

# Innovative bullying prevention system RESQL – experience from country-wide implementations

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## ABSTRACT

### Aim

This article presents the results of research from an implementation project aimed at developing measures to prevent peer bullying. Peer bullying is understood as systematic aggressive behaviours directed at harm to the victim in a situation where there is a relationship of power and authority imbalance between the bully and the victim.

### Highlights and Implications

The problem of peer bullying is widespread in Polish schools, and as such requires systemic actions targeted at all school society members.

### Conclusion

The result of the research is the RESQL peer violence prevention system consisting of a mobile app, a panel supporting intervening teachers and a set of tool/scenarios for working with students. The article presents the implementation of the system in schools and the very encouraging results of the evaluation studies carried out as part of pilot implementation.

**Keywords:** peer bullying, children, teenagers, school.

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## PEER BULLYING: THE SCALE OF THE PHENOMENON BASED ON POLISH AND INTERNATIONAL RESEARCH RESULTS

Peer bullying is defined as a form of aggressive behaviour characterized by regularity, imbalance of power and authority between the bully and the victim and the intention to hurt the victim. (Salmivalli, 2014; Olweus, 1993). It is a universal phenomenon (Gini & Pozzoli, 2009; Wójcik & Helka, 2018) which can take an overt form (physical, verbal, material and sexual harassment) or an indirect form of relational bullying. Relational bullying refers to harming the victim through a third party such as the victim's social network, friendships, social support, and acceptance in a peer group. It is displayed through various forms at school or via the Internet, for example, by gossiping, excluding, giving the silent treatment, and ignoring (Gini, Pozzoli, 2009; Olweus, 2002; Salmivalli, 2014).

The problem is also present to a large extent in Polish schools what indicates the research of the Educational Research Institute in which 10,993 students from 555 classes participated. 54% primary students, 36% secondary students, 35% vocational students and 36% technical school students were victims of gossiping, isolating, and ganging up against them. 49% primary students, 19% secondary students, 22% vocational students and 24% technical school students experienced verbal aggression in the form of name-calling, insults and yelling at. A large group of students of all types of school experienced also belittling and humiliation, physical and cyber aggression, and coercion. When asked which peer behaviours were the most severe students most often indicated ganging up against them (46% described this behaviour as very unpleasant and 30% as unpleasant), exclusion and isolation (36% and 39% respectively), destroying things (38% and 35% respectively), assault requiring medical assistance (48% and 35% respectively) Przewłocka 2015, s. 25).

The data contained in the PISA 2018 report shows that many more Polish students experience bullying by peers in compared to the average for OECD countries. 11% of students are bullied "once a week or more" (on average 9% for OECD countries respectively), another 16% are bullied "a few times a month" (an average of 13% for OECD countries respectively). In EU countries, the fewest students experiencing bullying at least a few times a month live in the Netherlands (12%), Portugal (14%) and Spain (17%), and the most of them in Latvia (35%) and the Czech Republic (30%). An analysis of the phenomenon of bullying as the most severe form of violence that undermines a student's self-esteem, destroys self-confidence, increases anxiety and negative mood shows that among the 15-year-olds respondents, it most often takes the form of relational bullying. 15% of students have experienced gossiping about them; 14% have been laughed at; 9% have experienced exclusion in some situations; 9% have experienced picking up or destroying their things; 8% experienced shoving or hitting in their schools at least a few times a month (Sitek, Ostrowska, 2020, p. 249). The results on schools and the prevalence of this phenomenon seem equally important to cite. The nature of the PISA study and the way the sample is selected allow to draw conclusions on the subject of bullying in Polish schools against other OECD countries. The authors of the report indicate that "about 51% of Polish 15-year-olds

are learning in schools where more than 25% of students report bullying. In the OECD, on average there are 38% 15-year-olds with such characteristics, which is much fewer. Furthermore, 7% of students in Poland study in schools where bullying is reported by less than 10% of students while in OECD the rate is 15% of students in schools with such characteristics” (Sitek, Ostrowska, 2020, p. 251).

Another study that allows us to look at the phenomenon of peer bullying from a national perspective and to compare the results between countries is TIMSS – an assessment on the mathematics and science achievements of 4 grade students. In addition to the mathematics and science assessment, students are given surveys to gather information about the background context for learning including e.g. sense of safety at school, social relations, motivation to study. In the aspect of peer bullying, students responded, among other things, how often they are exploited, excluded from common games, robbed, cheated or teased by other students. In a nationwide representative sample of students (4 882 students from 149 primary schools) 5% say they are the victim of such behaviour at least once a week, a further 22% of students experience these events at least once a month (Sitek, 2020)

**Table 1**

**Percentage of students declaring experience of selected forms of bullying**

Question	Once a month or more	A few times a year
Did they laugh at you or tease you?	19	20
Did they exclude you from games or other group activities?	19	20
Did they spread lies about you?	19	21
Did they assault you (shove, kick, hit)?	15	18
Did they force you to do things you didn't like?	9	12
Did they threaten you?	8	11

*Based on Sitek, 2020, p. 138, Fig. 6.9*

Students who experience peer bullying have significantly lower results in terms of science subjects compared to those who do not experience it (470 points vs. 527 points). The authors of the report draw attention to the prevalence of bullying in Polish schools. Almost every school has students who are being harassed. More often, these are boys and students from large cities and large schools. It is clear that bullying is a significant problem in Polish schools when comparing the scale of the phenomenon in Poland to the other countries participating in the study. Compared to other countries participating in TIMSS assessment, Poland ranks 15 in terms of students' feeling of safety at school (Sitek, 2020, p. 137).

