Original article

Gender Differences in Socioemotional Factors During Adolescence and Effects of a Violence Prevention Program

Maite Garaigordobil, Ph.D.*, Carmen Maganto, Ph.D., José Ignacio Pérez, Ph.D., and Eneko Sansinenea, Ph.D

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

Abstract

Purpose: The study had two aims: 1) to analyze the existence of gender differences in socioemotional developmental factors, and 2) to apply a program of education for peace and prevention of violence to determine whether the pretest–posttest change in socioemotional developmental factors differs as a function of gender.

Methods: The sample comprised 285 adolescents, aged 15–16 years, including 162 experimental subjects and 123 control subjects. An experimental design of repeated pre–posttest measures with a control group was used, and four assessment instruments were administered.

Results: Analyses of variance confirmed significantly higher scores in the female adolescents in cognitions of rejection of violence, prosocial cognitions, cooperative conflict solving, positive strategies for coping with violence, and positive social behaviors. Male adolescents obtained significantly higher scores in cognitions of acceptance of violence, aggressive conflict solving, aggressive strategies for coping with violence, and negative social behaviors. The pre–post change in most of the factors of socioemotional development assessed was similar in both sexes.

Conclusions: Results suggest the need to reflect on and modify the type of childrearing and socialization patterns that are promoted in males so that they will favor the development of skills oriented toward warm interpersonal relations, nonaggressive communication, positive social behaviors, internal control of anger, empathy, etc. Results also suggest including supplementary modules for males when designing interventions to prevent violence. © 2009 Society for Adolescent Medicine. All rights reserved.

Keywords: Gender differences; Adolescence; Socioemotional development; Violence prevention program

In the last few years, a line of research has focused on exploring the gender differences in the socioemotional developmental factors during adolescence. With regard to *social behavior*, some studies have found that adolescent girls score significantly higher in social competence, for example, girls had higher levels of warm and friendly prosocial behaviors and lower scores in aggressive behavior [1]. However, intercultural differences have been noted; for example, Turkish male adolescents had significantly higher levels of assertiveness than the females, but there were no gender differences in assertiveness among Swedes [2]. In prosocial behavior, whereas some investigators found no gender differences in Chinese adolescents [3,4], most of the studies conclude that girls have significantly higher levels of prosociability than boys [5,6].

A research study examined empathy and gender as predictors of prosocial behavior among African-American early adolescents. Results revealed a significant main effect for empathy, as well as an interaction between empathy and gender in predicting prosocial behavior. In general, youth with more empathy reported more prosocial behavior, and this effect was more pronounced for males than for females. These

*Address correspondence to: Maite Garaigordobil, Ph.D., Department of Personality, Assessment, and Psychological Treatments, Faculty of Psychology. University of the Basque Country, Avda. de Tolosa 70. 20018. Donostia-San Sebastián, Spain.

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

findings suggest that the ability to understand another person's point of view may be important in the development and expression of prosocial behaviors, particularly among males [7].

With regard to *behavior problems* during adolescence, gender differences have been found frequently [8,9]. Boys tend to display more aggressive, antisocial, and delinquent or externalizing behaviors, whereas girls present more anxious–depressive or internalizing problems [10]. In another work [11], it was found that the girls presented significantly higher levels of adaptation and had fewer behavior problems than the boys. In this direction, diverse cross-cultural studies with adolescents have found a significantly higher prevalence of externalizing behavior problems in boys, in samples both from the United States and China [12], and in samples from Spain and other countries from Europe, Asia, Africa, and America [13]. Some investigators even confirm that gender is a predictive factor of violent behavior in adolescence [14,15].

The studies that have explored gender differences in conflict-solving styles have found that girls score higher in communication skills to deal with conflict [16], they are more precise in the perception of conflict [17], and have more skills related to empathy, whereas boys are more assertive with regard to their needs [18]. Investigations with Mexican adolescents have found gender differences with significantly higher scores in the girls in the use of problem-oriented conflict-solving style, and significantly higher scores in boys in the use of a self-oriented conflict-solving style [19].

Therefore, many studies confirm gender differences from very early ages in children's and adolescents' expression of emotions and behavior. Although cross-cultural differences have been found, in western countries, boys and girls adopt different cognitive–behavioral roles in life, and whereas it is more frequent for girls and female adolescents to develop cognitions and emotions related to internalizing problems (e.g., sadness, anxiety, anger inhibition), boys and male adolescents develop cognitions and emotions related to externalizing problems (e.g., aggressiveness, dominance).

