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### Deposited in DRO:

03 May 2019

### Version of attached file:

Accepted Version

### Peer-review status of attached file:

Peer-reviewed

### Citation for published item:

Vezzali, L. and Birtel, M. D. and Di Bernardoa, G. A. and Stathi, S. and Crisp, R. J. and Cadamuroa, A. and Visintin, E. P. (2020) 'Don't hurt my outgroup friend : imagined contact promotes intentions to counteract bullying.', *Group processes intergroup relations.*, 23 (5). pp. 643-663.

### Further information on publisher's website:

<https://doi.org/10.1177/1368430219852404>

### Publisher's copyright statement:

Vezzali, L., Birtel, M. D., Di Bernardoa, G. A., Stathi, S., Crisp, R. J., Cadamuroa, A. Visintin, E. P. (2020). Don't Hurt my Outgroup Friend: Imagined Contact Promotes Intentions to Counteract Bullying. *Group Processes Intergroup Relations* 23(5): 643-663. Copyright © 2019 The Author(s) 2019. DOI: <https://doi.org/10.1177/1368430219852404>

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# IMAGINED CONTACT AND BULLYING

## **Don't Hurt my Outgroup Friend:**

### **A Multifaceted Form of Imagined Contact Promotes Intentions to Counteract Bullying**

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Manuscript word count: 7,116

Abstract word count: 171

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### **Abstract**

A growing body of research has shown that imagined intergroup contact can improve outgroup attitudes. The aim of the present study was to examine the effectiveness of a multifaceted form of imagined contact in counteracting bullying in school children, and additionally to test the underlying processes of this effect. Two hundred and fifteen Italian elementary school children took part in a three-week intervention, where they were asked to imagine a scenario in which they become friends with an unknown disabled child, interact in various social settings, and react to forms of discrimination toward the newly acquired friend. After each session, they discussed collectively what they had imagined. The dependent measures were administered one week after the last session. Results revealed that inclusion of an outgroup member in the self mediated the effect of imagined contact on intentions to counteract social exclusion and bullying of disabled children, as well as helping intentions. Imagined contact also promoted greater willingness for outgroup contact via more positive outgroup attitudes and empathy. Our findings are important in delineating new forms of imagined contact, and understanding ways to promote behaviors that defend victims of social exclusion and bullying in school environments.

*Keywords:* imagined contact, inclusion of other in self, empathy, prejudice, social exclusion, bullying

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Diversity, for example in terms of ethnicity, health or sexual orientation, is increasingly present in individuals' private and professional lives, and it not only provides new opportunities for friendships with individuals who are different from them (Hewstone, 2015; Plaut, 2010; Verkuyten, 2005), but also inevitably comes with conflict and skepticism (Putnam, 2007). This can lead to social exclusion and bullying which severely affect the health and well-being of people and children in particular (Aboud & Joong, 2008; Juvonen & Graham, 2001). There is extensive evidence that experiencing diversity through intergroup contact reduces prejudice (Dovidio, Love, Schellhaas, & Hewstone, 2017; Hodson & Hewstone, 2013; Pettigrew & Tropp, 2006). Interestingly, when direct intergroup contact is difficult to implement due to high segregation or limited opportunities to meet the outgroup, indirect contact can also reduce prejudice (Dovidio, Eller, & Hewstone, 2011), for instance extended contact (Vezzali, Hewstone, Capozza, Giovannini, & Wölfer, 2014; Wright, Aron, McLaughlin-Volpe, & Ropp, 1997) or imagined contact (Crisp & Turner, 2012; Miles & Crisp, 2014) can also improve outgroup attitudes. However, although the role of direct or indirect contact is well established, there is a surprising lack of research on one likely outcome of prejudice in educational contexts, that is bullying.

The aim of the present research was to examine, for the first time, whether imagined contact, and especially a multifaceted form of the approach that aimed to strengthen its impact, could impact on children's response to bullying behavior. In particular, we explored if this new form of imagined contact could promote assertive behavior in response to bullying and social exclusion behaviors toward disabled peers. We tested this new variant of imagined contact in two steps, where participants are first asked to become friends with an outgroup member and then, in a second step, to defend

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him/her in case of exclusion or bullying behaviors from other ingroup peers. In addition, we examine outgroup attitudes, cognitive and affective empathy, and inclusion of the other in the self (IOS; Aron, Aron, & Smollan, 1992) as potential mediating processes.

### **Imagined Contact Hypothesis**

Intergroup contact theory has been the most influential theory in the effort to promote more positive intergroup relations (Allport, 1954; Brown & Hewstone, 2005; Pettigrew, 1998). A wealth of research has demonstrated positive effects of intergroup contact on prejudice on both micro- and macro-level. In other words, contact reduces prejudice not only for individuals, but also has reliable, and even stronger contextual effects on a macro-level (Davies, Tropp, Aron, Pettigrew, & Wright, 2011; Dovidio et al., 2017; Pettigrew & Tropp, 2006, 2008; Vezzali & Stathi, 2017). Intergroup contact reduces prejudice by building affective ties (Brown & Hewstone, 2005; Pettigrew & Tropp, 2008), that is reducing intergroup anxiety (Stephan & Stephan, 1985; Swart, Hewstone, Christ, & Voci, 2011; R. N. Turner, Hewstone, & Voci, 2007), enhancing empathy and perspective-taking (Swart et al., 2011; R. N. Turner, Tam, Hewstone, Kenworthy, & Cairns, 2013) and trust (Cehajic, Brown, & Castano, 2008; Kenworthy, Voci, Al Ramiah, Tausch, Hughes, & Hewstone, 2016; Tam, Hewstone, Kenworthy, & Cairns, 2009).

