Original article

Evaluation of a program to prevent political violence in the Basque conflict: effects on the capacity of empathy, anger management and the definition of peace

Maite Garaigordobil

Department of Personality, Assessment, and Psychological Treatments, Faculty of Psychology, University of the Basque Country, Donostia-San Sebastián, España

A R T I C L E  I N F O

Article history:
Received 9 March 2011
Accepted 15 June 2011
Available online 28 January 2012

Keywords:
Violence
Adolescent psychology
Primary prevention

A B S T R A C T

Objective: To assess the effects of a program for the prevention of political violence on empathy, expression of feelings of anger, and the capacity to define peace–violence.

Method: This study used a quasi-experimental design with pretest-posttest repeated measures and a control group. The sample comprised 276 adolescents aged between 15 and 17 years (191 in the experimental group, 85 in the control group; 127 boys and 149 girls). A battery of three assessment instruments was administered before and after the intervention. The aim of the program was to increase sensitivity to the victims of political violence, promote respect for human rights, and prevent violence. The intervention consisted of 10 sessions over 3 months.

Results: MANOVA analyses revealed that the program increased participants’ capacity of empathy (perspective-taking), anger control in annoying situations, and capacity to define peace-violence.

Conclusions: This study has practical educational implications and provides an intervention tool that enhances the development of personality during adolescence and may have a preventive effect on violent behavior.

Evaluation of a program for the prevention of political violence in the conflict of the Basque Country: effects on the capacity of empathy, anger management and the definition of peace

E-mail address: maite.garaigordobil@ehu.es

© 2011 SESPAS. Published by Elsevier España, S.L. All rights reserved.

Palabras clave:
Violencia
Educarción
Psicología del adolescente
Prevención primaria

R E S U M E N

Objetivo: Evaluar los efectos de un programa para prevenir la violencia política en la capacidad de empatía, la expresión de sentimientos de ira y la definición de paz-violencia.

Método: El estudio utilizó un diseño cuasiexperimental de medidas repetidas pretest-intervención-posttest con grupo de control. La muestra está configurada con 276 adolescentes de 15 a 17 años de edad; de ellos, 191 son experimentales y 85 controles, 127 hombres y 149 mujeres. Se administró una batería de tres instrumentos de evaluación antes y después de aplicar el programa de intervención. El objetivo del programa fue incrementar la sensibilidad hacia las víctimas de la violencia política, promover el respeto por los derechos humanos y prevenir la violencia. La intervención consistió en 10 sesiones realizadas durante 3 meses.

Resultados: Los resultados del MANOVA revelaron que el programa incrementó la capacidad de empatía (toma de perspectiva), el control de la ira en situaciones de enredo y la capacidad para definir paz-violencia.

Conclusiones: Este estudio tiene implicaciones prácticas y provee una herramienta de intervención para fomentar el desarrollo de la personalidad durante la adolescencia. Por ello, puede tener un efecto preventivo de la conducta violenta.

© 2011 SESPAS. Publicado por Elsevier España, S.L. Todos los derechos reservados.

I n t r o d u c t i o n

In recent years, the problem of youth violence has caused increasing concern in educational and mental health professionals worldwide. Accordingly, one line of research has focused on violence prevention programs. The results of these studies have revealed the efficacy of this type of intervention carried out in community, clinical, and educational contexts.1-11 The systematic implementation of such programs has been shown to promote the prevention and reduction of violent behavior.

Although there are many kinds of violence and all are a source of concern and should therefore be the focus of interventions, in this study, particular attention is paid to political violence. Specifically, the Basque Country has suffered a severe problem of political violence for the past 50 years. ETA (Euskadi Ta Askatasuna) was created in 1959. Since then, this terrorist organization has killed 829 people.12 Various terrorist organizations created to combat ETA [the Anti-Terrorism Liberation Group (Grupo Anti-terrorista de Liberación), the Basque-Spanish Battalion (Batallón Vasco-Español), Triple A . . . ] were active until 1987, during which time they killed 66 people.13 Although the number of people killed by ETA has
decreased in the last few years, 42,000 people are threatened, and many have fled the Basque Country. Members of ETA have also been tortured in jails by the Spanish state security forces, and 600 ETA members are currently in prison.13,14 In this cultural context, some people, and consequently some adolescents, defend ETA violence and believe that certain violent behaviors are justifiable. This belief stimulates adolescents to perform more politically motivated violent behavior and to be less sensitive to victims of violence. Hence, intervention programs to prevent violence and increase awareness of victims of violence are urgently required in the Basque Country.