In recent years, the problem of youth violence has been the cause of increasing concern for educational and mental health professionals all over the world. Accordingly, one line of research has focused on violence prevention programs. Results of these studies have revealed the efficacy of this type of interventions carried out in community, clinical, and educational contexts [20–26]. From different perspectives, it has been confirmed that the systematic implementation of such programs promotes the prevention and reduction of violent behavior.

Specifically, the Basque Country, in the Northern region of Spain, has had an important problem of political violence for the past 40 years. In this cultural context, some people, and consequently some adolescents, defend ETA (Organization Euskadi Ta Askatasuna/Basque Country and Freedom) violence and think that certain violent behavior is justifiable. This stimulates adolescents to carry out more violent, politically motivated behavior and to be less sensitive toward the victims of violence. Moreover, the frequency of this type of violent behavior is higher in males. Therefore, intervention programs for violence prevention and awareness of the victims of violence are even more necessary in the Basque Country.

Regarding the program framework, of a cognitive–behavioral approach, the intervention programme for adolescents applied follows the guidelines of the "Positive Youth Development" (PYD), a perspective based on a positive conception of adolescent development [27,28]. This approach substitutes the belief that adolescence is an unavoidably difficult stage in which many risk and/or destructive behaviors occur, with a more optimistic view that considers adolescence to be a developmental stage in which many resources and competences can be established. The PYD underscores the importance of promoting competences such as trust, connection with others, positive affect, and empathy.

The cognitive perspective states that people's thoughts have great impact on their emotional response and behavior and, therefore, that certain ideas, beliefs, or thoughts can justify violent behaviors. The origin of hatred has two factors: the moral devaluation of the victim and the ideology of the person who hates. Both of them model and extend hatred. After one has morally or humanly devaluated the victims, attacking or killing them, can become a right. From these theoretical proposals, we offered the intervention program (independent variable IV) because we consider that programs that promote the moral analysis of these thoughts, ideas, and beliefs, and that promote empathy toward the victims, as well as the moral sense of responsibility for the behaviors carried out, would have an important preventive effect on violent behavior.

The present study has two goals: 1) to analyze the existence of gender differences during adolescence in diverse factors of socioemotional development (such as cognitions about violence, cognitions about prosocial values, conflict-solving style, cognitive capacity of analysis and coping with violence, as well as positive and negative social behaviors); and 2) to apply a program of education for peace and prevention of violence to determine whether the pretest–posttest change in socioemotional developmental factors differs in according to gender.

Globally, the study proposes that females will have a better social and emotional adaptation than males at this developmental stage, which is expressed in the formulation of three hypotheses. Firstly, it is hypothesized that significantly higher scores will be found in the females in cognitions of rejection of violence, prosocial cognitions, problem-oriented conflict solving (cooperative), knowledge of the causes that generate violence and positive coping strategies to deal with violence, as well as positive social behaviors. The second hypothesis postulates that significantly higher scores will be found in males in cognitions of acceptance of violence, self-oriented conflict-solving (aggressive), aggressive coping strategies to deal with violence, and negative social

behaviors. The third hypothesis proposes that the educational program for peace will have a greater effect on males as, before the intervention, males will have higher levels of violent cognitions and behaviors.

Methods

Design and procedure

The study employed an experimental design with pretest–posttest repeated measures and a control group. Before and after implementing the intervention program, a battery of four assessment instruments with psychometric guarantees of reliability and validity was administered to the experimental and control participants. For 3 months, the program of education for peace was administered to the experimental groups, whereas the control participants carried on their habitual program of tutorship and ethics.

The centers were selected randomly from a list of all the educational centers of the Basque Country. For sample selection, the criteria of public–private and rural–urban centers were taken into account, so that the centers were representative of the different types of centers in the Basque Country. All the classrooms of adolescents 15–16 aged (4th course of secondary school) from the six randomly selected centers were included; concretely there were 16 classrooms. In each center, the classrooms were numbered and randomly assigned either to the experimental or control conditions. The sampling unit was the school class.

After selecting the schools, a meeting with the schools' headteachers and teachers of the corresponding age group took place. After the general presentation of the project, they decided unanimously to agree to participate in the study. The decision was made with the acceptance of the parents of the adolescents involved, after a meeting in which they were given information on the project. There was no rejection of participation, nor pretest–posttest attrition. To carry out the study, there was a research team consisting of the teachers, who implemented the program in the experimental groups, and three psychologists who carried out pretest–posttest assessment tasks. This team attended systematic training seminars. The training was applied in relation to both the program and its assessment. The marking was carried out with no knowledge of the condition or the hypotheses.

