


Reducing prejudice toward Syrian refugee children: A vicarious contact intervention among Turkish elementary school children

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1 | INTRODUCTION

There is consistent evidence that intergroup contact is effective in reducing prejudice even when it is applied indirectly (Dovidio et al., 2011). For instance, simply observing positive interactions between ingroup and outgroup members, referred to as “vicarious contact,” can promote positive outgroup attitudes (Vezzali et al., 2014; Wright et al., 1997). Vicarious contact has been successfully applied in educational contexts, generally by means of story reading (Cameron & Turner, 2017; Di Bernardo et al., 2017). However, some questions that relate to vicarious contact principles remain unexplored. First, it is important to examine the boundaries of the effectiveness of vicarious contact among children, and specifically whether children who are more prejudiced benefit more or less from a vicarious contact intervention. Second, in middle-late childhood, children are undergoing a series of cognitive developments and an increase in abstract reasoning (Doyle & Aboud, 1995). However, research has overlooked the effects that vicarious contact can have in shaping the complexity of reasoning about prejudice and contact with the outgroup at this age.

The present study aims to address these gaps in the literature. Specifically, we conducted an experimental vicarious contact intervention with fourth-grade Turkish children, with the aim of improving attitudes toward Syrian children. Using both quantitative and qualitative methodologies, we explored initial prejudice as a moderator of vicarious contact, and the complexity of children's representation of issues concerning the relations between Turkish and Syrian children as a function of the intervention.

Research has shown that vicarious contact, defined as the observation of contact between ingroup and outgroup members, is an effective prejudice reduction strategy (Brown & Paterson, 2016; Dovidio et al., 2011; Vezzali et al., 2014). Vicarious contact is typically operationalized by asking participants to watch carefully prepared ad hoc videos, where ingroup members have positive contact with outgroup members (Mazziotta et al., 2011; West & Turner, 2014). However, these studies using videos are mainly conducted in the laboratory. In contrast, research conducted with children has predominantly used story reading. Specifically, children read (or more frequently, experimenters read to children) carefully created stories, depicting ingroup and outgroup characters who interact positively and become friends in different situations. There is now evidence of the beneficial effects of story reading in child and adolescent samples, by considering a variety of target groups (Aronson et al., 2016; Cameron & Rutland, 2006; Cameron et al., 2006, 2007, 2011; Greenwood et al., 2016; Husnu et al., 2018; Liebkind & McAlister, 1999; Liebkind et al., 2014, 2019; Mäkinen et al., 2019; McKeown et al., 2017; for reviews, see Cameron & Turner, 2017; Di Bernardo et al., 2017).

Importantly, research in children has overlooked the boundary conditions of vicarious contact. One important research question is whether vicarious contact is also effective in the case of more prejudiced individuals, who may display greater resistance to attempts that aim to improve their outgroup attitudes. Relatedly, research evaluating direct contact showed that, contrary to the fears of scholars (cf. Allport, 1954), contact is effective for individuals characterized by more prejudicial beliefs, and in fact has stronger effects among these individuals (Hodson et al., 2017; Turner et al., 2020). Possibly, contact allows more prejudiced individuals to disconfirm their negative expectations, resulting in more positive outgroup attitudes. However, vicarious contact, as an indirect contact strategy, may have weaker effects than direct contact (Christ et al., 2010); it is, therefore, important to explore whether its effects hold—or are stronger—when levels of prejudice are high.

Liebkind et al. (2019) conducted a story reading intervention among Finnish adolescents and found that, unexpectedly, outgroup attitudes deteriorated over time both in the experimental and in a control condition. However, this deterioration was less pronounced for those who had more positive initial outgroup attitudes. In addition, outgroup attitudes improved to a greater extent as a function of the intervention among girls with more initial prejudice. However, in a further study with adults, initial prejudice did not moderate the effects of vicarious contact (Preuß & Steffens, 2020). Importantly, we are not aware of studies testing initial prejudice as a moderator using child samples.

A further limitation of existing research is that it has not considered the profound cognitive changes that take place in middle childhood, and that may allow greater complexity of thoughts and understanding of prejudicial issues as a consequence of the intervention. Developmental research has shown that the expression of prejudice reduces starting from middle-late childhood (Aboud, 1988; for a meta-analysis, see Raabe & Beelmann, 2011). Importantly, the meta-analysis by Raabe and Beelmann revealed that contact opportunities were associated with the decrease in prejudice in these age groups, supporting the importance of conducting prejudice reduction interventions when this is still malleable in childhood (Killen et al., 2012; Turner & Cameron, 2016).

According to cognitive-developmental theory (Aboud, 1988, 2008), improvements in outgroup attitudes between middle and late childhood can be attributed to the increase in cognitive abilities related, among other issues, to prejudice. At this age, the group rather than solely the individual becomes the focus of attention, while children become more used to abstract reasoning (Levy et al., 2016). An important cognitive change relates to classification skills. Specifically, children become able to categorize groups across different dimensions simultaneously, therefore demonstrating a more sophisticated conceptualization of groups (Aboud, 2005). In middle-late childhood, children also rely to a greater extent on group norms and morality considerations, related to the fair treatment of other individuals and groups (Abrams & Rutland, 2008; Rutland et al., 2010).

Based on this literature, we argue that a prejudice reduction intervention can stimulate the elaboration of group differences and social justice, leading to a more sophisticated and complex conceptualization of prejudice and intergroup relations. Despite the benefits of quantitative research in this field, it allows less space for the exploration of the complexity

of reasoning about relations with the outgroup. In this study, we asked participants in the experimental and control group to engage in group discussions on issues related to the intergroup relationship under consideration (Turkish and Syrian refugee children), and then we analyzed responses with a qualitative approach. This approach complemented the quantitative assessment of the effectiveness of the applied intervention.

2 | THE PRESENT RESEARCH

We conducted an experimental vicarious contact intervention among Turkish elementary school children, maximizing on story reading as the main tool for operationalizing contact. The outgroup targeted by our intervention was Syrian refugee children. The aim of our research was to replicate and extend previous research in two directions. First, we tested whether effects depend on initial outgroup attitudes, and specifically whether the intervention was more effective among highly prejudiced children. Second, we examined not only the quantitative effects, but also for the first time the qualitative effects of the vicarious contact intervention. After the quantitative assessment, participants engaged in a group discussion with open questions raised by the researchers aimed to explore Turkish students' perceptions about Syrian students' thoughts and feelings about majority behavior, as well as how friendships between Turkish and Syrian students affected relationships and the immediate network of peers and family.