A review of the literature reveals a lack of intervention programs and research into their effects in conflictive social contexts of political violence with terrorism. Among the research most closely related to this topic is Slone and Shoshani’s15 primary prevention program for coping with exposure to political violence in Israel. The results validated modification of the mobilization of support factors.

The program assessed in the present study employs a cognitive-behavioral theoretical framework and attempts to promote cognitive restructuring of thoughts about violence and its consequences in order to reduce violent behavior. From the cognitive perspective, thoughts have a strong impact on a person’s emotional response and behavior16,17 and, therefore, certain ideas, beliefs, or thoughts may be used to justify violent behaviors. There are two factors in the origin of hatred: moral devaluation of the victim (the hated) and the ideology of the hater. Both these factors model and extend hatred. After a person has morally or humanly devalued the victims, attacking or killing them can become a right. Haters see the hated as someone profoundly evil, immoral, dangerous, or all of these qualities18. Hatred is based on the perception of the other, but is also related to the haters – to their personal history and its effects on their personality, feelings, beliefs, and, especially, their identity. Certain adverse life conditions (jealousy, failure . . . ) and contextual factors (situations of racial or religious discrimination, social injustice, linguistic or cultural repression . . . ) can trigger and intensify hatred. The cognitive components of hatred involve one person’s devaluation and perception of the other as threatening. The emotional part includes feelings such as anger, fear, distress, and hostility.18

Based on these theoretical proposals, the present study aims to assess the effects of the “Taking steps toward peace” program in the prevention of violence in the Basque Country. This study assesses the effects of the program on the capacity of empathy, anger management, and the capacity to define concepts associated with peace and violence.

Methods

Design and procedure

This study employed a quasi-experimental design with pre-posttest repeated measures and a control group. Before and after the intervention, a battery of three assessment instruments with psychometric guarantees of reliability and validity was administered to all the groups. The program was administered to the experimental groups for 3 months (a 10-session school-based program), while the control participants continued their habitual program of tutorship and ethics. The study was conducted in 2008–2009. After the schools were selected, a meeting with the school directors and teachers of the corresponding age group was held. After the general presentation of the project, they agreed unanimously to participate in the study. The decision was made with the acceptance of the parents of the adolescents involved. There were no rejections nor was there any pre-posttest attrition. A research team consisting of the teachers who implemented the program in the experimental groups and three psychologists who performed the pre-posttest assessments carried out the study.

Before beginning the program, the teachers were released from their teaching activities to participate in an intensive training course (a full work day for 1 week). During this time, the teachers participated in many training activities such as conferences by international experts in educational programs for peace and conflict resolution, debates about the program’s activities, analyzing the Basque conflict, becoming aware of their viewpoints on this conflict, and analyzing ways to resolve conflicts. The study met the ethical values required in research with human beings, respecting the fundamental principles included in the Helsinki Declaration: informed consent and right to information, protection of personal data, and guarantees of confidentiality, non-discrimination, gratuity, and the possibility of dropping out of the study in any of its phases.

Participants

The sample (Table 1) comprised 276 middle-class adolescents, 46% boys (n = 127) and 54% girls (n = 149), aged 15–17 years (M = 15.55, SD = 0.70), from four schools, distributed in 13 groups. Among the sample, 191 participants were assigned to the experimental group (69.9%) and 85 to the control group (30.4%). Pearson’s chi-square test between group and sex yielded no statistically significant differences (χ² = 3.46, p > 0.05). Nor were there any statistically significant differences between group and age (χ² = 0.05, p > 0.05), or between group and type of school (χ² = 0.05, p > 0.05). The centers were selected randomly from a list of all the educational centers in the Basque Country. In each center, the classrooms were numbered and randomly assigned to the groups (experimental or control). In each center, one control classroom was selected and the remaining classrooms were assigned to the experimental group.

