

## Effect of intergroup contact and peace education on Intermediate social cohesion outcomes

Intergroup contact and peace education have a large effect on improving empathy, understanding, conflict resolution skills, and cooperation, strengthening intergroup relationships and reducing bias..

Geographical region: Europe & Central Asia, Middle East & North Africa, South Asia, Sub Saharan Africa, East Asia & Pacific

Effect size: Large effect ( $g=0.316$ )

Confidence in study findings: Low confidence (30 studies; 190 ES)

### Short summary

Intergroup contact and peace education interventions have a **large effect** on intermediate social cohesion outcomes. Programs delivered through schools, media, dialogue sessions, and collaborative projects improved participants' empathy, trust, conflict resolution skills, and positive attitudes toward outgroups. These interventions facilitated stronger social-emotional skills and understanding, contributing to reduced bias and enhanced interpersonal and intergroup relations. Confidence in this cell is low due to inconsistencies in the overall effect across studies.

### Long summary

#### *The intervention*

Interventions included structured intergroup contact and peace education programs designed to promote dialogue, empathy, and positive attitudes across divided groups. These took the form of school-based curricula, community forums, reconciliation workshops, digital storytelling, media literacy exercises, and narrative-based activities. The programs aim to develop conflict resolution skills, mutual understanding, and tolerance among participants from diverse backgrounds.

#### *How the intervention is expected to work*

Intergroup contact and peace education interventions are expected to work by providing structured opportunities for individuals from different or opposing groups to interact, share experiences, and engage in guided dialogue. Through direct contact, narrative exchange, and collaborative activities, participants are exposed to new perspectives, challenge stereotypes, and develop empathy for outgroup members. Educational components foster understanding of conflict resolution, tolerance, and equality. These mechanisms are intended to reduce prejudice, shift attitudes toward acceptance and nonviolence, and enhance social cohesion. Over time, repeated engagement cultivates trust, builds conflict resolution skills, and strengthens participants' commitment to peaceful and inclusive social norms.

#### *The evidence base*

The cell includes 30 impact evaluations. The studies used randomized controlled trials, quasi-experimental pre-post designs, experimental laboratory designs, and mixed-methods or

cross-sectional comparative approaches. Studies were conducted in diverse settings including Kyrgyzstan, Belgium, Israel, Rwanda, Germany, China, Nigeria, Indonesia, Turkey, Pakistan, and Liberia, spanning both post-conflict and stable societies.

### *Evidence findings*

Intergroup contact and peace education interventions had a large effect on intermediate social cohesion outcomes. Participants demonstrated meaningful improvements in empathy, understanding of other groups, conflict resolution skills, and willingness to cooperate, reflecting reduced bias and strengthened interpersonal and intergroup relationships.

### *The impact evaluation evidence*

**Aladysheva (2017)** assessed a peace education program implemented in Kyrgyzstan, aiming to build youth capacities in conflict resolution, equality, and democratic values. The intervention targeted secondary school students and involved activities such as peer mediation, training workshops, and curriculum-based education on peace and tolerance. The context of the intervention was post-ethnic violence in southern Kyrgyzstan, where the initiative sought to rebuild trust and social cohesion among young people. A quasi-experimental pre-post design was used to evaluate outcomes in participating schools, with sampling done among 1,100 students across three different school types: schools with peace education, schools with limited peace activities, and schools with none. Key findings showed significant improvement in key outcome indicators in schools with full peace education programs. Average self-efficacy (confidence) was highest among students in these schools ( $M = 3.65$  vs.  $3.48$ ), as was average locus of control ( $M = 3.70$  vs.  $3.50$ ). Students in peace schools also performed better in identifying mediation skills (76% correct) and recognizing behaviors of unequal treatment (68% correct), compared to students from other school types. The study is rated high confidence.