A more recent implementation of contact theory, imagined intergroup contact (Crisp & Turner, 2012), draws on the power of mental imagery and the extended psychological benefits of the intergroup contact concept. Mental imagery has been shown to yield benefits in various areas such as clinical therapy, sports, consumer research, and psychology (for a review see Crisp, Birtel, & Meleady, 2011). Mentally simulating an experience of a particular social context can have the same or similar

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effect as an actual experience of that context (Blair, Ma, & Lenton, 2001; Garcia, Weaver, Moskowitz, & Darley, 2002). Mentally simulating a positive social interaction with an outgroup member has been shown to promote more positive intergroup relations similar to direct intergroup contact (for reviews see Crisp & Turner, 2012; Stathi, Crisp, Turner, West, & Birtel, 2012).

Previous research has demonstrated imagined contact effects on *attitudes* (e.g., Brambilla, Ravenna, & Hewstone, 2012; Falvo, Capozza, Di Bernardo, & Pagani, 2015; Harwood, Paolini, Joyce, Rubin, & Arroyo, 2001; Prati & Loughnan, 2018; Stathi, Tsantila, & Crisp, 2012; R. N. Turner, Crisp, & Lambert, 2007; R. N. Turner & West, 2012; Vezzali, Capozza, Giovannini, & Stathi, 2012), *contact intentions* (e.g. Husnu & Crisp, 2010a, 2010b; Stathi, Cameron, Hartley, & Bradford, 2014; R. N. Turner, West, & Christie, 2013), *helping intentions* (Vezzali et al., 2015), and *behavior* (e.g., Birtel & Crisp, 2012a; Meleady & Seger, 2016; R. N. Turner & West, 2012).

Imagined contact has been identified as a powerful strategy for reducing prejudice in children (Cameron, Rutland, Turner, Nicholas, & Powell, 2011; Stathi et al., 2014; Vezzali, Capozza, Giovannini, & Stathi, 2012; Vezzali, Capozza, Stathi, & Giovannini, 2012; see Miles & Crisp, 2014, for a review) and its effects have been found to last up to two weeks (Vezzali, Stathi, Crisp, Giovannini, & Capozza, 2015, Study 1). Notably, imagined contact effects have been found to be as strong as those produced by direct contact both among adult (Giacobbe, Stukas, & Farhall, 2013) and child samples (Vezzali, Stathi, Crisp, & Capozza, 2015). This supports the importance of including prejudice interventions early in educational strategies to promote positive social change.

### **Social Exclusion and Bullying in Children**

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Childhood is an important period for the psychological, cognitive and social development of people, in which interventions can shape their socio-cognitive development. Firstly, during childhood children become aware and act upon differences between groups, such as those stemming from different ethnicities. They develop their identity (Marcia, 1966), stereotype consciousness (McKown & Weinstein, 2003), empathy (Radke-Yarrow, Zahn-Waxler, & Chapman, 1983), and moral beliefs and prejudice (Aboud, 2008; Bigler & Liben, 2007; Rutland, Killen & Abrams, 2010). They also learn that belonging to a certain group cannot always be changed (Ocampo, Bernal, & Knight, 1993; Rutland, Cameron, Bennett, & Ferrell, 2005). Secondly, interpersonal relationships develop. Children become aware of more complex social categories, seeing others in terms of psychological traits (e.g., their values) instead of only physical characteristics (e.g., their skin color) (Barenboim, 1981; Livesley & Bromley, 1973). With the ability to see others in terms of shared values, their ability for empathy and their ability to include other people in the self-concept develops.

Bullying is one form of discrimination that can result from prejudice and stereotypes (Palmer & Abbott, 2018). The consequences of social exclusion for children can be severe, for example poorer quality of friendships, higher anxiety and depression, lower self-esteem, poorer academic performance (Juvonen & Graham, 2001; O'Leary, 1990; Nansel et al., 2001; Twenge & Baumeister, 2005). Similarly, bullying can also lead to lower health and wellbeing, and social exclusion. Importantly for the present research, these negative behaviors can be motivated by intergroup differences and belonging to distinct groups, and thus they can be a direct outcome of prejudice toward stigmatized categories. Intergroup name-calling is the most common form of bullying in intergroup relationships (Verkuyten & Thijs, 2002). It not only causes personal damage

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to the victim, but also reinforces intergroup differences and prejudice (Aboud & Joong, 2008). Taking the role of an assertive peer bystander has been suggested to be effective in tackling intergroup bullying, for example the peer can intervene when they observe another peer being a victim of bullying (Aboud & Joong, 2008).

Despite the impressive literature on intergroup contact, research has only focused on children's *evaluation* of social exclusion based on group membership, and research on the relationship between contact and reaction to intergroup bullying behavior is practically absent (see Rutland et al., 2010). One notable exception is provided by Abbott and Cameron (2014) who tested cross-sectionally the relationship between direct contact and assertive behavior in response to bullying in the context of interracial interactions among children aged 11-13 years. Results revealed that positive intergroup contact promoted assertive bystander intervention intentions, and it did so by enhancing outgroup empathy.

Although promising, initial evidence by Abbott and Cameron (2014) was correlational. Moreover, the authors did not consider young children at the beginning of their school education, that is children from first grade, but rather pre-adolescents. As prejudice and stereotypes influence behaviors such as social exclusion and bullying, it is particularly important to develop interventions early in childhood when identities and attitudes are still being formed (Killen, Rutland, & Ruck, 2011).

It should be noted that whereas direct contact interventions can be promising strategies when the ratio of ingroup-outgroup members is similar or at least some degree of contact can be achieved, direct contact strategies are unlikely to be applied when the number of outgroup members is very limited and opportunity for contact is scarce. This is the case of the present study, in which we considered the relationship between non-



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disabled and disabled schoolchildren. Therefore, we focused on imagined contact as a strategy that can be easily applied in educational contexts when opportunity for meaningful contact is scarce.

