

Prospecting chatbots as a communication platform to tackle online abuse

What is this research about?

Online abuse is any type of abuse (including cyberbullying or grooming) that happens on social applications across any device connected to the Internet, like social media or online games. Grooming happens when someone builds an online relationship with a young person with a sexual intention. Although the number of reports of online abuse is continuously growing, it is hard to know how many children and young people are affected, mainly because they do not tell anyone due to feelings of shame and guilt, not knowing whom to talk to, or simply not realising that they are being abused.

Chatbots are computer programs designed to simulate a human conversation. Chatbots can be an alternative solution for tackling online abuse and can be available on a messenger platform for young people to ask for advice, report suspicious conversations, and to engage with educational content. As the chatbots have some human characteristics that can demonstrate empathy and inspire trust, it is expected that chatbots work better than informational websites.

This research aims at investigating the viability of using chatbots as a communication channel to prevent and tackle online abuse, involving young people as co-creators of a chatbot.

Who is behind it?

We are researchers at The Open University (OU) with background in Computer Science, Interaction Design and Social Sciences. This work is a collaboration with the Metropolitan Police Service – Online Child Sexual Abuse & Exploitation command and the Safety Centre Hazard Alley Milton Keynes. Dr Lara Piccolo (lara.piccolo@open.ac.uk) is the principal investigator.

What will the participants be asked to do?

The participants will be asked to attend a 2-hour workshop on **<date>**, at **<school name>**, on designing a chatbot for raising awareness and tackling online abuse.

The workshop will involve from **12 to 15 participants** from 11-13 or 14-17 years old. An OU researcher with Disclosure and Barring Service (DBS) check will be leading the activities with the support of one teacher or school staff qualified to address any eventual participants' need.

The participation of the students is voluntary and they can withdraw from the workshop at any point if they wish.

What will happen during the workshop?

During the workshop:

- They will attend an Internet safety session.
- Individually and anonymously, the participants will fill a survey on their understanding of risks associated to social media usage and their perceptions of chatbots as a potential solution to prevent online abuse.
- In groups, they will create fictional stories that includes a dialog between a chatbot and the user. The activity will be supported by Lego figures.

Although the activities with children will not be addressing any personal experience, we are aware that the topic might trigger some spontaneous reaction from participants that eventually experienced something related. This risk has been addressed in order to have some local staff available prepared to deal with the situation. In critical cases, the OU safeguarding team will be informed and the children' identity can be revealed for eventual related measures.

Centre for Policing Research and Learning



What data will be collected?

The researchers are interested in participants' general perception of the technology and mainly in the dialogues built as part of the fictional stories. No personal data or experience will be asked or collected. The audio will be recorded to support further analysis and the performances with Lego figures will be video recorded (but not the players). Any personal information eventually spontaneously revealed will be deleted from the recordings. Results will be analysed preserving the participants' anonymity.

The consent forms will be stored at the school premises, preserving then the identity of the participants. The recordings and consent forms will be destroyed 1 year after the project is concluded. The school will be advised of the date on which the consent forms will be destroyed.

What happens next?

The analysis will be presented to the Metropolitan Police and to the NSPCC – Childline team that will make the decisions about using or not chatbots to support children protection activities. The results will be published, always preserving the anonymity of the participants. If you wish to receive a summary of the results, please, inform your email address in the consent form. The report will be forwarded to you by the school once it is available.

What if I have questions or concerns about the project?

You can **contact <partner/gatekeeper> (email address)**. They will bring your questions to us. Alternatively, if you have any concern about the project you can contact Prof Harith Alani – h.alani@open.ac.uk.

This research project has been reviewed by, and received a favourable opinion, from the OU Human Research Ethics Committee - HREC reference number: HREC/3048/Piccolo.

Parents/Guardians – Informed Consent Form

Research Title: **Prospecting chatbots as a communication platform to tackle online abuse**

Researcher name: Dr Lara Piccolo – lara.piccolo@open.ac.uk

I agree that my child(full name of child)
for whom I am a guardian may take part in the research project by the Open University and the Metropolitan Police Service.

I have read the Participant Information Sheet, which I may keep for my records, and have had the opportunity to ask the researcher any further questions I may have had.

By signing below I am consenting for my child to:

- Take part into a 1-hour Internet Safety session by the Milton Keynes Safety Centre Hazard Alley.
- Participate in design activity to create a chatbot for raising awareness and preventing online abuse.
- Filling up a survey anonymously on her/his understanding of the problem and perception of having a chatbot solution to prevent it.
- Have the Lego performance video recorded without identifying the players.
- Withdraw her/his participation at any time during the workshop if she/he wishes to.

