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Online Perspective-Taking as an Intervention Tool Against Cyberbullying

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Abstract. This study will examine the use of an online role-playing experiment as a cyberbullying intervention tool. The study will be carried out among 14 – to 18-year old adolescents ($N = 200$). Respondents will be assigned a fictitious character and a role (perpetrator, victim or bystander) in a cyberbullying situation. They will be asked to identify with this character and act accordingly in an initiated mock, but realistic online bullying situation. We expect, also based on existing literature and bullying prevention programs, a positive change in the adolescents' behavioral intentions (e.g. defending a victim).

Keywords. Cyberbullying, Intervention, Role-Play, Behavioral intentions, Empathy

Introduction

Nowadays, cyberbullying, or bullying through electronic devices and digital platforms, is a common form of bullying amongst adolescents (12-18 year olds) [1]. Cyberbullying has potential harmful implications for victims. It can result, amongst others, in depression, low self-image and even suicidal behavior [2]. Bullies, in turn, have a higher chance of showing delinquent behavior at a later age. Exploring efficient ways to prevent this kind of digital harassment is therefore vital and can benefit all parties involved: victims, bystanders and bullies.

The recently initiated 'AMiCA' project (Automatic Monitoring for Cyberspace Applications, <http://www.amicaproject.be>) aims at detecting possible threatening situations on social networking sites (SNS) by means of automatic text and image analysis. The target group of this project is the adolescent population of secondary schools (12-18 year olds). The present study will be conducted as part of the AMiCA project and includes a role-playing experiment in which adolescents will be asked to adopt a specific role in a mock, but realistic, cyberbullying situation. The objective of the current study is twofold. First, the role-playing experiment will be used as a tool for gathering (examples of) language use in cyberbullying situations, which in turn will be used for machine-learning purposes. Second, the potential of the role-playing experiment as an intervention tool against cyberbullying will be investigated. In particular, we set out to explore whether playing one of the three most common roles in cyberbullying situations, victim, perpetrator or bystander, in a mock, 'as if', but realistic setting, affects the behavioral intentions of adolescents towards cyberbullying.

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In this paper we only describe the second objective of the study and aim to answer the following central research question:

CRQ: How does an online role-play experiment influence the behavioral intentions of the adolescent towards cyberbullying?

1.1. The role-playing experiment

Role-playing is an intervention method similar to perspective-taking. The definition of role-playing was given in 1968 by Aronson and Carlsmith [3, p. 26]: “An ‘as-if’ experiment in which the subject is asked to behave as if he were a particular person in a particular situation.” Taking on perspectives of others can lead to an increase in overlap between the self and the other and forces people to watch and evaluate their own behavior through the eyes of someone else. Whether the other is a real person or a fictitious character, perspective-taking can lead to changes in behavior [4]. Various psychosocial experiments conducted by Jeremy Bailenson, amongst others, implement role-playing experiments in a virtual setting, whereby the respondents have to empathize with an avatar and act like this character in a given situation [4]. Bailenson reports that even an imposed, brief, role-playing experiment can affect a person’s behavior related to certain phenomena (e.g. pro-environmental behavior, pro-social behavior and the reduction of negative social stereotyping) [4].

The implementation of role-playing experiments is a method that has already been applied successfully in traditional bullying studies and bullying intervention programs (e.g. the well-known KiVA-program) in order to change the behavioral intentions of children and youngsters towards bullying [5]. This study will apply this approved method to the context of cyberbullying. In particular, we will investigate whether the act of empathizing with the actors in a cyberbullying situation, by means of role-play, changes the behavioral intentions of adolescents in order to prevent/reduce cyberbullying and increase victim-defending behavior.

1.2. Roles in cyberbullying situations

Within the context of cyberbullying, actors can adopt the role of perpetrator, victim and bystander [1, 2]. Bystanders can be either active or passive. The latter participate actively in cyberbullying situations, through either supporting the perpetrator or defending the victim. Since textual input is a requisite for analysis in the present study, all bystanders will be asked to actively participate in terms of replies, likes and status updates. Depending which communication tool (e.g. status update, direct chat) used, cyberbullying situations on a SNS are often visible to a broad audience. Thus, bystanders are a large group in a given cyberbullying situation. Furthermore, the reactions of bystanders might influence the actions and reactions of the perpetrator, victim and other bystanders, in both positive and negative sense [1].

1.3. Different types of cyberbullying

The characteristics of cyberbullying are closely related to those of traditional bullying. Generally, three key features define cyberbullying: power imbalance, intention to harm and repetition of negative online actions [1]. The focus of the present study will be on the act of cyberbullying in a direct manner (i.e. the victim is directly involved) and in

the presence of bystanders. Vandebosch and Van Cleemput [7] describe four different forms of direct cyberbullying: threatening, insulting, hindering and ridiculing someone. The different cyberbullying scenarios in the pre-test will be designed according to these four categories.

