

“BULLYING AND CYBERBULLYING AT SCHOOL”: AN ACTION RESEARCH PROJECT AT A LOWER SECONDARY SCHOOL

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Abstract

This paper describes a pilot action research study conducted at the "Aldo Moro" lower secondary school in Stornarella-Ortona (Foggia, Italy). The study in question involved the whole institute (six classes), as part of an outreach and training course co-managed by the Learning Science Hub research center of the University of Foggia. The main aim of the project was to carry out an intervention that directly involved young people, in a student-centered dynamic. The intervention integrated the use of Information and Communication Technologies (ICT) in a cooperative way to raise awareness of bullying and cyberbullying. Motivations and results of the present study align with some recent national legislative provisions put in place to discourage the phenomena, thus responding to a precise need detected by governance and surveying data in a socio-demographic context hitherto little considered in research processes on the topic. The project in question involved the delivery of validated self-report questionnaires to assess the effects of the intervention, namely the Florence Bullying and Victimization Scales (FBVSs) and the Florence Cyberbullying and Victimization Scales (FBCVSs). The present study presents the results of an intervention that integrated the use of ICT, and Digital Storytelling (DST) in particular, with the aim of implementing the intervention research model.

Keywords: *Bullying, cyberbullying, media education, digital storytelling, ICT.*

1. Introduction

Bullying dynamics, as well as the perpetration of the same in digital environments, i.e., cyberbullying (Smith et al., 2008; Smith, Del Barrio, & Tokunaga, 2013), represent a problem that afflicts many students around the world. This problem cannot be ignored at all, given its obvious negative impact on the well-being of young people: victims of bullying and cyberbullying show social anxiety and depression (Martínez-Monteaudo, Delgado, Inglés, & Escortell, 2020; Chou et al., 2020), and in some cases suicidal ideation or attempts (Hinduja, & Patchin, 2019; Dorol & Mishara, 2021). In Europe, the phenomenon of peer violence in school settings has been studied for several decades now (Olweus, 1973), with positive and concrete effects on the design of effective interventions (Salmivalli, Kärnä, & Poskiparta, 2011; Del Rey, Ortega-Ruiz, & Casas, 2019; Guarini et al., 2020) and policies aimed at preventing and counteracting its forms and manifestations.

Despite the excellent results reported so far and the adoption of legislative measures in response, the phenomenon continues and persists. From the "Global Status Report on Preventing Violence against Children" published by the WHO (2020) we learn with dismay that one-third of students between the ages of 11 and 15 are involved in bullying and cyberbullying dynamics. There is also to consider that the exponential increase in the use of the Internet makes young people increasingly vulnerable to cyber-violence incidents, which include hate speech, theft of personal data, grooming, non-consensual sharing of private and/or intimate material, and have the characteristic of invading the victim's private space without any physical limits to stop them (Tokunaga, 2010), thanks to the very digital medium. However, ICT (Information and Communication Technologies) themselves, from being a potential vehicle and catalyst for virtual aggression, can also become a helpful ally in prevention and intervention programs against such phenomena.

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Exploiting contemporary technologies to their advantage in the field of bullying prevention, in fact, is useful, on the one hand, to update and implement traditional programs; on the other hand, it serves to train students and teachers involved in the conscious use of digital technologies, in line with what is prescribed by European development frameworks (EU, 2019; 2020). In this regard, the study is presented as a pilot study for an action research intervention aimed at integrating ICT within a prevention program to bullying and cyberbullying in a lower secondary school.