Measures

1) Interpersonal Reactivity Index (IRI)19,20

Empathy was measured with Davis’ IRI, which evaluates the capacity of empathy through 28 statements, seven for each of its four factors: perspective-taking (the ability to adopt other people’s viewpoint), fantasy (capacity to identify with fictitious characters from books and films), empathic concern (capacity to experience feelings of compassion for others), and personal distress (capacity

<table>
<thead>
<tr>
<th>School</th>
<th>Province</th>
<th>Area</th>
<th>Type of school</th>
<th>Participants (%)</th>
<th>Group</th>
<th>Sex</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Experimental</td>
<td>Control</td>
<td>Boy</td>
</tr>
<tr>
<td>1</td>
<td>Bizkaia</td>
<td>Urban</td>
<td>Public</td>
<td>75 (27.2%)</td>
<td>56</td>
<td>19</td>
</tr>
<tr>
<td>2</td>
<td>Bizkaia</td>
<td>Rural</td>
<td>Public</td>
<td>67 (24.3%)</td>
<td>45</td>
<td>22</td>
</tr>
<tr>
<td>3</td>
<td>Alava</td>
<td>Urban</td>
<td>Private</td>
<td>95 (34.4%)</td>
<td>71</td>
<td>24</td>
</tr>
<tr>
<td>4</td>
<td>Guipuzoa</td>
<td>Rural</td>
<td>Private</td>
<td>39 (14.1%)</td>
<td>19</td>
<td>20</td>
</tr>
</tbody>
</table>
to experience feelings of discomfort and anxiety when observing others’ negative experiences). This index also provides a global empathy score. Participants were requested to rate the extent to which each statement described them on a Likert-type scale ranging from 1 (not at all) to 5 (very much). In the standardization sample of the test, the minimum value was 60 and the maximum was 122. All variables are continuous, and higher scores indicate greater capacity for empathy. Cronbach’s alpha coefficient with the sample of this study confirmed internal consistency (α = 0.81), and was even higher than those originally obtained by Davis, 19 which ranged between 0.70 and 0.78.

2) State-Trait Anger Expression Inventory (STAXI-2)21
This inventory measures feelings of State-Anger, Trait-Anger, and the Anger Expression Index (AEI). In this study, we used only the AEI, which includes 24 statements with which individuals rate, on a scale ranging from 1 (almost never) to 4 (almost always), the way they react when they get angry. The AEI has four factors of expression-control of feelings of anger: Anger Expression-Out (expression of anger toward other persons or objects), Anger Expression-In (holding in or suppressing angry feelings), Anger Control-Out (controlling angry feelings by preventing their expression toward persons or objects), and Anger Control-In (controlling feelings of anger by calming down or cooling off). In the standardization sample of the test, the minimum value was 0 and the maximum was 72. Higher AEI scores indicate higher anger expression. In the original version, the STAXI-2 has been shown to have adequate internal consistency (AEI α = 0.69). Cronbach’s alpha coefficients with this sample also confirmed the internal consistency (AEI, α = 0.71).

3) Questionnaire to Assess the Concepts of Peace and Violence (PAVI)22
This test explores the capacity to define concepts associated with peace and violence: negative peace (absence of wars), positive peace (state of personal and social harmony based on justice, equality, and respect for freedom and human rights), direct violence (physical and psychological aggression, direct physical attacks on human lives causing death and destruction), indirect violence (attacks which there is no direct relation between the aggressor and the victim), repressive violence (violation of people’s human rights), structural violence (poverty), and cultural violence (direct and indirect violence toward a person or group because of their culture, religion, etc.). Participants are requested to define these concepts and are assigned one point for each correct definition. PAVI scores range between 0 and 7 points, although in the standardization sample, the minimum value was 0 and the maximum was 4. Higher scores indicate a higher capacity to define these concepts. Cronbach’s alpha coefficient with the sample in this study showed a somewhat low internal consistency (α = 0.69).

4) The intervention program
The “Taking steps towards peace” (“Dando pasos hacia la paz”) program aims to increase sensitivity to the victims of political violence, promote respect for human rights, and prevent violence. The intervention consisted of a weekly 90-minute session for 3 months (10 intervention sessions). The program was administered to nine experimental groups and was incorporated into the school curriculum, as part of the subject “Ethics and human development” and was scheduled as a normal subject. The sessions were directed by each group’s tutor.

The program uses diverse techniques: debates, role playing, videos, brain-storming, etc. An example of a program activity is “The Cow”. This activity consists of watching a video in which an ETA member sets a bomb that accidentally kills his little sister. Then, there is a debate about the consequences of violence and the identification of nonviolent strategies to solve human conflicts. In another activity, several testimonies of the victims of terrorist violence (relatives of a person murdered by ETA or the Anti-Terrorist Liberation Group) are heard, and later the situation is role-played, and a debate takes place in which the students reflect upon the Basque conflict: the consequences of hatred and violence, the importance of dialogue, forgiveness, regret, empathy, etc., in solving the conflict.

