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## Effects of a Cooperative Learning Intervention Program on Cyberbullying in Secondary Education: A Case Study


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## Effects of a Cooperative Learning Intervention Program on Cyberbullying in Secondary Education: A Case Study

### Abstract

The goal was to assess the effects of an intervention program, based on cooperative learning and involving the whole school community, on the emotional and social evolution of a student who had suffered cyberbullying. The student, her parents, the school administration, a teacher and the student's classmates agreed to participate in the study. A qualitative research design was used, which included interviews, discussion groups and diaries. The information obtained was structured in three categories: cyberbullying detection and response, psychoeducational intervention program, and emotional and social evolution. Results showed that the program produced significant improvements in the cyberbullied adolescent's emotional and social state. The teacher, the school administrators and the parents observed these positive changes in the adolescent and her classmates, since the class' social climate had improved too. It seems important to establish protocols to detect cyberbullying behaviours, as well as intervention programs to deal with this problem that involve the whole school community.

### Keywords

Cyberbullying, Learning Community, Emotions, Interpersonal Relations, Qualitative Research

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### Acknowledgements

The authors are specialists in qualitative education research. Their approaches focus on the use of action-research cycles to transform educational realities.

# Effects of a Cooperative Learning Intervention Program on Cyberbullying in Secondary Education: A Case Study

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## Introduction

School harassment or bullying includes all types of violence in the school context where one or several individuals harass one or several partners (Álvarez-García et al., 2011). It has a multifactorial origin, and self-esteem, ego and belonging to the group play a determining role (Simón et al., 2017). The increase in the use of mobile devices and social networks has changed the form of traditional school bullying, giving way to cyberbullying (Primack & Johnson, 2017). It includes several significant elements: a) the victim has many difficulties to escape, because he or she can continuously receive messages through a mobile or computer; b) the amplitude of the audience can be enormous, because it can reach many different individuals at the same time; c) the invisibility of the bullies can be almost perfect, because they can hide behind the anonymity of the web; d) the durability of the harm can be unlimited, because the content of the harassment can be permanent; e) the speed of the spread can be very fast, because of its online nature; and, finally, f) the bullying can be very easy for the bully, because he or she can conduct it comfortably from anywhere (Garaigordobil & Martínez-Valderrey,

2014). Therefore, the amplitude of the effect of cyberbullying compared to traditional bullying is greater. Cyberbullying can be defined as that situation of repeated attack against a person's will through the use of information and communication technologies. Some authors indicated that bullying, when it is not conducted online, is less harmful than verbal and / or physical bullying (Lapidot-Lefler & Dolev-Cohen, 2015), but several facts seem to indicate that it can be the opposite: in addition to *live* bullying, cyberbullying includes *deferred* harassment, since technology makes the negative message almost permanent for the victim, and it allows *masking*, the authors can hide themselves under false identities (Davis, 2012). Therefore, cyberbullying may even be more intense than verbal and / or physical bullying because of the perpetuation and continuity that it generates outside the classroom. The harm can be so deep that it has been found related to suicidal ideas among adolescents (Hinduja & Patchin, 2010). Gursakal and Bozkurt (2017) manifested how perverse is the situation, because society values positively those individuals who have more online followers, are more active in social networks and who are even more controversial on the net. However, there is no critical awareness of the thin line between being socially recognized in networks and the emotional damage that can be suffered through them. This situation is aggravated in adolescence where, due to social influence and the importance of peer recognition, serious traumas can be easily created (Brunzell, Stokes, & Waters, 2016).

Even today, there are no clear protocols for detection, prevention and treatment of cyberbullying in schools (Pelfrey & Weber, 2015). Davis and Schmidt (2016) pointed out the relevance of three factors: (a) schools must act with immediacy; (b) management teams should treat the problem with the importance that it deserves; and (c) the whole educational community should be involved. Based on these ideas, the response to cyberbullying should be formative and global intervention programs that involve parents, students and teachers, thus granting the social transcendence of the problem (Couvillon & Ilieva, 2011), increasing the communication channels between school and family.

