



Technology and Bullying

Dana de Bok & Gregor Wolbring

Dana_de_bok@hotmail.com; gwolbrin@ucalgary.ca



Purpose

Bullying is a global social problem [16]. Volk and his colleagues (2012) stated that it involves “hundreds of millions adolescents worldwide” and the effects of bullying are devastating for all that are involved. We present here a conceptual piece that looks at possible future forms of bullying whereby we take into account discourses around certain emerging sciences and technologies.

Introduction

What is bullying, who is involved, types of bullying, and what are the effects?

- The act of bullying can take place anywhere were groups of people interact [18]
- Owleus (1996) describes bullying or victimization as when a person is “exposed, repeatedly and over time to negative actions on the part of one or more other” people
- Three key characteristics of bullying: behaviour is intentional, imbalance of power, and the act happens repeatedly [18][4]
- A bully is an individual who uses emotional or physical power in a calculated way to torment their victim [14][3]
- The bystander is the individual who reinforces or perpetuates the cycle of bullying; they are not directly involved in the bullying act [14][10]
- The proactive victim can be described as having both victim and bully characteristics [13].Rose et al (2011) argue that the proactive victim develops these bullying characteristics as a result of being victimized
- Rose et al (2011) discuss four distinct categories of bullying: physical, verbal, indirect; which would include social, relational, emotional, and sexual
- As a bully ages the use of verbal and social forms of bullying become more prominent, Bullies start to learn that social and verbal bullying are equally, if not more effective, at tormenting their victim [1]
- Victims can suffer from loneliness, depression, generalized and social anxiety, low self-esteem and worth, poor social skills and few friends; they begin to lose trust in other’s and the world, and they also have higher psychosomatic and psychosocial problems, such as bedwetting and increased headaches and stomach aches [17][2][8][7]
- If the bullying becomes too much the victim may resort to self harm, which could escalate to suicidal ideations, and in the worst case the victims may commit suicide [3][12][8]

Methods

A literature review was completed using the term bullying. We gathered articles from various databases. We then used a program designed by Dean Yergens called Knowledge Share (version 2.1.1) to thoroughly review the literature. 105 articles were included out of a possible 283, the criteria in which the articles where included in the literature review was based on if they were in English, available in PDF, and on relevance. When comparing relevant articles we had a kappa factor of .87. After the articles have been chosen we used Atlas.ti (version 7), which is and qualitative data analysis and research software, to go through each article to hand and auto code for themes, such themes included definitions of bullying, types of bullying, and effects of bullying. We then furthered looked for articles pertaining to new and emerging technologies such as social robotics and prosthetics.

Results

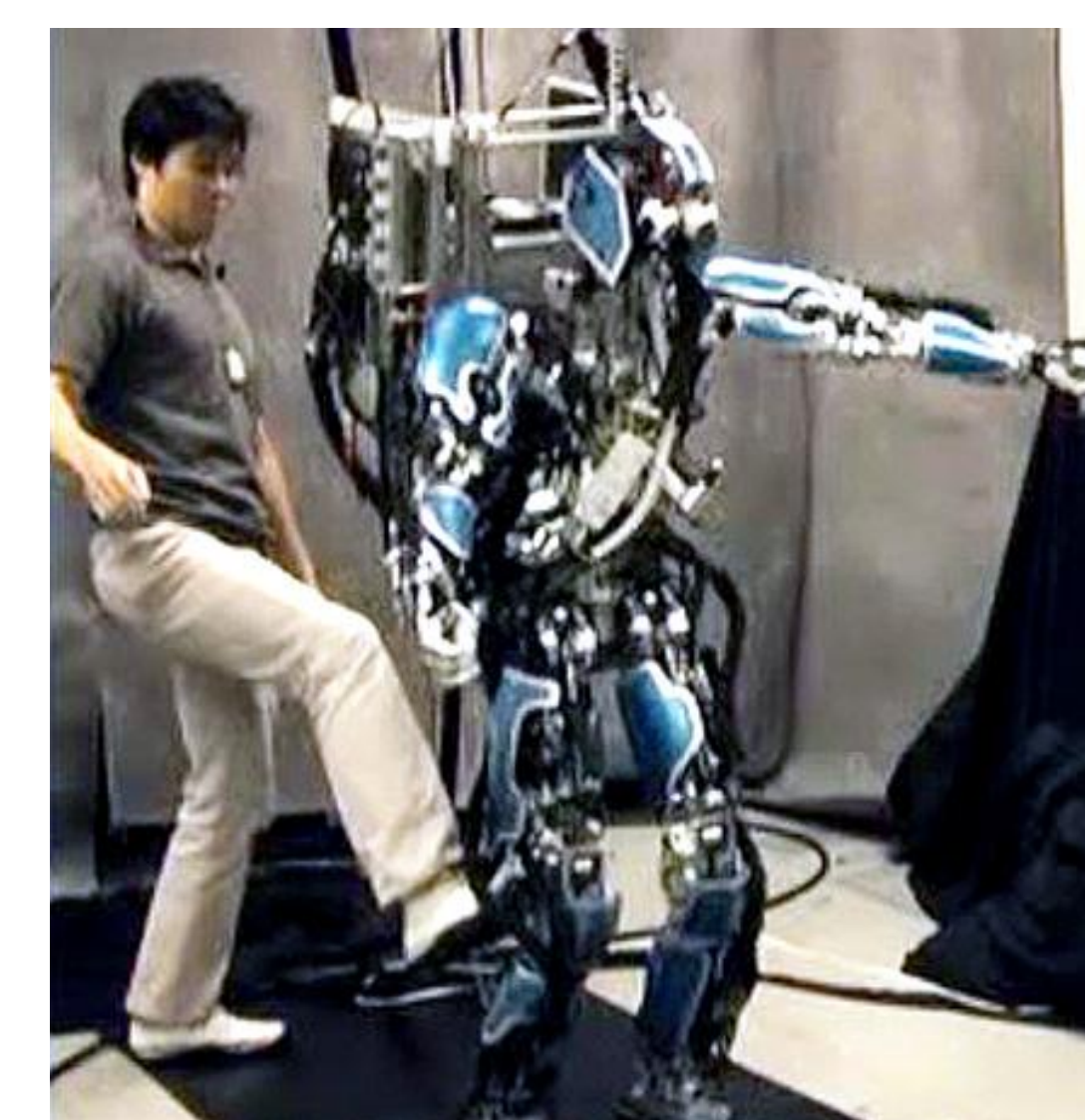
- Does not seem as if we are looking at future forms of bullying
- As a society we have almost become desensitized to bullying
- Bullying has evolved and changed over time; part of childhood to social phenomenon to...
- When creating anything that will be used by or coexist with humans it is important to predict if they can be used in malicious ways, by making these predictions it will make us more prepared to deal with the effects