5) Data analysis
Multivariate analysis of variance (MANOVA) with the pretest data was used to determine the homogeneity of the experimental and control groups. Complementarily, univariate analyses were conducted for each variable. To determine whether the intervention stimulated significant improvement in the experimental groups, a MANCOVA was carried out on the pre-posttest differences between experimental and control subjects (covarying the pretest scores), and univariate analysis of the pre-posttest differences in each variable was performed, with calculation of the effect size (Cohen’s d). Analysis of variance was employed to determine whether the change differed depending on sex and the province of residence. Data analysis was performed with the Statistics Package for Social Sciences (SPSS-18).

Results
The results of the pretest MANOVA (Multivariate Pillais, F(9, 266) = 2.33, p < 0.05) revealed significant pretest group differences, although the effect size was small (ŋ² = 0.082, r = 0.28). The results of the pre-posttest MANCOVA revealed statistically significant group differences (Multivariate Pillais, F(9, 257) = 7.80, p < 0.001), and the effect size was large (ŋ² = 0.286, r = 0.53). The results of the ANOVAs (pretest and pre-post group differences) and effect sizes are shown in tables 2 and 3.

When the capacity of empathy was examined (table 3), the pre-postest ANOVA showed that the program stimulated an increase of global empathy in the experimental group. Among the factors that comprise the capacity of empathy, significant differences were only found in perspective-taking. The effect size was medium in the global capacity of empathy but was large in perspective-taking. When feelings of anger were examined (table 3), the pre-postest ANOVA showed that the program stimulated a significant increase in the AEI in the experimental group. However, the effect was mainly due to the change produced in two factors, Anger-Control-Out and Anger-Control-In, which significantly increased in the experimental group. The effect size was medium for the AEI and for Anger-Control-Out, and was somewhat larger for Anger-Control-In. The pre-postest ANOVA showed that the program stimulated a significant increase in the capacity to define peace-violence concepts (table 3) in the experimental group. The pre-postest ANCOVA conducted in view of the pretest group differences in this variable confirmed the positive effect of the intervention on the capacity to define peace-violence concepts, F(1, 274) = 29.18, p < 0.01. The effect size was very large.

Lastly, we examined whether the change differed by sex in the experimental group. The pre-postest MANOVA was nonsignificant, F(9, 182) = 0.53, p > 0.05, revealing that the intervention produced a similar change in both sexes. Complementarily, we examined whether the change differed depending on the province of residence. The univariate analyses confirmed that the change was similar in empathy, F(2, 188) = 1.42, p > 0.05, and anger (AEI), F(2, 188) = 0.74, p > 0.05, but in the capacity to define peace-violence, the change in Alava was somewhat smaller, F(2, 188) = 6.44, p < 0.05.
Table 2
Empathy anger and the peace-violence concept at pretest (Basque Country, 2008-2009)

<table>
<thead>
<tr>
<th></th>
<th>Experimental (n = 191)</th>
<th>Control (n = 85)</th>
<th>F value (1, 274)</th>
<th>p</th>
<th>d</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td></td>
</tr>
<tr>
<td>IRI. Capacity of empathy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perspective-taking</td>
<td>23.01</td>
<td>4.90</td>
<td>23.54</td>
<td>4.77</td>
<td>0.67</td>
</tr>
<tr>
<td>Fantasy</td>
<td>21.12</td>
<td>5.44</td>
<td>22.23</td>
<td>5.95</td>
<td>2.23</td>
</tr>
<tr>
<td>Empathic concern</td>
<td>25.49</td>
<td>5.00</td>
<td>25.66</td>
<td>4.39</td>
<td>0.06</td>
</tr>
<tr>
<td>Personal distress</td>
<td>20.16</td>
<td>4.64</td>
<td>20.07</td>
<td>5.53</td>
<td>0.02</td>
</tr>
<tr>
<td>Global empathy</td>
<td>90.01</td>
<td>12.94</td>
<td>91.65</td>
<td>13.84</td>
<td>0.77</td>
</tr>
<tr>
<td>STAXI 2. Feelings of anger</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expression-Out</td>
<td>13.84</td>
<td>4.17</td>
<td>13.44</td>
<td>4.01</td>
<td>0.55</td>
</tr>
<tr>
<td>Expression-In</td>
<td>12.63</td>
<td>3.07</td>
<td>12.02</td>
<td>4.00</td>
<td>1.50</td>
</tr>
<tr>
<td>Control-Out</td>
<td>15.67</td>
<td>4.54</td>
<td>15.95</td>
<td>4.21</td>
<td>0.23</td>
</tr>
<tr>
<td>Control-In</td>
<td>13.28</td>
<td>3.96</td>
<td>14.46</td>
<td>4.17</td>
<td>5.01</td>
</tr>
<tr>
<td>Anger Expression Index</td>
<td>33.53</td>
<td>10.21</td>
<td>31.05</td>
<td>8.93</td>
<td>3.74</td>
</tr>
<tr>
<td>PAVI. Concept of peace</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peace-Violence</td>
<td>1.62</td>
<td>1.37</td>
<td>2.31</td>
<td>1.34</td>
<td>14.92</td>
</tr>
</tbody>
</table>