### **Mediating Processes**

Research has provided evidence for several mediators of the effects of imagined contact, which largely overlap with those identified for direct contact. In particular, there is evidence that the effects of imagined contact are mediated by outgroup attitudes (Birtel & Crisp, 2012b, Study 3; Harwood et al., 2011; Husnu & Crisp, 2010a; R. N. Turner et al., 2013; West, Hotchin, & Wood, 2017), infrahumanization (Prati & Loughnan, 2018), outgroup trust (Hodson, Dube, & Choma, 2015; Meleady & Seger, 2016; Pagotto, Visintin, De Iorio, & Voci, 2013; R. N. Turner et al., 2013), intergroup anxiety (Birtel & Crisp, 2012b; Ioannou, Hewstone, & Al Ramiah, 2016; Stathi Tsantila, et al., 2012; R. N. Turner, et al., 2007; R. N. Turner et al., 2013; West & Greenland, 2016; West, Holmes, & Hewstone, 2011) and perspective-taking (Husnu & Crisp, 2015). Outgroup attitudes (Stathi et al., 2014), outgroup trust (Vezzali, Capozza, Stathi, & Giovannini, 2012) and self-disclosure (Vezzali, Capozza, Giovannini, & Stathi, 2012) have been shown to mediate the imagined contact effect in children. We are extending previous research by testing new mediators among children, that is cognitive (perspective-taking) and affective empathy, and inclusion of the other in the self.

**Affective and cognitive empathy.** Empathy is the ability to understand or share another person's emotional state, and can be divided into two components. Affective empathy is the ability to vicariously experience the other person's emotion. Cognitive empathy, or perspective-taking, is the ability to cognitively take the perspective of the

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other person (Davis, 1983). Taking the perspective of another person is more effective in the cognitive understanding of others, while feeling empathic towards another person is more effective in the emotional understanding of others (Gilin, Maddux, Carpenter, & Galinsky, 2013).

Research has shown that inducing affective empathy for targets of stigmatized groups (Batson, Polycarpou et al., 1997; Batson, Early, & Salvarani, 1997) and perspective-taking (Vescio, Sechrist, & Paolucci, 2003) reduces prejudice, enhances prosocial behavior (Eisenberg & Fabes, 1990), and behaviors to counteract bullying (Caravita, Di Blasio, & Salmivalli, 2009; Gini, Albiero, Benelli, & Altoè, 2008). Furthermore, empathy is a key mediator of the contact-prejudice relationship (Brown & Hewstone, 2005; Pettigrew & Tropp, 2008, 2011; Swart et al., 2011; R. N. Turner et al., 2013). A meta-analysis revealed that empathy is a much stronger mediator than knowledge (30% of the contact-prejudice relationship, Pettigrew & Tropp, 2011). Empathy is also an important predictor of prosocial behavior in children (Litvack-Miller, McDougall, & Romney, 1997), who start developing it since preschool years (Radke-Yarrow et al., 1983). Only few studies have however examined intergroup empathy in children, showing that it is associated with improved attitudes and reduced aggression tendencies (Nesdale, Maass, Durkin, & Griffiths, 2005; Nesdale, Milliner, Duffy, & Griffiths, 2009). Moreover, intergroup empathy (and specifically, affective intergroup empathy) was shown to mediate the effect of extended contact on improved outgroup attitudes, stereotype and contact behavioral intentions among majority (Italian) and minority (immigrant) elementary school children (Vezzali, Hewstone, Capozza, Trifiletti, & Di Bernardo, 2017).

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Relevant to the purposes of our research, both cognitive and affective empathy have been found to be associated with reactions to bullying (Caravita et al., 2009; Gini et al., 2008). Our hypothesis is that imagining becoming friends and reacting to bullying behavior will lead participants to better understand the situation and the feelings of disabled peers victims of bullying. In turn, cognitive and affective empathy should promote not only stronger intentions to interact and help outgroup members in generic situations, but also to react if they are socially excluded or bullied.

**Inclusion of other in self.** Individuals in close relationships tend to experience overlapping self-concepts, where the person's own self-concept is shared with the partner's self-concept. This inclusion of other in the self (Aron et al., 1992) has been used as an indicator for interpersonal interconnectedness and psychological distance. The closer individuals experience their relationship with another person, the more their selves overlap. The concept of self-other overlap in interpersonal relationships has also been applied to intergroup relationships. When individuals self-categorize as an ingroup (J. C. Turner, Hogg, Oakes, Reicher, & Wetherell, 1987), instead of an individual person, other ingroup members become spontaneously incorporated in the self (Smith & Henry, 1996; Tropp & Wright, 2001). In other words, the ingroup, like a close partner or friend, represents the self. This cognitive self-other overlap is not only important for intragroup processes but also intergroup processes. Positive direct or extended contact with an outgroup member can lead to the inclusion of outgroup in the self. The inclusion of the other in the self has been suggested to be a mediator of the extended contact effect (Wright et al., 1997), for outgroup attitudes in adults (R. N. Turner, Hewstone, Voci, & Vonofakou, 2008), outgroup attitudes in children (Cameron, Rutland, Brown, & Douch, 2008), and outgroup humanization (Capozza, Falvo,

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Trifiletti, & Pagani, 2014). In our study, we predicted that imagining meeting and defending a disabled child will reduce psychological distance, making participants see themselves and the outgroup member as a single unity, therefore in turn motivating more positive intentions to help and have contact with the outgroup, but also to defend outgroup members in the case of bullying behaviors.

**Outgroup attitudes.** Outgroup attitudes are a classic outcome of most studies examining intergroup relations and, more specifically, intergroup contact. In addition to finding that direct (Hodson & Hewstone, 2013) and indirect contact (Crisp & Turner, 2012; Vezzali et al., 2014) improve outgroup attitudes, there is also evidence that outgroup attitudes mediate the effects of contact (e.g., De Tezanos-Pinto, Mazziotta, & Feuchte, 2017, for direct contact; West & Turner, 2014, for extended contact; Birtel & Crisp, 2012b, for imagined contact). Stathi et al. (2014), for example, showed that improved outgroup attitudes mediated the path between imagined contact and willingness to engage in future contact. We suggest that outgroup attitudes can be an especially relevant mediator in our experimental design. In fact, since disabled people are a typically stigmatized group, it is important to first improve attitudes toward its members, and only then, once prejudice is reduced, is it more likely that participants will be willing to help and have contact with them. More importantly, only when attitudes have been improved, will children be sufficiently motivated to enact assertive behavior and respond to discriminatory acts addressed to disabled individuals.