Discussion

Social Robots

- Robot bullism is used to describe any behaviour, violent and inappropriate, which is meant to impede or damage the robot [15]
- Humans can express bullying tendencies towards robots, but we have not address whether the roles can be reversed
- If the ‘do no harm’ mechanism is damaged:
 - If the robot uses physical actions such as, hitting and kicking the robot could cause a great deal of harm to a human, could even kill its victim
 - If robots do have vocal capabilities and advanced verbal skills they will be able to create instantly verbal gabs that will be victim specific to inflict the most emotional and psychological damage. They will also be able to keep attacking their victim because they will not need the time to come up with another insult, as it will be available immediately to them
 - With the robots physical strength, the ability to process information quickly and efficiently, and with unlimited access to the internet this combination will make for smart resourcefully bullies



Cripple to Freak

- Individuals with disabilities are targets of bullying because they are seen as weaker, defenceless, and different [9][16]
- Children with disabilities often indicate that they experience more verbal and indirect forms of bullying [14]
- Society has place individuals with disabilities in a less-able category, but with the progress that has been made on their therapeutic aids they may start to outperform the able bodied population.
- Brain machine interfaces (BMI) are therapeutic devices developed for disabled people that allows them to thought control various aspects of their environment [6]

The technology and capabilities of BMIs are still limited If it miss interprets thought for intention it can make the individual a further target for bullying. If the BMI gets hacked then the individual could be susceptible to carrying out the bullies acts

- The use prosthetics :
 - Prosthetics might also soon be able to allow disabled people to outperform the non-disabled; for example in 2007 the Cheetah legs of the Paralympian athlete Oscar Pistorius were labelled techno doping devices as they were seen to give him an unfair advantage [19]
 - In today’s society many individuals are using aid to help
- Question is whether obtaining abilities that are beyond the abilities of non-disabled people will eliminate the bullying or whether they are continue to be bullied only now the label will not be cripple but freak.

Human Enhancement

We are not only developing science and technology products that allow disabled people to achieve abilities beyond the norm but we develop also products that will allow the today as healthy perceived people to outperform the ability norm. In essence everyone who would have access to the products could outperform the species-typical ability norm. If we assume that the strong bully the weak as is evident for example with disabled people being bullied by non-disabled people the same bullying could happen between the enhanced and the non-enhanced. On the other hand the people with beyond species typical abilities might also be bullied as freak in the same way enhanced disabled people might be bullied as freaks.

Conclusion

Bullying is a social issue that is going to persist and continually evolve. Science and technology developments are one factor that enables new forms of bullying (see cyber-bullying for example, made possible through the development of the internet) . As a society we need to be more proactive in regards to bullying. Especially given the bullying potential, due to ability enhancements beyond the norm it might be worthwhile to educate and campaign for acceptance of ability difference; something the disability movement is lobbying for. Not accepting ability diverse disabled people might set a dynamic with which the species-typical person shoots themselves in the foot given the appearance of beyond species typical abilities. We think this is a worthy area of ethical inquiry.

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