M: pretest mean; SD: standard deviation; F value: pretest ANOVA; NS: nonsignificant; d: Cohen’s value (effect size); IRI: Interpersonal Reactivity Index; STAXI 2: State-Trait Anger Expression Inventory; PAVI: Questionnaire to Assess the Concepts of Peace and Violence.

Discussion

Firstly, the results show that the intervention program—which aimed to educate for peace, living together, promoting respect for human rights, and preventing violence—increased the capacity of empathy. This was especially noteworthy in the factor of perspective-taking. Secondly, the results suggest that the program increased both external and internal control of anger, decreasing the AEI. Thirdly, the results show that the program significantly increased the capacity to define concepts associated with peace (positive and negative) and violence (direct, indirect, repressive, structural and cultural).

The program promoted positive changes, providing adolescents with better reasoning about peace-violence, as well as stimulating less anger expression and greater empathy for other human beings. Thus, by increasing empathy for the victims of violence and anger control, we hope to be able to reduce adolescents’ violent behavior and to minimize their joining social movements that foment violent behavior. We can therefore consider that the results justify continuing to administer the program and to perform long-term assessments, so that adherence to terrorist groups will cease to escalate.

The results obtained in this study confirm those of other investigations4-7,9,15 that found that psychoeducational interventions involving debates, negotiations, and cooperation had positive effects because they improve socio-emotional developmental variables related to the prevention of and positive coping with violence. Currently, there is a need for effective violence reduction programs for adolescents at school. Social psychologists have been successful in teaching adolescents integrative negotiation strategies that help them to resolve potentially violent conflicts.9 This study, in the same vein as other works,9 leads us to conclude that in order to develop an effective violence reduction program, we must teach young people the skills of integrated negotiation and strategies to help them transform competitive social contexts into cooperative social contexts. However, as stressed by some investigators,8 whereas schools are increasingly being asked to address issues of violence, certain cultural, organizational and managerial factors can obstruct violence prevention.

The results obtained in this study are interesting because of the connections between empathy and social behavior. Some studies have found that cognitive perspective-taking is a stronger predictor of guilt,24 that empathy is positively correlated with guilty feelings,25 and that shame-guilt is related to more feelings of

Table 3
Pretest-posttest differences in empathy, anger, and the peace-violence concept (Basque Country, 2008-2009)

<table>
<thead>
<tr>
<th></th>
<th>Experimental (n = 191)</th>
<th>Control (n = 85)</th>
<th>F value (1, 274)</th>
<th>p</th>
<th>d</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td></td>
</tr>
<tr>
<td>IRI. Capacity of empathy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perspective-taking</td>
<td>2.18</td>
<td>4.65</td>
<td>-1.17</td>
<td>4.09</td>
<td>27.25</td>
</tr>
<tr>
<td>Fantasy</td>
<td>0.22</td>
<td>5.75</td>
<td>-0.16</td>
<td>4.32</td>
<td>0.23</td>
</tr>
<tr>
<td>Empathic concern</td>
<td>-0.59</td>
<td>4.55</td>
<td>-0.47</td>
<td>4.77</td>
<td>0.02</td>
</tr>
<tr>
<td>Personal distress</td>
<td>0.16</td>
<td>4.77</td>
<td>0.03</td>
<td>4.73</td>
<td>0.03</td>
</tr>
<tr>
<td>Global empathy</td>
<td>2.07</td>
<td>11.46</td>
<td>-2.36</td>
<td>10.51</td>
<td>6.55</td>
</tr>
<tr>
<td>STAXI 2. Feelings of anger</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expression-Out</td>
<td>-0.54</td>
<td>3.72</td>
<td>-0.30</td>
<td>4.04</td>
<td>0.18</td>
</tr>
<tr>
<td>Expression-In</td>
<td>0.51</td>
<td>4.29</td>
<td>0.05</td>
<td>3.74</td>
<td>0.61</td>
</tr>
<tr>
<td>Control-Out</td>
<td>1.95</td>
<td>4.48</td>
<td>0.05</td>
<td>4.60</td>
<td>8.84</td>
</tr>
<tr>
<td>Control-In</td>
<td>2.20</td>
<td>4.25</td>
<td>-0.16</td>
<td>4.18</td>
<td>15.77</td>
</tr>
<tr>
<td>Anger Expression Index</td>
<td>-4.29</td>
<td>9.82</td>
<td>-0.19</td>
<td>8.84</td>
<td>8.98</td>
</tr>
<tr>
<td>PAVI. Concept of peace</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peace-Violence</td>
<td>1.18</td>
<td>1.86</td>
<td>-0.53</td>
<td>1.67</td>
<td>45.56</td>
</tr>
</tbody>
</table>