Due to the Civil War in Syria, Syrian refugees have been crossing the Syrian-Turkish border and entering Turkey since April 2011. The influx of refugees has continued since, while, following an "Open-Door" policy, Turkey is not deporting Syrian refugees. As of August 2020, Turkey has received 3,609,884 refugees with temporary protection status. Although 61,419 are hosted in refugee camps, 3,548,465 live outside camps dispersed in various cities. Thus, Turkish and Syrian individuals coexist in neighborhoods (Republic of Turkey Ministry of Interior— Directorate General of Migration Management, 2020), which are generally located in lower socioeconomic regions. However, refugees who joined the workforce in the past 10 years since their arrival have been able to improve their living standards over time.

Currently, there are 501,578 Syrian refugee children and young adults between the ages of 0–4 years; 541,505 between 5 and 9 years; 386,682 between 10 and 14 years; 259,633 between 15 and 18 years; and 497,881 between 19 and 24 years (Republic of Turkey Ministry of Interior—Directorate General of Migration Management, 2020). These Syrian refugees between 0 and 24 years of age are in the educational system, including higher education, suggesting that 60% of the Syrian refugees are at school/university age. Children of refugee families attend neighborhood public schools together with Turkish students in mixed classes. Unfortunately, few Syrian students continue to secondary education. It is therefore important to promote their integration into the Turkish school system and society. To the extent that relations with peers are key in enhancing motivation and adjustment to the school environment (Ladd et al., 2009; Wentzel, 1998), it is critical to address Turkish students' attitudes, in the effort to promote social inclusion of refugees in the school, and beyond. Of importance to this study, we selected a school located in an area of low socioeconomic status to conduct our intervention. The school has a large number of refugee Syrian children, making the context of this study highly topical.

For the quantitative part of the study, in addition to measuring initial outgroup attitudes, we also measured behavioral intentions (e.g., Cameron & Rutland, 2006), as intentions can lead to subsequent behavior (Godin & Kok, 1996). We focused on helping intentions, specifically assessing intentions to help the outgroup in everyday situations. The decision to focus on this dependent variable was driven by the specific outgroup we considered. As the Turkish context may be relatively new to Syrian children, who sometimes also have difficulties with the Turkish language, offering help may be especially valuable and can assist social inclusion. Previous research has shown that children's intentions to help the outgroup are associated with a subsequent actual helping of outgroup members (Vezzali, Stathi, Crisp, Giovannini, et al., 2015).

For the qualitative part of the study, we selected a wide range of questions related to contact, including the evaluation of positive and negative contact and the appraisal of consequences for the ingroup and the outgroup. These questions also

tap on metaperceptions, which are key in determining the course of intergroup relations in educational contexts (Stathi, Di Bernardo, et al., 2020; Stathi, Pavetich, et al., 2020), and that provide the opportunity to evaluate how the intergroup relationship is conceptualized. Using qualitative methods, we can examine the discursive processes at the class level, and evaluate whether discussions reveal more complex patterns indicative of greater awareness of the disadvantaged situation of Syrian children, and of how these children can be supported.

Hypotheses are:

- H1: Helping intentions should be higher in the experimental than in the control condition
- H2: Initial outgroup attitudes should moderate the effect of the condition: helping intentions should be higher in the experimental than in the control condition among those with more negative initial outgroup attitudes.
- H3: Discussions on key topics related to outgroup acceptance, conducted as part of our qualitative assessment post-intervention, should reveal more variety and complexity, indicative of greater awareness of intergroup issues, in the experimental than in the control condition.

3 | METHOD

3.1 | Participants and procedure

Participants attending to both pre- and post-intervention assessments were 96 Turkish 8–9 years old, fourth-grade primary school children (48 males, 48 females) from four classes of one elementary school in Izmir (Turkey). All participants considered for the present study had Turkish nationality. We excluded five participants due to missing data on one or more of the assessed variables, so the final sample consisted of 91 children (46 males, 45 females).¹ Participants were randomly assigned to the experimental or the control condition. For organizational reasons within the school, allocation to a condition was at the level of the class rather than the individual child.

The school principal, along with teachers who volunteered to take part in the study, were consulted to decide on the selection of four classes. The classes had similar demographic characteristics and a similar number of Syrian refugee students. The four classes that were selected were then randomly assigned to the experimental or to the control condition.

The stories that we used to operationalize intergroup contact were created ad hoc for this study, based on previous literature (e.g., Cameron et al., 2007, 2011; Liebkind et al., 2014, 2019). Three stories had an ingroup member as the main character, who depending on the story worked cooperatively over school assignments with a Syrian child; apologized to a Syrian child for having misinterpreted some behaviors because of his/her prejudice; or had positive cultural exchanges with a Syrian child; in all three stories cross-group friendships developed between the Turkish and the Syrian child. Three more stories included a Syrian child as the main character, who integrated into the new social context thanks to his and a Turkish peer's passion for books, which led to sharing common interests; started playing with a Turkish child who was the son of one of his father's colleagues; was helped by a Turkish classmate integrate into the new class. In all cases, the stories featured more positive relations with Turkish classmates and cross-group friendships over time.

First, children were collectively administered a questionnaire assessing their attitudes and helping intentions toward Syrian peers approximately one week before the beginning of the intervention (pre-intervention). Then, participants in the experimental group engaged in six sessions conducted during regular classes, once a week for six consecutive weeks. Each session lasted 40 min, and each week a different story was read. Sessions were held on the same day, at the same time, for

¹ The selected classes also included 10 Syrian 8–9-year-old children under temporary protection since they had refugee status.

a period of 6 weeks. Class teachers, in agreement with the school principal, were not present during the sessions to avoid children's self-presentation concerns.

Participants were first given 20 min to read the story individually. After reading the stories, they individually answered questions related to their understanding of the story and were invited to comment on them. Then, participants were encouraged to share their responses with the class, to promote a group discussion (which is common in vicarious contact interventions, e.g., Cameron & Rutland, 2006). Participants in the control condition did not engage in any intervention and followed the regular school curriculum.