Participants

The sample comprises 285 adolescents, aged 15–16 years, distributed in 16 groups from six educational centers. From the entire sample, 162 participants were assigned to the experimental condition, and 123 participants were assigned to the control condition. Regarding gender, 153 are male (53.7%) and 132 are female (46.3%). The Pearson's chi-square between condition and sex did not yield statistically significant differences ($\chi^2 = .52$, $p > .05$). Participants were Caucasian, Catholic, and middle-class.

Intervention program

The program education for peace called "A Society That Builds Peace" consisted of a weekly 90-minute intervention session for 3 months, specifically, 10 intervention sessions were carried out. The intervention was administered to nine experimental groups (n = 162). The program was incorporated into the school curriculum, as a part of the subject "ethics and human development" and time-tabled in the same way as other subjects such as mathematics or physical education. The intervention sessions were directed by professors/tutors of each group, who were previously trained to develop the intervention.

The program had the following as goals: 1) to stimulate in adolescents the perception and experience of the Basque Country as a plural and multicultural society; 2) to debate and reach conclusions about the consequences of the use of political violence and the conculcation of human rights both in the people and in the articulation of the Basque society; 3) to learn nonviolent strategies to solve human conflicts; 4) to promote sensitivity toward the suffering of victims of terrorism, and solidarity with them; and 5) to promote a life project that contemplates among its values dialogue, justice, solidarity, respect for differences, and peace. The intervention is made up of eight didactic units with the following themes, and each unit has two activities: 1) what do we want to know about the sociopolitical reality of our surroundings? 2) my group and me in a violent world; 3) giving meaning to peace; 4) difference enriches us; 5) the transformation of conflicts; 6) human rights; 7) we are with you; and 8) shared building efforts.

The program uses diverse techniques, such as debates, role-playing, videos, and brain-storming. An example of a program activity is "tennis match: sharing values." In this activity, one wall of the classroom represents "yes," whereas the opposite one represents "no." The group members stand in the middle of the classroom and the teacher reads a statement or sentence out loud, claps his/her hands, and the group members move to one of the walls, according to whether they agree with the statement. Later, the teacher asks the participants why they moved to the respective pole. When the main arguments have been set out, the teacher suggests that those who agree with an argument stated by the other group move to the opposite wall, depending on the extent to which the arguments of the other group convince them. They eventually attempt to arrive at a statement upon which they all agree. By means of this technique, several subjects are discussed, for example: "Sometimes, the use of violence is legitimate," "The people who suffered an attack by ETA must have done something wrong," "The death penalty should not be eliminated because whoever commits a crime should pay." Another activity consists of watching a video in which a member of ETA sets a bomb that accidentally kills his little sister and the debate revolves around the consequences of violence and the identification of nonviolent strategies to solve human conflicts. In another activity, several

testimonies of victims of terrorist violence (e.g., relatives of a murdered person) are listened to, and later the situation is role-played and a debate takes place in which they reflect about the Basque conflict, the consequences of hatred and violence, the importance of dialogue, forgiveness, regret, empathy, and so forth, in solving the conflict.

Measures

ISAP: Incomplete sentences to assess concepts and prejudices

This instrument [29] comprises a set of 22 incomplete sentences that adolescents should complete quickly, and which explore the following parameters: 1) attitude toward violence; and 2) attitude toward prosocial values and behaviors: justice, pardon, dialogue, and regret. When correcting, positive cognitions (victims of violence do not deserve what happened to them; to forgive is wise, it is of great value), negative or prejudiced cognitions (victims of violence probably did something to deserve it; it is foolish to forgive), and neutral cognitions (victims of violence are the result of violence; forgiving is the way to tell the other that you won't take his/her behavior into account) are considered and appraised. Psychometric studies have confirmed ISAP internal consistency (attitude toward violence: Cronbach alpha = .85, .90, and .92; attitude toward prosocial values: Cronbach alpha = .84, .89, and .90). Test–retest reliability (between $r = .46$ and $r = .59$) revealed temporal stability ($p < .001$). Correction was carried out independently and in a blind way by two assessors. For the analysis of between-judge agreement, the traditional kappa rates were calculated, showing satisfactory results in the all scales (between .89 and .93). Validity studies [29] have found significant correlations ($p < .001$) between acceptance of violence and antisocial behaviors (r = .26), empathy (r = −.28), the Anger Expression Index (r = .25), and aggressive behaviors ($r = .25$).

