

## Imagining Intergroup Contact Enables Member-to-Group Generalization

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Intergroup contact improves intergroup relations. In some cases, however, actual contact is impractical and here imagining intergroup contact (Crisp & Turner, 2009) may represent a viable alternative. While initial findings have been promising, imagined contact research has yet to confirm whether it enables a critical process involved in successful intergroup contact: member-to-group generalization. We tested the hypothesis that imagined contact, and specific enhancements to the technique, are enabling in the form of generalized contact self-efficacy. In Experiment 1 participants who imagined a positively toned encounter with a single outgroup member subsequently felt more confident about future interactions with the outgroup in general. Furthermore, imagining contact was maximally effective at achieving generalization when group versus individuating information was salient (Experiment 2) and when the imagined interaction involved an outgroup member who was typical versus atypical (Experiment 3). These findings contribute to growing support for the notion that imagined contact represents a flexible, effective tool for improving intergroup relations.

**Keywords:** contact, generalization, prejudice, self-efficacy

Intergroup contact reduces prejudice, especially under conditions that favor cooperation and egalitarianism (Allport, 1954; Brown & Hewstone, 2005; Pettigrew, 1998; Pettigrew & Tropp, 2006). However, direct contact is not always attainable. For instance, what if there is no opportunity to bring groups together? Geographic and social segregation mean that for many communities contact with the outgroup is simply not possible (Phinney, Ferguson, & Tate, 1997). *Imagining* contact may be a solution. Imagined intergroup contact is “*the mental simulation of a social interaction with a member or members of an outgroup category*” (p.

234, Crisp & Turner, 2009). Generally, the technique instructs people to engage in a mentally simulated contact experience with a stranger from the outgroup, and think about what they learn and how they feel during this interaction. Previous research has established this technique as a valuable addition to existing intergroup contact strategies, with benefits for both explicit (Turner, Crisp & Lambert, 2007) and implicit (Turner & Crisp, 2010) intergroup attitudes, outgroup variability (Turner et al., 2007), projection of positive traits to outgroups (Stathi & Crisp, 2008), positive attributions (Crisp & Husnu, 2011) and negative self-stereotyping (Abrams et al., 2008). Furthermore, in line with the contact literature, it has been found that the effects of imagined contact on attitudes are mediated by reductions in intergroup anxiety (Husnu & Crisp, 2010a; Turner et al., 2007).

As a low-cost, simple and easy technique imagined contact has considerable potential as an educational strategy for promoting inclusion and tolerance for multicultural diversity (see Crisp, Stathi, Turner, & Husnu, 2008). While previous research is encouraging, it has, however, yet to confirm that imagined contact enables a critical process involved in successful

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intergroup contact: member-to-group generalization (Hewstone & Brown, 1986). In this article, we provide evidence that it does. Specifically, we explore the effect of imagined contact on contact self-efficacy, that is, the confidence that one can engage in positive interactions with outgroup members.

### Contact Self-Efficacy

While imagined contact helps to improve intergroup attitudes (Stathi & Crisp, 2008; Turner et al., 2007; Turner & Crisp, 2010), we have argued that it may also be of great value as a *preparatory* measure—a means of promoting greater interest in, and engagement with, intergroup contact (Crisp & Turner, 2009; Crisp, Husnu, Meleady, Stathi & Turner, 2010; Husnu & Crisp, 2010a; Husnu & Crisp, 2010b). In the present research we developed this reasoning. We propose that there are two critical elements to imagined contact as a strategy for promoting greater engagement with outgroups.

First, encouraging people to engage in outgroup contact is about increasing *confidence* in dealing with outgroup members. We refer to this particular set of beliefs about one's ability to interact effectively with outgroups (and without inadvertently displaying behaviors that could be construed as prejudiced) as *contact self-efficacy*. Previous research on contact has yet to focus on such efficacy beliefs, but we believe they are particularly important for imagined contact because they tap directly into people's intentions to engage in future contact.