Cyberbullying is emerging as an increasingly important form of bullying as access to modern technology and broadband Internet connection are becoming more widespread. Use of social media, forums, groups, instant messaging for aggressive intentions toward peers is both a new form of violence, as well as a new way of carrying out activities which may happen and do happen in direct contact. Use of e-communication makes this type of violence even more difficult to detect by adults. The harm inflicted by ridicule, offence, gossip, exclusion, impersonating, posting photos or untrue information is much more powerful than physical or verbal bullying (Pyżalski et al., 2019). The range (potential recipients and the duration of such an event) is much greater than in the case of direct acts of violence. As noted by Michel Walrave and Wannes Heirman (2009, p. 7), the use of technology allows “young people to expand episodes of peer violence outside the school environment. Unlike traditional peer bullying, access to the victim of cyberbullying is no longer restricted in time.” Due to the developmental growing needs of being in contact and having relationships with others, and building their identity, young people cannot easily give up or block this type of communication. Experience, or even believing, that they are being rejected, creates an experience comparable to experiencing physical pain (see Blakemore, 2018).

The EU Kids Online 2018 study (Pyżalski et al., 2019) in the section on Polish students showed that 7,1% of young people aged 9–17 experienced cyberbullying. Most of the time, the subjects received unpleasant or malicious messages in personal communication (8,7%) The second most common form of aggression was relational bullying by means of exclusion from online group (5,5%). In addition, as many as 62,5% of students who experienced physical or verbal peer violence in direct contact (at least once a week or more), were also a victim of cyberbullying. Moreover, almost 68% of the traditional bullies were also often involved in cyberbullying (op. cit.). International comparative analysis conducted in the same study (Smahel et al., 2020) indicate that the frequency of experiencing peer bullying in the last year varies from 7% (Slovakia) up to 40% (Poland). In most countries, more than 20% of children have experienced peer bullying. The percentage of children experiencing physical or verbal bullying in direct contact (at least once a month) varies from 2% (Slovakia) up to 13% (Malta) with the average of 7%. In case of cyberbullying the number of victims vary from 1% (Slovakia) to 13% (Poland) with the average of 5%. Overall, in almost all countries participating in the study, less than 10% children experience cyberbullying. The number of children reporting assault on their peers ranges from 3% (Slovakia) to 38% (Poland). The number of bullies in most countries varies between 10% and 20%.

Given the scale of the phenomenon, particular attention should be paid to serious consequences of peer bullying for victims, witnesses and bullies (Buhs i Ladd, 2001, Dutkiewicz and Szpringer, 2007). Experience of peer bullying may cause a negative attitude to the whole context of school, low attendance and problems with learning, feeling of loneliness, lack of a peer group support (Wojcik et al., 2021). It may lead to a social withdrawal, primary and secondary isolation, relational difficulties, depression, anxiety disorder, maladaptive regulation of emotions, suicidal tendencies (DeLara, 2016; Hodges & Perry, 1999). The longer bullying is ongoing, the more serious the consequences can be – for most

of the bullied students it takes several weeks or the semester, unfortunately for a group (around 19% of victims) it lasts for several years, even after changing school (Juvonen et al., 2016; Smith & Shu, 2000; Hodges et al., 1997). For these students, the effects of bullying can be disastrous. It may seem surprising that those students are not always identified as victims by school staff (Yablon, 2017). The results of the studies indicate that school staff only identifies one fourth of the long-term bullied students (Haataja et al., 2016), which results in the lack of appropriate intervention and prolonged problems of victims and witnesses to bullying events. One of the reasons is the reluctance or lack of conviction to report such an event among students. The victims are most likely to confide in colleagues (Hunter and others, 2004), parents (Fekkes i in., 2005), and much less frequently in teachers – only 3–18% of victims tell teachers about their problems (Smith & Shu, 2000). About 3–9% of victims confide in other adults at school. Although learning about bullying from students is a strong predictor for effective teacher intervention (Ahn and others, 2013; Novick and Isaac, 2010; Yablon, 2017; Smith and Shu, 2000), this is extremely difficult, as you can see from the studies listed above. In preparation for designing the RESQL application, we have undertaken exploratory qualitative research in a group of 40 students, 40 teachers and 20 parents of primary and secondary school students. We have also carried out a study of 35 people with the experience of peer bullying (12 men, 9 women aged 19–23, SD = 20, 56) which has revealed the factors facilitating or hindering seeking help from adults in the event of experiencing or witnessing peer bullying (Wójcik, Rzeńca, 2021). Research shows that students rarely report relational bullying (excluding, ignoring, gossiping about, ruining reputation). This can be caused by the failure to recognize these behaviours as bullying, their unobvious nature and thus the problem of describing the situation, the feeling of shame and the sense of guilt. Moreover, there are no clear, anonymous, and accessible to all school reporting and response procedures. Students are unsure of what behaviours should be reported, to whom and how they are supposed to describe them. They are afraid to expose themselves to other students by reporting and become the victims. It is therefore important to facilitate the first step, the ease and security of reporting understood as anonymity and confidentiality. Meeting these conditions and preparing the staff of the school may contribute to increasing the number of reported cases of bullying (Wójcik, Rzeńca, 2021).

