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Imagined contact favors humanization of individuals with intellectual disabilities: A two-wave study

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Abstract

The aim of the current study was to test the effectiveness of imagined contact – a mental simulation of a social encounter with an outgroup member – in improving humanity perceptions of individuals with intellectual disabilities (ID). A longitudinal study was conducted, examining non-disabled adults. Humanity perceptions were assessed by using uniquely human and non-uniquely human emotions. Results showed that a not fully human status was ascribed to people with intellectual disabilities. Imagined contact, however, reduced the humanity bias. Moreover, the positive influence of imagined contact was revealed also after one month, thus providing evidence of a long-term impact. Practical implications of results are discussed.

Keywords: Imagined contact; Individuals with ID; Humanity attributions; Primary and secondary emotions; longitudinal effects.

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1. Introduction

In this paper, we present a study aimed at investigating whether imagined contact (Crisp & Turner, 2012) – a mental simulation of an encounter with an outgroup member – may ameliorate humanness attributions to people with intellectual disabilities (ID).

Intellectually disabled: A stigmatized group

The participation of persons with disabilities, including those with ID, in the educational system, work, and community activities is strongly recommended by international social policies and legislations, which stress the importance of favoring the access of the disabled to all domains of public life (see, e.g., the Convention on the Rights of Persons with Disabilities, United Nations, 2006; The World Declaration on Education for All, UNESCO, 1990). Even so, individuals with ID still represent a stigmatized group, and face prejudice, negative stereotypes, and discrimination, which hinder acceptance and inclusion (see, e.g., Werner, Corrigan, Ditchman, & Sokol, 2012). People with ID are avoided, disregarded, and teased (Pratt, 2010); they are stereotyped as aggressive (Slevin & Sines, 1996; see also Crocker, Major, & Steele, 1998), and without perspectives of change (Jahoda & Markova, 2004); their skills are underestimated (Siperstein, Norins, Corbin, & Shriver, 2003). Prejudice and discrimination toward people with ID are pervasive phenomena (see, e.g., Tachibana & Watanabe, 2004; Akrami, Ekehammar, Claesson, & Sonnander, 2006; Siperstein Parker, Norins, & Widaman, 2011), generally spread across cultures (Siperstein *et al.*, 2003; Scior, 2011).

Imagined contact: A strategy for improving intergroup relations

Under these circumstances, how is it possible to increment prejudice reduction toward persons with ID, thus favoring their social inclusion and well-being? One of the strategies most frequently investigated in social psychological research and implemented in practical interventions, is intergroup contact (Allport, 1954; Pettigrew, 1998). According to Allport's original formulation, repeated interactions between members of different groups, under favorable conditions (cooperation, equal status, institutional support, and common goals), can reduce prejudice and promote positive attitudes toward the outgroup. Recent meta-analytic studies have well-documented its effectiveness, by considering many target groups, different contact settings, and different cultures. In addition, contact appears to be

effective also in the absence of the optimal conditions singled out by Allport (see Pettigrew & Tropp, 2006; Pettigrew, Tropp, Wagner, & Christ, 2011). Intergroup contact theory has been further investigated by Pettigrew (1998) and Brown and Hewstone (2005), and processes underlying the effects of contact on prejudice reduction have been highlighted (see, e.g., Pettigrew & Tropp, 2008). However, only a few studies have analyzed intergroup contact as an intervention to improve attitudes toward people with ID; in general, they indicate a positive relationship between contact and more favorable attitudes (see McManus, Feyes, & Saucier, 2010; see also the review by Scior, 2011).

Research and theory on contact have been broadened to include new forms of intergroup encounter that go beyond the face-to-face interactions between members of different groups. For instance, Wright, Aron, McLaughlin-Volpe, and Ropp (1997) proposed the extended contact hypothesis, according to which merely knowing that an ingroup member has a friendly relationship with an outgroup member improves the attitudes toward the outgroup. More recently, another form of intergroup contact - imagined contact - has been proposed by Crisp and Turner (2009): it consists in a mentally simulated interaction with an unknown member of the outgroup.