**Baseler (2021)** evaluated the impact of a digital storytelling intervention aimed at improving public perceptions of refugees in Belgium. The intervention involved exposure to short films and narratives depicting real-life experiences of refugees, focusing on their economic contributions, personal stories, and integration efforts. Conducted across multiple urban regions in Belgium, the study employed a randomized controlled trial design, comparing treatment and control groups exposed to different media formats. The sample consisted of over 5,000 adult Belgian citizens, randomly assigned to view either the refugee narratives or neutral content. Findings indicated significant positive shifts in knowledge and beliefs about refugees' economic outcomes. Participants in the treatment group were more likely to believe that refugees positively affect them personally and possess relevant skills, with increases of 5–7 percentage points across items. Beliefs that refugees have sufficient money and receive more aid than needed declined by 4–6 percentage points ( $p < 0.01$ ). Importantly, perceptions that refugees can support themselves increased significantly (by 6–8 percentage points). Additionally, attitudes toward immigrants in general also became more favourable. The study is rated as medium confidence due to attrition rate.

**Berger (2016)** tested the Extended Class Exchange Program (ECEP), a multi-theoretical prejudice-reduction intervention for 3rd and 4th grade Israeli–Jewish and Israeli–Palestinian students in Jaffa, Israel. Using a randomized controlled design, 322 students (161 intervention, 161 control) from four schools participated. Outcomes were measured pre-intervention, post-intervention, and at 15-month follow-up. The main outcome examined was readiness for social contact, which refers to participants' willingness to interact with members of the outgroup. Findings showed a statistically significant increase in readiness for social contact among students in the intervention group compared to those in the control group. The effect was particularly pronounced among Jewish students, suggesting that structured,

emotionally resonant peace education programs can effectively promote openness to intergroup engagement in conflict-affected societies. The study is rated as high and medium confidence quantitative study.

**Bilali (2013)** tested the effects of the reconciliation radio drama *Musekweya* on intergroup attitudes, using an audio-based priming method. Participants (N = 842, 53% female) from across Rwanda were randomly assigned to hear a questionnaire read either by a main character of the drama (experimental condition) or a neutral voice (control). The aim was to assess the drama's impact on intergroup mistrust, specifically the belief that "It is naïve to trust members of the other ethnic group. Participants in the intervention group showed a statistically significant decline in the belief that only their group had suffered during the conflict and became more open to acknowledging suffering on all sides. They also reported greater efforts to understand the opposing group's historical perspective. These findings suggest that peace education rooted in historical dialogue can reduce exclusive victimhood and promote inclusive narratives in post-conflict settings. The study is rated as low confidence quantitative study due to use of single-item measures instead of longer, more reliable scales due to practical constraints in field research.

**Cao (2020)** evaluated a narrative-based intergroup contact intervention aimed at promoting intergroup forgiveness among Chinese university students in the context of historical Sino-Japanese conflict. Conducted in China, the intervention involved reading stories that highlighted either offenses committed by the outgroup (Japanese) or narratives emphasizing forgiveness and reconciliation. The goal was to assess how exposure to different types of intergroup narratives influenced participants' willingness to forgive. The study used a randomized controlled experimental design with participants randomly assigned to one of three conditions: offense, forgiveness, or control. The sample consisted of 216 Chinese students (mean age = 19.67, SD = 1.43), who completed surveys measuring intergroup forgiveness after reading the narratives. Findings revealed that participants in the forgiveness condition demonstrated significantly higher levels of intergroup forgiveness compared to those in the offense and control conditions ( $p < 0.001$ ). The results suggest that narrative-based interventions emphasizing forgiveness can be effective in improving attitudes toward historical outgroups, even in contexts involving deeply rooted intergroup grievances. This study is rated as high and medium confidence quantitative study.

**Gausel (2017)** investigated how apology, justification, and perspective-taking function as conflict-resolution strategies within intergroup settings, focusing on their effects on emotions and motivations such as anger, revenge, relationship repair, and perceived risk to social image. Conducted in Germany, the study employed an experimental design where participants were randomly assigned to one of six experimental conditions involving either a perspective-taking prompt or no such prompt, combined with one of three conflict response strategies (apology, justification, or control). The sample comprised 228 German university students (aged approximately 22), who were asked to imagine a conflict scenario involving Jewish and German historical groups and then report their emotional and motivational responses. The findings revealed that participants exposed to perspective-taking combined with an apology showed significantly lower levels of anger and revenge motivations ( $p < 0.05$ ), while also reporting higher intentions to repair relationships ( $p < 0.01$ ). Additionally, perceived risk to social image was significantly lower when apology was offered within a perspective-taking context. The study is rated as low confidence quantitative study due to very small sample size.

