

INFORMING STUDENTS ABOUT BULLYING THROUGH THE DEVELOPMENT OF DIGITAL STORIES. RESULTS OF A PROJECT IN GREECE

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ABSTRACT

The study presents the results of a project in which third-grade primary school students developed their own digital stories and through this process, they advanced their understanding of what bullying is. The constructivist principles concerning the learning process, and in particular, the requirement of students' active participation, provided the necessary framework. Participants were 132 students, from six schools in Athens, Greece. Their teachers, although present, avoided guiding or lecturing them. Data was obtained by analyzing students' digital stories, the short essays they were asked to write after the intervention, and a short test that tried to determine if they could make the distinction between bullying and non-bullying situations. The results indicated that students were able to grasp what bullying is, its main aspects and how they should react, but they were not able to accurately portray the role of bystanders. The intervention was short in duration and can be easily applied, without altering the school's timetable. The results of the study might prove useful when designing more comprehensive anti-bullying programs.

Keywords: bullying, bystander, constructivism, digital storytelling, victim

INTRODUCTION

Digital narrations are a powerful tool in the hands of educators. They cause the keen interest of students and thus, they can easily assimilate information (Coventry, 2008). They foster literacy skills as well as artistic and social skills, they strengthen critical thinking, and the ability to analyze and synthesize information (Robin, McNeil, & Yuksel, 2011). Digital storytelling combines the creative work of constructing a story, together with the use of technology. This, in turn, allows students to acquire a wide range of skills and abilities (e.g., creative thinking, collaborative skills, communicative skills, flexibility, taking initiatives, leadership) that all of them fall under the term "21st-century skills" (Czarnecki, 2009). Students also learn to voice criticism either on their own work or on the work of others, facilitating social learning (Robin, 2008).

Extensive research has been conducted on the educational benefits when using digital storytelling. There lies a contradiction; while researchers focus on the instructional settings, the improvement of literacy skills and on knowledge acquisition, at the same time they acknowledge that the benefits of digital storytelling go far beyond these objectives, as presented above. In addition, far less research has been conducted on examining the potential of this tool in other areas where the settings are not strictly instructional or the main objective is not some form of knowledge acquisition. Such areas could be aiding or counseling students, acquirement of behavioral patterns, and the resolution of complex problems. The underlying philosophy of such uses of digital stories is that they are a good method for documenting personal experiences, that they can be a form of narrative therapy and that they can help students to discover parts of their personality (Sawyer & Willis, 2011). The pilot program presented in the following sections embraces this standpoint. It examines how digital storytelling can be used in raising students' awareness on bullying, a phenomenon that students, as well as teachers, quite often face at school. Knowledge acquisition was not an important factor; instead, the focus was on assisting students to understand how to deal with this issue and how they can assist others that might need help.

The paper is organized as follows. First, a brief review of the literature regarding bullying and bullying prevention programs is presented, followed by the project's rationale and methodology. Subsequently, results are discussed and the conclusion completes the work.

DEFINITION OF THE PROBLEM

Intimidating and aggressive behavior, school violence, and bullying are phenomena that are becoming more and more frequent in Greek schools. They greatly affect students' attitudes and behavior, psycho-emotional development, and their school performance (e.g., Bond, Carlin, Thomas, Rubin, & Patton, 2001; Glew, Fan, Katon, Rivara, & Kernic, 2005; Ortega, Elipe, Mora-Merchán, Calmaestra, & Vega, 2009; Juvonen, Wang, & Espinoza, 2010) and may lead to serious psychological trauma and dysfunctional social behavior (e.g., Frizzo, Bisol, & Lara, 2013; Gini, 2008). The victim is weaker and powerless compared to the abuser. The attacks are

programmed, repeated at regular intervals and the abusers' objective is the affirmation of their power over the victims (e.g., Atlas & Pepler, 1998; Bond et al., 2001). School violence, as a social phenomenon, has a close relationship to social discrimination, social exclusion, and cultural diversity (Garnett, Masyn, Austin, Miller, Williams, & Viswanath, 2014; Nikolaou, Thanos, & Samsari, 2014). In general, the occurrence of bullying in Greek schools is lower than in other countries, however, it becomes more and more frequent (Sapouna, 2008; Houndoumadi & Pateraki, 2001). It usually lasts for a short period of time, but for 19% of the incidents, it can last for more than a year (Artinopoulou, 2010).