Research has shown that simply imagining a positive encounter with an outgroup member can have favorable effects on many aspects of the intergroup relationship (see Crisp & Turner, 2012). Imagined contact represents a powerful tool to improve intergroup relationships, especially when the opportunities to meet outgroup members are scarce, or when encounters are likely to cause high levels of uncertainty and anxiety. Mentally simulated contact can, therefore, constitute a form of pre-contact, particularly useful for getting people prepared for actual interactions with outgroup members. Actually, imagined positive encounters contribute to developing a mental script – a contact mindset – associated with favorable feelings; this mental script can promote the intentions to actually meet members of the target outgroup. In their integrated model, Crisp and Turner detailed key principles, moderator variables, and mediation processes of the effects of imagined contact on the outcome variables. One crucial mechanism is anxiety reduction, a common mediator in literature regarding contact (see Pettigrew & Tropp, 2006, 2008; see also Swart, Hewstone, Christ, & Voci, 2011). A second basic mediator is the availability of a positive mental script channeling future interactions with outgroup members.

Concerning the beneficial effects of imagined contact, many studies have demonstrated that mental imagery of contact with outgroup members stimulates not only more tolerance at an attitudinal level, but also stronger intentions to positively interact with the outgroup. In particular, imagined contact has been found to increase: positive explicit (e.g., Turner, Crisp, & Lambert, 2007) and implicit attitudes (Turner & Crisp, 2010, Vezzali, Capozza, Giovannini, & Stathi, 2012), contact self-efficacy (Stathi, Crisp, & Hogg, 2011), intentions to engage in future contact (Husnu & Crisp, 2010), behavioral approach tendencies (Turner, West, & Christie, 2013), and positive nonverbal behaviors (Turner & West, 2012). Interestingly, and relevant to the present study, imagined contact can improve humanity perceptions (Vezzali, Capozza, Stathi, & Giovannini, 2012).

A variety of intergroup relations have been examined, such as: young versus old people, straight versus gay men, Muslims versus non-Muslims, ethnic majorities versus minorities, normal-weight versus obese people (see Crisp & Turner, 2012). This suggests again the effectiveness of the imagined contact strategy for promoting harmony between groups, as well as its applicability to many intergroup settings. It is worth noting that imagined contact can have a positive impact also in ameliorating attitudes and beliefs toward highly stigmatized groups, such as people with schizophrenia (West, Holmes, & Hewstone, 2011; Stathi, Tsantila, & Crisp, 2012), a group stereotyped as dangerous, threatening, and unpredictable (see Angermeyer & Matschinger, 2005).

The typical experimental task, in the imagined contact paradigm, consists in asking participants to engage for a few minutes in a mentally simulated positive encounter with an unknown member of the target outgroup. A crucial element in the instruction set is the positivity of the interaction: participants are asked to imagine themselves interacting with the target person in a positive, relaxed, and comfortable way. In order to strengthen the manipulation, after the mental simulation, participants are required to write a description of the imagined scenario. In the control condition, instructions ask participants to imagine, and then describe, a pleasant outdoor scene.

Several factors in the instructions can enhance the effects of imagined contact, for instance, the task of imagining a scenario rich in details (degree of elaboration; Husnu & Crisp, 2010), or that of closing eyes during the mental simulation (Husnu & Crisp, 2011). In addition, taking the perspective of a third person who, as a spectator, watches the encounter may lead to infer, from attitudes and emotions experienced during the interaction, more abstract self-traits, such as, being non-prejudiced or prosocial (Crisp &

Husnu, 2011). Finally, imagining the interaction partner as a typical outgroup member may favor the generalization of the positive contact effects from the partner to the whole outgroup (Stathi *et al.*, 2011).

As an intervention strategy, imagined contact is easy to implement, and suitable for different intergroup settings. It may promote more harmonious intergroup relationships in educational and organizational contexts, also when the outgroup is a stigmatized group (Crisp & Turner, 2009, 2012).