Any psychoeducational intervention involves the design of a long-term systematic action plan directed by psycho-pedagogues in collaboration with teachers to establish a connection between the curricular framework and inclusive school education (Martín & Solé, 2011). Most psychoeducational intervention programs have been developed in the group tutoring class or outside the school hours (Garaigordobil & Martínez-Valderrey, 2014). Only one psychoeducational intervention is known within the program of a curricular subject and developed by the teacher himself (Carrasco, Alarcón, & Trianes, 2015) and significant results were obtained to improve school coexistence. This intervention was based on cooperative learning and has been shown as an effective methodological approach to, among other things, develop students' social skills (Lavasani, Afzali, & Afzali, 2011), facilitating the inclusion of students with difficulties and group cohesion (Gillies, 2014), and promoting individuals' self-esteem (Bertucci et al., 2010). On the other hand, curricular subjects such as Physical Education, due to its motor and social nature, represent an ideal opportunity to work on inclusion, respect and tolerance among adolescents (Hortigüela, Fernández-Río, & Pérez-Pueyo, 2016). Therefore, it can become a perfect scenario to conduct intervention programs to prevent or treat cyberbullying.

Based on all the above, the main goal of the present study was to assess the effect of a cooperative learning intervention program on the emotional and social evolution of a cyberbullied student from the entire educational community's point of view (peers, parents, teachers and management team). It is a problem of special incidence in the current educational situation to which we have to respond from the schools. The consequences are increasingly evident, and often irreversible in the psychological and evolutionary development of students. On the other hand, families suffer a lot with these situations, and as educational professionals, we have to give our help. Based on this approach, as researchers we are particularly concerned

about how to avoid bullying in classrooms. Our lines of research are closely associated with cooperative learning and the generation of positive learning experiences in students. For many years, we have experimented with different inclusive methodologies in the classroom, as well as training teachers. We have applied different projects in schools. Our main intention is to demonstrate how a cooperative action protocol can be functional and useful to avoid cyberbullying.

## Method

### Participants

A non-probabilistic, intentional sampling was used (Cohen, Manion, & Morrison, 2011), since all participants were selected based on their direct connection to the case study: (1) Sonia (pseudonym): 13 years, the girl who was suffering cyberbullying, she was enrolled in a year Nine course; (2) Sonia's father and mother: 45 and 43 years old, nurse and administrative personnel, respectively; (3) School's management team: director and head of studies of the school where Sonia was enrolled; 52 and 48 years of age, respectively; the director had a teaching experience of 25 years and the head of studies 18 years; (4) Physical Education teacher: 35 years, 10 years of teaching experience; (5) Sonia's classmates: 28 students (17 girls and 11 boys); 10 of them (five boys and five girls) agreed to participate in a discussion group; they were selected based on two criteria: a) voluntariness, and b) participation in the intervention program. These students were not the ones who bullied Sonia. All of them or their guardians signed an informed consent to participate in the study. The school, where the whole project was conducted, had 312 students, and it was located in a medium-size state capitol of Spain.

### Design and Procedure

The researchers were aware that the theme of the study was an extremely sensitive issue. Therefore, in addition to using the pseudonym of Sonia at all times, all participants were assured absolute confidentiality and anonymity. Taking Lago and Onrubia as a reference (2011), the psychoeducational intervention was developed in five phases over a period of five months, more intensely in the subject of Physical Education, but also with the commitment from all the teachers to address it as a school project in curricular and non-curricular contexts. The local educational administrations were informed of the research, establishing the necessary legal protocols. Families were also informed in order to protect the security, privacy and confidentiality of the participants.

(1) Analysis of the demand and negotiation of responsibilities: the family and the school were contacted to obtain precise information about the situation and establish an action plan together.

(2) Analysis and comparison of teaching practices with theoretical referents: together with the Physical Education department, the normal teaching practice was assessed, comparing it with cooperative learning approaches: positive interdependence, promotive interaction, individual accountability, group processing and development of social skills (Johnson & Johnson, 1994).