In a bullying situation, individuals assume the roles of bullies, victims, and bystanders (Rigby, 2008). While the bully-victim dyad is quite clear, bystanders' involvement is ambiguous (Padgett & Notar, 2013). Bystanders can undertake one of the following roles: (a) actively take the side of the bully and become a source of power to him (Twemlow, Fonagy, Sacco, & Hess, 2001), (b) passively observe and often perceived as approving the bully's actions (Gini, Pozzoli, Borghi, & Franzoni, 2008), and (c) intervene and help the victim or ask adults to intervene (Salmivalli, Lagerspetz, Bjorkqvist, Osterman, & Kaukiainen, 1996). Those who intervene have the skills, the will, the confidence, and the sense of personal responsibility to help, whereas passive bystanders seem to lack all the above (Pozzoli & Gini, 2010). On the other hand, the motives of students who take the side of the bully, seem to be similar to the ones that the bully has (Camodeca & Goossens, 2005). In hypothetical situations (e.g., when they are asked to write an essay or when they respond to questionnaires), children easily take the side of the victim and express their intentions to help or to report the incident (Rigby & Johnson, 2006; Boulton, Trueman, & Flemington, 2002). In real situations, though, only a small percentage actually acts (Salmivalli et al., 1996).

It seems that there are two major categories of programs that try to deal with bullying: (a) narrowly focused, such as curriculum interventions and counseling and, (b) large-scale, whole-school interventions (Vreeman & Carroll, 2007). Such a large scale program is Olweus Bullying Prevention Programme-OBPP (Olweus, 2003), which tries to deal with bullying by utilizing multilayered tactics; providing measures, guiding principles and philosophies, including but not limited to: staff discussion groups, class rules against bullying, meetings with students and parents, talks with bullies and victims, and with parents of involved students, and individual intervention plans. Kiusaamista Vastaa (Against Bullying)-KiVa program, takes an even more holistic approach to the matter (Salmivalli, Kärnä, & Poskiparta, 2011). In addition to the above, it includes students' lessons, sets of tools for educators, students, and parents, and a computer game. What is interesting about KiVa, besides its good results (Kärnä et al., 2011), is that it is a prevention rather than an anti-bullying program, such as OBPP, and that students are more actively involved in the process.

On the other hand, studies that were carried out in Greece, focus on investigating the duration, frequency, and psychological impact of bullying. The problem is that its impact is studied mainly on a theoretical/abstract basis (e.g., Koutras & Giannopoulou, 2015; Nikolaou et al., 2014; Bogiatzoglou, Villi, & Galani, 2012). Large scale prevention programs are sparse (e.g., Andreou, Didaskalou, & Vlachou, 2007). Studies examining interventions where students were not just passive receivers of information but actively participated in the process are even more scarce (e.g., Kyriazis & Zacharias, 2015). One can assume that at least in Greece, the prevention of bullying is still in its early stages.

RATIONALE, METHODOLOGY, AND IMPLEMENTATION

Having in mind the above, together with the view that digital storytelling might prove to be a useful tool in dealing with bullying, a project was planned and carried out in the third grade of six primary schools in Athens, Greece, from late October 2015, till late February 2016 (the project was not implemented simultaneously in all schools). Constructivism provided the theoretical background but also the framework of the intervention. According to constructivism (Ertmer & Newby, 2013): (a) learners build personal interpretations of the world based on their experiences and interactions, (b) knowledge has to be embedded in the situation in which it is used, (c) effective use of knowledge comes from engaging the learner in real-world situations, and (d) knowledge is validated through social negotiation.