**Hartman (2018)** evaluated a community-level intervention promoting civic engagement, empathy, and dispute resolution in Liberia following civil conflict. The intervention involved a civic education program delivered through community forums, radio programming, and facilitated discussions across 83 treatment and 83 control towns. The study took place in Liberia, using a randomized controlled trial design to assess the intervention's impact. The sample included 3,603 individuals from across the study sites. Researchers measured key

outcomes through six constructed indices: Bias, Defection, Empathy, Forum Choice, Emotion Management, and Mediation, all reflective of norms, attitudes, and skills related to civic behavior and conflict resolution. The program significantly reduced the Bias Index and increased scores on the Empathy Index, Forum Choice Index, and Mediation Index ( $p < 0.05$  for most indicators), suggesting improved attitudes toward outgroups, stronger support for public forums, and greater use of nonviolent dispute resolution. Additionally, communities exposed to the program experienced improved conflict management in real-life disputes. This study is rated as high and medium confidence quantitative study.

**Influs (2018)** evaluated the impact of an intergroup contact intervention designed to explore physiological and psychological mechanisms influencing empathy and bias. Conducted in Israel, the intervention paired Jewish-Israeli and Palestinian-Israeli participants in dyadic sessions involving guided interactions and cooperative tasks. The objective was to assess whether oxytocin release and behavioral indicators could mediate intergroup empathy and reduce bias. The study used a randomized controlled trial design. The sample included 104 participants (52 dyads), equally split by ethnicity and gender. Salivary oxytocin was measured before and after the interaction to assess physiological response, while psychological outcomes were evaluated using the Interpersonal Reactivity Index (IRI), ethnocentrism scales, and behavioral coding of empathy and dyadic tension. Results revealed a significant increase in oxytocin levels among participants in the intergroup interaction compared to controls ( $p < 0.05$ ), suggesting greater physiological bonding. Additionally, the intervention led to higher behavioral empathy and lower dyadic tension scores ( $p < 0.01$ ), while ethnocentrism was reduced ( $p < 0.05$ ). The study is rated as high and medium confidence quantitative study.

**Kampf (2014)** examined the effects of a peace education intervention designed to enhance students' knowledge about the Israeli-Palestinian conflict through structured media analysis. Conducted in Germany, the program targeted high school students and was situated within a broader framework of intergroup contact and peace education. It aimed to improve critical understanding of how conflict is portrayed in the media and to foster reflective attitudes toward social and political issues. The intervention was delivered through workshops using real-world media content and facilitated discussions. The study followed a quasi-experimental design, employing pre- and post-intervention assessments. The sample included over 350 students aged 15 to 18 from various secondary schools. Knowledge levels were measured using standardized questionnaires before and after the intervention. Findings showed a statistically significant improvement in knowledge scores among students in the intervention group compared to the control group ( $p < 0.01$ ). This suggests that the intervention was effective in enhancing students' understanding of the Israeli-Palestinian conflict and media framing. The study is rated as high and medium confidence quantitative study.

**Kang (2020)** evaluated the impact of intergroup contact and peace education on psychological outcomes among Rwandan participants, specifically focusing on post-genocide reconciliation efforts. Conducted in Rwanda, the intervention involved structured community-based dialogues that included both survivors and perpetrators of the genocide. The objective was to promote reconciliation and emotional healing through narrative sharing and mutual engagement. The study used a cross-sectional comparative design to assess differences in psychological variables between participants and non-participants. The sample included adult survivors and former perpetrators (genocidaires), although the total sample size was not clearly specified. Key findings indicated that survivors who participated in the program showed greater readiness to reconcile than non-participants, with significantly higher scores in dispositional forgiveness and perceived forgiveness by others. Additionally, survivors reported higher levels of self-forgiveness. In contrast, participants displayed lower levels of state shame and guilt, suggesting a shift in emotional burden. The study is rated as low confidence study due to non-experimental design; quantitative findings did not adequately capture the participants' experiences of the encounters with depth.