## ORIGINAL RESEARCH

Studies on the implementation of RESQL system in schools, in addition to the evaluation of the applied tools, have also brought knowledge of the phenomenon of bullying in the researched classes. They also helped to identify the so-called “class atmosphere”. The RESQL system implementation studies included N = 600 students from thirteen public schools. The subjects came from the seven 1<sup>st</sup> and 2<sup>nd</sup> grade classes of secondary schools and seven 7<sup>th</sup> and 8<sup>th</sup> grade classes of primary schools. Students have completed the evaluation surveys concerning

the implemented RESQL system and surveys measuring the class atmosphere. Implementation studies have tested twelve scenarios for intervening teachers.

Students have completed the evaluation surveys for the system being introduced RESQL and surveys to measure the climate of the class. The implementation studies have been tested twelve scenarios for intervention teachers. The feedback from students on implemented elements of RESQL system was very positive. 75% of the surveyed students believe that the conducted lessons were necessary in their classes, 70% think the lessons were useful, 82% would like to participate in similar lessons in the future and 83% indicate that the rest of the students at school need such lessons. At the same time, studies on the class atmosphere have shown that some students are struggling with difficulties in their social groups in the researched schools. 31% of the subjects declare that they do not have a single person in their class they can count on. 30% of students don't like going to their school. 15% of students don't like their class and 11% don't feel safe at school.

The results of the studies show that the development of support systems for teachers to prevent violence in schools is justified. The RESQL system is an example of such a solution, and its developers hope for it to become a popular and simple way to prevent peer bullying at school.

## FUNCTIONALITIES AND APP IMPLEMENTATION

The RESQL system is based on an application for students to install on smartphones (IOS, Android) and a online panel for intervening teachers available through a website. The app works as an anonymous instant messaging system for making contact between the person reporting a bullying event and the intervening teacher. The school is provided with online panel and a unique code to be used by students for authorisation in the mobile app. Such a solution ensures that students from a given school will be able to contact intervening teachers from the same school only. The mobile app enables students anonymous reporting worrying or threatening behaviours of other students. It is also possible to attach multimedia (photos, films) to the report. Students can use a few categories of reports which are assigned to specific types of bullying, and simple, intuitive steps to describe the situation. Sample descriptions of inappropriate behaviours and their representation in drawings make it easy for students to assess whether a situation is bullying or not. RESQL use as a smartphone app, that is the most commonly used device among young people, gives it a good chance of becoming a popular solution. In addition, the application gives students the opportunity to report peer bullying for 24 h from a place the is discreet and safe for the reporting person.

Proper implementation of the system at your site is critical because of the serious, complex and delicate nature of the problems raised. It would be important for everyone – school employees, students, and parents – to understand the principles and purpose of the system being implemented. The RESQL system is

activated at the site when the implementation process is completed. It consists of a 2 h lecture for the school staff on “Peer bullying prevention”, 4 h technical and content training for intervening teachers that covers the scope of functionality, techniques and the characteristics of the intervention panel as well as the RESQL application, a 1 h workshop for class teachers, and educational materials including 11 educational lessons, presentations and training materials.

## CONCLUSION

Both original and national studies conducted by public institutions show that the problem of peer bullying in Polish schools is part of everyday life. This problem, depending on the adopted indicators and methodologies, becomes a significant burden for 10–20% of students. However, others, even if they are not directly affected by repeated acts of bullying – still remain witnesses, which significantly kills the school and class atmosphere leading not only to worse socio-emotional development of the affected students, but also learning problems.

The RESQL system is currently being implemented in primary and secondary schools throughout the country. A dedicated spin-off company of SWPS University with the creators and technology partners has been set up to commercialise the product. Further plans include the development of further application functionalities, preparation of new training materials and lessons for students. Assessing the effectiveness of the solutions being implemented is an important challenge. At this stage it shall be carried out by collecting quality information from schools concerning the use of RESQL, the range of reported issues and the utility of the solution for intervening teachers

The solution proposed by the authors – a system of peer bullying prevention RESQL – consisting of a mobile application, a support panel for intervening teachers, and the lessons to be used by class teachers and educators, can make an important contribution to reducing school bullying.

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