Second, in order to grow confidence in one's ability to engage positively with outgroups, it is important that any benefits from contact can be shown to generalize from individual members to the group as a whole (see the Mutual Intergroup Differentiation Model, Hewstone & Brown, 1986); that is, confidence accruing from a single, in this case imagined, intergroup encounter is generalized to future envisaged encounters with other members of the outgroup. Contact self-efficacy should not be restricted to one particular ingroup member. To improve intergroup attitudes efficacy beliefs should apply to all members of the group, not only members that one personally knows.

Bandura's theory of social-cognitive learning (1986), which recognized the critical role played by self-efficacy in people's behavior,

provides some theoretical grounding for our use of this novel measure of *contact* self-efficacy. According to the theory, self-efficacy regulates human functioning via cognitive, affective and motivational processes. Bandura defined self-efficacy as a person's belief that she or he can effectively perform "courses of action required to deal with prospective situations containing many ambiguous, unpredictable, and often stressful elements" (Bandura & Schunk, 1981, p. 587). Therefore, self-efficacy, or the confidence that a person has in performing a behavior, is a crucial determinant of people's willingness to engage in a specific behavior. If people are not confident that they will achieve desired outcomes, they have limited incentives to act (Bandura, 2001). Enhancing contact self-efficacy would, therefore, yield considerable benefits for intergroup relations.

Applying Bandura's analysis to imagined contact, we expected the mental simulation of contact experiences to raise contact self-efficacy. This was directly tested in Experiment 1. Specifically, we tested the effects of the typically employed imagined contact instructional set on our new measure of contact self-efficacy. In Experiments 2 and 3 we draw upon the Mutual Intergroup Differentiation Model (Hewstone & Brown, 1986) to develop the strategy in ways that would maximize the benefits of imagined contact on contact self-efficacy. More precisely, Experiment 2 aimed to explore if salience of group membership enhanced the effects of the technique. Accordingly, Experiment 3 tested the role of typicality in increasing contact self-efficacy.

In all three studies we focused on Westerner-Muslim relations in the United Kingdom. Relations between the two groups have been problematic, with Muslims facing increased discrimination following 9/11 (European Network Against Racism, 2008; International Helsinki Federation for Human Rights, 2005). This context is, therefore, a highly relevant one with respect to the aim of combating prejudice, promoting tolerance, and improving intergroup relations.

### Experiment 1: Imagined Contact and Contact Self-Efficacy

#### Method

**Participants.** Thirty-two non-Muslim students at the University of Kent in southern

England participated in this experiment (22 women, 10 men, mean age = 20.9 years)<sup>1</sup>. They participated in return for a monetary prize, and were randomly assigned across two conditions: control (mental simulation of an outdoor scene) versus experimental (mental simulation of contact).

**Procedure.** We have tested an extensive variety of control conditions in our previous research on imagined contact, including informational load (Turner et al., 2007, Experiment 1), nonrelevant positive interaction (Stathi & Crisp, 2008, Experiment 2), outgroup priming (Turner et al., 2007, Experiment 2), neutral contact (Stathi & Crisp, 2008, Experiment 1; Turner et al., 2007, Experiment 1), and no-contact control scenes (Stathi & Crisp, 2008, Experiment 3; Turner et al., 2007, Experiment 1). The significant benefits of imagined positive contact have been demonstrated against all of these controls.

Thus, in Experiment 1 we used the standard no-contact control scene used in previous research (Stathi & Crisp, 2008; Turner et al., 2007). "We would like you to take a minute to imagine you are walking in the outdoors. Imagine three specific things that you experience in the scene." Our experimental condition incorporated the elements already known from previous research to be required for effective imagined contact: the simulation of contact and the positive tone of the interaction (see Crisp et al., 2008 for an extensive review of research supporting these two basic requirements). Participants were instructed as follows:

"We would like you to take a minute to imagine coming back to this laboratory next week for another study. Imagine that in this new study you are asked to engage in a conversation with a British Muslim stranger. Imagine that the interaction is relaxed, positive, and comfortable. Imagine three specific things that you learn about the life and experiences of British Muslims in the U.K. from your conversation partner."