(3) The researchers designed the intervention programme according to the characteristics of the centre, the temporary space available and under the premise of the necessary involvement of the educational community: (a) *Establish cooperative learning as a methodological framework in the Physical Education class*, including peer-assessment and self-evaluation. All the contents (acrobatics, juggling, parkour ...) were non-competitive, and they included the connection of social and motor resources that resulted in the elaboration of

joint final assemblies; Cross-cutting issues were also addressed in other school subjects such as violence in sports, sexism or doping. (b) *Develop active recesses* with a diversity of physical activities where the students decided what type of physical activity to perform, having the resources available in specific areas and supervised by a teacher; the objective was to take advantage of the contents and resources worked in the Physical Education class outside of it; a weekly schedule was developed for the students to decide which content to practice according to the area selected and the material available; it was intended for students from different classes and courses to interact. (c) *Make trips to the natural environment with the families*: once a month, parents shared these trips with their children, performing hiking and biking activities that ended with a joint meal; those teachers who were interested also participated; it was intended to involve families to create a sense of community in the school, and to normalize relations between teachers, parents and students in non-academic activities. (d) *Increase sports and artistic proposals in the afternoons*: these were judo / capoeira and dramatization workshops two afternoons a week, since these activities had been very successful in the Physical Education class and the students showed their interest in continuing to practice them; the activities were conducted thanks to the support of the city council. (e) *Organize a cultural week*: during one week, the students shared with their classmates some of the contents worked on throughout the course; this allowed interdisciplinary work between the areas, designing activities and challenges together.

(4) Cooperation in the implementation, monitoring and adjustment of the intervention program: the cooperative methodological approach was initially limited to the Physical Education class, but it was quickly incorporated into other subjects to work on the importance of tolerance, empathy or respect for others. The areas that incorporated these cooperative teaching strategies were Biology and Geology, Geography and History, Spanish Language, Mathematics and English as a second language. At the beginning, basic cooperative learning techniques were developed, transforming the lectures into dynamic activities where the students reflected, organized ideas and made decisions together. Later, there were teachers who, due to their motivation, decided to put into practice more complex techniques. In addition, the school organized specific training workshops for the teachers (20 hours) on cyberbullying and social networks, in order to work on the topic across all subjects; this training included seminars with experts on the subject (professionals and researchers) with analysis of specific cases to train teachers on how to prevent, act, and interact with students and families. Likewise, two police officers came to the school to provide training to students and teachers related to the use of social networks and the consequences that mismanagement may have; the idea was for the former to be aware of the dangers and for the latter to intervene correctly when detecting cases of cyberbullying.

(5) Evaluation and improvement plan: the school's educational project was updated to include all the lines of action indicated above. Mechanisms for evaluating the plan carried out were also included (some are detailed in the later section of instruments) to make improvement plans for the entire intervention project.

### **Data Collection Instruments**

Three different instruments were used for data collection. The questions used in each instrument were structured around the three categories of analysis of the study, obtaining a greater data specificity (Beldag, 2016).

## Interviews

The parents and the management team were interviewed at the end of the intervention program. The one addressed to the parents focused on checking how they had experienced their daughter's whole cyberbullying process: how the problem was detected, how it affected their communication with Sonia and the school's management team (Table 1).

Table 1

*Script used for the interview with parents.*

1- How did you realize that your daughter was suffering from cyberbullying?
2- How did Sonia's behavior change? Was it easy to talk to her about the situation?
3- What was the first thing the school did when they knew what was happening?
4- How was your first contact with the school to address the issue?
5- What was the hardest thing during the intervention process?
6- What changes did you observe in your daughter with the intervention program? What was the most difficult to change?

All the sessions were recorded in audio for the recapitulation of the data and lasted approximately 60 minutes. In all cases, researchers sought to deepen the theme of the study in order to reach a reflective conversation in a relaxed atmosphere (Anyan, 2013). The interview addressed to the management team focused on assessing how an effective solution was sought to the cyberbullying case, what was the decision made, and how the information on the case was spread in the school (Table 2).

Table 2

*Basic script used for interviews with the management team*

1- How did you find out that Sonia was being cyberbullied?
2- How was the process of dialogue and interaction with her parents?
3- What kind of measures did you conduct and with whom did you count on?
4- Why did you decide to develop the inclusive PE program?
5- What were the main positive aspects that you have had?
6- Was the media interested in it? Did the news spread?

