Reducing implicit prejudice towards migrants in fifth grade pupils: efficacy of a multi-faceted school-based program

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Abstract

This study evaluated the impact of a school-based program designed to reduce implicit prejudice towards migrants in fifth-grade school children. The program used empathy and perspective taking and direct and indirect contact as strategies to reduce ethnic prejudice. Multiple activities were used, including drawings by migrant children as instruments to promote inclusive behaviors. One hundred and five students were divided into two groups (control, experimental), and the children in each completed the Child-IAT (Implicit Association Test) before and after the program, to measure their implicit prejudice. Only the experimental group participated in the program. The results showed a significant reduction in the implicit prejudice in the experimental group after the educational program, but not in the control group. The results are discussed considering the practical implications of such a school program.

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1 Theoretical framework

1.1 Ethnic prejudices in children

Migration is a worldwide and urgent phenomenon. In 2019, 79.5 million people were forced to leave their country, and 25.9 million of these people were recognized as refugees (UNHCR, 2019). Between January and December 2020, 94,800 refugees and migrants (18.5% of whom were children) arrived in Europe (UNICEF, 2020).

Migration is linked to prejudice and discrimination against immigrants (e.g., Stephan et al., 1999; Voci & Hewstone, 2003). It is certainly a recurring experience that is seen on television and read about in newspapers or through social media, with episodes characterized by aggressive and/or illegal actions against people who belong to groups that are stigmatized, such as migrants. Such expressions of prejudice are relatively widespread, and are found at all levels of society, from the world of work, to the school (Vezzali & Giovannini, 2012). For this reason, it is important to recognize the role of ethnic prejudices in intergroup relationships, and to reduce these in order to build inclusive communities and an inclusive society, beginning from childhood. In this framework, schools are considered to be an ideal context to promote equality and respect for human rights.

Exploration of processes that lead to the development of prejudices is the starting point: from their early years of life, children are influenced by racial, ethnic, gender, and age information, which is acquired from media, family, and peers (Bigler, 1999). This information shapes their categorization processes and their own identity (Houlette et al., 2004; Phinney, Ferguson & Tate, 1997; Ruble et al., 2006), and can result in bias between different categories already in preschool and primary school children (Baron & Banaji, 2006; Bigler & Liben, 2007; Dessel, 2010). Specifically, ethnic stereotypes and prejudices are involved in children's attitudes and behaviors when they relate to others (Brown, 2010; Dovidio et al., 2010), and their development and reduction are multidimensional and multidetermined processes (Levy et al., 2016).

Recent studies have differentiated between implicit and explicit ethnic prejudices. As defined by Wilson, Lindsey, and Schooler (2000), implicit racial prejudices refer to attitudes about a group that are activated automatically when an individual thinks about that (racial) group. Many studies have shown that it is not easy to change these attitudes, and often the individuals are not even aware of their nature (e.g., Degner & Wentura, 2010; Pirchio et al., 2018; Rutland, 1999; Schneider & Shiffrin, 1977; Vezzali & Giovannini, 2012). Explicit prejudices, in contrast, are more easily modified, and they are often moderated by social desirability; the individuals are aware of their racial attitudes and are able to control their expression of them (e.g., Dovidio et al., 2002; Leone, Chirumbolo & Aiello, 2006; Pettigrew & Meertens, 1995; Wilson et al., 2000).

Therefore, implicit prejudices in children appear to be a significant issue for investigation, with the aim to reduce them and to foster awareness among children of fundamental human rights, cultural differences, social inclusion, and citizenship.

1.2 Strategies and school-based programs to reduce prejudice

According to the literature, intergroup contact appears to be one of the most effective strategies to reduce prejudice (e.g., Allport, 1954; Brown & Hewstone, 2005; Dovidio, Eller & Hewstone, 2011; Vezzali et al., 2012b; see also meta-analysis by Lemmer and Wagner, 2015). To have positive effects, intergroup contact has to be structured, taking into account a set of facilitating factors: equal status, cooperative interactions, common goals, and support of the authorities (Allport, 1954). From the perspective of contact theory, the contact characterized by participation in meaningful activities can affect children's racial attitudes and reduce prejudice (McKown, 2005).