CONFLICTALK: An instrument for measuring youth and adolescent conflict management message styles

This self-report [30] is designed to identify the style of dealing with conflict through the messages used. The test measures three styles to manage conflicts: self-oriented (implies wanting to do everything one's own way, and being aggressive and authoritarian when dealing with conflict); problem oriented (implies interest in finding the cause of the conflict and in specifically identifying the problem in collaboration with the other, with a focus on finding the best solution and using cooperative action); and other oriented (implies thinking that conflict is always bad, and being passive when dealing with conflict). The questionnaire presents 18 sentences one could use in a conflictive situation, and the adolescents are asked to rate each sentence on a five-point Likert-type scale ranging from 1 (I never say things like that) to 5 (I almost always say things like that). Studies have shown that the internal consistency of CONFLICTALK is adequate (Cronbach alpha: problem-oriented = .87,

self-oriented = .81, and other oriented = .63). Validity studies [19] have found significant correlations ($p < .05$) between communication skills and a problem-oriented style of managing conflicts. Significant correlations ($p < .001$) were also found [29] between a self-oriented style and aggressive behavior (r = .46), trait-anger (r = .53), Anger Expression Index (r = .42), and between a problem-oriented style and empathy (r = .42) and cooperative behaviors (r = .28).

QAVIO: Questionnaire of the capacity to analyze causes and ways of coping with violent behavior

This test [29] assesses the cognitive capacity to identify causes or factors that generate violence, and the availability of coping strategies (positive, aggressive, avoidant) to manage others' violent behavior. Participants are asked to list the causes, situations, or factors that stimulate any kind of violent behavior, and to state what could be done by a person who is exposed to violent behaviors to cope with such situations. Cronbach alpha coefficients showed adequate internal consistency of the QAVIO (between .70 and .83). Validity studies have confirmed significant correlations ($p < .001$) between the capacity to identify causes that generate violence and cognitions of rejection of violent behavior (r = .20), as well as between the availability of many positive coping strategies and empathy ($r = .20$). Negative correlations between the availability of aggressive coping strategies and empathy ($r = −.28$) were also found. These results reveal test validity.

QUSOA: Questionnaire of social attitudes and cognitive strategies

This questionnaire [31] comprises 77 statements referring to a range of social behaviors. It measures adolescents' social competence on nine scales: social conformity, social sensitivity, help–collaboration, assurance–firmness, prosocial leadership, aggressiveness–stubbornness, dominance, apathy–withdrawal, and social anxiety. Cronbach alpha coefficients showed somewhat low internal consistency of the QUSOA (between .54 and .70). Validity studies have found high correlations between all the scales and the BAS Socialization Battery [32].

Data analyses

After verifying the basic assumptions (normality, variance homogeneity, independence), a multivariate analysis of variance (MANOVA) was performed to determine the existence of significant differences as a function of gender in all the socioemotional variables in the pretest phase, before the intervention. Moreover, pretest analyses of variance (ANOVA) were also conducted for each variable. Subsequently, to assess the effect of the program, using pretest scores as covariates, a pre–posttest multivariate analysis of covariance (MANCOVA) was carried out. A pre–posttest MANCOVA, to assess the Condition × Gender interaction (experimental–control/males–females) was also calculated. Complementary,

a pre–posttest analysis of covariance (ANCOVA) was implemented for each variable. Data were analyzed using SPSS 15.0 (SPSS Inc., Chicago, IL). The dependent variables (DV) explored were as follows: 1) attitude toward violence; 2) attitude toward prosocial values and behaviors: justice, pardon, dialogue, and regret; 3) styles to manage conflicts; 4) cognitive capacity to identify causes or factors that generate violence, and the availability of coping strategies (positive, aggressive, avoidant) to manage others' violent behavior; and 5) social behaviors (social conformity, social sensitivity, help–collaboration, assurance–firmness, prosocial leadership, aggressiveness–stubbornness, dominance, apathy–withdrawal, and social anxiety).