2. Research design

Bullying prevention programs that directly involve students, thus seeking to capture the youth perspective and make students co-researchers of the project itself, have, moreover, the advantage "to allow new friendships to develop with victimized students," since "classroom discussions about bullying may engender empathy toward victims, which would facilitate bystander interventions in bullying incidents" (Slee & Skrzypiec, 2016, cit. p. 164). In order to ensure the centrality of youth voices in the process, an action research intervention was chosen, traditionally understood as "a form of self-reflective enquiry (...) to improve the rationality and justice of their (*scil.* the participants) own social or educational practices, as well as their understanding of these practices and the situations in which these practices are carried out. These participants can be teachers, students or principals and the process is most empowering when undertaken collaboratively, though sometimes it can be undertaken by individuals and sometimes in cooperation with outsiders" (Kemmis & McTaggart, 1998, cit. pp. 5-6). Based on this, the research was conducted by directly involving students, promoting circular communication and extracting useful data for project follow-up, which will take place in the second semester of the school year. The dual objective of the present pilot study, in accordance with the principles of action research (Meyer, 2000), is to collect data while attempting to influence the environment-in this case, the six classes involved in the project-in a positive light, preparing the ground for designing a targeted intervention to counteract bullying and cyberbullying. As such, the research question underlying the study was:

RQ: Which are the levels of bullying and cyberbullying after a 3-week action research intervention with ICT integration on a group of lower secondary school students?

3. Methods and materials

3.1. Participants and procedure

Eighty-six students participated in the project (December 2022-January 2023), called "Bullying and cyberbullying at school" and carried out at "Aldo Moro" lower secondary school in the province of Foggia (Italy). The intervention was articulated in 5 meetings, for a total of 15 hours. A research team composed of two psychologists and two pedagogists coordinated the activities, in collaboration with the reference teacher for bullying and cyberbullying of the institute². Meetings consisted in: 1. introduction on the topic and pre-test measurements; 2. interactive completion of a Mentimeter presentation and circle time for surveying youth's perspective on the topic 3. Digital Storytelling (DST) workshop with storyboard making (di Furia, Guarini, & Finestrone, 2022), theoretical introduction to the participant roles of bullying behavior (Salmivalli et al., 1996), and participants' production of digital role playing (3 meetings in total). The post-test measures were then administered upon return from the Christmas vacations. On February 7, during Safer Internet Day celebrated in about 100 nations around the world, a dissemination meeting on the project was held at the school, in the presence of parents and conducted entirely by the students.

3.2. Measures

Three families did not consent to data collection. All participants were given pre and post-tests self-report questionnaires, but only 75 of them actually completed both questionnaires. To measure the incidence and prevalence of bullying and cyberbullying, the Florence Bullying and Victimization Scales (FBVSs) and the Florence Cyberbullying and Cybervictimization Scales (FCBVSs) were used. These are self-report questionnaires validated on previous evidence-based interventions (Palladino, 2013; Palladino, Nocentini, & Menesini, 2016). In the post-test, the question "How many times in the last 2-3 months have you..." was changed to "How many times in the last few weeks have you..." in order to put the focus on the period of the intervention. The FBVSs has two versions: one for bullying; one for victimization. Each version of the FBVSs consists of ten items that assess how frequently have the respondents experienced specific situations (e.g., "I've been beaten up"; "I beat somebody up"); each item is measured on a 5-points Likert scale (1 =; 5 =). The FCBVS also includes two versions (e.g., cyberbullying; cybervictimization).

² This figure was introduced in Italian schools with the Law no. 71 (2017).

Each version has 14 items concerning specific online situations (e.g., “How many times have you received text messages with threats and insults”; “How many times have you sent text messages with threats and insults”). Each version of the FBVSs include 3 subscales, with 4 items on physical bullying (e.g. “receiving/giving punches and kicks”), 3 items on verbal bullying (e.g. “insulting/being insulted”), and 3 items on indirect-relational bullying (e.g. “ignoring/being ignored”). Each version of the FCBVSs includes 4 subscales, with 4 items on written/verbal behaviors (e.g. “receiving/sending threatening messages and/or calls”), 3 items on visual behaviors (e.g. “receiving/sending pictures of embarrassing situations”), 3 items on exclusion behaviors (e.g. “being deliberately ignored/ignoring in virtual group settings”) and 4 items on impersonation behaviors (e.g. “being deprived of personal data/stealing personal data”).