Pettigrew and Tropp (2008) carried out a meta-analysis of more than 500 studies, where they investigated the three most-studied mediators of intergroup contact: enhancing knowledge about the outgroup; reducing anxiety about intergroup contact; and increasing empathy and perspective taking. Their results revealed that anxiety reduction, empathy, and perspective taking are the major mediators - compared to knowledge - recognizing the role of affective variables over cognitive ones.

Even with children, empathy is considered to be an effective strategy to reduce negative attitudes towards outgroups (e.g., Aboud & Levy, 2000; Rutland & Killen, 2015) and to value the welfare of others (Eisenberg & Fabes, 1990). Empathy «provides lenses through which children and adolescents experience the intergroup environment» (Miklikowska, 2018, p. 705), to facilitate children's understanding of nondiscriminatory norms (Rutland, Cameron, Milne, & McGeorge, 2005; Rutland & Killen, 2015; Turner & Cameron, 2016). Similarly, perspective taking has been demonstrated to be effective with children for the reduction of automatic expressions of racial bias (Todd et al., 2011), and to be related to greater racial tolerance (e.g., Aboud, 1988; Nesdale et al., 2005; Quintana et al., 1999). As stated by Miklikowska (2018), perspective taking influences the processes involved in the representations of outgroup members: taking the perspective of a member of another group can even change well-crystallized intergroup attitudes (Finlay & Stephan, 2000; Vescio et al., 2003).

Although intergroup contact is one of the most successful approaches to improve attitudes between groups, it cannot be applied when there is no opportunity for such face-to-face interactions, and it might be difficult and costly to put into practice (Paluck & Green, 2009). To overcome these obstacles, researchers have been focused on the effectiveness of indirect contact, with different forms defined, particularly in terms of their underlying processes (e.g., Dovidio, Eller & Hewstone, 2011; Turner et al., 2007; Vezzali et al., 2014). One of these forms is 'imagined contact', which involves simulated interactions between the subject and a member of an outgroup category. Mental simulation of a positive contact can promote more comfortable and less apprehensive feelings about the prospect of future contact with that group, which should reduce negative outgroup attitudes and anxiety associated with intergroup contact (Crisp & Turner, 2009).

Schools represents the ideal context for the reduction of ethnic prejudice, and indeed, they should be the place in which to build democratic and active citizenship, refuse assimilation, and value the power of interculturalism in the

recognition of others (Fiorucci, 2015; Gabrielli et al., 2019): «an intercultural approach to education includes all the communicative and relational modalities occurring when different cultures meet (…) implementing constructive learning processes based on active methodologies» (Passiatore et al., 2019, p. 216). The inclusive intercultural approach can determine positive outcomes both for migrants - acculturation - and natives - reducing prejudices, so for societal development (Passiatore et al., 2019).

Therefore, it is important to determine whether such strategies are effective through systematic evaluation of interventions at schools that are designed to improve positive outgroup attitudes through empathy, perspective taking, and contact (e.g., Birtel et al., 2019; Taylor & Glen, 2019; Turner & Brown, 2008).

