclusions

In two experiments, we showed that imagined contact affects intergroup behaviour. In Experiment 1, participants who imagined contact with an obese person subsequently sat closer to where they believed an obese person would shortly be sitting for an intergroup encounter. In Experiment 2, non-Muslim participants who imagined contact with a Muslim subsequently sat closer to where they believed a Muslim person would soon be seated for an intergroup encounter. Moreover, participants also had more positive feelings and beliefs about Muslims in general. In sum, imagined contact not only affects the cognitive and affective components of attitudes: it also changes how people behave when anticipating an intergroup encounter. It has been previously argued that a strength of imagined contact as an intervention to improve intergroup relations is its capacity to encourage people to seek out contact, remove inhibitions associated with existing prejudices, and prepare people to engage with outgroups (Crisp & Turner, 2009). Much more research will have to be done to demonstrate the usefulness of imagined contact in preparing participants for future intergroup interactions. However, these findings provide compelling initial support for this argument.

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