**Levy (2022)** explored in this study was a neuroscience-based approach aimed at reducing intergroup bias through non-invasive brain stimulation. Conducted in Israel, the intervention involved administering transcranial direct current stimulation (tDCS) targeting the right dorsolateral prefrontal cortex (rDLPFC), a region linked to social cognition. The objective was to assess whether modulating neural activity could influence behavioral and neural markers of bias among Jewish-Israeli participants when evaluating Palestinian outgroup members. The study followed a randomized controlled trial design. Participants were randomly assigned to either an active stimulation group or a sham (control) group. The sample consisted of 49 Jewish-Israeli adults. Behavioral outcomes were measured through tasks involving conflict-related social decision-making, while neural outcomes were assessed using functional magnetic resonance imaging (fMRI). Findings revealed that those in the active stimulation group exhibited longer response times (RTs), indicating increased cognitive processing or hesitation during intergroup decisions. Moreover, fMRI scans demonstrated a significant reduction in neural intergroup bias in empathy- and perspective-related brain areas, suggesting that brain stimulation can alter intergroup attitudes at both behavioral and neurological levels. The study is rated as high and medium confidence quantitative study.

**Lonergan (2017)** focused on strengthening interethnic cohesion and reducing intergroup conflict through community engagement activities in Jos, Nigeria. Set in a context marked by violent identity-based clashes, the program employed inclusive dialogue sessions, peacebuilding workshops, and conflict resolution training to counter inflammatory rhetoric, hate speech, and entrenched social trauma. A quasi-experimental, mixed-methods design was used with treatment and control groups. The sample included adults and youth from Christian and Muslim communities, with data collected through pre- and post-intervention surveys and focus groups. The exact sample size is not provided in the figure. Key findings indicated improvements across multiple dimensions. Participants in the intervention group reported a reduction in feelings of injustice and social trauma, as well as lower endorsement of identity-based ideologies. There was also a decline in support for inflammatory rhetoric and hate speech. The intervention contributed to lower identity-based tensions and promoted mutual understanding between previously antagonistic groups. The study suggests that localized peace education and intergroup dialogue can reduce conflict drivers and foster social healing in areas affected by religious and ethnic violence. The study is rated as low confidence quantitative study because the uneven representation of the sample, short duration of the intervention.

**Malhotra (2005)** examined was a reconciliation workshop designed to promote intergroup empathy and altruism between Jewish-Israelis and Arab-Palestinians, focused on encouraging charitable behavior as a proxy for empathy and trust. Conducted in Jerusalem, the study was implemented through a structured experimental lab design using vignettes and simulated donation decisions. Participants were randomly assigned to treatment and control groups, with the treatment group exposed to reconciliation messages and stories before making charitable donations. The study employed a randomized experimental design to assess the impact of reconciliation narratives on behavioral giving. The sample consisted of 1,200 participants representing both Israeli Jews and Palestinian Arabs, evenly distributed across treatment arms. The key outcome measured was the amount donated to an outgroup-affiliated charity. Findings indicated that exposure to reconciliation narratives led to a statistically significant increase in donations to outgroup charities. Specifically, participants in the intervention condition donated more compared to control participants ( $p < 0.01$ ). The study is rated as high and medium confidence quantitative study.

**Mashuri (2021)** evaluated an intergroup contact and peace education intervention aimed at promoting positive intergroup orientations in the context of conflict-prone communities in Indonesia. The intervention, titled "Peace Workshop," was implemented in a classroom setting and focused on promoting empathy, critical thinking, and intergroup understanding among Muslim and Christian high school students. The program included structured dialogues, collaborative tasks, and reflection sessions across multiple modules. Conducted

in Ambon, Maluku—a region with a history of sectarian violence—the study used a quasi-experimental, pre-post design involving treatment and comparison groups. The sample included 260 high school students, with equal representation from both religious groups. Pre- and post-surveys were administered to measure positive intergroup orientations, such as trust, respect, and willingness to engage in intergroup dialogue. Findings demonstrated that participants in the intervention group reported a statistically significant increase in positive intergroup orientations (mean pre = 3.47, post = 3.98,  $p < 0.01$ ), while the comparison group showed no significant change. The study rated as low confidence quantitative study due to reported low Cronbach's alpha ( $\alpha = .41$ ) for avoidance regulatory focus, indicating poor internal consistency.

**Porat (2020)** aimed to explore how emotion regulation strategies particularly cognitive reappraisal and expressive suppression can influence emotional responses and policy support in the context of the Israeli-Palestinian conflict. Conducted in Israel, the study used a randomized experimental design involving 253 Jewish-Israeli adults who were exposed to emotionally provocative news clips about Palestinian violence. Participants were randomly assigned to one of three groups: reappraisal, suppression, or control (no regulation strategy). The sample was diverse in age and background, and interventions were administered via an online platform. Key outcomes focused on emotion regulation attempts and habituation to these strategies. Findings indicated that those in the reappraisal group reported significantly more emotion regulation attempts compared to control and suppression groups ( $p < 0.001$ ). Moreover, participants in the reappraisal condition showed greater habituation, indicating increased ease and effectiveness in using reappraisal over time. In contrast, suppression led to less habituation, suggesting it may be a less sustainable strategy. The study is rated as medium confidence as it is designed as a non-experimental study design and has partially defined the interventions and outcomes in the study.

**Sagkal (2012)** evaluated the effect of a Peace Education Program on empathy levels among sixth-grade students in two low socioeconomic elementary schools in Menemen, İzmir, Turkey. Using a quasi-experimental pretest-posttest control group design, the intervention was conducted over 12 weeks, consisting of 24 sessions. The experimental group ( $n=158$ ) received the program, while the control group ( $n=123$ ) did not. The program covered peace and violence, elements supporting peace, peaceful individual skills, and negotiation-based conflict resolution. The “Index of Empathy for Children” was used to assess empathy levels. The results showed significant increases in empathy scores for both boys and girls in the experimental group compared to the control group. The total adjusted posttest mean empathy score was significantly higher in the experimental group (14.43) than in the control group (11.48) ( $p=.000$ ), with effect sizes of  $\eta^2 = 0.17$  overall. The program appeared particularly effective for male students, with an effect size of 0.25. This study can be rated as low confidence quantitative study due to quasi experimental design.

**Walther (2015)** aimed to reduce intergroup prejudice among religious Jews, secular Jews, and Muslim youth in Israel through a school-based intergroup encounter program. Implemented in Israeli schools, the program utilized structured dialogue, narrative sharing, and cooperative activities to address cultural divisions and reduce hostility among diverse ethnic and religious groups. The study used a quasi-experimental pre-post design with a control group, conducted across different school types. The sample included 206 students: religious Jewish ( $n=55$ ), secular Jewish ( $n=82$ ), and Muslim ( $n=69$ ) adolescents. Prejudice was assessed using multidimensional attitude measures across three identity groups. Results indicated a statistically significant reduction in prejudice among Muslim participants toward religious Jews ( $p < 0.001$ ), secular Jews ( $p < 0.01$ ), and Arabs ( $p < 0.001$ ). Secular Jewish participants also showed decreased prejudice toward Arabs ( $p < 0.001$ ) and religious Jews ( $p < 0.01$ ), with minimal change toward their own group. Among religious Jewish participants, changes were not statistically significant. The study is rated as high and medium confidence study.

### *Confidence assessment*

We have low confidence in this cell as there is considerable inconsistency in the effect sizes across studies.

### **Other outcomes in the study**

- Violence and atrocity prevention/diplomatic relation and dispute resolution/nature and scale of violence or atrocities/social norms regarding violence and atrocities
- Social cohesion/Feeling of trust and acceptance of diversity/sense of belonging/willingness to participate or help
- Human security/economic security/educational security/food security and nutrition & health security/physical security