Meta-analyses have provided converging evidence that interventions can contribute meaningfully to the reduction of outgroup bias between groups, to indicate which variables appear to best-improve the efficacy of any intervention. Among the studies based on meta-analyses, there were the more recent ones by Beelmann and Heinemann (2014) and Ulger and colleagues (2018), which reached similar results, at least in part. Beelmann and Heinemann (2014) evaluated the effectiveness of 122 structured interventions designed for children and adolescents to promote positive intergroup attitudes and prevent prejudice. More specifically, Ulger and colleagues (2018) explored the effectiveness of 50 intervention programs that were performed in schools. The results from both of these studies showed that intergroup contact, empathy, and perspective taking are the most promising components of such programs; in contrast, programs that use only group discussions and printed materials yielded fewer benefits. Moreover, programs that involve multiple strategies are highly effective (Beelmann & Heinemann, 2014; Ulger et al., 2018), as are interventions that involve multiple sessions rather than one-shot interventions, and one-to-one interventions rather than those involving a school class as a whole (Ulger et al., 2018). The age of the school children appeared to be another moderator for in-school program efficacy: interventions are particularly more effective for children of middle and high school age and adolescents (i.e., 11–18 years old) than for children under 8 years old, due to their levels of socio-cognitive development (Ulger et al., 2018). In addition, Ulger and colleagues showed that interventions conducted by researchers are more effective than teacher-led interventions, probably on the basis that teachers are less familiar with the processes of implementation fidelity and delivery standardization (Grapin et al., 2019; Gresham, 2017; Stains & Vickrey, 2017). However, interventions actively led by trained teachers, students or researchers yield significantly greater benefits with respect to those led by untrained teachers (Beelmann & Heinemann, 2014).

Although many studies have been carried out, some limitations have emerged. Among these, there are the measures of intergroup attitude; i.e., how to measure prejudice. Beelmann and Heinemann (2014) recommended the use of age-appropriate instruments, with indirect and implicit measures to control social desirability. On the other hand, Ulger and colleagues (2018) indicated that it is important to continue the implementation of in-school interventions and their evaluation to find reliable principles for the reduction of prejudice in school children.

2 The present study

2.1 Research aims

As highlighted above, schools are the context in which to implement programs for the reduction of prejudice and discrimination towards minority groups, and in particular migrants, who are increasingly present in today's society. Italian legislation provides for the reduction of discrimination that can create group conflict, and the promotion of interculturalism that involves all school children and adolescents, native or not, with the responsibility for this process assigned to school teachers (MPI, 2007; MIUR, 2012, 2014).

The current study was designed to determine the efficacy of an educational program for primary school children for the reduction of ethnic prejudice towards a minority group: migrants. The educational program was specifically created on the basis of the social psychology literature and the results of previous research, including meta-analyses (Aboud et al., 2012; Beelmann & Heinemann, 2014; Ulger et al., 2018), which have provided considerable insight into the characteristics of effective interventions for prejudice reduction.

First, the program combined different strategies systematically (Beelmann & Heinemann, 2014; Ulger et al., 2018), based on direct and indirect contact, empathy, and perspective taking (e.g., Birtel et al., 2019; Taylor & Glen, 2019; Turner & Brown, 2008). To overcome the limitations of one-shot or short interventions (Ulger et al., 2018), the program created was long: it was structured as seven lessons carried out over about 2 months. In addition, the program involved all of the children in the classes and was organized as part of the school routine and the educational practices, to take maximum advantage from the limited availability of time and trainers (Ulger et al., 2018). Finally, to ensure compliance with the program and promote its effectiveness (Ulger et al., 2018), cooperation between researchers and teachers was maintained in all of the study phases, to guarantee an intervention that was theoretically driven, practically linked to the work context, and standardized (Cameron & Rutland, 2016). Thus, the teachers who led the in-school program were part of the research group, and they carried out the intervention following a standardized protocol.

To determine the effectiveness of the educational program, we measured implicit prejudice instead of explicit prejudice, although this has seldom been used for evaluation purposes. The implicit prejudice measure is not affected by social desirability, because children do not understand that they are responding to items based on their racial attitudes, and they cannot control their answers in line with social norms (Levy et al., 2016). Moreover, studies on prejudice development have shown reductions in explicit prejudice at 8 to 10 years of age, while this has not been shown for implicit prejudice (Birtel et al., 2019). Thus, we investigated 10-year-old pupils in a primary school. This also took into consideration that at this age they had reached a level of socio-cognitive development that allows them to observe other people's individual characteristics and to acquire the ability to perceive similarities among members of different groups (Ulger et al., 2018).