### **The Present Research**

While previous research has established imagined contact effects on outgroup attitudes and behavioral intentions, we tested, for the first time, whether imagined contact can promote support for disabled victims of social exclusion and bullying, in the

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form of intentions to counteract those discriminatory behaviors. Social exclusion and bullying in school can severely affect children's health and well-being as well as their perception of intergroup relations. Specifically, by considering the relationship between non-disabled and physically disabled (i.e., in a wheelchair) children, we ran a three-week intervention where we tested an innovative two-step procedure of imagined contact. In each weekly session, first we provided instructions aimed at fostering friendship with the outgroup member; and second, we asked children to imagine that the child with whom they have just become friends is bullied, and subsequently report their reaction to this. After each session, children were also invited to discuss collectively what they had imagined.

Note that counteracting bullying can be more challenging than "simply" improving outgroup attitudes, as it also includes a behavioral component (since we are interested in children's reaction to bullying episodes), and one that may encounter resistance (for instance, that of the bully). With that in mind, we used a multifaceted intervention aimed to strengthen the "classic" operationalizations of imagined contact. In particular, as explained above, after a classic imagined contact task, children were asked to further imagine their reaction to bullying of the newly acquired friend.

As outcome variables, we focused on behavioral intentions, which have been shown to be important predictors of behavior (Godin & Kok, 1996). In particular, we focused on intentions to have contact with and help outgroup members in different situations. In addition, we tested behavioral intentions specifically linked to assertive behavior: intentions to react to social exclusion and name-calling behavior directed at outgroup victims (see also Abbott & Cameron, 2014). Furthermore, we examined various likely mediators of the eventual effect of imagined contact on outcome

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variables: cognitive and affective empathy, IOS, outgroup attitudes. Notably, unlike most imagined contact research conducted with adult samples, we investigated whether the predicted effects can last beyond the imagined contact situation, up to one week. We are extending previous research by testing whether a multifaceted imagined contact intervention can promote support for victims of social exclusion and bullying.

### Method

#### Participants and Design

Participants were 215 elementary school children (106 males, 109 females), recruited from 10 classes of a primary school located in Northern Italy. Age ranged from 5 years 11 months to 11 years 11 months (*Mean* age = 8 years 10 months). Children were in classes from the first to the fifth grade. Specifically, there were two classes for each of the five grades. Classes (each varying in size from 20 to 23 children), for each grade, were randomly allocated to the experimental ( $N = 107$ ) or to the control condition ( $N = 108$ ), so that for each grade one class was randomly allocated to the experimental and one class to the control condition.

Since sample size depended on school availability in providing classes participating in the study, we calculated a range of participants sufficient for running a multiple regression model with seven predictors (one independent variable, four mediators, and two covariates to control for effects of age and gender – see Footnote 1) in order to detect an effect size from small ( $f^2 = .04$ ,  $N = 364$ ) to medium ( $f^2 = .15$ ,  $N = 103$ ) with a power of 0.8 (Cohen, Cohen, West, & Aiken, 2003). The final sample, reaching 215 participants, allowed running the hypothesized model with an anticipated effect size of  $f^2 = .07$  with a power of 0.8.

#### Procedure

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Researchers conducting the intervention were students enrolled in educational academic courses at a northern Italian university. All researchers were trained by the first author of the present article. Children in the *experimental condition* took part in three intervention sessions individually with the researcher. The interventions were implemented once a week for three consecutive weeks, with each session lasting approximately 30 minutes. In the first session, participants were provided with a description of what a child in wheelchair is before they were asked to imagine two scenarios, each for two minutes. First, they imagined a pleasant interaction with an unknown disabled child in a wheelchair, then they imagined the disabled child being discriminated against and how they would react. In order to minimize the possibility of subtyping the imagined contact partner, so impairing the generalization process, the imagined intergroup context was systematically varied (see Stathi et al., 2014; Vezzali, Capozza, Stathi, & Giovannini, 2012). Specifically, every week participants imagined interacting with a different disabled child in a different contact scenario: in their neighborhood (first session), at the park (second session), in class (third session).

An example of the positive contact instructions provided each week in the first step was the following:

*I would like you to close your eyes and take two minutes to imagine the following situation. Imagine being at the park and meeting an unknown disabled child in wheelchair. At first you don't know what to say. But then, you start to speak and play together and become friends. Please think of what you and the disabled child in wheelchair say and what you do together in order to become friends.*

An example of instructions provided in the second step each week was the following:

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*Close your eyes and imagine for two minutes that as you walk home with your new friend, the child in wheelchair, a group of children starts making fun of the disabled child's wheelchair. Imagine how you react when you see this.*

Each step was followed by five to ten minutes of discussion aimed at reinforcing the instructions. Although to implement this type of reinforcement, previous research has usually asked participants to write down what they have just imagined (Crisp & Turner, 2012), not all children may be able to write, for example due to the grade they are in, thus their skills may be different and impair the result of the imagination process. Also, in order to make the task more engaging, we varied how instructions were reinforced each week. The first week, participants were asked to verbally describe what they had just imagined, and they were asked to imagine they were verbally describing it to their best friend, while being audio-recorded by the researcher. The second week, they were asked to draw what they had just imagined, while describing it to the researcher (for an application of drawing to imagined contact, see Birtel et al., 2018). The third week, they were presented with a large poster depicting the garden of their school, and were asked to draw, cut and attach to the poster the characters, toys etc. they had just imagined, while describing it to the researcher. The reinforcement task, which was implemented both in the first and the second step of each session, was accompanied by stimulus questions aimed at fostering the imagination of a detailed scene, which has been shown to reinforce the effect of imagined contact (see Husnu & Crisp, 2010b).

