CYBREATH

New app to end cyberbullying among children

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This note of intent aims at introducing our Great Transition Final Project that takes the form of an application for 8-13 years old children to fight cyberbullying. It deals with the issue of virtuality and loneliness.

Introduction - problems identified

Cyberbullying was first mentioned in 2003. In that year, Canadian Professor Bill Belsey defined the phenomenon as "the use of information and communication technologies to deliberately, repeatedly and aggressively engage in behaviour towards individuals or a group with the intention of causing harm to others".This new form of harassment, often discovered in SMS and on the internet, especially social media takes various forms such as creating false profile of the victim and diffusing it, spreading rumors online, sending a message with insults.

According to the research of e-Enfance, French association for the protection of children from violence on the internet, the number of internet users who declared themselves as victims of cyberbullying increased about 30 percent just between 2016 and 2017. Moreover, about 45% of these newly accrued victims of cyberbullying were women and children (E-enfance, 2017).

In this fast-growing phenomenon, children are the most vulnerable group of victims among all age groups. They do not realize the importance of their actions and often go unpunished. They have earlier and earlier access to digital tools and new means of communication such as social networks. statistics of 2018 show that 45% of 8-year-old French children owns a smartphone, 32% of 10-year-old, 73% of 12-year-old and 89% 14-year-old French children have a smartphone. Almost all the French children live in a housing that owns a computer and have access to it. Some of them have already their own computer. These statistics reflect the fast-growing internet and smartphone penetration rate, now it is imperative to take action to restrict cyberbullying in all education institutions in France (Statista, 2018).

In 2017, 40% of French children confessed that they are under online aggressions from their classmates, and 85% of these aggressions are committed by groups. In 90% of cases, the bully is in the same age group as the victim. Another point is that 22% of victims testified that they couldn't tell anyone that they are under such violence and harassment, even to their parents. Moreover, 9% of parents didn't know that their children were victims of cyberbullying (Bazzara, 2019).

At the same time, children are more susceptible about their own reputation, and criticizing, and they are also highly dependent on their peer group to find emotional stability. This is why 61% of young victims say they already had suicidal ideas. Also, traumatic memories from childhood can last with the victims permanently or lead to violent behaviors.

In 2014, Cyberharcèlement loi (Cyberbullying law) was enacted to restrict the online violence against children, stipulating that a first-time offender of the law can be demanded two years of imprisonment, or be charged €30,000 of monetary penalty. However, after five years of practice, the law raised doubts on its efficacy because cyberbullying usually takes place online, where all data can be easily edited and even erased, making victims difficult to prove that they were under psychological harassment.

From 2019, French government launched "safer internet day" campaign in France, sending questionnaires and quizzes about safe and respectful use of the internet to children and informing parents about cyberbullying, but the campaign lacks means to communicate with victims and offenders by providing them with psychological and social support.

As detection of cyberbullying and punishment on the offenders are not very much feasible, they cannot be an effective constraint on cyberbullying. To effectively prevent cyberbullying, educating children about the consequences of cyberbullying, and informing teachers and parents about the phenomenon and how to react to cyberbullying is essential. Raising empathy among children and teaching responsible behavior on the internet is the most fundamental solution to cyberbullying. At the same time, supporting the victims to escape traumatic experiences of cyberbullying is as important as guiding the offenders on the right path.

Why is Cybreath an effective, original and feasible solution

Cybreath, available on smartphones and computers, is an application for 8-13 years old French pupils, studying in both public or private school wherever in France, designed to tackle cyberbullying. Every French Student will have a personal space financed by the National Education. This age group was chosen because it is a pivotal period regarding cyberbullying since children start having access to smartphones and computers at that age and don't measure the consequences of their acts.

Cybreath reverses our stereotype on internet that we consider to have a harmful effect on children, making them addicted and hurt each other. The app aims to bring a reconciliation between offenders and victims of cyberbullying, and help them to restore a healthier relationship.

At Cybreath, we truly believe that to control the problem is to deal with it in a systemic way that means acting on all fronts, with victims, bullies, witnesses, parents and teachers. Therefore three sections with different types of services are available: one is designed for children, one for their parents, one for their teachers.

Children

The children's section aims at preventing the phenomenon, helping victims and assist bullies to change their behavior through several services.

8 to 13-year-old children in French educational institutions will be registered as pupil users, and they will be provided with the following services.

Questionnaire. This questionnaire is the very first step that all pupil users have to go through: they cannot access other services without answering the

questionnaire. Since their profile will be linked to their teachers', professors will be able to see who filled the quizzes and who did not, without knowing their individual answers. The questionnaire will be divided in three parts - a non-exhaustive model of which can be found in the appendix.

The first part aims at collecting data on children's knowledge about cyberbullying. Thanks to the pupil's answer, the app will be able to adapt its content. It will also help the teacher to know how to address the subject.