In the selection of the activities and materials, we decided to use drawings through which the children could visually represent their thoughts and feelings and learn about other subjects, which thus represents an easy way to investigate social information (Brook, 2009). Furthermore, drawing is considered to be an enjoyable activity in which the children are actively involved (Birtel et al., 2019). For these reasons, we cooperated with the *Yesterday–Today–Tomorrow (YTT) Association*[1], which has created a visual language collection from refugee camps, as drawings produced by migrants about their past experience (Yesterday), their current life (Today), and the future they envision (Tomorrow).

2.2 The YTT school program

The educational program had the following multiple aims: to stimulate awareness of the living conditions of migrants and refugees; to promote deconstruction of prejudice and reduction of discrimination practices; and to foster awareness among the school children of fundamental human rights, and of cultural differences, inclusion, and citizenship. For the methodological approach, the YTT program uses student-centered strategies and an active learning approach, which are designed to activate emotive and cognitive empathy and perspective taking, and to promote anti-discrimination practices. By fostering the concepts of identity and ethnic differences, along with social comprehension, the program creates a contrast between the children's own experiences and those of migrants, to stimulate a more profound understanding of the minority experience. To create this contrast, the YTT visual language was used in the first three lessons, with the children asked first to draw their own Yesterday, Today, and Tomorrow. They were then asked to draw what might be their Yesterday, Today, and Tomorrow if they were a migrant child. They then compared their drawings with the YTT drawings made by migrant children of the same age. Therefore, through their reflections on the differences between their own experiences, their idea of a migrant's experiences, and an actual migrant's experiences, the children were able to reach emotional comprehension of the migratory phenomena.

The following two lessons were focused on imagined indirect contact: the children were asked to write an interview that might be administered to a familiar migrant about his migratory experience. Indirect contact appears to be important as a preparatory strategy that encourages people to seek real contact, to help them

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[1] The Yesterday–Today–Tomorrow (YTT) Association is an independent educational and humanitarian nonprofit organization that since 2016 has collaborated with thousands of refugees (of more than 50 nationalities, aged from 3 to 70 years old) in over 40 camps and squats across Europe and North Africa. The migrants receive three sheets of paper and colored pens, and are asked to draw three sketches: one of their life before, as Yesterday; one of their current life, as Today; and one of their imagined future life, as Tomorrow. These drawings have been collected in a database, and are defined as the YTT visual language, an emotional language that speaks logically and directly to the audience. Through drawing, people can more clearly express their thoughts and feelings, independent of dialect, nationality, or education (Arizpe, Colomer, and Martínez-Roldán, 2014). Thus, migrants can leave their own trace, through the creation of their own contemporary culture and voice, while simultaneously losing all traceability of their inherited culture.

to overcome any initial inhibitions that might affect the intergroup interactions and future contact (Vezzali et al., 2012a, 2012b). Some of the children succeeded in conducting the interview with migrants living in Italy (e.g., shopkeepers, neighbors), thus turning the indirect contact into direct contact, while others conducted the interview with Italians (often family members) who had moved from the south to the north of Italy, or who had moved from the countryside into the city. This activity stimulated a discussion about the reasons for migration, the different experiences, and the acceptance and hospitality in the new place. It also allowed a focus on Italian migratory history and background, to analyze experiences near to the children's reality, compared to the refugee reality.

In the next lesson, the children were involved in three activities that were focused on their identities. The first activity referred to the *Who are you?* approach by Kuhn and McPartland (1954), which allowed the children to identify their identity aspects, including their personal qualities and characteristics (i.e., their personal identity), and their membership of social groups (i.e., their social identity). In the second activity, the children were asked to imagine giving up some of their identity aspects that they previously indicated. Then they were encouraged to reflect on the feelings that this loss had created, and to compare their feelings with those that a migrant might experience, for example, in changing their name, abandoning their job, or leaving their family. In the third activity, the children were asked to imagine which resources (as materials or personal traits) they would take with them that would help them on a long-trip. Then they discussed which resources a migrant might take on their migration that would help them in their new life.

The last lesson involved direct contact: young migrants (19–26 years old) were invited into the classrooms to share their histories and experiences with the children. During the meetings they showed their own YTT drawings and answered questions from the children's interviews. They then involved the whole class in some proposed activities from their own countries (e.g., stories, songs).