2. Aims and hypotheses

The main aim of the current study was to explore whether imagined contact can enhance humanization of individuals with ID, and whether this effect can last a certain amount of time. Initial evidence concerning the disabled as a target is offered by Cameron, Rutland, Turner, Holman-Nicolas and Powell (2011). They showed that, among young children (5 to 10 years), imagined contact reduces prejudice against physically disabled peers. However, as far as we know, people with ID have never been considered in imagined contact research. We suggest that this form of contact can be a suitable intervention strategy, which can prepare the non disabled to encounter individuals with ID when they enter a class, a working group, or a leisure setting.

Regarding the outcome of imagined contact, we decided to consider humanness attributions. Current research in social psychology has well documented a subtle humanity bias, namely, the tendency to ascribe a lower human status to the outgroup than the ingroup. In their pioneering work, Leyens and colleagues (Leyens, Demoulin, Vaes, Gaunt, & Paladino, 2007) introduced the paradigm of primary/secondary emotions. Secondary emotions (e.g., hope, remorse) are unique to human beings; primary emotions, in contrast (e.g., pleasure, anger), are shared by humans and animals. Leyens *et al.* (2007) showed that people tend to ascribe more secondary emotions to the ingroup than the outgroup, while primary emotions are not differently assigned to the two groups. Subsequent empirical evidence has demonstrated that this effect, along with the tendency to perceive the outgroup in animalistic or mechanistic terms (see, e.g., Capozza, Boccato, Andrighetto, & Falvo, 2009; Loughnan, Haslam, & Kashima, 2009; Capozza, Andrighetto, Di Bernardo, & Falvo, 2012), represents a pervasive bias that may strongly damage the relationships between groups. Goff, Eberhardt, Williams, and Jackson (2008, Study 5), for instance, found that the activation in White participants of the Black/ape

cultural association enhanced the justification of violence against Black targets. Similarly, Greitemeyer and McLatchie (2011) showed that the denial of humanness to others can lead to an increase in aggressive behaviors (see also Waytz & Epley, 2012); dehumanization can even enhance the willingness to torture prisoners of war (Viki, Osgood, & Phillips, 2013).

Some studies have analyzed whether direct intergroup contact and extended contact can reduce the humanity bias (e.g., Brown, Eller, Leeds, & Stace, 2007; Capozza, Falvo, Favara, & Trifiletti, 2013; Capozza, Trifiletti, Vezzali, & Favara, 2013). However, so far only one study has investigated the effects of imagined contact on humanity attributions (Vezzali, Capozza, Stathi, *et al.*, 2012). In the present study, we test the hypothesis that imagining a positive encounter with an individual with ID can ameliorate the humanity perceptions of the entire category of mentally disabled. We chose to analyze humanity attributions, rather than other forms of bias, because studies investigating stigma toward intellectual disability have mostly focused on attitudes and stereotypes (see e.g., Scior, 2011; Werner *et al*., 2012). Furthermore, attributions of 'humanity' are particularly relevant when dealing with this social category, because people with intellectual disabilities have been frequently denigrated over the past through animalistic rhetoric and metaphors comparing them to animals (see Haslam, 2006). In this study, we also test whether the positive effects of imagined contact may last in time. Long term effects would provide strong support to the efficacy of this intervention strategy.

Non-disabled adults were examined. A longitudinal experimental design was used: participants were examined twice with a one-month interval. The imagined contact versus control manipulation was introduced in the questionnaire administered at Time 1 (T1). The dependent variable, measured both at T1 and T2, consisted in the attribution of primary and secondary emotions to individuals with ID.

The hypotheses are the following.

Hypothesis 1. A not fully human status should be ascribed to individuals with ID, namely they should be assigned more non-uniquely human (primary) than uniquely human (secondary) emotions.[5]

[5] It is worthwhile to note that generally people describe one's group or category more in terms of secondary than primary emotions, namely more in terms of the characteristics which are distinctive of the human species than in terms of the characteristics that humans share with animals (see, e.g., Cortes, Demoulin, Rodriguez, Rodriguez, & Leyens, 2005, Study 1; Demoulin et al., 2004; Eyssel & Ribas, 2012; Leyens et al., 2001, Studies 1 and 2; Whol, Hornsey, & Bennett, 2012, Studies 1 and 5). This greater attribution of uniquely than non-uniquely human features may not concern the outgroups.

Hypothesis 2. The tendency to deny a fully human status to individuals with ID should be reduced by imagined contact, namely the greater attribution of primary versus secondary emotions should be lower in the imagined contact condition than in the control condition.

Hypothesis 3. The beneficial effects of imagined contact should persist at T2.

3. Method

Participants and procedure

Participants were 164 adults, mostly living in Northern Italy (96.3%). Females were 109; the age range was between 18 and 65 years (M = 31.49, SD = 13.71; age data were missing for two participants). Eighty-two participants were randomly assigned to the imagined contact condition, and 82 to the control condition.

Participants, individually examined, were informed that they would have to answer a first questionnaire, which included an imagination task. After a month, they would have to fill out a second questionnaire. Participants were told that the aim of the study was to analyze intergroup attitudes; detailed information about the research would have been provided at the end of the experimental session at T2. Confidentiality of responses was guaranteed. After filling in the informed consent form, participants ran through the mental simulation task.

Experimental manipulation (T1 Questionnaire). Participants in the imagined contact condition were instructed as follows: "We ask you to imagine, for few minutes, that you meet for the first time a person with intellectual disability. Imagine that the interaction is positive and pleasant. During the encounter you notice some pleasant, interesting, and unexpected aspects about the person. When you are imagining, think in detail about the scenario in which the encounter occurs. We ask you also to imagine the scene by taking a third-person perspective; that is, you see yourself and the disabled person as in a movie. During the imagination task, try to keep your eyes closed. Please write in the following lines the imagined encounter, reporting as many details as possible." In the control condition, instructions were: "We ask you to imagine, for few minutes, an outdoor landscape. Try to imagine the major aspects of the scene (e.g., is it a beach, a forest, are there trees, hills, what is on the horizon). We ask you to complete the imagination task keeping your eyes closed. Please write in the following lines the imagined scene, reporting as many details as possible."

Manipulation check (T1 Questionnaire). As a check of the experimental manipulation, we tested whether concepts associated with ID were more accessible in the imagined contact than in the control condition. A word-fragment completion task was applied that required participants to produce a meaningful word from each fragment proposed (e.g., *d w n*). Seven word-fragments were presented in a list. For each of them, participants were instructed to add as many letters as they needed to form a meaningful word. We expected that words semantically linked to disability (e.g., *d w n* [down]; *d b e* [disabled]; *h c p* [handicapped]) would be more frequently evoked in the imagined contact condition than control condition. As a further manipulation check, we measured whether the imagined interaction had a positive tone. Four items, used only in the imagined contact condition, asked participants whether they had perceived the imagined interaction as: a) positive, and b) pleasant; whether, during the encounter, they had perceived: c) interesting, and d) unexpected aspects about the imagined target. A 7-step scale was used, anchored by *definitely false* (1) and *definitely true* (7) with 4 as the midpoint (*neither true nor false*). The four items were averaged to form a reliable composite score ($\alpha = .73$).

Dependent measure: Humanity attributions (T1 and T2 Questionnaires). In order to assess the humanity attributions, we used an emotion-based measure (Demoulin, Leyens, Paladino, Rodriguez, Rodriguez, & Dovidio, 2004; Leyens *et al.,* 2007). We used three positive (hope, pride, admiration) and three negative (remorse, shame, resentment) uniquely human emotions, and three positive (pleasure, excitement, surprise) and three negative (anger, pain, sadness) non-uniquely human emotions. The 12 emotions were randomly presented in a list including also 14 filler traits (e.g., shyness, generosity, cordiality). Participants were instructed to choose the items that better described individuals with ID; they could choose as many items as they wished. For each participant, two scores were obtained, corresponding to the number of primary and secondary emotions ascribed to individuals with ID. Two scores were obtained for T1 and two for T2.