One week after the last intervention session, participants in both the experimental and control conditions were administered a questionnaire with the dependent variables. In a separate session, also conducted approximately one week after the end of the intervention, we conducted a qualitative assessment.

In order for Syrian children not to feel discriminated against by the research team, they took part in the experimental sessions, and in the quantitative and qualitative assessments in both the experimental and control conditions. However, their responses were not considered when analyzing the data.

3.2 | Measures

3.2.1 | Quantitative measures

Initial outgroup attitudes (administered pre-intervention)

Participants were presented with a feeling thermometer and asked to report their feelings toward Syrian children from their class on a scale ranging from 0 to 10, where 0 indicated negative attitudes and 10 indicated positive attitudes.

Helping intentions (administered both pre- and post-intervention)

Four items were used (adapted from Vezzali, Stathi, Crisp, & Capozza, 2015; Vezzali et al., 2016; Study 1; Vezzali et al., 2019), for example, "If at school a Syrian child that you don't know has problems writing, will you help him/her?" A 5-point response scale was used and ranged from 1 (definitely not) to 5 (definitely yes). Ratings were combined in a single index both at pre- and postintervention (Cronbach's $\alpha = .88$ and $.89$, respectively), with higher scores indicating stronger intentions to help outgroup children.

3.2.2 | Qualitative evaluation

To provide a qualitative assessment of the effect of the intervention, we assessed verbal qualitative data. Specifically, immediately after administering the questionnaire, participants were collectively administered a set of questions related to the main aim of the experiment, both in experimental and control classes, to be answered verbally in a discussion in the class (discussions were recorded and then transcribed).

Specifically, participants were asked to discuss the following questions:

1. What do you think the Syrian students in our classrooms think about how we treat them?
2. What do you think the Syrian students in our classrooms feel about how we treat them?
3. How would a friendship between a Syrian student and a Turkish student, and the time they spend together, affect Turkish students in general?

4. How would a friendship between a Syrian student and a Turkish student, and the time they spend together, affect Syrian students in general?
5. How would a friendship between a Syrian student and a Turkish student, and the time they spend together, affect their close friends?
6. How would a friendship between a Syrian student and a Turkish student, and the time they spend time together, affect their families?
7. What are the consequences of positive relationships between Turkish and Syrian students in classrooms?
8. What are the consequences of negative relationships between Turkish and Syrian students in classrooms?

Each class discussion lasted 40 min.

4 | RESULTS

4.1 | Quantitative analyses

Means in the two conditions and correlations among variables are presented in Table 1. First, we checked whether initial outgroup attitudes and helping intentions differed for the experimental and control group. The fact that means were not statistically different (Table 1) indicates successful randomization.

We tested whether helping intentions post-intervention differed as a function of the condition, controlling for helping intentions pre-intervention. Results revealed no significant differences, $F < .01$, $\eta^2_p = .01$, thus failing to provide support for H1.

We then tested initial outgroup attitudes as a moderator of the effects of conditions using regression analysis. In the first step, we included condition (coded 1 for experimental and 0 for control condition), initial outgroup attitudes (centered); pre-intervention helping intentions were added as a control variable. In the second step, we added the interaction between condition and initial outgroup attitudes. The results are presented in Table 2. As expected, the interaction between condition and initial outgroup attitudes was significant. Simple slope analysis revealed that the experimental (vs. the control) condition was associated with higher helping intentions postintervention for individuals with more negative initial outgroup attitudes, $b = 0.55$, $SE = 0.25$, $p < .05$. In contrast, the TABLE 1 Means, standard deviations (in parentheses), and correlations among variables

	Condition		t test	Cohen's d	1	2	3
	Experimental (N = 47)	Control (N = 44)					
1. Initial outgroup attitudes (pre intervention)	4.83 (3.23)	4.16 (2.26)	1.15	0.24			
2. Helping intentions (pre-intervention)	3.29 (1.25)	3.46 (1.02)	0.74	0.15	0.51***	-	
3. Helping intentions (post-intervention)	3.28 (1.20)	3.23 (1.14)	0.20	0.04	0.41***	0.69***	-

Note: The response scale ranges from 0 to 10 for the measure of initial outgroup attitudes and from 1 to 5 for the measures of helping intentions.

- *p < .05.
- **p < .01.
- ***p < .001.

experimental condition did not improve helping intentions post-intervention when initial outgroup attitudes were more positive, $b = -0.28$, $SE = 0.27$, $p = .291$ (Figure 1). These findings provide full support to H2.

4.2 | Qualitative analyses

Data were analyzed using thematic analysis, which allows tapping on personal experiences, individual understanding, and subjective realities. With thematic analysis it is possible to organize and describe data in detail, allowing a more thorough interpretation of people's views. Specifically, we followed Braun and Clarke's (2006) approach, which is based on six steps: familiarizing with data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the report.

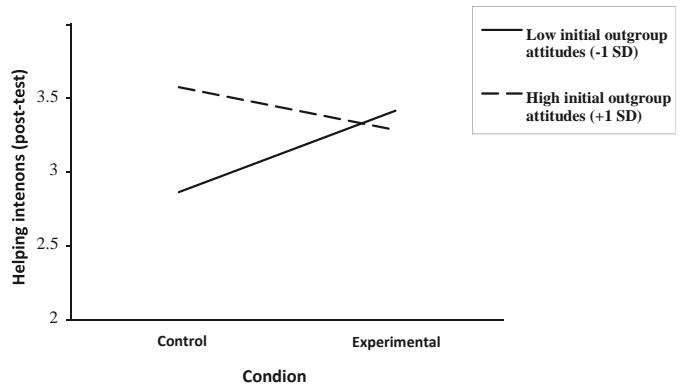
First, the answers provided for each discussion question were listed. Statements that revealed contextual similarities were merged to form clusters of similar content which stood out as especially important (Ntontis et al., 2017). The clusters and commonalities which appeared repeatedly, stood out, and had

TABLE 2 Hierarchical regressions testing the proposed model. Unstandardized regression coefficients are reported (standard errors in parentheses)

	Helping intentions (post-intervention)	
	First step	Second step
Condition (1 = experimental, 0 = control)	0.15 (0.18)	0.13 (0.18)
Initial outgroup attitudes	0.02 (0.04)	0.13* (0.06)
Helping intentions (pre-intervention)	0.68*** (0.09)	0.68*** (0.09)
Initial outgroup attitudes × condition	-	-0.15* (0.07)
F	27.54***	22.77***
R ²	0.49	0.51
Fchange	-	4.82*

- *p < .05.
- **p < .01.
- ***p < .001.