3 Methods

3.1 Participants and design

The sample consisted of 105 fifth grade children from six primary school classrooms in Rome (48 females, 57 males; Mage $= 10$, $SD = 0.33$). Seventy-seven of the children were Italian (73%) and 28 were not Italian. Based on the aim of the present study, an inclusion criterion was being Italian. Therefore, the final sample consisted of 77 Italian school children (34 females, 43 males; Mage $= 10$, $SD = 0.36$). These children were assigned to two different conditions (groups): (i) the control group ($n = 39$; 15 females, 24 males); and (ii) the experimental group ($n = 38$; 19 females, 19 males). Only those who were assigned to the experimental group participated in the educational program, which lasted for a total of 20 h. As a result, the present study used a 2 (Condition: control vs. experimental) $\times$ 2 (Time: T1 vs. T2) R mixed design, with Condition as a between-subject factor, and Time varying within the participants.

3.2 Instruments and procedure

The implicit ethnic prejudices of the children were initially assessed using the child version of the Implicit Association Test (Child-IAT) that was adapted to comply with the recommendations by Baron and Banaji (2006) and was designed by Pirchio et al. (2018). The test consisted of seven blocks (Nosek et al., 2005):

(1) The participants were asked to categorize photographs of Caucasian, African, Asian Indians, Asian Chinese, Arabian, and South American children into two different groups: "We" and "Other". When the pictures appeared in the centre of their screen, the top of the screen showed buttons (to be pressed): the left (blue) button for Caucasian children; the right (yellow) button for other children.

(2) They categorized verbal stimuli by positive (i.e., good) or negative (i.e., bad) valence for the two different groups, as represented by two emoticons (green and happy vs. red and unhappy), and chosen by pressing the left (blue) or right (yellow) buttons when the vocal word occurred.

(3) The respondents were asked to press the left (blue) button when a stimulus in either the "We" (picture) category or the "Positive" attribute (vocal word) occurred, and the right (yellow) button when a stimulus in either the "Other" or the "Bad" category appeared. This was a practice block.

(4) This block was the same as the third, but this was a "critical" block, so the participants were asked to answer as quickly as possible.

(5) The fifth block was analogous to the second, but reversed the positions (right/left) of the two groups.

(6) This block was the same as the third, but with the opposite pairing of the target and attribute categories (Caucasian/negative on the left, Other/positive on the right);

(7) As for the sixth block, but this was a "critical" block, so the participants were asked to answer as quickly as possible.

The tests presented each stimulus until the children provided a response, followed by an inter-stimulus period of 150 ms. A red X at the center of the screen followed any incorrect answers, which disappeared only when the child gave the correct answer. Answers given with a latency of over 10,000 ms and inferior 0.80 ms were excluded from the data, whereas wrong answers were replaced by a penalized score, consisting in the average time of latency increased by 600 ms.