After timing the participants for one minute, and to reinforce the impact of the manipulation (as is typical with the standard imagined contact task, Crisp et al., 2008), the experimenter asked the participants to write down the three specific things that they imagined they had learned from the interaction (or, in the control condition, just the things they saw during the scene they imagined). Follow-

ing the experimental task, participants were asked to rate their contact self-efficacy regarding interactions with British Muslims.

**Dependent variable.** Contact self-efficacy was measured by adapting Gudykunst and Nishida's (1986) measure of attributional confidence. The scale included nine items measuring confidence about interactions with British Muslims (1 = *strongly disagree*, 7 = *strongly agree*),  $\alpha = .84$ . For example: "When I interact with British Muslims . . .", "I am confident in my ability to predict their attitude", "I am confident in my ability to predict their willingness to communicate", "I am confident that they can understand my feelings".

## Results and Discussion

An independent samples *t* test was revealed that following imagined contact participants reported significantly higher contact self-efficacy ( $M = 4.83$ ,  $SD = 0.91$ ) compared to the control condition ( $M = 4.07$ ,  $SD = 0.99$ ),  $t(30) = -2.24$ ,  $p = .033$ . In other words, non-Muslim participants who imagined having positive contact with a British Muslim stranger were subsequently more confident in their ability to interact with British Muslims in general compared to participants who imagined a control scenario.

Having obtained initial support for the facilitating effect of imagined contact on contact self-efficacy, in Experiments 2 and 3 we sought to further delineate the conditions that could explain and enhance this effect. Generally, as in direct contact situations, to feel more confident about future interactions one has to be able to generalize from the single mental experience to interactions with the outgroup as a whole. Hewstone and Brown (1986) argue that maintaining group salience is advantageous for the generalization of positive contact effects. According to the Mutual Intergroup Differentiation Model (MIDM; Hewstone & Brown, 1986; see also Brown & Hewstone, 2005), category salience must remain relatively high during contact for the positive effects of contact to generalize—this provides the required psychological connection between the individual and their group. If the interaction partner's category membership is not salient during the interaction, the

<sup>1</sup> There was no effect of participants' age or sex.

partner may be subtyped and the contact effects will not generalize to the outgroup.

Research on the role of group salience has confirmed its importance in generalizing contact effects (Brown, Vivian, & Hewstone, 1999; Van Oudenhoven, Groenewoud & Hewstone, 1996; Voci & Hewstone, 2003; Wilder, 1984). For example, Van Oudenhoven et al. (1996) asked people to participate in cooperative learning groups with a Turkish person (who was a confederate). The participants were allocated to either group "salience" conditions, where the experimenter introduced the participants and made specific references to their different ethnicities or a control condition, where there were no references to the ethnicity of participants. The results showed that the Turkish person was evaluated favorably in all conditions (confirming the positive role of cooperative contact) but only in the salience conditions was positive evaluation generalized to Turkish people as a whole.

Hewstone and Brown's model (1986) is theoretically distinct from the decategorization model (Brewer & Miller, 1984; Brewer & Miller, 1988). The latter argues that the contact situation has to be structured such that the salience of different categories is reduced, so that interpersonal interactions are promoted and the contact situation can be seen more as contact between individuals than between groups. According to the decategorization model, new information gained from interpersonal, decategorized contact enhances the extent to which interaction partners are seen as individuals rather than group members, and this should lead to more positive feelings about the interaction partner. According to the MIDM, however, this will not generalize to the group as a whole (for findings supporting this idea, see Ensari & Miller, 2001; Ensari & Miller, 2002).

We applied the MIDM to the imagined contact paradigm by examining the effects of a person- versus group-based contact script on participants' contact self-efficacy. Compared to a person-based script, where targets would be individuated thus reducing the potential for member-to-group generalization, we hypothesized that greater contact self-efficacy would follow an imagined contact task in which group salience was maintained.