On the basis of the above principles, it was considered inappropriate to present students with ready-made digital stories, it would be like lecturing them. Instead, I thought that it would be in line with the constructivistic views regarding how knowledge is constructed if students were asked to create their own digital stories. I also decided, purely for research reasons, that students were going to be provided only with a minimum of information regarding bullying, during the project's initial stages. By doing so, it would be possible to trace changes in their views, but also to examine to what extent they were able to understand by themselves:

- The basics of bullying (types, duration, and roles).
- The right course of action in case they are the victims.

- The right course of action in case they are the observers.

Having set the above as the main research questions, I also came to the decision that the target group was going to be third-grade students (8 year-olds). The underline reasons for this decision were: (a) that younger students might face problems in using the digital stories' developing software, and (b) although bullying is found at all ages, it tends to peak during the middle school years (Monks & Smith, 2006; Rios-Ellis, Bellamy, & Shoji, 2000); therefore, one needs to inform students about bullying as early as possible.

The main idea was students to develop stories regarding bullying without any prior help, discuss their stories with the rest of the class and with their teachers, and re-visit their stories and modify them according to what they were able to comprehend during the discussions. Therefore, the project's stages and the respective methods were:

Preparatory stage. Prior to the beginning of the project, students' parents were gathered and they were briefed about the project, its methodology, and objectives. Their written consent for their children's participation was obtained. Written consent was also obtained from the schools' headmasters. The third-grade teachers of the participating schools were also gathered and briefed. They were explicitly asked to follow the project's methodology, as it is further elaborated in the coming paragraphs.

Preliminary stage (one two-hour session). At this stage, teachers informed students what they were going to do during the following days and they also discussed with them incidents of aggressive and intimidating behavior at their schools, while they avoided mentioning the term "bullying". Bullying was brought up as a topic of the discussions only when students raised that issue (in all schools they did), but not to a great extent. Naming the roles individuals assume in a bullying situation and offering possible resolutions to the problem were also avoided because students would be given the chance to reflect on these matters on the subsequent stages.

Main stage, development of the students' digital stories (two weeks, eight two-hour sessions). The key principles of constructivism together with the roles assumed by the ones involved in bullying, as presented in previous sections, shaped the methodological approach of the intervention's second stage, which had two sub-stages. During the first, which lasted for three two-hour sessions, students learned how to use the software for developing their digital stories. This was necessary in order to avoid problems and delays during the next sub-stage.

On the second sub-stage, which lasted for five two-hour sessions, groups of four were formed and teachers outlined what students were expected to do. After reminding them the discussion they had a few days earlier, they asked each group to think of a scenario which, in their view, constituted a bullying situation, and, by using the developing software, to develop a story based on this scenario. They were also asked to include as many characters as they believe that they are involved in bullying and to give a resolution to the problem. The stories' artistic aspect was not important; what was important was the thoroughness of the scenarios, the thoughts, and dialogues of the story' characters and the resolution that each team was able to come up with. Teachers did not offer any help or guidance and did not intervene in the process, except when technical help was needed.

On a side note, there were some problems when students were asked to develop their own stories. Since, in two schools, students were accustomed to working in groups, where each member assumes a certain role, they thought that they had to do the same when developing their stories and tried to assign roles according to the story's characters. As a result, no one wanted to take the side of the "bad guy" (bully) and, in few cases, they did not want to take the side of the victim either. This is an indirect indication of how young children identify themselves with the characters of a story, especially when it is their "own" story (Appleyard, 1994). In any case, teachers explained to students that each story would be collectively developed and that they all have to contribute in portraying the story's characters.

Final stage (two weeks, four two-hour sessions). This stage also had two sub-stages. During the first, all groups presented their stories. These presentations served as a starting point for discussing, in-depth this time, the issue of bullying. Teachers asked questions regarding the scenarios of the stories, the characters in them, and the endings. In addition, having as an example certain key-points of students' stories, teachers pointed out what students accurately portrayed or what they missed to include. At the second sub-stage, students were asked to re-think their stories and, if they considered it appropriate, to make changes to them.