Results

Differences in socioemotional variables as a function of gender

The pretest MANOVA (Multivariate Pillai) jointly carried out for the 22 variables revealed significant pretest differences between males and females, $F(1, 283) = 4.52$, $p < .001$, and the effect size was very large ($\eta^2 = .277$, $r = .52$). An ANOVA for each variable was also calculated, and the results are shown in Table 1. As can be seen in Table 1, the results reveal significant gender differences in many variables. First, significantly higher scores were observed in the females in the following: cognitions of rejection of violence, prosocial cognitions, problem-oriented or

cooperative interpersonal conflict-solving, knowledge about causes, situations, or factors that stimulate any kind of violent behavior, knowledge of positive–constructive coping strategies for the violent behavior of others, social conformity behaviors, social sensitivity behaviors, and help–collaboration behaviors. Secondly (Table 1), significantly higher scores were observed in the males in the following areas: cognitions of acceptance of violence, self-oriented or aggressive interpersonal conflict solving, knowledge of aggressive coping strategies to manage others' violent behavior, negative social behaviors of aggressiveness–stubbornness, dominance, and apathy–withdrawal.

Differential effect of the program in socioemotional variables as a function of gender

First, the pre–posttest MANCOVA (Multivariate Pillai) jointly conducted for the 22 variables revealed significant pre–posttest differences between experimental and control condition, $F(1, 283) = 8.79$, $p < .001$, and the effect size was very large ($\eta^2 = .468$, $r = .68$). Specifically, ANCOVAs showed that experimental participants significantly ($p < .001$) increased their scores in: a) cognitions of rejection of violent behavior, $F(1, 283) = 76.03$; b) positive cognitions about prosocial values and behaviors such as justice, forgiveness, dialogue, and regret, $F(1, 283) = 51.75$; c) the capacity to identify causes or factors that generate violence, $F(1, 283) = 17.54$; and d) positive coping strategies to manage others' violent behavior, $F(1, 283) = 29.72$. Moreover, the experimental

Table 1
Gender differences in socioemotional variables in the pretest phase

Variable	Males (n = 153)		Females (n = 132)		F value (1, 283)	p Value
	Mean pretest	(SD)	Mean pretest	(SD)		
Violence rejection	5.04	(2.06)	5.56	(1.88)	4.79	.029
Violence acceptance	1.56	(1.53)	.92	(1.23)	14.82	<.001
Violence neutral	1.48	(1.49)	1.56	(1.38)	.19	NS
Prosocial positive	1.89	(1.14)	2.31	(1.12)	9.54	.002
Prosocial negative	1.11	(1.00)	.95	(.90)	1.91	NS
Prosocial neutral	.64	(.81)	.58	(.85)	.41	NS
Other-oriented conflict solving	12.66	(3.84)	12.50	(3.31)	.12	NS
Self-oriented conflict solving	12.08	(4.30)	10.71	(4.16)	7.34	.007
Problem-oriented conflict solving	16.16	(5.52)	17.83	(5.36)	6.58	.011
Causes of violence	2.27	(1.28)	2.60	(1.51)	3.01	.046
Positive coping	.99	(.86)	1.50	(.94)	21.75	<.001
Avoidant coping	.41	(.66)	.27	(.52)	3.40	NS
Aggressive coping	.41	(.59)	.24	(.47)	7.03	.008
Social conformity	42.34	(8.93)	44.56	(8.17)	4.73	.030
Social sensitivity	42.24	(7.36)	45.90	(5.81)	21.11	<.001
Help and collaboration	48.95	(8.64)	52.65	(7.84)	14.04	<.001
Assurance and firmness	53.68	(8.09)	54.15	(7.50)	.24	NS
Prosocial leadership	17.07	(4.27)	17.15	(4.56)	.02	NS
Aggressiveness−stubbornness	28.57	(7.31)	25.93	(8.18)	8.17	.005
Dominance	13.70	(6.65)	10.17	(4.98)	24.84	<.001
Apathy–withdrawal	26.34	(7.42)	21.56	(6.77)	31.67	<.001
Social anxiety	21.64	(8.41)	22.37	(8.35)	.52	ns

SD = standard deviation.

F-value = ANOVA pretest coefficient.

group also significantly decreased their scores in: a) acceptance of cognitions of violent behavior, $F(1, 283) = 23.24$ $p < .001$; b) negative cognitions about prosocial values and behaviors, $F(1, 283) = 34.85, p < .001$; c) a self-oriented style of managing conflicts that implies wanting to do everything one's own way, being aggressive and authoritarian when dealing with conflict, $F(1, 283) = 5.01, p < .05$; d) aggressive coping strategies to manage others' violent behavior, $F(1, 283) = 14.79$, $p < .001$; and e) aggressive–stubborn behaviors $F(1, 283) = 4.09, p < .05$. These results confirm that the program significantly promoted various positive changes in the experimental participants.