## Experiment 2: Person- Versus Group-Based Imagined Contact

Experiment 1 showed that mentally simulated contact can act as a preparatory measure for real intergroup interactions by increasing contact self-efficacy. In Experiment 2 we built conceptually on this finding, as described above, to investigate the role of person- versus group-based contact in contact self-efficacy. The content of the imagined script was manipulated such that participants focused on either the individual conversation partner (person-based contact) or on the group that they represent, that is, British Muslims (group-based contact). Since contact self-efficacy involves confidence about interacting with the outgroup more generally, we expected group-based contact to result in higher contact self-efficacy about future interactions with the outgroup as a whole (i.e., a generalization effect).

## Method

**Participants.** Thirty non-Muslim University of Kent students (19 women, 11 men, mean age = 20.5 years)<sup>2</sup> participated in this study in return for course credits, and were randomly allocated across the two imagined contact conditions (person- vs. group-based instructions).

**Procedure.** The procedure was the same as in Study 1 with the only difference being in the content of the task. Participants in the group-based condition read:

"We would like you to take a minute to imagine yourself meeting a British Muslim stranger for the first time. Imagine that the interaction is relaxed, positive and comfortable. Imagine that you find out about the life and experiences of *British Muslims* in the U.K. from your conversation partner."<sup>3</sup>

Participants in the person-based condition read:

"We would like you to take a minute to imagine yourself meeting a British Muslim

<sup>2</sup> There was no effect of participants' age or sex.

<sup>3</sup> Although the imagined contact manipulation in Experiment 1 could have also resulted in making the outgroup salient, in this study we designed our instructions regarding the imagined interactions such that we could systematically compare person- versus group-based imagined contact scripts.



stranger for the first time. Imagine that the interaction is relaxed, positive and comfortable. Imagine that you find out about the life and experiences of your conversation partner."

**Dependent variable.** In this study we measured contact self-efficacy by adapting and simplifying Fan and Mak's (1998) measure of social self-efficacy. This is a measure that targets self-efficacy in interactive conversational contexts; we, therefore, considered it more pertinent to contact situations than the scale used in Study 1. The scale consisted of six items (1 = *strong disagree*, 7 = *strongly agree*),  $\alpha = .70$ . Participants were asked to think of interactions they might have with British Muslims *in the future* and indicate their agreement with statements such as: "I would feel confident talking to British Muslims", "I would be worried that I might not handle myself well in social gatherings with British Muslims (reversed)", "I would feel I have common topics for conversation with British Muslims".

## Results and Discussion

An independent samples *t* test revealed that following group-based imagined contact participants reported significantly higher contact self-efficacy ( $M = 5.56$ ,  $SD = 0.66$ ) compared to person-based imagined contact ( $M = 4.82$ ,  $SD = 0.83$ ),  $t(28) = -2.67$ ,  $p = .012$ . In other words, following imagined contact instructions that directed participants to focus on the group membership of the interaction partner, contact self-efficacy was higher (relative to person-based focus).

The results suggest that when imagined contact is structured such that it promotes an *intergroup* interaction, rather than an individual focus, it is more effective in raising contact self-efficacy. Theoretically, these findings support the MIDM which argues that when contact is experienced as being between *group members* it has a greater generalizing effect. In line with this, if keeping identities salient is important for generalizing confidence about future intergroup interactions, then we should observe a similar pattern of results when manipulating the *typicality* of the conversation partner (Ensari & Miller, 2002). We explored this possibility in Experiment 3.

## Experiment 3: Typicality-Based Imagined Contact

The role of the typicality of outgroup members in contact experiences has been shown to exert an important moderating role in generalization. In their account of the MIDM, Hewstone and Brown (1986) argued that maintaining group salience can have advantages in the generalization of positive contact effects, and that contact between ingroup and outgroup members should be arranged such that the interacting members are considered *typical* of their groups and thus avoid the potential danger of subtyping atypical individuals (Hewstone, 1994; Richards & Hewstone, 2001; Weber & Crocker, 1983). Research on the role of salience and outgroup typicality has confirmed the importance of the two factors for generalizing the effects of contact (Brown et al., 1999; Wilder, 1984). Wilder (1984) found that positive contact with typical outgroup members generalizes to the whole outgroup whereas contact with atypical outgroup members does not. Wolsko, Park, Judd, and Bachelor (2003) found that positive contact with an outgroup member who disconfirms existing stereotypes but is considered to be a typical member of the outgroup increases group variability. Ensari and Miller (2002) demonstrated that typicality and group salience are essential components of a contact setting that aspires to reducing intergroup bias.

By manipulating typicality we should, therefore, be able to find convergent evidence that generalization can be achieved in the imagined contact paradigm by applying the same group-focused conditions as observed with direct contact. In Experiment 3 we, therefore, manipulated the typicality of the imagined interaction partner.

## Method

**Participants.** Twenty-eight non-Muslim University of Kent students (19 women, nine men, mean age = 20.6 years)<sup>4</sup> participated in return for a monetary payment, and were randomly assigned across the two conditions (typical vs. atypical imagined outgroup interaction partner).

<sup>4</sup> There was no effect of participants' age or sex.

**Procedure.** The procedure was the same as in the previous two studies, with the only difference being in the instructions to the participants. Those in the typicality condition read:

"We would like you to take a minute to imagine yourself meeting a British Muslim stranger for the first time. Imagine that this person is a typical British Muslim, he or she dresses in a traditional way, avoids alcohol, reads the Koran and prays five times a day. Imagine that the interaction is relaxed, positive and comfortable. Imagine that you learn about the life and experiences of your conversation partner."

Participants in the atypical condition read:

"We would like you to take a minute to imagine yourself meeting a British Muslim stranger for the first time. Imagine that this person is a not a typical British Muslim, he or she dresses in 'western' clothes, drinks alcohol, eats pork and does not pray regularly. Imagine that the interaction is relaxed, positive and comfortable. Imagine that you learn about the life and experiences of your conversation partner."

**Dependent variable.** The same measure as in Experiment 2 was employed (Fan & Mak, 1998),  $\alpha = .81$ .<sup>5</sup>

## Results and Discussion

We computed an independent sample *t* test, which confirmed that in the typicality condition participants reported significantly higher contact self-efficacy ( $M = 5.56$ ,  $SD = 0.76$ ) compared to the atypicality condition ( $M = 4.80$ ,  $SD = 1.04$ ),  $t(26) = -2.23$ ,  $p = .035$ . In line with predictions, the mental simulation of an intergroup interaction was more effective in heightening contact self-efficacy when the imagined partner was a typical outgroup member.

### General Discussion

In this research we extended the imagined contact paradigm by (a) exploring the impact of imagined contact on contact self-efficacy, a measure that directly taps into confidence about future interactions; and (b) exploring the conditions that enhance imagined contact's member-to-group generalization effects. The results supported the hypothesis that mentally simulating interactions with outgroup members can lead to

greater confidence in engaging in future direct contact with outgroup members in general. However, the generalization effect was more likely to occur when imagined interactions were either (a) group-based, where the group membership of the imagined interaction partner was salient; and/or (b) typicality-based, where the imagined interaction partner was typical versus atypical of the outgroup. The findings are consistent with previous research on the nature of generalization following contact, while also delineating further the theoretical and practical scope of the imagined contact paradigm.

Theoretically, the findings are in line with the Mutual Intergroup Differentiation Model (Hewstone & Brown, 1986). The model suggests that identity salience is a crucial component for the generalization of positive effects of contact. In our studies it was shown that maintaining identity salience (via manipulating the content of the imagined script or the typicality of the conversation partner) affects people's perceived efficacy about future interactions with the outgroup as whole. This finding counters concerns over maintaining the salience of different identities in contact situations, a process that can emphasize differences between the groups and reinforce biases. Although perceptions of group differences may lead to negative emotions like fear, discomfort, and intergroup anxiety (Hewstone, 1994; Stephan & Stephan, 1985) we believe that a key advantage of indirect forms of contact is that people experience contact while avoiding negative feelings such as anxiety. During mentally simulated contact, for example, people practice intergroup interactions in a safe and controlled environment. This experience can enable them with the requisite confidence for seeking real interactions with outgroups and, subsequently, benefiting from direct contact.

Increased confidence about future intergroup interactions may be a critical component in developing more harmonious intergroup relations. According to *uncertainty-identity theory* (Hogg, 2000; Hogg, 2007; Hogg, in press) uncertainty about and related to self, how to behave, and how one will be treated by others is anxiety-

<sup>5</sup> This time we included eight items but dropped one in order to increase the reliability of the scale. We included some additional measures, but for clarity we only discuss those that directly inform the focus of the current article.

provoking and motivates uncertainty reduction (cf. Van den Bos, *in press*). One way to resolve this uncertainty is self-categorization as a group member, which generates group and intergroup behaviors, including ingroup bias that may be associated with prejudice. So, uncertainty-sponsored anxiety about interaction with an outgroup may strengthen ingroup identification and outgroup antipathy. However, if the contact-related uncertainty can be reduced in advance through cognitive rehearsal—imagining contact—then the motivation to identify is weakened and the undesirable corollaries of identification, for example intergroup bias, are avoided. The research reported here provides evidence for this—imagining contact provides people with a resource, self-efficacy, to reduce uncertainty and thus the need to identify. Consistent with this, previous work has found that imagined contact can reduce stereotype threat, which can be seen as the assimilation to ingroup stereotypes under conditions of uncertainty (Abrams et al., 2008; Crisp & Abrams, 2008). Although further research is warranted, uncertainty-identity theory provides a potentially powerful conceptual framework to help make sense of imagined contact effects and the role of contact self-efficacy.

The link between imagined contact and contact self-efficacy could be further explored in two other ways. One problem associated with avoidance of intergroup contact is intergroup anxiety (Plant & Devine, 2003). Imagined contact may act as an anxiety-buffer mechanism, functioning in a way similar to systematic desensitization in clinical behavioral therapies (Marks, 1975), so that the anxiety is removed. Alternatively, imagining intergroup contact may work through a more cognitive route. Once an individual imagines a hypothetical future behavior, the subjective likelihood of that behavior is increased because a mental script of the behavior is then available to the perceiver (see Crisp et al., 2010). Simulation, therefore, provides a set of accessible cues that are available to guide behaviors and expectations (such as self-efficacy) in subsequent actual encounters (Bandura, 2001). How these processes may help to explain the imagined contact effect will be an important question for future research.

More generally, the concept of contact self-efficacy can have important implications not only for the imagined contact but also for the

broader contact literature. Future work can better specify the role of typicality as a facilitating condition of increased confidence in intergroup interactions. Furthermore, an interesting research focus can be on developing the multifaceted concept of contact self-efficacy to better specify its role as an antecedent and/or consequence of intergroup contact. Accordingly, future work could explore if increased contact self-efficacy leads to greater willingness for intergroup contact, a process necessary for benefiting from direct intergroup experiences.

We also note that some readers may have concerns over demand characteristics in these studies. Extensive research on imagined contact has ruled out this possibility. Turner et al. (2007) showed that in post experimental debriefing, participants were not able to guess the imagined contact experimental hypothesis. Turner and Crisp (2010) have subsequently shown that imagined contact reduces implicit prejudice measured using response times. We would argue that it is unlikely that participants would have been able to modify their responses on such a task. Previous studies have also ruled out informational load (Turner et al., Study 1), stereotype priming (Turner et al., Study 2), positive affective priming and nonrelevant social interaction (Stathi & Crisp, Study 2) as alternative explanations for the imagined contact effect. Furthermore, the use of a between-subjects design also makes a demand explanation unlikely here. However, we believe that future research should also continue to use a wide range of possible control conditions to further confirm the unique effects of positive contact simulations on intergroup perceptions.

We acknowledge that we did not include baseline conditions in Studies 2 and 3, and as such the reader might wonder about the specific direction of these effects (e.g., does person-based contact decrease self-efficacy, or does group-based contact enhance it?). We believe that while group/typicality-based imagined contact are maximally effective forms, the other variants tested—person/atypicality-based imagined contact—would not harm contact self-efficacy, rather they simply represent a less effective implementation. There is both theoretical and empirical support for these assertions.

First, all existing research on contact shows that any positive contact is good, in whatever form that positive contact takes (Pettigrew &

Tropp's, 2006, meta-analysis illustrates this point). This is also consistent with the theoretical perspectives on generalization, and in particular the MIDM. For instance, while person-based/atypical contact runs the risk of the outgroup member featured in the encounter being subtyped, thus limiting the effectiveness and extent of any generalization, there is no reason to expect (nor any evidence) that such encounters *harm* perceptions of the group as a whole. Therefore, while previous research on actual contact, and the studies of imagined contact reported here, show that group-based/typicality contact is most effective for generalization, other sorts of positive contact will be effective, but just less so than these optimal forms.

Second, although it is difficult to compare across samples, our data across all three studies corroborates the assertion that both forms of contact enhance self-efficacy, but to differing degrees. Both the mean contact self-efficacy in the person-based condition in Study 2 (4.82) and the mean contact self-efficacy in the atypicality-based condition in Study 3 (4.80) were higher than the mean contact self-efficacy in the baseline condition in Study 1 (4.07). This supports the notion that even imagining person-based/atypical contact is beneficial for contact self-efficacy (although group-based/typical imagined contact is significantly more effective). In sum, while we do not believe that person-based or atypical imagined contact will harm intergroup perceptions, we expect that overall group/typicality based imagined contact will be more effective.

There is a further critique that it is important for us to address. We argue that contact self-efficacy is a critical determinant of individuals' willingness to engage in future actual contact; however, we acknowledge that we did not measure actual behavior in these studies, so we must remain a little tentative in this regard. To this extent our study is similar to many studies in the contact literature that have focused on attitudes as outcomes, rather than the behaviors that those attitudes are assumed to influence. However, assessing the impact of contact strategies on actual behavior is critical if we are to translate contact research from the laboratory to implementations in real contexts. With respect to self-efficacy, there are good empirical and theoretical reasons to expect our measure to be a reliable predictor of actual behavior. We know

from a wealth of research on self-efficacy that it is a key determinant of people actually going on to engage in the relevant behaviors (see Bandura, 2001). These include smoking cessation (Nick, Remington & Macdonald, 1985), weight loss (Chambliss & Murray, 1979), use of contraception (Gilchrist & Schinke, 1983), and exercise (Ewart, Taylor, Reese, & Debusk, 1984). Having now ascertained the impact of imagined contact on contact self-efficacy, we are therefore confident, based on this extensive cross-domain support in other areas, that future research will empirically verify the predictive power of contact self-efficacy as it relates to contact behaviors.

Finally, readers may also wonder about the longevity of the imagined contact effect. We note here that it is unlikely that a single experience of imagined contact will lead to long-term changes in attitudes or beliefs (see Crisp & Turner, 2010). We believe, like any intervention, imagined contact will require multiple sessions to develop sustainable changes in attitudes and behavior. Future research should explore the potential interactions of imagined contact with existing contact strategies, as well as examining the longevity of the effects with multiple experiences, to assess its effectiveness as a first step on the route toward reconciliation and reduced prejudice.

In conclusion, we believe that imagined contact represents a highly promising implementation of contact theory—no actual or extended contact is required, it is of low-cost, easy to use, and effective. Educators, practitioners and policymakers can implement this highly flexible tool as an intervention strategy in educational settings and in the context of antidiscriminatory programs. While actual positive contact experiences will likely provide the richest source of experience upon which to develop more confidence about future encounters (Pettigrew & Tropp, 2006), our research has provided support for the idea that *imagined* contact can provide the first step toward attaining these actual positive contact experiences. We found that imagined contact enhances contact self-efficacy, and in so doing it should encourage people to seek out contact, remove their contact inhibitions, and prepare them to engage outgroups with an open mind. We believe that exploring these and other benefits of simulated contact strategies will be an important and fruitful endeavor for



future researchers aiming to capitalize on the power and effectiveness of intergroup contact.

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