At the end of each session, children engaged in a collective discussion with all children in the class for 15 to 20 minutes. In this discussion, children were asked to repeat what they had imagined. In a fourth session, one week after the last intervention session, participants were individually administered by a researcher a questionnaire



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containing the dependent measures (individually in grade one to three, and collectively in class in grades four to five). Importantly, researchers that administered the questionnaire were different from those who administered the intervention, in order to reduce concerns of demand characteristics.

Participants allocated to the *control condition*, after being provided with a description of a child in wheelchair (like we did in the experimental group), were asked to complete the dependent measures first, and then engaged in all the activities performed by the experimental group.

### Measures

Unless otherwise indicated, a 5-point Likert scale ranging from 1 (*absolutely not*) to 5 (*absolutely yes*) was used; 3 was the neutral point (*maybe not, maybe yes*).

**Inclusion of the other in the self.** IOS was measured with one item (see Aron, et al., 1992). Participants were asked to imagine meeting a disabled child in a wheelchair from their school they did not know in the park. Then they were presented with five pairs of overlapping circles varying in their degree of overlap between the self as one circle and the outgroup member (disabled children in a wheelchair) as the other circle, for which they indicated the pair of circles that best described their closeness to this child, with higher scores denoting greater closeness (for a similar measure, see e.g., Cameron et al., 2006; Vezzali, Capozza, Giovannini, & Stathi, 2012).

**Affective empathy.** Two items were used, adapted from Capozza, Trifiletti, Vezzali, and Favara, 2013: “Do you understand the emotions felt by disabled children in wheelchair?”; “Do you feel the same emotions felt by disabled children in wheelchair?”. Items were averaged in a composite measure of affective empathy ( $r = .20, p < .01$ ).

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**Perspective-taking.** We adapted two items from Capozza et al. (2013): “Do you see things as disabled children in wheelchair see the things?”; “Do you think in the same way as disabled children in wheelchair think?”. The two items were combined in a single index of perspective-taking ( $r = .38, p < .001$ ).

**Outgroup attitudes.** A feeling thermometer (e.g., Esses, Haddock, & Zanna, 1993) was used to evaluate disabled children in a wheelchair, with scores ranging from 0 (*most negative attitude*) to 10 (*most positive attitude*); 5 was the neutral point.

**Contact intentions.** Participants were first asked to imagine meeting a disabled child in wheelchair that they did not know at the park. They were then asked to indicate whether they would be happy to meet him/her, playing with him/her, go and take an ice-cream together (see Cameron & Rutland, 2006; Vezzali, Capozza, Stathi, & Giovannini, 2012). We created a single measure of contact behavioral intentions by averaging the three items (Cronbach’s  $\alpha = .64$ ).

**Helping intentions.** Four items were used, adapted from Vezzali, Drury, Versari, Cadamuro (2016) and Vezzali, Stathi, Crisp et al. (2015, Study 1), e.g., “Think about a disabled child who may have problems with writing an essay. Would you help him/her?”. A 5-point scale was used, ranging from 1 (*definitely not*) to 5 (*definitely yes*). Ratings were averaged in a single index (Cronbach’s  $\alpha = .68$ ), with higher the scores indicating stronger intention to help outgroup children.

**Reaction to social exclusion.** This measure was adapted from Abbott and Cameron (2014). Participants were asked to imagine being at the park on Sunday playing with their friends, when a disabled child in a wheelchair that they do not know approaches them and asks to play together, but one of their friends tells the child to go away because of their disability. Participants were presented with drawings of the scene,

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where the characters matched the gender of the participants. Children were then asked how they would react, and were presented with four items: “I would try and make the disabled child in wheelchair feel better”; “I would play myself with the disabled child in wheelchair”; “I would tell the disabled child in wheelchair to ignore my friend”; “I would tell my friend to play all together with the disabled child in wheelchair.” We combined the items in an index of reaction to exclusionary behavior (Cronbach’s  $\alpha = .72$ ), with higher scores denoting stronger intentions to react.

**Reaction to name-calling behavior.** We adapted this measure from Abbott and Cameron (2014). Participants were asked to imagine to be at the end of the school day walking down the corridor, and hearing someone (Child A) shout a rude word to someone else (Child B) because Child B is a disabled child in a wheelchair. They were then presented with drawings of the scene, with one drawing indicating a non-disabled child (Child A) and one indicating a disabled child in wheelchair (Child B). The characters in the drawing matched the gender of the participant. They were then asked what they would do when assisting to this scenario, and were presented with four items: “I would try and make Child B feel better”; “I would tell Child B to ignore Child A”; “I would tell Child A not to tell nasty things”; “I would tell a teacher.” We averaged the items in a measure of reaction to name-calling behavior, with higher scores representing stronger intentions to react (Cronbach’s  $\alpha = .58$ ).

### Results

Means and standard deviations of all measures are presented in Table 1; correlations are in Table 2. In general, attitudes were positive both in the experimental and in the control condition. In fact, scores were all higher than the mid-point of the scale in both conditions,  $t_s > 2.13$ ,  $p_s < .05$ , with just one exception: the mean score of

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affective empathy in the control condition non-significantly higher than the mid-point,  $t = 1.74$ ,  $p = .085$ . Nonetheless, imagined contact promoted more positive intergroup relations on most of the dependent variables.

In line with our hypotheses (see Table 1), compared to the control condition, participants in the imagined contact condition reported significantly greater intentions to engage in contact with outgroup members. Furthermore, participants who imagined contact with a disabled child reported greater efforts to counteract social exclusion of disabled children. The difference between experimental and control condition was not significant for helping intentions and reactions to name-calling behavior.

The imagined contact intervention also positively affected the mediator variables. Participants who imagined positive contact with a disabled child, compared to those in the control condition, reported significantly greater IOS, affective empathy towards the outgroup, and more positive outgroup attitudes. There was no significant effect on perspective-taking.