Post stage (one two-hour session). At this stage, which took place about a month after the final stage, the issue of bullying was re-examined. First, a set of 17 images created using the digital stories' developing software was

presented to students. Speech bubbles indicated the dialogues between the characters and captions outlined the situation in which these dialogues took place. They depicted aggressive acts of a varied type and intensity (physical, verbal, direct, indirect, imbalance of power, provocation, repetition, and intent). Students were asked if each image illustrated a bullying situation or not. These images were inspired by a set of images which were first used and extensively validated by Smith et al. (2002) and later on by Monks and Smith (2006). It has to be noted that the original set included 25 images, 8 of which were about sexual and racial discrimination and I thought that they were not appropriate for use with younger children. Students were also asked to write a short essay, presenting: (a) their thoughts about how they would have reacted if they were the observers on a bullying incident and (b) how they would have reacted if they were the victims.

RESULTS ANALYSIS

In total, 132 students participated in the study (62 boys and 70 girls). Their digital stories (66 in total, 33 initial and 33 after the changes students made) were analyzed using the iterative coding process (Creswell, 2002; MacQueen, McLellan, Kay, & Milstein, 1998) to identify the categories, themes, and patterns that emerged from the data. All stories were viewed once, by two individuals, to identify the main ideas. Then, they were re-viewed in more detail and the ideas were labeled with codes. This process was repeated two more times to reduce overlap and redundancy of the codes, until a small set of sub-themes, under a few major categories, were identified. It has to be noted that the coders were trained prior to analyzing the data and their reliability was assessed: (a) informally (during their training), (b) formally (in a pilot test), and (c) formally during the coding of the full sample. An interrater reliability analysis using Cohen's kappa coefficient was performed to determine consistency among raters. The interrater reliability was found to be $\kappa = 0.84$ ($p < 0.001$), 95% CI (0.896, 0.784), which was considered very good (Landis & Koch, 1977).

The initial stories although simplistic accurately illustrated what bullying is; the repetition of the incidents, the use of violence and bad language, the abuser's overwhelming power, the victim's reluctance to report the events. Physical together with verbal bullying was the main theme in all scenarios (Table 1). There were no cases of emotional bullying, cyberbullying, and of sexual harassment. Quite interestingly, bullies, in all cases, were boys and sometimes they were portrayed as fat and/or tall, besides being strong; amplifying in that way their overwhelming power. In twelve cases it was also stated that the bully was an older student. There were some notable, changes in students' stories after the in-classroom discussions. Though no other type of bullying was added, there was a shift to more complex types of bullying (verbal and physical). Also, in 4 cases girls replaced the boy bullies, the overwhelming power of the bullies was even more amplified and the recurrence of incidents was also highlighted.

Table 1. Bullies

Category	Theme	Initial* N = 33	After** N = 33
Type of bullying	Verbal	6	1
	Verbal, physical	14	24
	Physical	13	8
Gender	Boy	33	29
	Girl	0	4
Characteristics	Strong	14	5
	Strong, fat	7	6
	Strong, older	7	11
	Strong, fat, older	5	11
Recurrence of incidents	2	3	0
	3	10	5
	4	9	11
	5	9	14
	6	2	3

Notes. * = Initial digital story, ** = Changed story, after the in-classroom discussions

In most cases, the victim was a boy (Table 2). The most common emotions were fear, depression, loneliness, embarrassment, and humiliation. Only in two cases the victim immediately reported the events. Once again, there was a notable shift in students' stories after the in-classroom discussions to (a) the complexity of emotions that the victim experienced, and (b) the reaction of the victim because in 16 cases he/she was keen to report the events. Most of the stories ended with the victim talking to a parent (mostly to his/her mother) or to the class's teacher, both before and after the in-classroom discussions.