Prior contact (T1 Questionnaire). Finally, in the T1 questionnaire participants were asked demographic information; they also answered an item measuring the quantity of their contact with members of the target category. Specifically, the item was: "How much contact do you have with people with intellectual disabilities?"; the 6-step scale was anchored by *no contact* (1) and *very frequent contact* (6). *Very little* (2), *little* (3), *some contact* (4), *frequent contact* (5) were the other steps of the scale.

4. Results

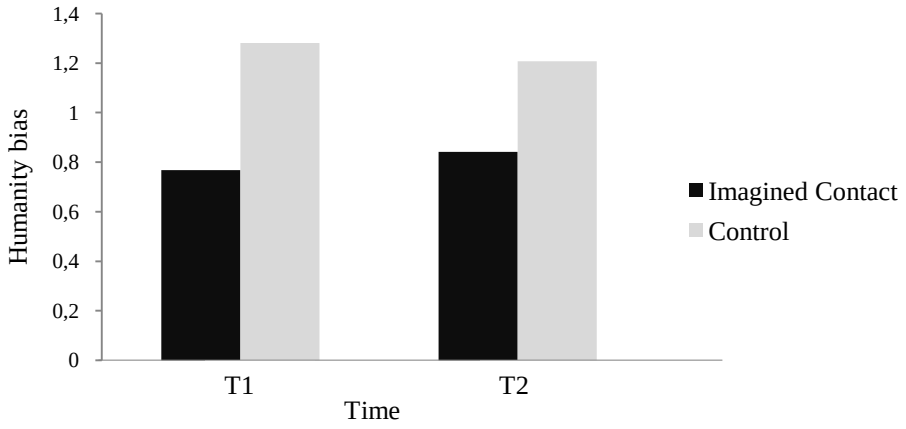
Manipulation check. In the word-fragment completion task, it was found that completions related to ID were higher in the imagined contact than control condition: $M = 2.38$ ($SD = .84$) versus $M = 1.65$ ($SD = .91$), $t\ (162) = 5.36$, $p < .001$, respectively. Therefore, intellectual disability was more cognitively accessible to participants instructed to engage in the imagined encounter compared to participants who imagined the outdoor scene.

One of the key aspects of the experimental task in the imagined contact condition was the perceived positivity of the interaction with the outgroup member. Results showed that the perceived quality of the imagined encounter was high: $M = 5.65$ ($SD = .94$), the mean being significantly different from the midpoint of the scale, $t\ (81) = 15.99$, $p < .001$. Thus, in the imagined contact condition, participants viewed the interaction as positive and pleasant, and recognized interesting and unexpected characteristics in the imagined partner (for the four items separately, mean scores ranged from 5.32 to 5.87, all being different from 4, ts ≥ 8.89, ps $< .001$).

Prior contact. As a preliminary analysis we checked whether quantity of prior contact with people with ID was equivalent for participants assigned to the two conditions. Mean score for the single-item measure was $M = 2.89$ ($SD = 1.51$), in the imagined contact condition, and $M = 3.12$ ($SD = 1.49$), in the control condition. The two means were not different, $t < 1$, and prior contact with people with ID was rather infrequent for both groups of participants.

Effects of imagined contact on humanity attributions. For each participant, at both waves in each condition, an index of humanity bias was created corresponding to the difference between the number of primary emotions and the number of secondary emotions assigned to the target; the higher the positive score, the more people with ID are perceived more in terms of non-uniquely human than uniquely human attributes. The mean for the control condition was $M = 1.28$ ($SD = 1.66$) at T1, and $M = 1.21$ ($SD = 1.60$) at T2. The mean for the imagined contact condition was $M = .77$ ($SD = 1.46$) at T1, and $M = .84$ ($SD = 1.49$) at T2 (see Figure 1). The four means significantly differed from 0, ts > 4.77, ps $< .001$, indicating that more primary than secondary emotions were assigned to people with ID. This finding supports Hypothesis 1: in both conditions, at both waves, a tendency to assign a not fully human status to disabled persons was present.