FIGURE 1 Helping intentions at 4 post-intervention as a function of Condition (1 = experimental, 0 = control) and initial (positive) outgroup attitudes



contextual similarities were determined based on the statements of the students. Repetitive and similar responses were further reduced to reflect different, original, and concise responses and were included as direct excerpts.

The categories that emerged from the thematic analysis are presented in Table 3. Examples of excerpts for each category for each discussion point are presented in Tables A1–A8 in the Appendix. The statements of the students in the experimental and control conditions are provided separately in these tables to allow descriptive comparisons.

4.2.1 | What do you think the Syrian students in our classrooms think about how we treat them?

Examples of excerpts are presented in Table A1 of the Appendix. Seven themes emerged: feeling excluded, reciprocity, positive thinking, negative thinking, ambivalent thoughts, misunderstandings. Participants in the experimental group emphasized the theme of reciprocity, stating that Turkish students' positive behavior would be perceived positively and vice versa. Participants mentioned that Syrian students might feel excluded, unwanted, as bad people, or like an enemy. They also believed that, if treated well, Syrian students might think that Turkish students are, in fact, good people and could become good friends. The students in the control condition, on the other hand, generally said that Syrian students might feel bad. However, they also underlined that they think they are treated well.

Comparing statements between conditions, we observe that those in the experimental condition provided richer and more detailed information. In particular, the emphasis on the theme of reciprocity shows that the Turkish students' self-awareness with respect to the effects of their behavior on Syrian students is quite high.

4.2.2 | What do you think the Syrian students in our classrooms feel about how we treat them?

Examples of excerpts are presented in Table A2 of the Appendix. The themes identified here were: negative feelings, positive feelings, positive thoughts, discrimination, humiliation, reciprocity, and generalization. Statements mainly revolve around positive and negative emotions. Control condition statements mainly highlighted negative emotions such as shyness, bashfulness, anxiety, and feeling bad. The only positive emotion mentioned was feeling happy. Shyness, humiliation, exclusion, feeling bad, and sadness were also TABLE 3 Categories that emerged in the experimental and control conditions during the qualitative assessment

Categories emerged

Question	Experimental group	Control group
What do you think the Syrian classrooms thoughts	Feeling excluded, reciprocity, positive thinking, negative misunderstandings treat them?	Positive thinking, negative thinking, students in our thinking, ambivalent
What do you think the Syrian students in our classrooms feel about how we treat them?	Negative feelings, positive thoughts, discrimination, humiliation, reciprocity (good/bad), generalization	Negative feelings, positive feelings, reciprocity
How would a friendship between a Syrian student and a Turkish student, and the time they spend together, affect Turkish students in general?	Extended cross-group friendships, helping each other, learning outgroup culture and language, being happy	Negative consequences, extended cross-group friendships, learning outgroup culture and language, outgroup empathy
How would a friendship between a Syrian student and a Turkish student, and the time they spend together, affect Syrian students in general?	Intergroup homogeneity, extended cross-group friendships, learning about the outgroup	Negative feelings, positive feelings, extended cross-group friendships, learning about the outgroup
How would a friendship between a student and a Turkish student, and the time they spend together, affect their close friends?	Extended cross-group friendships, learning about the outgroup culture, common ingroup identity	Extended cross-group friendships, Syrian student, and the time they spend together, affect their close friends?
How would a friendship between a Syrian student and a Turkish student, and the time they spend together, affect their families?	Learning about outgroup culture and language, outgroup empathy, outgroup helping, extended cross-group friendships	Negative consequences, learning about outgroup culture and language, extended cross-group friendships
What are the results of positive relationships between Turkish friendships, direct cross-group in classrooms?	Learning about outgroup culture and language, extended cross-group friendships, outgroup helping	Direct cross-group friendships, outgroup helping and Syrian students
What are the results of negative relationships between Turkish and Syrian students in classrooms?	Interpersonal violence, interpersonal conflict, feeling excluded, extended cross-group friendships, direct cross-group friendships, learning about outgroup culture and language, outgroup empathy	Interpersonal violence, interpersonal conflict

emotions commonly mentioned in the statements of the experimental condition. However, these also focused on feeling good, feeling happy, recognizing intergroup similarities, positive metaperceptions, and desire to play together. In statements indicating positive emotions, reciprocity is again stressed.

Comparing statements between conditions, the statements of the experimental group clearly differed from those of the control in that they contained more positive emotions and emphasis on reciprocity.

4.2.3 | How would a friendship between a Syrian student and a Turkish student, and the time they spend together, affect Turkish students in general?

Examples of excerpts are presented in Table A3 of the Appendix. The themes that emerged here were: negative consequences, extended cross-group friendships, helping each other, learning about the outgroup culture and language, being happy, outgroup empathy. The statements of the students in the control condition indicate both positive and negative effects. On the other hand, the statements of the experimental group condition vary in terms of content, diversity, and depth.

Following the intervention, the students highlighted friendships between groups and possibilities to build novel friendships, tapping on the construct of extended contact. Similarities between groups were also emphasized. Learning about the outgroup is another important theme that emerged. Considering statements comparatively between conditions, the differences in the number of themes and their complexity is evident (see Table A3 of the Appendix).

4.2.4 | How would a friendship between a Syrian student and a Turkish student, and the time they spend together, affect Syrian students in general?

Examples of excerpts are presented in Table A4 of the Appendix. The analysis revealed the following themes: intergroup homogeneity, positive and negative feelings, extended cross-group friendships, learning about the outgroup. Also, in this case, responses between conditions differed in terms of depth and diversity. Participants in the control condition emphasized that friendship between Turkish and Syrian students would make other Syrian students “happy,” make them feel “good and positive,” and affect them in a good way. They also stated that other Syrian students would become good friends and make “other, new friends.” Similarly, it was stated that friendships between Syrian and Turkish students would enable them to get to know each other and to learn the Turkish language. One student used the word “ashamed.”

Participants in the experimental condition focused to a greater extent on cross-group friendships, vicarious contact, knowledge about the outgroup, and positive emotions. They particularly mentioned cross-group friendships and vicarious contact together. Participants also noted that outgroup members were not a homogeneous group (pointing to outgroup variability).

Comparing experimental and control conditions, participants in the experimental condition highlighted crossgroup friendships, vicarious contact, knowledge about the outgroup, and positive emotions; whereas, statements by the students in the control condition stressed that the friendship between Turkish and Syrian students would have a positive impact on other Syrian students. Thus, it appears that the students after the experimental intervention showed more awareness of the consequences of cross-group friendships as a result.

4.2.5 | How would a friendship between a Syrian student and a Turkish student, and the time they spend together, affect their close friends?

Examples of excerpts are presented in Table A5 of the Appendix. The themes that emerged here refer to extended cross-group friendships, learning about the outgroup culture, common ingroup identity, negative consequences, intergroup jealousy. The statements by participants in the control condition revolve around three main themes, that is extended cross-group friendships, negative consequences, and intergroup jealousy. In the experimental condition, the themes that emerged concern extended cross-group friendships, learning about the outgroup culture, and common ingroup identity. Comparing statements between conditions, it appears that negative expressions were common in the control statements, while no negative opinions were expressed in the statements following the intervention. Statements by the students in the experimental and control conditions again appear to differ in terms of depth and diversity.

4.2.6 | How would a friendship between a Syrian student and a Turkish student, and the time they spend together, affect their families?

Examples of excerpts are presented in Table A6 of the Appendix. Five themes emerged here: negative consequences, learning about the outgroup culture and language, extended cross-group friendships, outgroup empathy, outgroup helping. Participants in the control condition discussed generally the negative consequences. Statements from the experimental group condition revolved around acquiring information about the outgroup, direct and vicarious contact between groups that result in friendship, helping, and learning about each other's culture and language. This highlighted again differences between conditions in terms of the depth and diversity of statements.

4.2.7 | What are the consequences of positive relationships between Turkish and Syrian students in classrooms?

Examples of excerpts are presented in Table A7 of the Appendix. The themes that emerged here are: learning about the outgroup culture and language, direct and extended cross-group friendships, outgroup helping. Statements by participants in the control condition related to building positive intergroup relationships and were rather simplistic, but noteworthy. On the other hand, participants in the experimental group provided complex statements on themes that were of primary relevance for intergroup relations such as contact and helping. Once again, a comparison between conditions evidenced differences in terms of depth and diversity of statements, with participants in the experimental condition expressing more complex, deep, and diverse views.

4.2.8 | What are the consequences of negative relationships between Turkish and Syrian students in classrooms?

Examples of excerpts are presented in Table A8 of the Appendix. The following themes emerged here: interpersonal violence, interpersonal conflict, feeling excluded, direct and extended cross-group friendships, learning about the outgroup culture and language, outgroup empathy. Participants in the control condition highlighted physical fights, disputes, negative emotions, and disagreements as a result of negative contact. On the other hand, participants in the experimental condition displayed an awareness of a wider range of negative consequences, across the several dimensions listed above. This revealed again greater elaboration on issues concerning intergroup relations as a consequence of the intervention.

In sum, the interventions produced a greater awareness of issues related to the intergroup relationship under consideration, in terms of the diversity, depth, and complexity of the responses produced during the qualitative assessment.

5 | DISCUSSION

We conducted an experimental intervention with elementary school children in Turkey to test the effectiveness of vicarious contact in the context of the Turkish–Syrian refugee relationship. Specifically, we investigated initial outgroup attitudes as the moderator of the effects of vicarious contact on intentions to help disadvantaged group children (Syrian refugees). We also evaluated the complexity of children's views in the experimental intervention and control conditions, exploring themes that related to intergroup relations, contact, and social inclusion.

The results were generally consistent with our predictions. First, vicarious contact was more effective among children who initially reported more negative outgroup attitudes. This is the first time that initial outgroup attitudes are tested as a moderator of the effects of vicarious contact in children. The results are encouraging as they show that vicarious contact is effective among individuals who need it the most, that is individuals who possess more negative outgroup attitudes. We

argue that the absence of effects among low-prejudiced individuals may be due to their initial high willingness to help the outgroup (which was our dependent variable). As can be seen in Figure 1, in fact, individuals with initially more negative outgroup attitudes displayed similar levels of helping intentions as a function of the intervention as those with low initial prejudice. We acknowledge that, in contrast with some of the previous studies and with our first hypothesis, we did not find a main effect for vicarious contact. Note that vicarious contact has often been shown to have weak effects that disappear over time (McKeown et al., 2017), and we tested the effects of our intervention approximately 1 week after the last intervention session.

For the first time, we evaluated the complexity of participants' intergroup perceptions as a consequence of the intervention. Specifically, participants were provided with a series of open questions concerning relations between Turkish and Syrian children. The questions related to intergroup contact, its appraisal and consequences for both ethnic groups. The results revealed a consistent pattern of findings. In general, participants in the experimental condition displayed a more sophisticated and diverse content, quality, and eloquence in their responses, compared to those in the control condition. The intervention, therefore, shaped how participants conceptualized intergroup relations and increased awareness of the importance of intergroup contact.

It is worth noting that qualitative results are only partly consistent with quantitative findings. In fact, individuals displayed moderate helping intentions in both conditions (cf. Table 1), and effects were statistically significant only among those with higher initial prejudice. Qualitative analyses, instead, provided a more optimistic picture, revealing clearer effects of the intervention. We argue that such qualitative and quantitative findings complement each other, revealing effects on intentions (which may translate into behavior; Godin & Kok, 1996) and on awareness and appraisal of intergroup relationships. Although the quantitative results relate to a specific domain, helping Syrian children at school, the qualitative findings concern a wider range of intergroup issues that tap on contact, diversity, feelings, and attitudes. The new conceptualization of intergroup relations that was revealed in the thematic analysis may later develop into long-lasting positive perceptions of the outgroup (but this is a speculation that needs to be tested).