2. Method

The study will consist of a role-playing experiment on an online social networking platform. A mock social networking platform is created and will be monitored by the experiment leader. Prior to the experiment, each respondent will receive a character sheet and will be asked to closely read the character description and identify with the described character. The study will be carried out in groups of six adolescents, consisting of a single perpetrator and victim and four bystanders. Afterwards, the respondents will be asked to log in into the mock social networking platform with their character's account and react and behave accordingly to his or her character. Two cyberbullying situations, varying in perceived severity, will be initiated through an automated status update by one of the characters. The status updates initiating the role-play will be derived from literature [1, 8] and real-life examples. In addition, they will be evaluated in a pre-test in which the scenarios will be assessed in terms of realism and perceived severity. Thus, two groups of scenarios will be discerned: cyberbullying situations with low- and high-perceived severity.

2.1. Materials

SNS accounts of fictitious characters will be used. The fictitious characters will have an identifiable account (i.e. not anonymous) on the SNS. Thus, all messages sent by the characters will be traceable to the character, but not to the respondent. The assignment of characters among adolescents will not be concealed to the adolescents during and after the experiment. This way, potential cyberbullying of the respondents instead of the characters is prevented.

Figure 1 shows an example of a character sheet that will be presented to the respondents at the start of the experiment. We choose to work with avatars instead of real photos. Bailenson suggests that the use of avatars can be strategically important, in order to suppress certain features and non-verbal signals [4]. Moreover, the use of avatars prevents emotional reactions of the respondent towards the appearance of their character. The characters will correspond to the respondents' age and gender. The character sheet will show various objective user data, for example residence, school and name. Apart from those factual characteristics, a summary of the (recent) events in the life of the character will be provided, as well as a description of the relationship the character has with the other characters in the experiment. The character sheet will also show the role of the character in the cyberbullying situation (perpetrator, victim, bystander supporting the victim, bystander supporting the perpetrator) and the log in details for the SNS. Prior to the experiment, the respondents will be given sufficient time to read, study and empathize with their character. The character sheet will remain with the respondent throughout the experiment and thus can be revisited at any time.

The social media platform is specifically designed for the experiment and will run on a private server with all the functionalities of the most popular SNS 'Facebook'. The platform will be given the 'look and feel' of Facebook, by using the same color palette

and fonts. This way, we hope to create a sense of familiarity and make the adolescents feel at ease on the platform (See Figure 1).



Figure 1. Example of a character sheet and a conversation on the SNS.

Several precautions will be taken in order to prevent unintended harm caused by playing and experiencing a cyberbullying scenario. We will actively cooperate with the school to select non-cyberbullying victims as respondents for the study, a 'Quit Experiment'-button will be added to the platform and a direct chat-channel with the experiment leader will be provided to the respondents. This study received ethical approval from the Ethical Review Board of the University of Antwerp (Belgium) on 07/02/2014.

2.2. Respondents

The experiment will be carried out among 200 adolescents, aged 14 to 18 years old. According to the developmental psychologist Selman [6], at the age of 14, people are fully developed in terms of perspective taking. Variation in region and in educational level will be taken into account.

2.3. Measures

We will measure dependent variables, personal characteristics, and demographics. The respondents will be asked to fill out a survey twice; before and after the experiment. Before the actual role-playing experiment we will collect the following measures: (1) the individual trait 'empathy' and (2) behavioral intentions as a bystander in a cyberbullying situation [5, 11]. Behavioral intentions as a bystander will be measured by presenting a screenshot of a pretested high- and low severity cyberbullying situation to the respondent. Three possible bystander actions are assessed based on the theory of planned behavior: doing nothing, supporting the perpetrator and defending the victim. Respondents will be asked to rate these actions in terms of behavioral beliefs, normative beliefs, control beliefs and behavioral intentions [11]. After both role-playing experiments, respondents will complete a survey that assesses the perceived severity of the experienced cyberbullying scenario and to which degree they found it easy to empathize with the character and the situation.

Following the second and last role-playing experiment, behavioral intention as a bystander of a cyberbullying situation is measured a second time. A different set of two pre-tested cyberbullying situations will be shown. The order in which the two sets of

screenshots will be presented is randomized. Also the emotional reaction of the respondents towards the high-perceived severity role-playing exercise will be assessed through SAM-scales and open-ended questions. Finally, the respondents' real-life experience with the roles of perpetrator, victim and bystander in cyberbullying situations will be assessed both in terms of expressed reactions as a bystander and frequency of adopting the particular role. The questionnaires will be carried out on a PC and will employ validated self-report scales.

2.4. Analyses and expected results

The experiment will be carried out early 2014. Data and results will be available at the time of the conference.

With this study, we aim to explore the online role-playing experiment as a potential, strong intervention tool against cyberbullying through investigating changes in behavioral intentions towards direct cyberbullying on SNS. The impact of the role-playing experiment on the results will be measured in terms of perceived realism and ease to empathize. Finally, prior experience with cyberbullying, demographic factors and the individual trait 'empathy' will be taken into account.

We expect that the role-playing experiment can positively change the adolescents' behavioral intentions with respect to possible future cyberbullying incidents. This positive behavioral modification can be expressed by a decrease in the intention to perform cyberbullying behavior and/or an increase in the intention to defend the victim.

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