In students' initial stories, bystanders were included, though in eight of them there were no observers at all. Even so, only in six cases, there were dialogues or thoughts accompanying these characters, so it is impossible to know which type of bystanders were portrayed to the majority of the stories (Table 3). In those six cases, the only emotion that was expressed was fear, because the bully might turn against them. After the in-classroom discussions, students changed their stories; to the majority of them, the observers took the side of the victim, expressing anger and sorrow.

Table 2. Victims

Category	Theme	Initial N = 33	After N = 33
Gender	Boy	24	24
	Girl	9	9
Emotions	Fear	3	2
	Fear, loneliness	8	5
	Fear, embarrassment	2	1
	Fear, depression	6	4
	Fear, humiliation	4	2
	Fear, loneliness, depression	5	8
	Fear, depression, humiliation	4	5
	Fear, loneliness, depression, humiliation	1	6
Reports the events during the story	yes	2	16
	no	31	17
Ending of story	Talks to teacher	7	9
	Talks to headmaster	3	4
	Talks to mother	12	14
	Talks to parents	4	4
	Talks to a friend	3	1
	Talks to an adult (unspecified)	4	1

Table 3. Bystanders

Category	Theme	Initial N = 33	After N = 33
Included	Yes	25	33
	No	8	0
Type	Passive observer	6	4
	On the side of the victim	0	24
	On the side of the bully	0	0
	Not specified	19	5
	Not expressed	19	9
Emotions	Fear	6	3
	Sorrow	0	9
	Anger	0	12

Students' essays were analyzed using the same iterative coding process as in their digital stories. Three were the key elements for evaluating their them; the reasoning for selecting their own "right" course of action either as bystanders or as victims, the person that one would seek help from, and the time to react. The results are presented in Table 4. Twelve cases (five boys and seven girls) were excluded from the analysis because their essays were incomplete and/or had problems in writing. It has to be noted that either as observers or as victims, students expressed, more or less, the same reasoning for reacting and the same course of action and there were profound similarities with the final versions of the digital stories. What is interesting is that in 23 cases students stated that they will help the victim by intervening and by trying to reason with the bully. What is more, in 11 cases (all boys) students stated that they would react violently, either as observers or as victims, and that they feel confident that they will prevail. What is a cause of some concern is that in 13 cases, students stated that they will not react immediately, but only if the situation becomes intolerable.

Finally, the results from students' responses to the set of images are shown in Table 5. The last column presents the results from Monks and Smith's (2006) study, in which a set of images with the same captions was used,

though they did not use cartoonish characters but stick figures. Some notable differences can be observed, that will be further elaborated in the coming section.

Table 4. Analysis of students' essays

Category	Theme	Observers N = 132	Victims N = 132
Time to react	Immediately	110	107
	Delayed reaction	10	13
	Not specified	12	12
Course of action	Talks to teacher	37	28
	Talks to headmaster	22	16
	Talks to mother	6	34
	Talks to parents	4	23
	Talks to a friend	14	4
	Talks to an adult (unspecified)	3	4
	Verbally intervenes to help the victim	23	-
	Violent reaction	11	11
	Not specified	12	12
Reasons for reacting (multiple reasons)	Not good to live in fear	68	78
	Life would become intolerable	55	62
	Not good to be humiliated	75	77
	Others will laugh at the victim/me	58	60
	I can tolerate intimidating behavior up to a point	-	13
	Not specified	12	12

Table 5. Students' responses to the set of images

Image	Caption	Type	Bullying Yes %	Ref. %
1	X and Y don't like each other and start to fight	Pa	26.52	90.0
2	X starts a fight with Y	Pa	53.79	92.5
3	X starts a fight with Y who is smaller	Pa/Ip	90.15	92.5
4	X starts a fight with Y because Y said that X was stupid	Pa/Pr	48.48	77.5
5	X starts a fight with Y every break time	Pa/Rp	95.45	95.0
6	X borrows Y's ruler and accidentally breaks it	In	1.5	10.0
7	X takes Y's ruler and breaks it intentionally	In	85.60	60.0
8	X forgot their pen so Y lends them one of theirs	Bp	0	5.0
9	X says something nasty to Y	Va	59.85	85.0
10	X says nasty things to Y every day	Va/Rp	93.18	87.5
11	X makes fun of Y's hair. They both laugh	Ou	0	12.5
12	X makes fun of Y's hair. Y is upset	Ou	53.03	85.0
13	X asks Y if he/she would like to play	Bp	0	2.5
14	X won't let Y play today	Dr	45.45	87.5
15	X never lets Y play	Dr/Rp	91.67	90.0
16	X tells everyone not to talk to Y	Ir	75.76	87.5
17	X tells nasty stories about Y	Ir	87.12	90.0

Notes.

Ref. = Results from Monks & Smith's (2006) study (8 year-olds)

Pa - physical aggression; Va - verbal aggression; Dr - direct relational aggression; Ir - indirect relational aggression; Bp - benign or prosocial; Ip - imbalance of power; Pr - provocation; Rp - repetition; Ou - outcome; In - Intention

Gender-appropriate names were used in the place of X and Y; genders were mixed in the images.

DISCUSSION

The project presented in the preceding sections used digital storytelling in a way that deviates from its mainstream uses, that is in a strictly instructional framework, for simply telling a story, or for acquiring literacy skills (Robin, 2006; Sadik, 2008). Taking advantage of storytelling's compatibility with young students' mentality (Ohler, 2006), the study examined if it is possible through the development of digital stories to raise students' awareness of bullying.

Bullying is a phenomenon that has to be dealt efficiently and quickly since its implications can be severe for victims (Hawker & Boulton, 2003; Olweus, 1994), as well as for bullies (Nansel et al., 2001). Most prevention programs' objectives, at least in Greece, try to raise awareness by simply informing students (e.g., Bogiatzoglou et al., 2012); their active participation is hardly a feature. In contrast, this study relied mostly on students' active participation in the process, by adopting a constructivistic approach (Ertmer & Newby, 2013).

To the best of my knowledge, students were not previously lectured about bullying by their teachers, and no other anti-bullying programs were carried out at these schools. Consequently, it can be assumed that their initial digital stories were not the result of someone imposing his thoughts and views on them, but a combination of: (a) pieces of previous knowledge and experiences they might have had, (b) their own point of view, (c) their own understanding of what bullying is, and (d) how they think one can deal with it. Their final stories, on the other hand, were the result of the above, plus, whatever effects had the presentation of stories and the subsequent discussions with the teachers and the other students.

By working in groups, students were able to reflect on bullying, to visualize their thoughts when developing the stories, to negotiate their views and knowledge, and to embed the results of this negotiation into their stories, which represented situations where this knowledge and views are used. By doing so, the Piagetian perspective on how knowledge is constructed was implemented (Smith, 2012). Also, by viewing the digital stories of others, students became communicants of someone else's thoughts and feelings and this helped them in having a better understanding of the problem (Cane, 2010). In addition, while during the development of the stories teachers did not intervene, they guided students, through discussions, when each story was presented to the rest of the students, thus, implementing the Vygotskian perspective on learning (Niesel & Griebel, 2007).

It is quite important to have in mind the above when interpreting the results. On the basis of the findings in the initial stories, it can be concluded that students:

- Were capable of grasping, by themselves, the basics of bullying and the emotions one has when being bullied. This is in line with findings of other studies (e.g., Oliver & Candappa, 2003). They were also able to understand that the victim is reluctant to report the events since there were just two stories displaying the opposite behavior.
- View bullying only as physical and verbal harassment. Other types of bullying were not presented, probably due to students' age or because physical and/or verbal bullying is more easily understood as Oliver and Candappa (2003) pointed out.
- Were not able to adequately portray bystanders. It seems that their role needs to be clarified and analyzed to students, as others had pointed out (e.g., Polanin, Espelage, & Pigott, 2012).
- Understand, by themselves, that a bullying situation can be resolved by asking for help from an adult.

On the basis of the findings in the final stories and on the essays, it can be concluded that students:

- Became able to sufficiently portray bystanders, only after discussing their role.
- Were able to show empathy, their emotions for the victim, and their intention to help, only when they were asked to (in their essays). This is in line with other studies which indicated that in hypothetical situations children easily express good intentions (Rigby & Johnson, 2006; Boulton et al., 2002).
- Understood that the bullying incidents must be reported immediately. However, and despite the fact that the majority stated that if they are bullied they will react immediately, this has to be viewed with caution, since, once again, it refers to a hypothetical situation.

The project's positive impact can also be established by examining the results from students' responses to the set of images. Literature suggests that younger students, up to the age of 8, tend to be over-inclusive when they try to define bullying. They do not pay so much attention to the limiting characteristics of repetition, intention, and of the imbalance of power, characterizing acts of aggressive behavior, such as a fighting, as bullying (e.g., Madsen, 1996). Monks and Smith (2006) add that 8-year-olds use just one dimension to discriminate behaviors as bullying or not bullying, that of aggressive and non-aggressive behavior. Contrary to the findings of the above studies, I found that students were able to use at least two dimensions for characterizing aggressive acts as bullying, that of repetition together with aggression (physical or verbal). That is because the differences in the results in images 1, 2, 4, 9, 12, and 14 between my study and that of Monk and Smith are considerable (see Table 5). In these images, the element of recurrence is not present and fewer students, in my study, characterized them as bullying. At the same time, they were able to correctly classify as bullying images that depicted such acts.

On the other hand, the results have to be viewed with some caution, since it is unclear if the project helped students in shaping actual attitudes and behavioral patterns. The digital stories and the essays were all

hypothetical situations. It is unknown how students will react in real situations, but all anti-bullying programs have the same problem (Merrell, Gueldner, Ross, & Isava, 2008; Salmivalli et al., 1996).

The study's findings have implications for practice. The project was short in duration (twelve two-hour sessions excluding the pre- and post-stage) and can be easily applied, without altering the school's timetable. Though it is certain that long term interventions yield good results, time is a crucial factor. Short term innovative interventions are needed because results can be produced right away and problems can be dealt on the spot. In this study, whatever results were attained, were achieved fast, probably easing the way to follow up, longer term interventions. Also, no specialized equipment was needed and software similar to the one that was used is freely available on the Internet. In addition, the simplicity of the study's design allows similar interventions to be easily applied to younger students, though, in such case, an easier-to-use software tool will be needed. Thus, teachers, as well as policy makers, can consider using the study's set-up when designing similar or more well-organized, long-term interventions.

CONCLUSION

The study has limitations that need to be acknowledged. Even though all necessary precautions were taken, one can never be certain whether students expressed their actual thoughts and feelings on bullying. Since it was limited only to six schools and had a limited number of participating students, its results cannot be easily generalized. Further studies are needed with larger sample sizes and from different educational systems, in order to identify differences or similarities to the findings of the present study and to obtain more reliable results. In addition, since the duration was short, longer-term projects can be tested, examining and comparing their results to short-term projects. Additional data collection tools can also be used, for example, questionnaires and/or interviews with the students. It would also be interesting to conduct research using conventional, instead of digital storytelling and compare the results. By doing so, it would be possible to determine if the results can be attributed to the medium used and/or to the method.

Nevertheless, the results indicate that the project's set-up helped students to understand the main aspects of bullying. By developing their own digital stories, they were able to organize their thoughts, to reflect on that issue and to understand its implications. Besides, since the intervention was short in duration, it can easily fit into a school's timetable, either as a stand-alone intervention or as part of a more comprehensive bullying prevention program.

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