Data Protection

I understand that any information my child provides is treated anonymously, and that no information that could lead to the identification of any individual will be disclosed in any reports on the project, or to any other party. No identifiable personal data will be stored or published, neither shared with any other organisation. As the data collected is anonymous, even if my children withdraw her/his participation, his/her contribution cannot be identified to be removed for the analysis. The performance will be recorded for analysis only, and will not be published.

I also understand that this informed consent will be kept at the school premises for a year, preserving my child's identity.

Participant's Age:.....

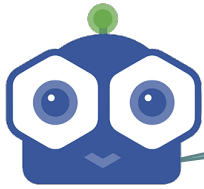
Parent's/Guardian's Name:

Your relationship to participant:

Signature of Parent/Guardian:Date:.....

If you wish to receive a summary of the project findings, please inform your email address (*optional*):

.....



Are you happy to participate?

We are very happy that you and your parents or guardians gave their permission for you to collaborate with our research! Before we start with the activities, we want to make sure that you are also happy for being here, and you know your rights regarding your participation. Please read the information below and come to us if you have any further questions.

What is it about?

This research is a collaboration between The Open University, the Metropolitan Police in London and the Safety Centre. We are studying chatbots, a computer program that simulates human conversation in a messenger platform. We want to know if they can be helpful in keeping you safe online.

What will I be asked to do?

We want your help for creating a chatbot! First, we will ask you to answer a survey individually and anonymously on your opinion about online safety, chatbots and social media. We will **not** ask anything that is personal and that can identify you. Then, based on stories that we will be presenting, we want you to work in groups to create your own story with a young person facing a difficult situation online and using the chatbot to ask for help. Your group will perform this story using Lego figures. We will keep eventual drawings and the performance with Lego will be recorded in video (only the performance, not you!).

What if I do not feel comfortable with this subject?

You do not need to stay if you do not feel comfortable. You can also approach your teacher or one of the researchers in the room asking for a private conversation if there is something bothering you regarding this subject. This conversation can happen during or after the workshop, according to your preference, and will not be recorded.

What if I do not want to stay?

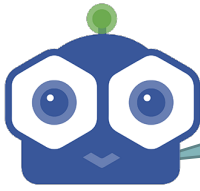
It is up to you whether you take part in this research. You will not receive any sort of payment for your participation and you are free to leave at any time. As the survey is anonymous, it cannot be withdrawn from our analysis. If you feel uncomfortable with anything recorded, you can ask us to delete some specific parts of it.

What is going to happen next, after this workshop?

We will analyse the stories that your group have created and your opinion on the results. We will not store any information that identifies you or your participation. The analysis will be presented to the Metropolitan Police and the Childline team that will make the decisions about the chatbot as a channel to support children facing worrying situations online.

What if I want to know more about it?

Talk to your teacher. He or she will bring your questions to us. If you wish to receive a summary of the findings, your parents/guardians can request to receive a report via email. To do so, their email address must be informed in the form they authorised your participation.



What do you think about social media, online safety and chatbots?

HOW TO FILL THIS SURVEY

- Please read the questions carefully and take your time to answer.
- Answer simply by putting a tick ☒ in the boxes next to the answers you choose.
- If you don't want to answer a question, just tick "don't know" or "prefer not to say" and go to the next question.
- Don't worry about other people seeing your answers. They won't!
- Just ask the researcher if you have any question or concern as you fill in the survey.

1) Where do you chat with friends online?

Please choose **all** that apply.

- | | | | | | |
|---|---------------------|--------------------------|---|--------------------|--------------------------|
| A | I don't chat online | <input type="checkbox"/> | F | TikTok | <input type="checkbox"/> |
| B | Instagram | <input type="checkbox"/> | G | Fortnite | <input type="checkbox"/> |
| C | WhatsApp | <input type="checkbox"/> | H | Minecraft | <input type="checkbox"/> |
| D | Facebook | <input type="checkbox"/> | I | Call of Duty / GTA | <input type="checkbox"/> |
| E | Snapchat | <input type="checkbox"/> | J | Roblox | <input type="checkbox"/> |

2) If you ever made new friends online, where did it happen?

Please choose **all** that apply.

- | | | | | | |
|---|---------------------------------------|--------------------------|---|--------------------|--------------------------|
| A | I have never made a new friend online | <input type="checkbox"/> | F | TikTok | <input type="checkbox"/> |
| B | Instagram | <input type="checkbox"/> | G | Fortnite | <input type="checkbox"/> |
| C | WhatsApp | <input type="checkbox"/> | H | Minecraft | <input type="checkbox"/> |
| D | Facebook | <input type="checkbox"/> | I | Call of Duty / GTA | <input type="checkbox"/> |
| E | Snapchat | <input type="checkbox"/> | J | Roblox | <input type="checkbox"/> |

3) Do you feel safe online?