## Discussion Group

The discussion group was carried out at the end of the school year with ten of Sonia's classmates. Its purpose was to assess how the students valued the intervention program in which they participated, highlighting the social and relational aspects that had been generated (Table 3).

Table 3

*Script used for the group discussion with the students.*

1- What is the most important thing about the implementation of the inclusive PE program?
2- Would you repeat the experience? Why?
3- Do you think that in-class respect and tolerance has improved? and with the rest of the colleagues from other classes?
4- Did you miss competition in some of the proposals?
5- What is the most important thing that you have learned?
6- Do you believe that the issues that have been worked in this program have a connection with your friends and the streets? Describe them.

## Teacher Diary

Its purpose was to assess the implementation of the intervention program and the students' adaptation to its activities (Table 4). It was completed weekly, collecting as much information as possible in each variable. The physical education teacher, who was primarily responsible for the implementation of the programme, completed the diary.

Table 4

*Script used in the teacher's follow-up journal.*

1- Students' involvement and participation in the program
2- Level of tolerance and respect in the activities
3- Level of socialization among peers
4- Types of actions associated with violence and their consequences

## Analysis of Data

With the intention of assessing the topic of the study in depth, the cyberbullying case, a qualitative methodology was used: specifically, the case study technique (Stake, 1995). The desire was to verify the effects that a global school intervention program had on the social and emotional development of a girl who suffered cyberbullying. To this end, the members of the management team, the teachers and the family decided to participate actively. This was necessary, if it is really intended for the schools to address social problems that have a direct impact on their students (Kronick & Cunningham, 2013). In addition, it concedes researchers the possibility to know in first person the real context in which the intervention program was developed. This unique case study, originated in the detection of cyberbullying in an adolescent, led researchers assess the existing interactions between the agents involved in the process, using interpretative models based on causal relationships (Carrión-Martínez & Luque, 2013). A triangulation of the information obtained in the data collection instruments was carried out, which enabled a multidimensional analysis of each of the approaches employed (Oliver & Hallen, 2006). The theme addressed had high social and educational significance, which gives more identity and coherence to the use of a qualitative approach (Lleixá & Ríos, 2015). The cross matching patterns technique was used (Saldaña, 2012) in the texts of each of the data collection instruments. The Grounded Theory model was also used (Straus & Corbin, 2002), grouping all the information using thematic axes in the generated categories. An open, selective and axial coding was used too. The information from each instrument was assigned to each of the corresponding three categories of analysis, thus complying with the triangulation procedure. In this way, the most significant text extracts with the corresponding coding are presented in the results, thus complying with the saturation procedure. The WEFT QDA computer program was used for this purpose.

The categories of analysis were directly related to the object of study and to the intervention design, which respects the criteria of specificity and coherence that all qualitative research must have (Trainor & Graue, 2014). The categories were:

*Cyberbullying detection and response:* all the information related to the process was assessed: how the parents detected the cyberbullying, how they acted and how they contacted the school. The school's response was also included.

*Intervention program:* all the data related to the benefits reported by the intervention program in the students, the school's involvement in the program,



and the connections between the educational agents throughout the process were also collected.

*Social and emotional evolution:* this category was directly related to Sonia's evolution during the intervention program: self-esteem, relationships with her classmates, with her parents, academic motivation, leisure time, among others.

Different acronyms were used to identify meaningful text fragments present in each category; the data collection instrument used is also indicated: for the interview with Sonia's parents (ISP), for the interview with the management team (IMT), for the teacher's diary (TD), and for the discussion group with students (DGS).

## Results

This section will deal with the results obtained in the research in relation to the detection of cyberbullying, the intervention programme carried out and the emotional evolution of the affected girl. It is verified how the fact of involving the educational community in the implantation programme has favoured the dynamics of the school. Cooperative learning becomes a key methodology for improving disruptive behaviour and fostering socialisation among students.

All the information extracted from the three data collection instruments was grouped into the three study categories indicated above. The number of meaningful text fragments resulting in each category is presented, showing the most significant ones.

**Cyberbullying detection and response** (357 meaningful text fragments). It was observed how hard it was for the parents the initial process of assimilation of the situation and the way to proceed and act with Sonia. This shows how teenage victims of cyberbullying tend not to manifest their emotions with the family and be introverted. For this reason, it is necessary to establish clear protocols of action from both families and schools.