### **Mediation Analysis**

In order to test underlying processes, we ran four regressions, one for each dependent variable. Our hypothesis was that imagined contact would affect contact and helping intentions, and reaction to social exclusion and name-calling behaviors via our mediators. The dummy-coded experimental condition (1 = imagined contact, 0 = control) served as independent variable; IOS, affective empathy and attitudes were entered simultaneously as mediators (we did not include perspective-taking, since the intervention did not affect this variable). Results are presented in Table 3.

When the experimental condition and the mediators were included in the regression equation, the path from IOS to our dependent variables was significant for

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contact intentions, helping intentions, reactions to exclusionary behavior, and reactions to name-calling behavior. Significant associations between mediators and outcome variables also emerged for affective empathy and outgroup attitudes, but only with respect to the dependent measure of contact intentions. The path from experimental condition to dependent variables, controlling for mediators, was nonsignificant for all outcome measures, with the exception of the measure of contact intentions.

To test if the mediation effects were significant, bootstrapping analyses were conducted using the SPSS PROCESS macro by Hayes (2016, Model 4). Results are presented in Table 4. Consistent with our predictions, IOS mediated the effect of imagined contact on all dependent variables). There were also indirect effects via empathy and outgroup attitudes, but only for contact intentions.<sup>1, 2, 3</sup>

### **Discussion**

The purpose of the present research was to examine whether an empowered form of imagined contact adapted to reflect the aim of counteracting bullying, that is a multifaceted form of imagined contact, could promote support for disabled victims of bullying and social exclusion at school. Whereas a classic version of imagined contact can be best suited to improve outgroup attitudes and contact intentions and behavior, in terms of more positive time spent with the outgroup or help offered to its members (Vezzali, Stathi, Crisp, Giovannini, et al., 2015; West, Turner, & Levita, 2015), a multifaceted form of imagined contact, as employed here, may be more likely to impact on reactions to bullying. Reacting to bullying may in fact be especially difficult in the school context, where the situation may be uncertain, in terms for example of social norms and solidarity from other peers, and resistance against reactions (for instance

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from the bully) may emerge. The study also examined a wide range of potential theory-driven mediating processes.

We found that our multifaceted form of imagined contact was effective in promoting more positive intergroup relations, in terms of fostering greater intentions to have contact with and help outgroup members. More importantly for the aim of this study, the imagined contact intervention also led to increased intentions to react to exclusionary and name-calling behavior. IOS emerged as the main mediator of this effect; we also found that the effect of imagined contact on contact intentions was mediated by affective empathy and outgroup attitudes.

These findings are in line with previous research that demonstrated the power of intergroup mental imagery in promoting positive intergroup relations (e.g. Crisp & Turner, 2012; Miles & Crisp, 2014). The findings are also consistent with research showing that imagined contact is associated with more positive outgroup attitudes and greater contact intentions (e.g., Husnu & Crisp, 2010a; R. N. Turner, Crisp et al., 2007). Our research extends previous findings by demonstrating for the first time that imagined contact also affects reactions toward discrimination. Specifically, we show that imagining contact can foster negative reactions toward discrimination and support for behaviors that counteract such discrimination among school children. Being an assertive peer bystander has been shown to be effective in addressing bullying (Aboud & Joong, 2008). We show that imagined contact has the potential to motivate children to become assertive bystanders, and through this, to potentially reduce discrimination toward outgroup members (similar to direct contact, see Abbott & Cameron, 2014).

It is important to note that, although we found a significant indirect effect, the direct effect of the intervention on reactions to name-calling behavior was

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nonsignificant. Possibly, this is due to the fact that personally engaging in a reaction toward the perpetrator of name-calling behavior puts the individual at greater risk of a reciprocal reaction from the bully (perhaps even physical) compared to supporting the victim of exclusionary behavior and asking friends to accept him/her (see items used in the section of Measures). Therefore, the intervention did not induce children to personally engage in a potentially risky reactive behavior. However, the fact that an indirect effect via IOS emerged indicated the important role that psychological closeness may have in fostering assertive behavior in reaction to bullying. A potential alternative explanation for the nonsignificant effect on reactions to name-calling behavior, as well as for the measure of helping intentions, may be the high levels of scores for the two measures in both the experimental and control condition (cf. Table 1), which leave little room for further improvement.

Furthermore, we extend previous research by identifying for the first time the mechanisms by which imagined contact leads to more positive intergroup relations in young children, namely through including the outgroup in the self, and enhancing affective empathy and outgroup attitudes (with the last two variables only implied in the indirect effect on contact intentions).

Notably, only IOS allowed imagined contact to indirectly affect reactions to exclusionary and name-calling behavior. In addition to measuring psychological closeness, IOS has also been used to assess the process of identity fusion (e.g., Vezzali et al., 2016). In contrast to “classic” ingroup identification, fused people do not simply see the ingroup as a shared category, but as a family, which motivates people to readily engage in support of other individuals included in the fused identity also in emergency

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and dangerous situations (e.g., Buhrmester, Fraser, Lanman, Whitehouse, & Swann, 2015; Swann et al., 2014).

Interestingly, imagined contact effects were only mediated by affective variables (for a review highlighting the role of affective factors in imagined contact, see Vezzali, Crisp, Stathi, & Giovannini, 2013). Contrary to previous research, only affective empathy but not cognitive empathy was a mediator of the imagined contact-prejudice relationship (Husnu & Crisp, 2015). One reason may be the different operationalization of perspective-taking. While Husnu and Crisp focused on taking a perspective (e.g., “see things from her or his point of view”), we focused on a more difficult task (e.g., “see things the same as disabled children see things”). Also, while previous research on empathy and perspective-taking has been largely carried out with adults, younger children may have more difficulties in understanding the questions in relation to these complex concepts. Note however that all items had been previously shared and discussed with school teachers, in order to ensure that from the discussion.

The intervention we conducted also included a collective discussion following the imagined contact tasks. Note also that field interventions are often multicomponent and that multicomponent interventions tend to produce stronger effects (Beelman & Heinemann, 2014). The discussion is an important part of field interventions (also those addressing bullying of individuals belonging to disadvantaged groups; Earnshaw et al., 2018), and although it may strengthen their effects (Fisher, 1968), this is not necessarily the case (Brown, Tam, & Aboud, 2018; Creel, Rimal, Mkandawire, Böse, & Brown, 2011). As an example, Johnson and Aboud (2013) found that the effect of reading storybooks to children aged 5-8 years did not change depending on the extent to which the researcher reinforced the message (conceptually, a condition similar to an



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intervention followed by a discussion). Also note that many field interventions based on indirect contact (extended and vicarious contact, e.g., Cameron & Rutland, 2006; Liebkind, Mähönen, Solares, Solheim, & Jasinskaja-Lahti, 2014; Slone, Tarrasch, & Hallis, 2000; imagined contact, e.g., Vezzali, Capozza, Giovannini, et al., 2012; Vezzali, Capozza, Stathi, et al., 2012) included the discussion after each session as a part of the intervention itself that could not be disentangled from the rest of the activities, and that interventions were effective even when activities were not followed by group discussions (e.g., imagined contact: Stathi et al., 2014; Vezzali et al., 2015). Finally, in some field interventions the post-session discussion focuses on concepts relevant to the specific condition and can reinforce the activity conducted in the session (e.g., Cameron & Rutland, 2006); in the present study the post-session discussion only aimed to reinforce what the participants had imagined, by focusing on the repetition to the class of what participants had imagined individually. However, we argue that it is generally advisable, whenever possible, to disentangle the pure effects of an intervention from the discussion following it (Paluck & Green, 2009), in order to understand the essential features defining a successful intervention. This is especially true when the discussion introduces new conceptual elements.

### **Implications**

Theoretically, our results extend previous research in several ways. First, we show that a new version of imagined intergroup contact specifically adapted to contrast discriminatory behavior not only influences outgroup attitudes and contact intentions, but also reactions toward social exclusion and bullying. Secondly, our research identifies new processes as to why imagined contact promotes more positive intergroup relations. Imagining positive contact appears to work similarly to direct and extended

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contact, with effects being allowed by greater IOS and affective empathy and by more positive outgroup attitudes (although these latter results are only found with respect to contact behavioral intentions). Third, we also show that the imagined contact effect has external validity and can last beyond the timeline intervention task, at least up to one week, in children from grades one to five.

It is important to note that the intervention was multifaceted, including an empowered form of imagined contact (in two steps: making friendships with an outgroup member, and reacting to bullying behavior toward this target) realized in three sessions with distinct activities. Although interventions with multiple components have generally stronger effect than simpler interventions (Beelman & Heinemann, 2014), we believe that the intervention we presented draws largely on imagined contact, rather than on different types of prejudice-reduction and/or counteracting bullying interventions. The different activities implied in fact (verbal description, drawing, poster realization) did not introduce new conceptual elements nor were they theoretically linked to other prejudice-reduction techniques. Rather, they simply intended as means to raise attention and interest in children, and reinforce the imagined task in a way accessible to their age (whereas reinforcement of imagined contact in adults generally takes place by asking them to write down what they have just imagined; cf. Crisp, Husnu, Meleady, Stathi, & Turner, 2010).

Practically, designing prejudice-reduction interventions is becoming more and more important given the increased diversity in schools, an environment that can easily foster social exclusion and bullying. The childhood is a period of significant socio-cognitive changes in the children's development, including the development of their identity, empathy and prejudicial attitudes. As prejudice can lead to discriminatory

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behaviors such as social exclusion and bullying, resulting in poor health and well-being in victims, it is crucial to develop and target interventions early in childhood (see also Cameron & Turner, 2017; R. N. Turner & Cameron, 2016). Imagined contact interventions can be implemented easily with little cost and resources. By incorporating imagined contact in educational settings, direct contact and, ultimately, cross-group friendships could be encouraged, leading to long-lasting positive attitude and behavior changes.

### **Limitations**

We acknowledge some limitations in our research. First, random allocation of participants to conditions was done at the level of the class, rather than at the level of the individual. Practically, this choice was unavoidable; otherwise, children from the same class from the experimental condition could easily have discussed the experimental activities with peers from the control condition, therefore limiting the possibility to find intervention effects as well as the interpretation of findings. However, this choice lead to a nested structure of the data with children nested in classes with the independent variable (i.e. the condition assignment) varying at the class level. While we could not conduct multilevel analysis due to the low number of classes, we could rule out that effects are due to the nested structure of the data given that class-level variance of the dependent variables was non-significant (see Footnote 2). Nonetheless, future research should test the effectiveness of such interventions on a larger scale and with a larger class-level  $N$ , in order to be able to perform multilevel analysis, or, if possible, to allocate participants to the conditions at the individual level.

An additional limitation is that, whereas participants in the experimental group completed the questionnaire after the manipulation, those in the control group

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completed it before the manipulation. This choice allowed us to conduct the intervention in four sessions (including pre-test and post-test for both experimental and control group would have increased to five the total number of sessions). Additionally, this approach allowed us to administer the intervention to all children, including those in the control group. However, this choice also opens up the possibility of maturation effects, whereby the effects found in the experimental group may simply reflect a change in attitudes due to maturation and/or contextual factors in the period comprised before the beginning and end of the intervention. We believe this possibility is rather unlikely, due to the short timeframe within which the intervention occurred. This is especially true when considering that the distribution of children across grades was balanced (two classes for each grade allocated to experimental and control conditions), therefore making an interpretation based on maturation (at least, based on age) unlikely. Future studies however may rule out this possibility empirically, by adopting whenever possible an experimental pre-post test design.