Second, the MANCOVA results of the pre–posttest differences in the Condition × Gender interaction were nonsignificant, $F(1, 283) = 1.18, p > .05$, and the effect size was medium ($\eta^2 = .106, r = .40$). This means that, in general, the change in socioemotional development stimulated by the program was similar for males and females. The pre–posttest ANCOVAs of the Condition × Gender interaction was conducted taking into account the *a priori* differences, and the results are presented in Table 2. As can be seen in Table 2, the program stimulated very few differential changes as a function of gender, because in most of the socioemotional factors, males and females changed similarly. The results showed significant differences only in positive cognitions about prosocial values, finding a higher increase of these cognitions in the boys studied.

Discussion

The results of this study show significantly higher scores in females in the following areas: cognitions of rejection of violence, prosocial cognitions, cooperative conflict-solving style, knowledge about causes that stimulate any kind of violent behavior, knowledge of positive coping strategies to manage violence, as well as positive behaviors of social conformity, social sensitivity, and help–collaboration. Therefore, the first hypothesis is ratified almost in its totality. These results confirm a higher level of socioemotional adaptation in females, and point in the same direction as some studies [1,6], although they contradict the studies carried out in China, which found no gender differences in prosocial behavior [3,4]. These discrepancies may be explained by the cultural differences, that is, a higher development of the concept of cooperation of the Chinese society, which is a part of the childrearing patterns for both sexes. Moreover, in the same direction as other studies [19], significantly higher scores were found in the females for cooperative conflict solving and significantly higher scores in the males for aggressive conflict solving.

The results of the study have also revealed significantly higher scores in males for the following: cognitions of acceptance of violence, the use of aggressive conflict solving, knowledge of negative–aggressive coping strategies to deal with others' violent behavior, and negative social behaviors of aggressiveness–stubbornness, dominance,

and apathy–withdrawal. Thus, the results obtained confirm the second hypothesis completely. According to these results, in the males there were higher levels of aggressiveness, both in cognitive and in behavioral aspects, which makes their adequate social adaptation more difficult at this developmental stage. These results ratify those obtained in other studies that also found more aggressive behaviors and externalizing behavior problems in males than in females [8,9,11–13].

Finally, the results confirm that the program significantly stimulated positive changes in the socioemotional development of the experimental participants. Specifically, the program increased cognitions of rejection of violent behavior, positive cognitions about prosocial values and behaviors, the capacity to identify causes or factors that generate violence, and positive coping strategies to manage others' violent behavior among the experimental participants. The experimental participants also significantly decreased cognitions of acceptance of violent behavior, negative cognitions about prosocial values and behaviors, an aggressive style of managing interpersonal conflicts, aggressive coping strategies to manage others' violent behavior, and aggressive–stubborn behaviors. However, there were very few differential changes as a function of gender. The males and females changed similarly; a significant increase was observed only in the positive cognitions about prosocial values in the experimental males. Consequently the third hypothesis is rejected. The third hypothesis proposed that the educational program for peace would have a greater effect on males as, before the intervention, males would have higher levels of violent cognitions and behaviors.

In this work, gender differences were studied to appraise their implications in the design of socioemotional intervention programs. The results have confirmed the efficacy of the program to prevent violence, in the same direction as other investigations that have verified the usefulness of intervention programs carried out in school contexts [21,23], and it can be concluded that it would be necessary to include supplementary modules for males when designing such interventions.

This work emphasizes the existence of gender differences with higher levels of socioemotional adaptation in females, whereas the males show higher levels of aggressiveness, both in cognitive and in behavioral aspects. As yet, we lack a clear explanation of the causes of these gender differences and the change between childhood and adolescence. However, they could be attributed to differences in the childrearing and socialization patterns of men and women. Thus, it can be assumed that women, at least in western countries in general, tend to be socialized in a way that favors the development of skills oriented toward warm interpersonal relations, nonaggressive communication, positive social behaviors, internal control of anger, empathy, and so forth, to a greater extent than the men, who are socialized with more permissiveness toward external expression of anger, aggressiveness, dominance, and acceptance of violence. Therefore, the

Table 2
Effect of the program in socioemotional variables as a function of gender