*"Sonia was different.... she barely ate, and her way of relating to us changed completely at the beginning of the year [...]". "Sonia is already introverted, but we knew that things started to be serious when she stayed at home on weekends" "What struck us most initially was her phone dependence [...]. She said that nothing was happening, that her head or stomach ached, but the situation was evident". "The trigger was when her mother checked the phone one day while she was in the shower and found what she found. Although there were several groups that she had left, there were two in particular who insulted her ruthlessly, even with images [...]". "It was striking that it was specifically two people who insulted, the rest hardly commented [...]". "When we told Sonia, she got very angry with us, we had never seen her like that before; she did not talk to us for two days [...]". "We did not say anything to the school until we talked to her calmly about the situation". "The management team did a good job, doing something about it" (ISP)*

Therefore, it is essential that parents, in the event of any change in behaviour of their children, inquire into the situation and contact the school.

The management team reflected their initial surprise and the immediacy and caution they had at all times when making decisions. This shows how schools are not aware in many cases of this type of situation.

*"We were very surprised by the situation, especially when we read the type of threats Sonia received [...]". "We acted immediately expelling the stalkers for a month [...] the whatsapp threats helped us to have evidence of the magnitude of the situation". "After reading what their children had written, the parents of the stalkers assumed the seriousness of the situation". "It was so important for us to act with immediacy, and to look for a protocol of detection and prevention of these situations [...]. In addition, we were very cautious with the media, preferring to address it internally". "The Physical Education teacher, who had a lot of initiative, proposed to carry out a physical activity program throughout the course to encourage inclusion, and we thought that it was a great idea that could work very well". "In addition, we approved a protocol of action in the school for teachers to know clearly how to proceed" (IMT)*

The discretion of schools in the treatment of information is fundamental, as is the establishment of clear and defined protocols for action.

**Intervention program** (386 meaningful text fragments). It was observed how Sonia's parents positively valued the intervention program carried out specifically in the Physical Education class, focusing on their daughter's self-esteem. In this section, it is observed how both parents, teachers and students value positively the programme carried out. This has led to collaborative work on prevention and action against cyberbullying.

*"The inclusive Physical Education program has been very beneficial for Sonia". "The program has served to relate and socialize more with others, although the damage done will take time to heal". "I highlight the spirit with which Sonia went back to school, doing sports activities in the evenings with colleagues which we never thought she would do [...]". "We must also highlight the normality with which the program was carried out [...]. It did not focus on Sonia; it was a school activity, which meant that she did not feel the centre of it" (ISP)*

It is demonstrated how the social climate established in the school has a positive impact on the positive evolution of Sonia. This also has an impact on the family.

The management team valued the dimension of the Physical Education program carried out, highlighting the variety of activities and the involvement of students and teachers:

*"As head of studies, I had seen many other Physical Education programs before in other schools, but the dimension, variety and participation that has been given to this one has gone very far". "We thought that at the beginning the program would not reach the end of the year, but we must emphasize the involvement of the teaching staff". "Having contacted the city council allowed us to give variety to the activities" (IMT)*

Decisions made by management teams are essential for schools to become inclusive. In this sense, physical education is a subject with great potential due to the social interactions it generates.

The Physical Education teacher emphasized that, although it was not easy to start, the students' involvement in the program and their socialization have been high:

*"At the beginning the goal of the program was not ambitious; it had the clear objective of fostering tolerance, respect and socialization of peers". "The basis was the Physical Education classes, where the necessary attitudes of respect were worked on". "The students' response was great, working on activities that I did not even think they could have done". "The socialization was clearly seen in recesses and in the students' free time" (TD)*

This shows that cooperation in physical education is fundamental. Group physical activity outside the classroom allows for positive social relationships among adolescents.