Pre-test was carried out in early March 2019 and post-test at the end of May 2019. All of the children from each class completed the Child-IAT individually in a separate room of the school, where they were led one-by-one by a researcher. The researchers first asked them to answer some questions about their name, age, and nationality, and the nationalities of their parents. Then, the researchers introduced the Child-IAT as a game, and encouraged the children to be as quick as possible while trying to give the correct answers. The researchers and the children read the Child-IAT instructions together before starting the game. The verbal stimuli of the Child-IAT were audio-recorded so as to eliminate possible confounding related to the children's different reading abilities. This procedure was repeated both pre-test and post-test. The Cronbach alpha was 0.942 for the pre-test Child-IAT, and 0.962 for the post-test Child-IAT.
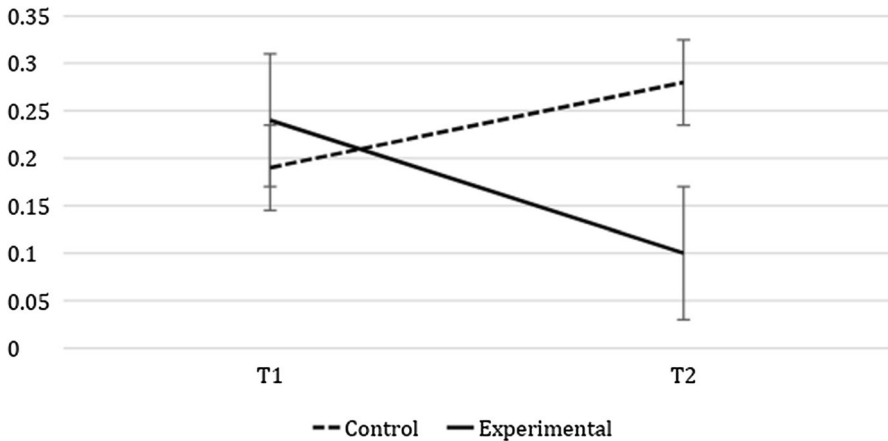
Fig. 1 Implicit prejudice scores as a function of Time (T1, pre-test; T2, post-test) and Conditions (control, experimental). Data are means ± standard errors

4 Results

Eleven participants were not included in the analysis because they did not perform the Child-IAT on T2 (retained sample: n = 66). A 2 (Condition: control vs. experimental) × 2 (Time: T1 vs. T2)R mixed-model ANOVA was carried out. The ANOVA showed no significant main effects for either Condition [$F(1,64) = 1.31$, $p = .26$, $\eta2 = 0.02$] or Time [$F(1,64) = 0.23$, $p = .62$, $\eta2 = 0.004$], which indicated that there were no differences in participants between the control condition ($M = 0.24$, $SD = 0.26$) and the experimental condition ($M = 0.17$, $SD = 0.33$), and between T1 ($M = 0.21$, $SD = 0.29$) and T2 ($M = 0.20$, $SD = 0.31$).

Importantly, a significant two-way interaction emerged [$F(1, 64) = 7.30$, $p = .01$, $\eta2 = 0.10$]. The results are shown in Fig. 1. Simple effect analysis revealed that at T1, the level of implicit prejudice did not differ between the participants assigned to the control condition ($M = 0.19$, $SD = 0.24$) and the experimental condition ($M = 0.24$, $SD = 0.33$) [$F(1, 64) = 0.50$, $p = .48$, $\eta2 = 0.01$]. Instead, at T2, the level of participant implicit prejudice for the experimental condition was significantly lower ($M = 0.10$, $SD = 0.32$) than for the control condition ($M = 0.28$, $SD = 0.27$) [$F(1, 64) = 6.20$, $p = .02$, $\eta2 = 0.10$]. Furthermore, the implicit prejudice of participants assigned to the control condition did not differ between T1 and T2 [$F(1, 64) = 2.63$, $p = .11$, $\eta2 = 0.04$]. Instead, for the experimental condition, the participants showed a lower level of implicit prejudice at T2 than at T1 [$F(1, 64) = 4.77$, $p = .03$, $\eta2 = 0.07$].

5 Discussion

The current study had the objective to evaluate the effectiveness of a school program for primary school children that was designed to reduce ethnic prejudice. In contrast to many other interventions, we measured the attitudes towards ethnic groups through the administration of the Child-IAT (Pirchio et al., 2018), an instrument specifically created to assess implicit prejudice in children. This measure appears to be more stable over children's development, compared to explicit attitudes, and less affected by social desirability. This approach is consistent with previous studies that have suggested that implicit measures can be adopted to evaluate school-based programs (e.g., Turner & Brown, 2008).

The results obtained here showed that the YTT program reduced the children's implicit ethnic prejudice. Indeed, the participants in the control condition showed no significant changes in their scores of implicit prejudice, while the participants in the experimental condition (i.e., those who had participated in the YTT program) showed significantly lower scores (i.e., less implicit prejudice) in the posttest compared to both the pre-test and the control group.

From these findings, we can assume that our educational program had a positive impact by reducing prejudice of the children actively involved in the program, because it was developed on the basis of social psychological models that were designed to promote positive attitudes towards migrants. For effective strategies to reduce prejudice, we followed a multifaceted approach here, with intergroup contact used, as both imagined and direct, as well as empathy and perspective taking. This is in line with previous studies that have addressed these strategies as effective for the reduction of prejudice in schools (Aboud & Levy, 2000; Allport, 1954; Rutland & Killen, 2015; Vescio et al., 2003; Vezzali et al., 2012a, 2012b). According to Grapin and colleagues (2019), although combined approaches can complicate the evaluation of the relative efficacy of interventions, they allow the variety of cognitive (i.e., perspective taking), emotional (i.e., empathy) and social (i.e., intergroup contact) processes involved in the reduction of prejudice to be taken into account.

In addition, we used several characteristics that made the school interventions more effective. First, the program was structured as a long intervention, as it lasted about 2 months. Then, it involved whole school classes, to overcome limitations due to the lack of resources available in schools. Finally, compliance with the program was guaranteed by adherence of the program to school practice, with the involvement of teachers in the research team.

Furthermore, the intervention used visual art as an easy language for the presentation of the migration phenomenon to the children. The cooperation with the *Yesterday–Today–Tomorrow* Association was a key factor, because this made it possible to use drawings made by actual migrant children. This gave the Italian children a better understanding of the migration experience, in particular regarding the life of migrants in camps, which was previously unknown to the children (Gabrielli et al., 2019).

5.1 Limitations and future research

The effect of the YTT school program on ethnic prejudice was successful, as designed; however the study presents some limitations:

- First, only the short-term impact was evaluated, and these data cannot be generalized to long-term effects. It would have been interesting to test the implicit prejudice in participants at a time T3, with follow-up after some months. Longitudinal studies that investigate both proximal and distal outcomes (i.e., attitudes, behaviors) should be considered in the future.
- Secondly, we were not able to assign participants randomly to the control and experimental conditions. For practical reasons, the educational program had to be taught within the existing school class groups. Nevertheless, we showed that in the pre-test there were no significant differences between the two groups.
- Thirdly, the study involved a small sample of children: a much broader interventional study that includes more schools would be necessary to extend our findings.
- Finally, we considered only the fifth grade school children. As the literature suggests (Aboud, 2008; Bigler & Liben, 2006), children's cognitive development can positively affect the program efficacy. Thus, future research should take into account the children's ages and school levels.

Forward looking, it will be possible to carry out the YTT program to also involve more school children in more schools, because it is designed to be easily implementable in these educational settings, and to be strictly connected to the school curriculum. This possibility stresses the need to train further teachers to be autonomous in using the program protocol, to guarantee their compliance for its effectiveness, and to be able to integrate the program into their lesson plans.

6 Conclusions

The present study evaluates the impact of a school-based program designed to reduce implicit ethnic prejudice in primary school children. The program highlights the importance of contact, empathy and perspective taking as effective strategies in implicit prejudice's reduction. From the educational perspective, the success of the program in reducing implicit prejudice in the experimental group shows drawings to be effective instruments to promote migrants' inclusion.

As suggested by Ugler et al. (2018), more evaluation studies of school-based interventions are required to define optimal practices to reduce prejudices, as the present study does. These evaluation studies have practical implications, in terms that they indicate the educational policies for the definition of school programs and curricula (Grapin et al., 2019). This is particularly relevant in our time of migrant flows and globalization, which also involve schools.

Schools have strong potential to promote diversity, inclusion, and awareness of living together with members of different groups. Furthermore, this program was

shown here to be effective to reduce inter-ethnic prejudices, and could also result in the reduction of other prejudices towards other social categories, such as sexism, homo/trans-phobia, disablism, ageism, and classism.

Declarations

Conflict of interest The authors declare that they have no conflict of interest.

Ethical approval All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. Approval was obtained by Roma Tre University Ethical Committee.

Consent to participate and for publication Written informed consent was obtained from all parents of the children included in the study, explaining aims, methods, data collection, privacy statement and publication.

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