A further limitation is that we did not assess existing direct contact. Although this is quite common in the imagined contact literature, nonetheless future studies should include direct contact items, in order to examine potential additive and interactive effects of direct and indirect (i.e., imagined) contact. Finally, we cannot completely rule out the role that demand characteristics could have played, although we are confident that they had minimal role in this study. First, researchers who administered the questionnaire were different from those who conducted the intervention sessions in each class. Second, direct effects of the manipulation on the two measures more closely related to the main aim of the intervention were small (reaction to exclusionary behavior) or nonsignificant (reaction to name-calling behavior),

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therefore suggesting that responses were weakly affected by the desire to meet the main study aims.

Finally, we note that, although we used a multifaceted intervention that could strengthen the classic imagined contact manipulation in this context, we did not include a baseline condition, therefore we cannot conclude that a more basic form of imagined contact intervention would not have produced similar effects. Further research is therefore needed to elucidate whether, and how, the multifaceted form of imagined contact we introduced here has positive imagined beyond standard forms of imagined contact, in this and other intergroup contexts.

### **Conclusion**

This research contributes to the literature on the effectiveness of imagined contact interventions in children. Firstly, our findings suggest that a multifaceted form of imagined contact with an outgroup member not only enhanced outgroup attitudes and contact intentions, but also supported intervening and defending outgroup victims who experience social exclusion and bullying. Secondly, inclusion of the outgroup in the self is an especially significant mediator of the effect of imagined contact. Our findings are important in understanding ways to encourage ingroup members to protect outgroup victims from social exclusion and bullying in school environments.

### Footnotes

1. Children belonged to 10 classes (see Participants section), and the independent variable (experimental vs. control condition) varied between classes. Despite the nested structure of the data (children nested in classes), we could not perform multilevel regression analysis due to the low number of classes. Nevertheless we conducted preliminary analyses to estimate the impact of the nested structure of the data. For the four dependent variables we calculated intraclass correlations (ICCs) and class-level variance. ICCs were  $\leq .046$ , indicating that less than 5% of the variance was due to the nested structure of the data, and class-level variance was not significant for any dependent variable ( $ps \geq .146$ ). The impact of class belonging on the dependent variables was thus small and nonsignificant.
2. For all analyses, results did not change when controlling for gender and grade (from grade 1 to grade 5; it was not possible to use the age score, since there were several missing data).
3. Data and material used in this study available upon request to the first author.

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Table 1. Means and standard deviations of all measures as a function of condition.

Measure	Condition		<i>t</i> -test	<i>p</i>	<i>d</i>
	Experimental	Control			
IOS	4.18 (1.18)	3.83 (1.21)	2.11	0.036	0.29
Affective empathy	3.60 (1.04)	3.20 (1.19)	2.60	0.010	0.36
Perspective-taking	3.35 (1.13)	3.26 (1.24)	0.60	0.550	0.07
Outgroup attitudes	8.22 (2.07)	7.45 (2.15)	2.69	0.008	0.36
Contact intentions	4.58 (0.56)	4.25 (0.75)	3.64	< 0.001	0.50
Helping intentions	4.65 (0.47)	4.60 (0.55)	0.75	0.456	0.10
Reaction to exclusionary behavior	4.62 (0.48)	4.44 (0.73)	2.09	0.038	0.29
Reaction to name-calling behavior	4.64 (0.46)	4.51 (0.71)	1.60	0.112	0.22

*Note.* Scores ranged from 1 to 5 for all measures, with the exception of the measure of outgroup attitudes, ranging from 0 to 10. Standard deviations are shown in parentheses.



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*Table 2. Correlations between measures.*

	1	2	3	4	5	6	7	8	9
1. Condition (1 = imagined contact, 0 = control)	-								
2. IOS	.14*	-							
3. Affective empathy	.18**	.33***	-						
4. Perspective-taking	.04	.26***	.41***	-					
5. Outgroup attitudes	.18**	.29***	.18**	.18**	-				
6. Contact intentions	.24***	.37***	.28***	.17*	.31***	-			
7. Helping intentions	.05	.36***	.21**	.13*	.14*	.53***	-		
8. Reaction to exclusionary behavior	.14*	.30***	.21**	.06	.16*	.54***	.54***	-	
9. Reaction to name-calling behavior	.11	.23***	.08	-.00	.11	.26***	.28***	.60***	-

\* $p \leq .05$ . \*\* $p \leq .01$ . \*\*\* $p \leq .001$ .

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Table 3. *Hierarchical regressions testing the impact of condition and mediators on the dependent variables.*

	Contact intentions	Helping intentions	Reaction to exclusionary behavior	Reaction to name-calling behavior
Condition (1 = imagined contact, 0 = control)	.15*	-.02	.08	.07
IOS	.26***	.33***	.24***	.21**
Affective empathy	.13*	.10	.11	-.01
Outgroup attitudes	.18**	.02	.05	.04
<i>F</i>	15.23***	8.80***	6.78***	3.36*
<i>R</i> <sup>2</sup>	.22	.14	.11	.06

*Note.* \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p \leq .001$ . Standardized regression coefficients are reported.

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Table 4. *Direct and indirect effects of the intervention on dependent variables via hypothesized mediators (2,000 bootstrap resamples).*

	Dependent variable							
	Contact intentions		Helping intentions		Reaction to exclusionary behavior		Reaction to name-calling behavior	
	95% Confidence interval	Effect (SE)	95% Confidence interval	Effect (SE)	95% Confidence interval	Effect (SE)	95% Confidence interval	Effect (SE)
<i>Mediator</i>								
IOS	.006/.135	.05 (.03)	.007/.118	.05 (.03)	.003/.137	.04 (.03)	.002/.115	.04 (.03)
Affective empathy	.003/.089	.03 (.02)	-.002/.062	.02 (.02)	-.003/.075	.02 (.02)	-.041/.035	-.00 (.02)
Outgroup attitudes	.007/.126	.04 (.03)	-.021/.037	.00 (.01)	-.022/.062	.01 (.02)	-.018/.047	.01 (.02)
<i>Residual effect of condition</i>	.034/.371	.20 (.08)	-.152/.114	-.02 (.07)	-.067/.264	.10 (.08)	-.075/.251	.09 (.08)