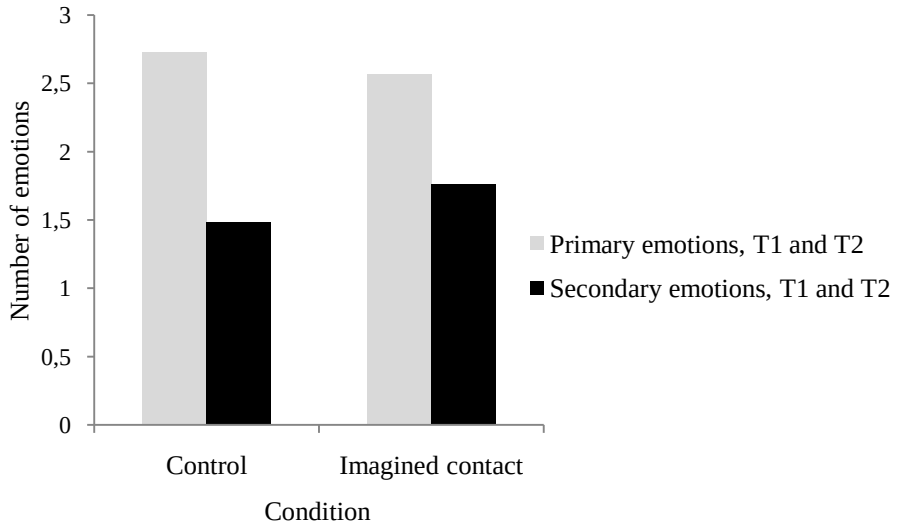
Figure 1 - *Effects of imagined contact on the humanity bias at Time 1 and Time 2.*



Note. Higher scores correspond to a greater attribution of primary than secondary emotions to individuals with ID.

In order to test the effect of imagined contact on the reduction of the humanity bias, a condition (imagined contact vs. control) x time (T1 vs. T2) ANOVA, with repeated measures on the time factor, was conducted. The main effect of condition was significant, F (1,162) = 4.60, p = .03, η_p^2 = .03: the humanity bias was lower in the imagined contact, M = .80 (SD = 1.20), than in the control condition, M = 1.24 (SD = 1.41). As shown in Figure 1, both at T1 and at T2, the differential attribution of primary versus secondary emotions was lower in the imagined contact condition compared to the control condition. This finding supports Hypothesis 2. Thus, imagined contact was effective in reducing the tendency to deny a fully human status to people with ID. Neither the main effect of time nor the Time x Condition interaction were significant, Fs < 1, these findings indicating that the positive effects of the imagined encounter lasted for about one month, and were not dissipated once out of the experimental setting. Thus, also Hypothesis 3 was confirmed. In Figure 2, we report the findings distinguishing primary from secondary emotions, and collapsing the time factor. From the figure it appears that, in the imagined contact condition, there was a tendency to ascribe less primary emotions and more secondary emotions to individuals with disabilities compared to the control condition.

Figure 2 - *Number of primary and secondary emotions (T1 and T2) ascribed to individuals with ID, as a function of the experimental condition.*



Note. The higher the score the higher the number of emotions assigned to individuals with ID.