The second part will focus on the pupil personality and potential experience with cyberbullying, thanks to the expertise of psychologists. It would therefore be able who is more likely to have the profile of a victim or an offender and to adapt the content again.

In the third part, the children will be asked their expectations about the app in order to take into account their feedbacks and better understand their hopes. Digital applications are flexible to changes and updates, and the staff of Cybreath will monitor the 'community' of the users of the application all the time.

Each student will be anonymously assigned to a psychologist that he would be able to talk with, to discuss with about any topic at any time. Access to this live chat will be available on each page of the pupil's session. This idea came up from the statement that existing call numbers are rarely used by children because they are not comfortable with it. It would be easier for a child to discuss directly on a chat and to call or meet the psychologist if they feel able to or want to.

Statistics: Since it is sometimes hard to identify the phenomenon or to realize that we are victim of cyberbullying, the app will offer the optional service of activating an algorithm that identifies some key words or expressions related to cyberbullying such as insults, negative comments on the weight, on the hair color etc.. Daily, weekly, monthly statistics would be available on the pupil profile and on their parents' and teacher's if the pupil accepted to share it with them.

"You are not alone" section: to resolve the loneliness of victims of cyberbullying, Cybreath includes a service that share information about the phenomenon, the punishments incurred and moral support through testimonies, videos, conferences. This community section will be filled with experiences of cyberbullying and being an outcast in general to inspire and support the victims to overcome their loneliness and depression.

VR experience for offenders: After serial analysis of behavior patterns on the internet and personality, a certain number of student users, who have potential tendency to become an offender or who are already accused of having offended others, will be provided with a VR service to experience what the victims had to go

through because of their actions. Videos will be produced by our company itself and masks for any type of smartphones will be available at school.

The app will provide an option with serial videos of different situations, where they can choose the options of their behavior that would lead to different storyline and ending to teach them the importance of their action, their impact on both victim's and bully's whole life and its circumstances.

Virtual reality has already proved its worth and makes it possible to really put yourself in someone else's shoes, in another environment. Children often do not realize their actions, especially on the Internet, and the emotional consequences they can have on their peers. Virtual reality then makes it possible to develop the offender's empathy, as if he had already experienced this situation. The positive effects of virtual reality are not only ephemeral, but also sensations and memories remain.

All the personal data that is collected by Cybreath will be strictly kept confidential and anonymous and shared only with psychologists who cooperate with our company. Cybreath will go through continuous data security tests and updates of security firewall software. However, overall data will be used to better identify the phenomenon. If children want to share their emotions, experiences and data with their parents or teacher, they can simply tap on "Share with your parents", "Share with your teacher".

Parents

Due to their educational and protector role, parents, parents will be involved in this project. Once a student user download Cybreath on their smartphone or computer and sign in, an email will be sent to parents of the student user, informing them about the app and the necessity of it. Parents users will be provided information services about cyberbullying and about how their children use technology. They will also have access to a forum participate in the discussion to share their opinion and get tips from other parents or psychologists. The collected data from their children will also be sent to them if the student user wants to share the data with his/her parents.

Teachers

As already mentioned, teachers will be provided with overall statistics of the students they are in charge of, letting them know who among the students are especially stressed out because of cyberbullying. This function is designed to allow teachers to give a quick feedback to the problems that are going on in their classes and guiding the pupils with social support because parents cannot always intervene in the school life. Teachers have more access to relationship between classmates, and more chances to mediate them.

The application confines its service area to France, but it can be expanded to other countries as well depending on its effectiveness after the launch.

Deployment strategy of the launch

The development team of Cybreath will be composed of three teams: 1. Software development department 2. Marketing department 3. Psychologists department. The software development department will create a prototype of the website and the application of the app and present them in the Startup conferences in Paris. Meanwhile, the marketing department will contact the Ministry of National Education and think about how to practically link Cybreath services with public/private educational institutions in France and let French pupils use it in relation with their Moral and Civic Education classes. Finally, the psychologists department will be composed of certified and specialized psychologists on the subject of cyberbullying or childhood. It will supervise the process of design of the application and complete the questionnaires for the users.

Cybreath will be promoted in anti-cyberbullying campaigns that the company will organize, "Let's Meet Up", gathering all the pupils and their parents. Also, the invitation to the campaign will be delivered to teachers and all education concerned personnel in France.

During the launch phase, the emphasis will be on communication about the security of our application. We will work with highly secure platforms and data centres to ensure the protection of the data we receive. Aware that our concept can raise certain ethical considerations, particularly on virtual reality, we will work closely with child protection associations, psychologists, parents and teachers to adapt the content of videos and make them both ethical and effective.