M: mean pre-posttest differences; SD: standard deviation; F value: pre-posttest ANOVA; NS: nonsignificant; d: Cohen’s value (effect size); IRI: Interpersonal Reactivity Index; STAXI 2: State-Trait Anger Expression Inventory; PAVI: Questionnaire to Assess the Concepts of Peace and Violence.
empathy and fewer feelings of anger/hostility. Hence, guilt is associated with the inhibition of violent behavior. Moreover, other studies have confirmed the relations between empathy and prosocial behavior.

Among the limitations of this study is the fact that we studied the effects of the program in three parameters associated with violence (empathy, anger expression, and the peace-violence concept) and therefore the approach to violence in this assessment was psychological, explaining violence as based on individual psychological characteristics (lack of terrorists' empathy for their victims...). However, the psychosocial approach to violence should not be forgotten because terrorist groups include people with very different personality characteristics and thus an individual-psychological approach does not allow us to explain the phenomenon completely. To analyze and explain socio-political phenomena such as terrorism, in addition to some social (socio-structural approach that attributes the emergence of political violence and terrorism to variables such as poverty, social inequalities, authoritarian government styles, etc.) and psychological conditioners (personality traits that predispose individuals to violence, impulsivity, etc.), a psychosocial approach (group or organizational dimension) should be taken into account.

This study has practical educational implications and provides an intervention tool that enhances the development of personality during adolescence and may have a preventive effect on violent behavior. This is the main contribution of the study, because other investigations have confirmed that collective violence is associated with a considerable loss of health in primary victims.

In addition to its clinical relevance, among the strengths of the study is the fact that there were no dropouts in the posttest follow-up.

The findings of this study suggest two future lines of research: 1) exploration of the differential effects of the intervention in adolescents who display many violent behaviors before beginning the program, as well as in those with favorable attitudes to politically motivated violence; and 2) analysis of whether the characteristics of the adult implementing the intervention (capacity of empathy, tolerance, attitudes to violence and to the Basque conflict, communication capacity...) play a role in the program's impact on the adolescents. In addition, future research should consider including a follow-up period in which the duration of the effect of the intervention can be assessed.

What is known about the topic?

Primary victims of collective violence have four to seven times more risk of having worse physical and emotional health, and eight times more risk of having functional alterations. These individuals also perceive more loneliness and stigma. Currently, collective violence is known to be associated with a considerable loss of health (physical, social, emotional) in primary victims. In addition, intervention programs to prevent violence during adolescence can have highly positive effects.

What does the study add to the literature?

Given the negative impact of collective violence on health, intervention programs to prevent young people from developing violent behaviors are required. This study contributes to the validation of an intervention program that promotes socio-emotional development and has a preventive effect on violence. The investigation shows the efficacy of this intervention tool in significantly increasing the capacity of empathy and anger control and in improving the capacity to conceptualize peace. In addition, this study incorporates the gender perspective.

Declaration of authorship

M. Garaigordobil designed the investigation, directed the data collection, conducted the statistical analyses and data interpretation, and wrote the manuscript.

Funding

This work was financed by the Basque Government Directorate of Human Rights (A-133/DJT2007; A-036/DJT2008) and by the Department of Education, Universities and Research of the Basque Government (GIC07/57-IT-351-07).

Conflict of interests

None.

Acknowledgements

The author thanks the following persons who collaborated in the study: Jon-Mirena Landa, Professor in the Faculty of Law of the University of the Basque Country, for his important role in impelling the project; Gotzon Quintana, Susana Harillo and Beatriz Ugarte, who coordinated the program's implementation; and, especially, the teachers and adolescents who participated voluntarily in the study and without whom this work would not have been possible.

References