5. Discussion

The aim of the present study was to investigate whether imagined contact (Crisp & Turner, 2009) can be effectively implemented to improve the perception of people with ID. In particular, we aimed at testing the beneficial effects of imagined contact on humanity attributions. A sample of Italian adults was examined in a longitudinal experimental study (one-month interval between the two waves). The task of imagined contact at T1 required participants to mentally simulate a positive encounter with an individual with ID; in the control condition, the task was to imagine a pleasant outdoor scene. To measure the humanity bias, we calculated the difference between the number of primary and secondary emotions ascribed to the target category. Findings revealed a general tendency to assign a not fully human status to people with ID, who are perceived more in terms of non-uniquely human than uniquely human emotions. These humanity attributions (see also Capozza, Di Bernardo, Falvo, Vianello, & Calò, 2013) may be one of the factors which lead to the stigma experienced in society by individuals with ID (Scior, 2011; Werner *et al.*, 2012). More notably, we found that the tendency to deny the outgroup a fully human status can be reduced by the mental simulation of a pleasant interaction with an outgroup

member, the positive effect of contact lasting at least one month after the imagination task. It is worth noting how the present study shows, for the first time, a one-month longitudinal effect of this form of contact. In the study by Vezzali, Capozza, Stathi *et al.* (2012), based on an intervention with a child sample, a shorter period effect was found. Our study, therefore, extends previous longitudinal results to an adult population in which humanity perceptions are presumably more difficult to change.

Our results have practical implications. Imagined contact can be easily implemented to equip people with more positive perceptions of individuals with ID for future encounters in schools, work settings, and health care institutions. Therefore, social policies designed to favor the inclusion of people with ID in community activities could fruitfully benefit from interventions based on imagined contact. The need for effective programs emerges, for instance, from a study (Siperstein, Parker, Norins, & Widaman, 2007) in which the attitudes of US students (middle school-aged) toward the inclusion of their ID peers in regular classrooms were examined. Results showed that, despite legislation and a long period of social policies, US students did not support the inclusion of students with ID and tended to avoid interactions with their intellectually impaired peers. Similar results have been found by Siperstein *et al.* (2011) among Chinese students.

Likewise for mentally ill people, direct contact with individuals with ID may cause high levels of anxiety and uncertainty. Thus, interventions based on imagined contact, rather than face-to-face contact, can represent a first step in stigma reduction, just because imagined contact creates a positive contact mindset which favors future interactions. In their research, Stathi et al. (2012) found that the mental simulation of a positive encounter with a schizophrenic person reduced negative stereotypes toward the whole group while enhancing intentions for actual encounters; these effects were mediated by reduced intergroup anxiety.

Research on direct and extended contact has widely demonstrated the crucial role played by the affective factors in reducing intergroup prejudice (Tropp & Pettigrew, 2005; Pettigrew & Tropp, 2008; see also Capozza, Falvo *et al.*, 2013). Affective factors are reliable mediators also when imagined contact is used (for anxiety, see, e.g., Hunsu & Crisp, 2010; Turner *et al.*, 2013; for trust, see Turner *et al.* 2013). In the study in which humanity attributions were used as the outcome (Vezzali, Capozza, Stathi *et al.*, 2012), the effects of imagined contact were mediated by outgroup trust. Future research should test whether also reduced anxiety and enhanced empathy may explain the relationship between imagined contact and

outgroup humanization. Which emotions are influential mediators likely depends on the target outgroup.

Another task of future research is to assess whether imagined contact can be successfully used to increase the attribution of uniquely human features (e.g., secondary emotions) to people with ID. As suggested by Capozza, Di Bernardo *et al*. (2013), the humanization of individuals with ID could be favored by the implementation of an imagined contact condition, in which the imagined person with ID feels secondary emotions. This strategy could generate an association between people with ID and uniquely human characteristics (for how to generate humanizing sentiments toward disabled persons, see also Haslam, 2006, p. 253).

A limitation of the study is that only one operationalization of the humanity attributions has been used. In future research, findings should be replicated by using other measures, for instance, trait-based measures or implicit tasks such as an adaptation of the Implicit Association Test (IAT; Greenwald, Nosek, & Banaji, 2003). Another limitation is that we used as target the general category of individuals with ID. Future studies should explore whether imagined contact is differently effective when targets have different degrees of intellectual impairment.

Humanization of individuals with ID may favor cooperation with these persons, reduce discrimination against them, and lead to more spontaneous approach tendencies (Capozza, Di Bernardo *et al*., 2013), which can pave the way toward friendly and cooperative encounters.

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