3.3. Data analysis

To measure the incidence of bullying and cyberbullying among our sample descriptive statistics (i.e., means, standard deviations, frequencies and percentages) were calculated. In addition to this, to verify possible changes in the levels of bullying and cyberbullying after the 3-week action research intervention with ICT integration a paired t-test was performed. All the analyses were conducted using SPSS v. 27 (IBM Corp., 2020).

4. Results and discussion

Among the respondents, boys and girls were balanced (53.3% and 46.6% respectively). None of them recognized him- or her-self as a non-binary person. The mean age was 11.96 (SD = .907). FCBVSs define two different levels of involvements in cyberbullying and cybervictimization, which are occasional (two or three times a month or more often) and severe (about once a week or more often). 29 students (42.6%) reported being occasional cyberbullies. After the action research intervention with ICT and DST, the percentage of students who reported being occasional perpetrators of cyberbullying was lower ($\chi^2_{(0, N=68)}=12.747, p=.000$). Also, there was a significant decrease in the levels of written/verbal cyberbullying [$t_{(72)}=2.180, p=.033$], visual cyberbullying [$t_{(70)}=2.113, p=.038$] and cybervictimization based on exclusion [$t_{(70)}=2.427, p=.018$]. The intervention did not have a short-term significant effect on the other variables investigated (i.e., occasional and severe bullying; severe cyberbullying). Table 1 shows mean scores of the investigated variables that significantly improved before and after the action research intervention:

Table 1. Significant mean scores before and after the action research intervention in relation with cyberbullying and cybervictimization.

	Pre-test	Post-test
Written-verbal CB	M=4.78, SD=1.94	M=4.30, SD=1.26
Visual CB	M=3.33, SD=1.08	M=3.05, SD=0.27
Exclusion CV	M=4.40, SD=1.80	M=3.78, SD=1.40

5. Conclusions

The present pilot study, by its very nature purely exploratory, has some limitations that need to be considered. First, the sample has a low degree of representability, since it refers to only one school in the area under consideration and thus represents a limited and fairly homogeneous population. Nevertheless, to our knowledge, there are no previous experiences of anti-bullying interventions with integration of ICT-based methodologies and data collection at the local level. Therefore, the results obtained, considered by the authors to be relevant and promising, open the way for reproducibility of the intervention on broader and more dishomogeneous populations. Furthermore, thanks to the circle time phase, aimed at eliciting social and emotional learning from a cooperative perspective (Cefai et al., 2014), qualitative data were collected that will be useful in developing subsequent lines of research and intervention, in accordance with the protocols of action research, whereby "action" and "research" are "contemporary," meaning that "research provides the cognitive support for action, which in turn modifies the situation and makes new research necessary to delineate the new picture that has been created" (Trincherro, 2004, cit. p. 142). The experience is presented as the first phase of a broader action research design aimed at implementing the previous models of intervention, employing the best practices from the fields of experimental pedagogy and media education. The results obtained take a snapshot of some of the dynamics at work among the survey population before and after the ICT-based intervention. In particular, the significant decrease in

occasional cyberbullying indicates the effectiveness of the intervention in terms of raising awareness and consciousness in managing online behaviors. In support of this, the significant decrease in written-verbal and visual cyberbullying can be cited; cybervictims also reported that they were less excluded in digital contexts. This can be the result of the collaborative activities carried out, particularly the digital role playing performed through the DST methodology (di Furia, Guarini, & Finestrone, 2022). Project outcomes were presented in a final dissemination event co-conducted by students and researchers with parents and teachers in the audience. In addition to the data obtained, during the course of the intervention 1) bullying and cyberbullying-themed posters were produced by the students, by means of recycled materials (old books and magazines, plastic objects, cloths, etc.) and designed by the students (Fig. 1), to be kept and displayed in the classrooms 2) Digital Storytelling products were written, interpreted, recorded, and edited by the students, and the published on the website of the "A. Moro" lower secondary school in a specially set up repository.

Figure 1. Examples of posters made by the students using bottle caps, plastic straws, images and texts cut from books, newspapers and magazines.



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