Sonia's classmates highlighted the variety of activities, cooperation and doing things outside of class together as the main advantages of the program:

*"I loved the connection of what we have worked in the Physical Education classes with what we have done in the afternoon and at other times". "It has been an experience that I would like to continue other years, since you do much more with your teammates". "At the beginning you miss the competition a bit, then, you realize that if you cooperate with the one next to you, it's more fun". "Sometimes I was not going to play games because of the pressure of losing; here, since there are no classifications, the most important thing is to play" (DGS)*

It is observed how the traditional competition in many cases is excluding for some students. Cooperative physical activity fosters respect and tolerance for others.

**Emotional and social evolution** (364 meaningful text fragments). Sonia's parents highlighted how she improved her socialization, both with her classmates and with other people. They emphasized how the varied physical activities of the program and the joint work of the teachers helped improve her predisposition to go to the school. In this section, we observe the importance of making these processes natural, and that the students affected do not feel the responsibility that the new actions are being carried out exclusively by them:

*"At the beginning it was all very hard, she did not want to go to the school [...]. However, the whole process was conducted carefully, so Sonia's evolution was positive ". "The Physical Education program was key [...]. Talking with Sonia and the teacher and seeing how she was happy with the classmates comforted us". "This, and the support of her friends, made her little by little recover her academic motivation". "Sonia told us how all the teachers had a greater influence on the patterns of respect and tolerance in the classes, as well as the dangers of using the telephone and social networks" (ISP)*

It is essential that teachers emphasize the idea of respect for others and the disciplinary consequences of not doing so.

The management team highlighted as key the recovery of the spontaneity that characterized Sonia and the loss of her fear of speaking in public. They also highlighted the importance of naturalness in dealing with it as a key factor:

*"The most important thing was to raise awareness among all the teachers and students of the seriousness of this type of actions .... And also to control the stalkers once they returned to the school". "We were in close contact with all the teachers to see the evolution of Sonia". "In the beginning it was difficult because she did not have any motivation [...]. Little by little, and knowing that*

*the stalkers would not be in her class, her attitude changed, talking more in public and relating more". "The support of her peers and the Physical Education program was key in her losing the initial fear". "She always confronted the subject naturally, not remembering at all what had happened .... This was what they told us in the training we received and it worked quite well" (IMT)*

Keep in mind that these processes are evolutionary and gradual and have to be developed over the long term. The actions have to be focused on recovering the emotional values of the person.

The Physical Education teacher who valued how the cooperative work was carried out, both in the Physical Education classes and in the other activities of the intervention program, served to achieve a better social climate among the students. Sonia greatly improved her self-esteem when she saw that she was recognized by the group in the activities she did:

*"The Physical Education teacher put special emphasis on applying cooperative learning as a methodology in his classes. We know that with it, improvements were obtained at the social level among the students". "Without focusing on her, we paid special attention to her evolution, talking with some of her colleagues so that they would be very aware and co-working ". "It has been very nice [...]. Seeing how 13-year-old students turned to help a classmate was amazing [...], for me, without a doubt, one of the pleasures of education". "Adolescents, when presented with challenges, can reach an incredible commitment, and this is something that Sonia will remember forever". "Her self-esteem increased as she saw that she was chosen in the teams, she participated in extracurricular activities [...]. We also successfully worked on ICT in various activities and the students were very aware and consistent with the goals and where the limits were" (TD)*

The effect of the group is very positive for people who have suffered cyberbullying to feel integrated again. This is because they are treated as equals, and not only as adolescents with respect to the vision of an adult.

## Discussion

The main goal of the present study was to assess the effect of a cooperative learning intervention program on the emotional and social evolution of a cyberbullied student from the entire educational community's point of view (peers, parents, teachers and management team). The results obtained have been organized around three themes: cyberbullying detection and response, intervention program, and emotional and social evolution, and they have shown that the program and the involvement of the entire educational community produced significant advances in the emotional and social state of the cyber-bullied teenager.

Regarding the first theme, cyberbullying detection and response, Sonia's parents emphasized how difficult it was to break the initial barrier to know what really happened to their daughter in order to address the situation. Bussey, Fitzpatrick, and Raman (2015) indicated that one of the keys to maintain the emotional stability of cyberbullying victims is in the diagnostic phase, not oversizing the situation in front of that person and showing support. However, it is very common for families to be overprotective towards the bullied son or daughter, and feeling attacked by the schools, something harmful in order to know the reality of the events (Pieschl & Porsch, 2017). The management team highlighted the caution and immediacy used in the decision-making process, showing forcefulness before the

cyberbullies because, in addition to showing an image of intolerance of the school in the face of these behaviours, it sends common codes of action visible to them (Pelfrey & Weber, 2015).

The second category, program intervention, showed how Sonia's parents highly appreciated the intervention program developed, being cooperative learning an ideal tool for the integration of their daughter and to avoid intolerant behaviours in the school. This coincided with the vision of the management team, which assessed the variety of activities and the involvement of the students in them. Some experiences have already shown the integrating potential of physical activity if one works from an inclusive perspective, highlighting cooperative strategies as the main factor towards tolerance and respect (Hortigüela et al., 2017). The Physical Education teacher expressed the difficulty of being able to conduct the intervention program at the beginning, because he had to change the usual dynamics of the classes and integrate activities outside school hours (breaks, afternoons, weekends). Nevertheless, the implication and responsibility of students, teachers and families derived in a great involvement and the development of greater tolerance and empathy in students at the end of the program. Specifically, the students highlighted two factors: a) the cooperative nature of the activities carried out; and b) the possibilities of experiencing group activities outside the classroom. Cooperative learning has been shown as a methodological approach that can improve students' intrinsic motivation (Fernandez-Rio et al., 2017), their social skills (Lavasani et al., 2011) and group cohesion (Gillies, 2014). It also facilitates the inclusion of students with special needs (Gillies, 2014) and fosters students' self-esteem (Bertucci, Conte, Johnson, & Johnson, 2010). Regarding the latter, Reilly and Mitchell (2010) pointed out the importance of students' autonomy in group formation, clearly focusing on self-esteem and in the perceived academic support. Similarly, Topping et al. (2011) have shown that those students who have experienced cooperative learning in the elementary stage have better affiliation with peers in later years, even at recess and outside of school. This reflects the importance of working on cooperation from the earliest ages, but always from an inclusive approach, since it allows the teacher to be more aware of the task structure to optimize learning experiences (Grenier, Miller, & Black, 2017).

Regarding the third category, emotional and social evolution, it was observed how parents expressed the positive evolution of Sonia throughout the implementation of the intervention program. Students worked together and teachers tried to promote respect, tolerance and cooperation between students. Previous studies (Brunzell, Stokes, & Waters, 2016) pointed out that the work around a trauma (violence, abuse...) in vulnerable students should be based on three fundamental pillars: recover the regulatory skills, repair the interrupted attachments, and increase the individual's psychological resources. Results from the present study showed that the intervention program managed to develop these three pillars. Both the teacher and the school's management team highlighted the recovery of Sonia's regulation skills (she became happy again in the Physical Education classes), the repair of connections with her classmates (the students turned to help her) and the increase of her psychological resources (Sonia regained her spontaneity and she lost the fear to speak in public).

In conclusion, a psychoeducational intervention program based on cooperative learning that involves the whole educational community has been effective to obtain advances in the emotional and social state of a cyberbullied teenage girl. Although the results and conclusions of the work cannot be generalized, the educational community can transfer the information reported here to their own contexts, developing similar programs. On the other hand, the results have direct application in the teaching training programs, since future teachers need to know strategies against cyberbullying.

The main contribution of this research is to demonstrate how a cooperative program in a school can help prevent, and especially intervene in adolescents who have suffered

cyberbullying. The qualitative methodology has been key to follow up on Sonia, checking how the involvement of the entire educational community is necessary to tackle problems of conduct and respect for others. However, research has some limitations. First, there is no specific follow-up on whether or not the bullies were reinserted. Second, the intervention program was not recorded by the educational administration, so we do not know to what extent the experience can be replicated in other contexts. Various lines of research of special interest are opened here, analyzing how the subject of physical education through its cooperative treatment can transform educational realities and make them fully inclusive.

We believe that this research may be of special interest to all management teams that want to prevent and address bullying in their schools. Also for all educational decision-makers and legislators, thus establishing common guidelines and protocols for action. What is evident is that from schools we cannot continue to look the other way on a subject of such importance as cyberbullying.

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