Variable	Condition	Gender	Mean Pre–Post	(SD)	SE	F Value (1, 283)	p Value
Violence rejection	Exp	Male	1.31	(2.08)	.19	.02	NS
		Female	1.62	(2.35)	.21		
	Con	Male	−1.15	(2.03)	.21		
		Female	−1.47	(1.76)	.23		
Violence acceptance	Exp	Male	−.46	(1.60)	.11	2.05	NS
		Female	−.33	(.93)	.13		
	Con	Male	.40	(1.24)	.13		
		Female	.02	(1.25)	.14		
Violence neutral	Exp	Male	−.43	(1.80)	.15	.11	NS
		Female	−.30	(1.72)	.17		
	Con	Male	−.24	(1.67)	.17		
		Female	.25	(1.92)	.18		
Prosocial Positive	Exp	Male	.92	(1.26)	.10	5.38	.021
		Female	.17	(1.13)	.12		
	Con	Male	−.76	(1.19)	.12		
		Female	−.55	(1.06)	.13		
Prosocial Negative	Exp	Male	−.77	(1.04)	.09	.10	NS
		Female	−.64	(.77)	.10		
	Con	Male	−.02	(1.04)	.10		
		Female	.11	(.95)	.11		
Prosocial Neutral	Exp	Male	.17	(1.00)	.09	1.48	NS
		Female	.42	(1.02)	.11		
	Con	Male	.40	(.91)	.11		
		Female	.31	(1.03)	.11		
Other-oriented conflict solving	Exp	Male	.62	(4.59)	.38	.13	NS
		Female	−.73	(3.17)	.44		
	Con	Male	−.10	(3.87)	.43		
		Female	−.89	(3.53)	.46		
Self-oriented conflict solving	Exp	Male	−.33	(4.32)	.36	.64	NS
		Female	−.82	(2.85)	.42		
	Con	Male	.21	(4.50)	.41		
		Female	−.47	(3.16)	.44		
Problem-oriented conflict solving	Exp	Male	.48	(5.79)	.54	2.08	NS
		Female	−.17	(5.40)	.62		
	Con	Male	−.29	(4.91)	.62		
		Female	−.49	(5.47)	.66		
Causes of violence	Exp	Male	.58	(1.64)	.16	2.74	NS
		Female	.48	(1.68)	.18		
	Con	Male	−.16	(1.48)	.18		
		Female	−.56	(1.78)	.19		
Positive coping	Exp	Male	.21	(1.17)	.10	.14	NS
		Female	.21	(1.28)	.11		
	Con	Male	−.45	(.91)	.11		
		Female	−.64	(1.12)	.12		
Avoidant coping	Exp	Male	−.19	(.75)	.05	.00	NS
		Female	−.03	(.67)	.06		
	Con	Male	−.02	(.73)	.05		
		Female	−.07	(.63)	.06		
Aggressive coping	Exp	Male	−.12	(.60)	.06	.56	NS
		Female	−.12	(.51)	.07		
	Con	Male	.15	(.84)	.06		
		Female	.00	(.57)	.07		
Social conformity	Exp	Male	−1.21	(10.62)	.97	.46	NS
		Female	.15	(7.52)	1.11		
	Con	Male	−2.85	(7.78)	1.10		
		Female	.07	(11.66)	1.17		
Social sensitivity	Exp	Male	−1.71	(8.47)	.70	.17	NS
		Female	−.79	(4.96)	.81		
	Con	Male	−2.16	(6.44)	.80		
		Female	−.51	(5.83)	.85		

(*Continued*)

Table 2
Effect of the program in socioemotional variables as a function of gender (*Continued*)