Please choose **one** answer that best applies to you.

- | | | |
|---|---|--------------------------|
| A | Yes, never came across any bad experience | <input type="checkbox"/> |
| B | Yes, I feel I can handle any eventual threat | <input type="checkbox"/> |
| C | Sometimes, because I have heard of people having bad experiences | <input type="checkbox"/> |
| D | Sometimes, case I have had some bad experiences | <input type="checkbox"/> |
| E | No, I don't feel safe, but I use it anyway | <input type="checkbox"/> |
| F | No, I don't feel safe and I am very careful with the things I do online to avoid any threat | <input type="checkbox"/> |
| G | I don't know | <input type="checkbox"/> |

4) How common do you think it is for people at your age in the UK to experience worrying situations online? Please choose **one** answer.

- | | | |
|---|---|--------------------------|
| A | It happens a lot | <input type="checkbox"/> |
| B | It happens only for those that do not take care | <input type="checkbox"/> |
| C | I haven't heard any story | <input type="checkbox"/> |
| D | I don't know | <input type="checkbox"/> |

5) How common do you think it is to feel bullied online within your circle of friends? Please choose **one** answer.

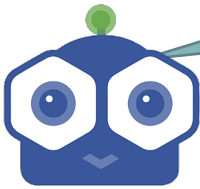
- | | | |
|---|-----------------------------------|--------------------------|
| A | It happens a lot | <input type="checkbox"/> |
| B | I have heard a few stories | <input type="checkbox"/> |
| C | I haven't heard anything | <input type="checkbox"/> |
| D | I don't know or prefer not to say | <input type="checkbox"/> |

6) How common do you think it is to feel worried online (for being approached by someone with a bad intention) in your circle of friends? Please choose **one** answer.

- | | | |
|---|-----------------------------------|--------------------------|
| A | It happens a lot | <input type="checkbox"/> |
| B | I have heard a few stories | <input type="checkbox"/> |
| C | I haven't heard anything | <input type="checkbox"/> |
| D | I don't know or prefer not to say | <input type="checkbox"/> |

7) In the event of facing a worrying situation online, what would you consider doing? Please choose **all** that apply.

- | | | |
|---|--|--------------------------|
| A | Probably nothing | <input type="checkbox"/> |
| B | Talk to a friend | <input type="checkbox"/> |
| C | Talk to a teacher | <input type="checkbox"/> |
| D | Talk to a family member | <input type="checkbox"/> |
| E | Search for advice on Google | <input type="checkbox"/> |
| F | Search for official information from the Police or Childline on social media (Facebook, Twitter, Reddit, etc.) | <input type="checkbox"/> |
| G | Search for information on Childline online | <input type="checkbox"/> |
| H | Search for information on CEOP www.thinkuknow.co.uk | <input type="checkbox"/> |
| I | Ask for advice from the Police (CEOP) over the phone | <input type="checkbox"/> |
| J | Call Childline | <input type="checkbox"/> |
| K | Ask for advice from Childline using a chatbot | <input type="checkbox"/> |
| L | Ask for advice from the Police (CEOP) using a chatbot | <input type="checkbox"/> |



Now that you know more about the chatbots, tell us your opinion

- 1) Have you ever had a chat with a chatbot? Please choose **one** answer.
- | | | |
|---|--|--------------------------|
| A | Yes, just for fun | <input type="checkbox"/> |
| B | Yes, to do something important | <input type="checkbox"/> |
| C | Probably I did, but I don't remember or didn't realise | <input type="checkbox"/> |
| D | Never | <input type="checkbox"/> |
| E | I don't know | <input type="checkbox"/> |
- 2) How do you like the idea of using a chatbot to support someone facing a worrying situation online? Please choose **one answer** that best applies to you.
- | | | |
|---|---|--------------------------|
| A | I would never trust a chatbot | <input type="checkbox"/> |
| B | People will feel uncomfortable using it | <input type="checkbox"/> |
| C | People will feel comfortable using it | <input type="checkbox"/> |
| D | I love this idea | <input type="checkbox"/> |
| E | I don't know | <input type="checkbox"/> |
- 3) Where would you expect to find a chatbot to help people experiencing online abuse available? Please choose **all** that apply.
- | | | |
|---|--|--------------------------|
| A | Official Police page or Childline on Facebook | <input type="checkbox"/> |
| B | Childline website | <input type="checkbox"/> |
| C | Skype | <input type="checkbox"/> |
| D | WhatsApp | <input type="checkbox"/> |
| E | Police website | <input type="checkbox"/> |
| F | Other places not listed here | <input type="checkbox"/> |
| G | I don't know | <input type="checkbox"/> |
| H | I don't expect finding a chatbot for online abuse anywhere | <input type="checkbox"/> |