Discussion points from the qualitative investigation also concerned the effects that friendships between Turkish and Syrian students produce on participants' social networks, including close friends and family. The fact that in the control condition participants identified both positive and negative consequences is especially noteworthy and is consistent with the literature on extended and vicarious contact. Research has shown that an individual having intergroup contact may be perceived negatively by his/her ingroup fellows when contact is counter-normative (Eller et al., 2017), or when these ingroup fellows are prejudiced (Jacoby-Senghor et al., 2015). This, however, did not appear to be the case in the experimental group condition, where excerpts (cf. Tables A7 and A8) clearly showed that participants were aware of the social network's potential to spread the positive effects of cross-group friendships. Tangentially, this may reflect the creation of social norms, where cross-group friendships are appraised positively and become socially acceptable and welcomed. These findings are also in line with the importance of social networks in extended and vicarious contact (Wölfer et al., 2017). Specifically, we argue that one of the major strengths of vicarious contact is that its effects multiply within social networks, which contribute to shaping social norms and reducing wider prejudice (see White et al., 2020).

It should be noted that the fact that Syrian children attended the various phases of the study together with Turkish participants may be problematic from an experimental point of view. This was done to avoid discriminating against Syrian children who were in classes and make them feel accepted and part of the study. The fact that the dependent variables (quantitative and qualitative) were administered to both Turkish and Syrian children during classes (although we obviously only considered those of Turkish children) may complicate the interpretation of findings, as being simultaneously present during the assessment may have somehow influenced their responses. This is especially true for qualitative assessment. However, we believe this is not problematic in the case of our findings, as Syrian children were present both in the experimental and control conditions, providing similar heterogeneity between conditions.

We also acknowledge some limitations in our research. First, the findings may be specific to the intergroup relationship considered (Turkish and Syrian refugee children) and may not generalize to other intergroup contexts. Second, we assessed intentions to help the outgroup, which was a self-reported measure. Future studies should take advantage of actual behavioral measures to assess more clearly whether vicarious contact interventions lead to actual behavioral change. Third, the present findings only refer to the ethnic majority group, Turkish children; we have no evidence that similar interventions would also be effective among minority samples.

In conclusion, our study provides evidence for the effectiveness of vicarious contact by relying on a mixed methodology considering both quantitative and qualitative assessments. Future research on intergroup contact can greatly benefit from considering mixed methodological approaches, allowing a deeper understanding of the effects of interventions.

CONFLICT OF INTERESTS

The authors declare that there are no conflict of interests.

PEER REVIEW

The peer review history for this article is available at <https://publons.com/publon/10.1002/jcop.22480>.

DATA AVAILABILITY STATEMENT

Data can be freely shared upon request to the first author of this article.

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How to cite this article: Tercan M, Bisagno E, Cocco VM, et al. Reducing prejudice toward Syrian refugee children: A vicarious contact intervention among elementary school children. *Community Psychol* 2021;49: 564–587. <https://doi.org/10.1002/jcop.22480>

APPENDIX

TABLE A1 Categories and examples of excerpts for the question: “What do you think the Syrian students in our classrooms think about how we treat them?”

Categories	Experimental group	Control group
Feeling excluded	<ul style="list-style-type: none"> • They might be feeling excluded and probably think the Turkish students do not want them • ...If we do not treat them well, they might feel excluded... 	-
Reciprocity	<ul style="list-style-type: none"> • ...but if we treat them well, we may become good friends, we can play together, and stuff like that. We can go to each other's homes • If we treat them bad, they would feel bad, if we treat them well, they would feel well • As long as we treat them well, they would understand we are good people and not hostile • Like, for instance, if we harm an animal, like hitting, they would do us harm too. If we model bad behavior, they would do the same 	-
Positive thinking	<ul style="list-style-type: none"> • They might have a positive opinion about behavior because we have a positive 	<ul style="list-style-type: none"> • They probably think we care for them our opinion of them • They probably think we treat them well
Negative thinking	<ul style="list-style-type: none"> • If we swear or do them wrong, they would do the same, they would feel bad 	<ul style="list-style-type: none"> • They probably think we are bad • They probably think we treat them bad • They might be thinking terrible about us because we had a fight • They may think ill of us because we have different religions, they cannot understand our intentions
Ambivalent thoughts	<ul style="list-style-type: none"> • They sometimes probably think that we are friends with them, good friends or that we see them as enemies 	<ul style="list-style-type: none"> • Good and bad
Misunderstandings		<ul style="list-style-type: none"> • They cannot understand what we think of them

TABLE A2 Categories and examples of excerpts for the question: “What do you think the Syrian students in our classrooms feel about how we treat them?”

Categories	Experimental group	Control group
Negative feelings	<ul style="list-style-type: none"> • They might be feeling humiliated and unhappy • Shy 	<ul style="list-style-type: none"> • Anxious • They probably do not feel good • They may feel shy, they may feel bad

Positive feelings	-	• Happy
Positive thoughts	• They would think we are good and would like to play with us	
Discrimination	• Let's say we arranged a game with our friends and we did not let them play. If I put myself in their shoes and I would feel sad, too. If somebody had not let me play, I would feel left out, I would feel bad and would not make friends with them	-
Humiliation	• ...I had a Syrian friend on my school bus, they used to beat him. (Teacher: What do you think he felt like in that situation?) Humiliated. I mean everybody laughed at him, beat him. He must have felt embarrassed	
Reciprocity (good/bad)	<ul style="list-style-type: none"> • When they see we get along well with them, they would understand us, feel good about us • They would feel happy. Because when you treat them well, they feel happy • They must be feeling happy. Because they will think we are good people. When we help them and when they help us, they would feel happy • If there are people in our school who think ill of them or treat them bad, our Syrian friends would feel bad. But if good behavior were modeled in some classes, they would feel good 	• They might feel embarrassed because if we treat them bad, they might treat us bad because when we treat them bad, they might think we do not want them
Generalization	• When they see we treat them well they would think all Turkish students in the school were the same and they would like us more	-

TABLE A3 Categories and examples of excerpts for the question: "How would a friendship between a Syrian student and a Turkish student, and the time they spend together, affect Turkish students in general?"

Categories	Experimental group	Control group
Negative -	<ul style="list-style-type: none"> • Would have negative effects because we consequences • How are we going to communicate? • Shyness 	do not speak their language

TABLE A3 (Continued)

Categories	Experimental group	Control group
	<ul style="list-style-type: none"> • Would have positive and negative effects. For instance, they may get in a fight or something bad might happen because they do not understand each other's language • Might feel anxiety because he does not know him 	

Extended cross-group friendships

- For instance, say a Turkish and a Syrian student are in the yard and the Syrian student is teaching his Turkish friend a game they play and if the other Turkish students are not friends with that Syrian student and if they are curious about the game, they can ask about it and become friends
 - For example, a Syrian friend and I tell the other students "he is a good friend of mine", is they exclude him I ask them "why do you isolate him?" Then, if they become friends, too the Syrian friends would be happy, as well. We play games together
 - When our Turkish friends see that a friend of theirs spends time together with a Syrian friend, becoming friends, other students will also think Syrian students are good and they can become friends, as well
 - They would understand that Turkish and Syrian students are similar and that we could be friends
 - Syrian students can become friends with the Turkish students, Turkish students can make friends with the other Syrian students, they can play and become good friends
 - That every child is equal and that we can be friends with the Syrian students
- Would have positive effects because he is from one nation and the other is from another nation. They become friends

Helping each other

- Turkish students can teach Syrian students how to read. They can teach their language
- Syrian students can teach Syrian to Turkish students
- For instance, when we go on a field trip, if there is a sign in Arabic, Syrian students can translate it for us
- If the Syrian students teach them new games and new dishes, they can share and they can learn them

(Continues)

(Continued)

TABLE A3

Categories	Experimental group	Control group
Learning outgroup culture and language	<ul style="list-style-type: none"> Turkish students will have understood Syrian culture 	<ul style="list-style-type: none"> Would have positive effects because we both make new friends and they learn our language and we learn theirs
Being happy	<ul style="list-style-type: none"> Makes us feel good, happy, and benevolent 	
Outgroup empathy		Turkish students may learn to empathize because the Syrians come from a war zone and there is no war in our country

TABLE A4 Categories and examples of excerpts for the question: "How would a friendship between a Syrian student and a Turkish student, and the time they spend together, affect Syrian students in general?"

Categories	Experimental group	Control group
Intergroup homogeneity	<ul style="list-style-type: none"> They would understand not all Turkish students are the same; some might be good and some bad 	-
Negative feelings	-	<ul style="list-style-type: none"> Would feel embarrassed
Positive feelings	-	<ul style="list-style-type: none"> Would make them feel positive
Extended crossgroup friendships	<ul style="list-style-type: none"> For instance, a Syrian student becomes friends with a Turkish student, others may become friends with him too. That would make the Syrian student very happy. Those who refused him earlier or threw rocks at him, fought with him, would become friends with him now. They would apologize and make peace Turkish students may introduce their Syrian friends to their Turkish friends, they let them know they are good. They play games together ...When the Syrian students start seeing Turkish students as good, they also become friends with them and when they find out there is no incompatibility between them, they can become friends and play together The Syrian students would feel good, become friends with Turkish students They would understand that Turkish students make good friends The Syrian students may understand this: Turkish students are kind-hearted, they are good people, every student has equal rights and they can become friends with them 	<ul style="list-style-type: none"> They would become good friends Would have a very positive effect. Because Syrian students cannot find their friends. They come to Turkey and make other friends would make them happy. They would make new friends Since they are becoming new friends, for instance, if the Syrian student spoke Turkish, they would get close and they can then become good friends. They would feel good
Learning about the culture, food, and games	<ul style="list-style-type: none"> They would learn each other's language, Turkish student, get to know him and 	<ul style="list-style-type: none"> Because they would make friends with a outgroup learn our language and religion

TABLE A5 Categories and examples of excerpts for the question: “How would a friendship between a Syrian student and a Turkish student, and the time they spend together, affect their close friends?”

Categories	Experimental group	Control group
Extended cross-group friendships	<ul style="list-style-type: none"> For instance, if a Turkish student and a Syrian student are friends and if the Turkish student has another friend they would say “This Syrian is a good person, a nice person, does not cheat in games. Then, the Syrian student tells his close friends “These Turkish students are also nice, they do not treat us bad or exclude us.” The close friends of the Turkish student also become friends with the Syrian friend and the Syrian students become friends with the Turkish students For instance, the Turkish student may introduce his Syrian friend to his close friend and the Syrian student may introduce his close friend to his Turkish friends For example, let's say the Turkish student and the Syrian student are friends. They play games together. The Syrian student's other Syrian friend joins them and Turkish student's other Turkish friend joins them, too. They are now four people. They can get to know each other and start a new game altogether For example, let's say Ahmet and I are friends. Ahmet has a Syrian friend and I have a Turkish friend. My Turkish friend may become friends with Ahmet's Syrian friend if they wanted. Other Syrians and Turkish students can also become friends if they wanted. We can provide opportunities for them to get to know each other better My close friends would be affected like this: they would ask that friend “how are the Syrian students?” When that friend finds out the Syrian students are also nice, he can tell the others they are nice and have good intentions and then, they, too, could become friends with other Syrian students 	<ul style="list-style-type: none"> Some would become friends. But some would introduce the Syrian student and they could become friends with him He could meet the Syrian students' friends and become friends with them For instance, the Turkish student's friend and the Syrian student's friend, all four of them may get closer and talk If we tell our friends how well we get along with the Syrian student, they may want to meet other Syrian students
Learning about the outgroup culture	<ul style="list-style-type: none"> ...Turkish student's friend can meet his Syrian friend and teach their games, their culture. Another Syrian student can teach their games 	

Common ingroup • That friend could tell them the Turkish and identify the Syrian students are the same and that they could be friends

(Continued)

(Continues)

TABLE A5

Categories	Experimental group	Control group
Negative consequences		<ul style="list-style-type: none"> • Would have a negative effect because other friends might think he would no longer play with us. They would say "he sold us" • Would have a negative effect because he would say "if I were to become friends with them others would think ill of me"
Intergroup jealousy		<ul style="list-style-type: none"> • If both of them spend time together every day, others might feel bad

TABLE A6 Categories and examples of excerpts for the question: "How would a friendship between a Syrian student and a Turkish student, and the time they spend together, affect their families?"

Categories	Experimental group	Control group
Negative consequences		<ul style="list-style-type: none"> • Would have a negative effect • Would have a negative effect because families would not like their children to become friends with foreigners • Syrian mothers might be a little suspicious. Since they newly arrived, they might still feel a little threatened. Same is true with the Turkish mothers. They might feel a little worried. They might think "to be on the safe side" • They might be a little concerned • uhm, they would feel worried because they do not have any Turkish friends and so, they do not know Turkish people
Learning about outgroup culture and language	<ul style="list-style-type: none"> • Their families could also meet. Syrian student's mother can teach the Turkish students how to make Syrian dishes, how to speak Arabic. Turkish students can teach her how to make Turkish dishes • They can teach each other about their cultures • If the Syrian student's mother cannot speak Turkish, Turkish student's mother could teach her • For example, they can teach Arabic to the Turkish student's mother • For instance, let's say a Syrian came to class and cannot speak Turkish. Turkish student's mother can teach her Turkish if she knows Arabic 	<p>For instance, uhm let's say the Syrian friend brought his mother along, as a guest. I think they would welcome her, they would get to know each other and stop worrying</p>

Outgroup empathy

- Turkish parents would realize how kind-hearted and well-behaved their child is. Syrian parents could feel the same

(Continued)

TABLE A6

Categories	Experimental group	Control group
Outgroup helping	<ul style="list-style-type: none"> • If the Syrian student had just moved and if they are having financial problems, and if I'm friends with that student, my father might offer his father a job if it is possible 	
Extended cross-group friendships	<ul style="list-style-type: none"> • If they are friends, they can introduce their parents and they would meet and go on a picnic and visit each other's homes • They would see that the families could also become friends. They could invite them over for dinner, or go someplace else together • ...For example, one parent could cook and invite the other. They could eat together. They could become friends • Other families who see that the Syrian parents are nice people they would want to spend time with them, too • ...They become like family. They spend more quality time and friendship between the Turkish and the Syrian students would have a positive effect on the other students and parents. They become like family • They could go out, go on trips, have coffee at a coffee shop • They could visit the Turkish student's relatives with his family. They could visit the Syrian student's relatives with his family. They could be offered to taste traditional foods 	<ul style="list-style-type: none"> • Would have a positive effect because if the child is not playing with his Syrian friends, they would want him to become friends • Would affect the families because the Syrian students meeting other students would make families happy

TABLE A7 Categories and examples of excerpts for the question: "What are the results of positive relationships between Turkish and Syrian students in classrooms?"

Categories	Experimental group	Control group
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(Continued)

- Learning about outgroup culture and language
- They can form good relationships, they can teach Turkish, Arabic, they can learn each other's traditional foods, they can learn each other's culture, they can tell their families, arrange family visits. Two students can, for instance, they can spend the night in each other's homes
 - ...Sometimes we would like to learn Syrian songs, our Syrian friends could teach us. Things would be better like that, we could play together, set an example for our other friends

(Continues)

TABLE A7

Categories	Experimental group	Control group
	<ul style="list-style-type: none"> • We could learn Syrian students' games and play together 	
Direct cross-group friendships	<ul style="list-style-type: none"> • They would become good friends and spend time together • They would become good friends... more than friends they could be like brothers • They would understand we are not malevolent, that we are equal and that we can be friends • They would hang out together, play games, go to the amusement park, meet each other's families... when they grow up, they would still be friends and keep doing those things • ...they would have memories of their friendship and the time they spent together 	<ul style="list-style-type: none"> • Would lead to good friendships, mutual trust • They would become friends, uhm, if they are mean to Turkish students, they start treating them nice. • Uhm, we had a Syrian friend, Rakik. She went to a different school for Syrians. We were sad to see her go. I can say we were very good friends
Outgroup helping	<ul style="list-style-type: none"> • Let's say the teacher gave the students some homework. If the Syrian student cannot read, the Turkish student can help him, they would spend quality time together and they become friendlier 	<ul style="list-style-type: none"> • They could do their homework, help the Syrian students • We had a Syrian girl in our class. Our teacher asked us to help her understand the questions on the exams, so we would help her during the exams. That made her so happy
Extended cross-group friendships	<ul style="list-style-type: none"> • For example, the other students would notice the friendship between the Turkish and the Syrian student and they would start to bond if they were not friends before • They would get along well and the Turkish students would develop favorable opinions of the other Syrian students. The Syrian students would clearly explain it to their Syrian friends and tell them that the Turkish and the Syrian students are not at all different and they would play altogether, have a good time and be happy 	

(Continued)

TABLE A8 Categories and examples of excerpts for the question: "What are the results of negative relationships between Turkish and Syrian students in classrooms?"

Categories	Experimental group	Control group
Interpersonal violence	<ul style="list-style-type: none"> • ...They would fight. This time the Turkish students would say "He is throwing rocks at me, he is starting a fight" Then the Syrian student tells his parents, and both families get in a fight • They might fight and avoid each other • There would be fights • Fights and arguments • It would lead to bad behavior • There would be arguments, err, they might hurt each other 	
Interpersonal conflict	<ul style="list-style-type: none"> • When they hurt each other, they would all feel sorry 	<ul style="list-style-type: none"> • Distrust and dislike • There would be conflicts • The Syrian student would feel sad and they would have conflicts • They would yell at each other
Feeling excluded	<ul style="list-style-type: none"> • ...For instance, while the Turkish and the Syrian students are trying to make friends, if the Turkish student points at them and laughs, they would feel bad and left out • The Syrian students would tell the other Syrian students "the Turkish students are mean, they reject the Syrian students, they beat them." Turkish students would say "The Syrian students are not nice, don't be friends with them or you would always fight." Then, the Turkish and the Syrian students in the class would get in a fight and the teacher would have to call their parents 	
Extended cross-group	<ul style="list-style-type: none"> • If the Turkish and the Syrian students cannot friendships become friends, other Syrian students would think less of us, they would 	
Direct cross-group friendships	<ul style="list-style-type: none"> • It would be bad because they could not get along well or become friends • They could not get along well or become friends, they may think less of each other 	
Outgroup empathy	<ul style="list-style-type: none"> • Close friends of both students would also be 	
Learning outgroup culture and language	<ul style="list-style-type: none"> • They could not learn new things • For instance, they could not taste new foods, learn new songs. Turkish and Syrian students could not learn each other's dishes and songs 	

affected. They may think less of Turkish people.

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(Continued)

ss of the Syrians. This would go on like this and they could never get to know each other. They could not learn each other's cultures, etc.