Variable	Condition	Gender	Mean Pre–Post	(SD)	SE	F Value (1, 283)	p Value
Help and collaboration	Exp	Male	−1.29	(9.75)	.85	.92	NS
		Female	−.50	(6.74)	.98		
	Con	Male	−.23	(7.95)	.97		
		Female	−.15	(6.28)	1.03		
Assurance and firmness	Exp	Male	−2.55	(8.32)	.87	.53	NS
		Female	−.30	(8.39)	1.00		
	Con	Male	−2.37	(8.05)	.99		
		Female	.62	(7.70)	1.06		
Prosocial leadership	Exp	Male	−.25	(4.20)	.55	.02	NS
		Female	−.64	(4.76)	.63		
	Con	Male	1.85	(6.26)	.62		
		Female	.47	(4.86)	.67		
Aggressiveness−stubbornness	Exp	Male	−1.64	(8.63)	.78	.07	NS
		Female	−1.11	(5.96)	.89		
	Con	Male	−.47	(8.25)	.88		
		Female	.42	(6.07)	.94		
Dominance	Exp	Male	2.36	(7.21)	.60	.38	NS
		Female	−.77	(3.02)	.69		
	Con	Male	2.44	(7.50)	.69		
		Female	.45	(5.13)	.73		
Apathy−withdrawal	Exp	Male	−.33	(8.66)	.83	.02	NS
		Female	−.03	(6.73)	.95		
	Con	Male	.44	(8.79)	.94		
		Female	−1.33	(7.10)	1.01		
Social anxiety	Exp	Male	−.92	(7.81)	.76	.92	NS
		Female	−.48	(5.10)	.87		
	Con	Male	.87	(8.06)	.86		
		Female	−.44	(6.34)	.92		

Mean Pre–post = mean differences pretest–posttest; Exp = experimental (intervention), Con = control; SD = standard deviation; SE = parameter standard error; NS = nonsignificant.

F value = ANCOVA pretest–posttest interaction Condition × Gender.

capacity for communication, prosociability, and the control of anger, aggressiveness, and violence are characteristics that are linked to the female role rather than to the stereotypic male role. Consequently, it is recommended to promote childrearing and socialization patterns of male children to stimulate the development of skills oriented toward warm interpersonal relations, nonaggressive communication, positive social behaviors, internal control of anger, empathy, and so on.

The acceptance of violence in society, and especially in adolescents, is linked to cultural values that consider violence a natural means to solve conflicts, particularly among males. It has been repeatedly shown that people who accept violence as a natural and spontaneous way to deal with conflicts usually also defend intolerant or openly violent attitudes toward minority groups [33]. Adolescents—the fruit of this socialized culture of differential expression of emotions as a function of gender—have chosen two preferential, but not exclusive, ways of dealing with conflicts for men and women. In women, conflicts are frequently solved using language, dialogue, and empathic responses and expressions of verbal and physical aggressiveness in response to the model of power and authority that is culturally acceptable in men.

The results obtained in this study lead us to suggest the need to reflect on and modify the type of childrearing and socialization patterns that are promoted in men, because this may make their socioemotional adaptation more difficult. Moreover, the results suggest the need to analyze critically the models of behavior associated with gender that adolescents receive from the mass media (television, the Internet, magazines, etc.) and that foment these gender stereotypes, to eradicate the sexist models they present, which mould human development negatively. These results also confirm the conceptual perspective of the Positive Youth Development model, which emphasizes the importance of implementing programs to promote competences and resources that stimulate positive development during adolescence.

Hill and Lynch [34] consider that the differential patterns of socialization with regard to gender turn into socializing pressure, and this pressure, more than the typical biological changes of puberty, explains the socioemotional gender differences, especially in adolescence. Programs that promote (cognitively, emotionally, and behaviorally) more empathetic, prosocial attitudes, beliefs, and behaviors are implemented to promote changes from educational socializing patterns for both sexes. That is, we expect both males and females to improve in socioemotional cognitive and behavioral factors.

The program ''A society that builds peace'' has been shown to promote cognitive and behavioral changes in

socioemotional factors in both sexes, providing adolescents with better critical and causal reasoning about violence, as well as less acceptance of it. In addition, although the changes were very similar for both sexes, the males improved more in the variable "positive cognitions about prosocial values and behaviors." These results support the preventive capacity of the program with regard to the socialization patterns and patterns of expression of negative emotions, although they also pose some questions. Is it because of the moderate stability of the socialization patterns that we cannot observe differential changes as a function of gender after implementing the program? Or does the program itself have some limitations regarding its duration and the structure of the modules to facilitate the expected changes? The answer could be found by extending the duration of the program and/or by introducing differential complementary modules for males.

Nevertheless, we consider that the results justify continuing to apply the program or other similar programs, also in other countries, and to perform long-term assessments and follow-ups, with the aim that, from a political–social perspective, adherence to terrorist groups or to groups that back them in the Basque Country as well as in other countries with similar armed conflicts, will stop increasing (or at least, will increase to a lesser extent).

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. However, a limitation of this work is the local nature of the sample, so the need to contrast these results cross-culturally is suggested; that is, performing the study in cultural groups with differential childrearing patterns that are habitually accompanied by real and virtual models that foment these gender stereotypes.

Acknowledgments

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