ROI analysis

The two major costs of the project will be the development of the app and the salaries for the psychologists online. We plan to reach an agreement with the french ministry of education and ministry of health to receive public investments for the project, as it is a is a project aimed at serving public interest. For the potential remaining investments we will organize fundraising campaigns at social entrepreneurship events. We will offer paid advertising space on our mobile application to generate regular advertising revenue.

<u>Estimations for 100 students:</u>

Costs		
	Development of the app	15 000€
	Basic virtual reality headsets	2 000€
	VR video development	7 000€
	Online psychologist	3100€/month

Revenues		
	Public funds from french ministries	1 800€/month
	Advertising revenues	1 300€/month

Conclusion

The first step of resolving a problem is to perceive the existence of the problem. So far, French government is not actively reacting to cyberbullying, and it is very probable that the number of victims of cyberbullying will increase year by year as living environment of children is getting more and more influenced by digital technology. Considering the seriousness of cyberbullying in current society, it is now imperative to take action to restrict it. THE APP is more of a social movement/campaign that aims to raise awareness about cyberbullying in our daily life, find a proper treatment for the victims and offenders of cyberbullying, and create a community where people can discuss and find a solution to the problem together.

Bibliography

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☐ Image source: www.istockphoto.com

Appendix – Questionnaire content *(non-exhaustive)*

You must respond honestly to all the answers. The answers won't be communicated to anyone.

Part 1: What do you know about cyberbullying?

This part aims at collecting data on pupils' knowledge about cyberbullying and to make them understand what this type of bullying is.

1) **According to you, what is cyberbullying?**

- □ an aggressive, intentional act perpetrated by means of electronic forms of communication, repeatedly against a victim
- □ a new type of cyber attack
- □ the exclusion by the society of persons working in the IT sector

2) **The main victims of cyberbullying are:**

- □ Elderly people
- □ Young children (0-8ans)
- □ Teenagers

3) **By what means of communication can one be a victim of cyberbullying?**

- □ Facebook
- □ Twitter
- □ Instagram
- □ In face to face
- □ Blogs
- □ Forums
- □ Text messages
- □ Calls

4) **What described situations are some examples of cyberbullying?**

- □ I receive insults by text message every day.
- □ People I considered as my friends created a group with the whole class by calling me "the big cow" and posting degrading pictures of me without my consent. They told me it was just for fun.
- □ My friends never answer to my messages.
- □ A boy I like sent me a message once telling me that he didn't want to hang out with me because I was too ugly.

5) What can be the consequences of cyberbullying?

- □ Suicide
- □ School refusal
- □ Depression or breakdowns
- □ Becoming more violent

Part 2: your experience with cyberbullying

This part aims at identifying pupil's personality and experience of cyberbullying to orient the content of other sections.

1) In general, how would you consider your personality?

- □ I'm a people pleaser: I just want to make everybody happy
- □ I'm the class clown: I will do whatever it takes to get the laugh, even if that means hurting myself or other people
- □ I'm a loyal friend: I will protect my friends because I know they will protect me
- □ I lack self-confidence because I never had any to beg in with

2) Do you think you have ever been a victim of cyberbullying?

- □ Yes
- □ No
- □ I don't know

3) If yes, for how long?

- □ Just one time and it never repeated
- □ For several months
- □ For several years
- □ I changed classes or schools but it never stopped
- □ I am now victim of cyberbullying

4) If yes, have you ever talked about it?

- □ Yes, to my parents or my family
- □ Yes, to other pupils
- □ Yes, to teachers or school members
- □ No, I was ashamed
- □ No, I didn't want to bother anyone with my problems

5) If no, do you ever think you could be a victim of cyberbullying?

- □ I think it can happen to anybody
- □ I think I could be a victim of cyberbullying one day
- □ I don't think I could ever be a victim of cyberbullying

6)   Do you think you have ever had any use of the Internet, social networks that could have hurt one of your classmates?

- □ Yes
- □ No
- □ I don't know

7)   If yes, what was your purpose?

- □ It was funny
- □ It was a bet with a friend
- □ I really dislike this person and it was a way for me to express what I felt
- □ I didn't realize the meaning of my behavior, I don't know why I did it

8) Do you think you had a traumatic experience or a background of violence that can explain your current behavior or your feelings?

Write your answer here:

9) Do you think you have ever witnessed cyberbullying?

- □ Yes, one time
- □ Yes, several times
- □ Yes, very often
- □ Never
- □ I don't know

9)   If yes, what was your feeling?

- □ I thought it was funny
- □ I felt sad for the person who was the target of the insults/post/mockeries
- □ I was angry with the person who posted the message, insults, pictures
- □ It was not my business

10)   Did you react?

- □ Yes, I defended the person concerned
- □ Yes, I talked about it with an adult (parent, teacher…)
- □ No, I was afraid of reprisals
- □ No, the person deserved it
- □ No, it was not my business

Part 3: What do you expect from this application?

This part aims at understanding the expectations of children to improve the content or functioning of the application.

Write your answer here: