

CIKGU LILI CARE: A MULTIMEDIA APPLICATION TO EDUCATE AUTISTIC CHILDREN ABOUT SAFE TOUCH

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Abstract

Cikgu Lili Care is a multimedia application that aims to provide awareness regarding ‘Safe Touch’ among children with autism aged from five to nine years old. It is a form of interactive digital storytelling application that supports user interaction. This digital storytelling platform aim to educate children with learning disabilities to understand about their private and sensitive body parts and also the course of action that they should take if someone touch or behaving inappropriately towards them. We hope by using the application, the autistic children would become more careful and aware of their surroundings and able to avoid any potential sexual abuse that is often targeted towards children with disabilities.

Keywords: *Multimedia, Safe Touch, Education, Autistic, Children, Sexual Abuse*

1. INTRODUCTION

Children with Autism Spectrum Disorder (ASD) often are views as ‘easy target’ by sexual offenders due to their vulnerabilities. Thus, in order to educate and increase awareness regarding ‘Safe Touch’ among children with ASD, we utilized the digital storytelling method by developing an interactive multimedia application that supports user interaction. This digital storytelling platform, called Cikgu Lili Care would help children with autism or learning abilities to understand about their private body parts and action that they should take if someone from their family members or strangers behaving inappropriately towards them. Since, reports on sexual abuse and harassment towards autistic children had been increasing, we hope this multimedia application would be able to educate these children about safe touch, taught them to become more aware of their surroundings and eventually enable them to protect themselves from any attempt of sexual abuse or harassment.

2. OBJECTIVE

Prior to the start of this project, we notice many existing ‘Safe Touch’ multimedia application in the market right now has the main problem i.e. most of the videos and applications regarding Safe Touch do not support learning for children with autism. According to Kamaruzaman et al. (2016), “The design principle and guidelines in designing User Interface (UI) for applications that suited the needs of children with autism is extremely important. A good UI

considers the demographics' cognitive ability" (p. 893). These includes the style of animation, the use of buttons, symbols, colors, characters and the learning environment should be designed according to the needs and characteristics of children with autism.

Besides, most current storytelling applications only display video animations without having any form of interactivity with the viewers. Hence, the autistic children would have difficulties to maintain their engagement, and give their full attention to the content which may lead them to have a wrong interpretation and comprehension. The difficulty of paying attention over long time span had been widely indicated as the main problems in delivering educational content to children with autism. Therefore, it is very important for the digital storytelling to be not only educative but also interactive to maintain engagement and attention from children with autism.

Previous study suggested that, one of the way to keep these children attention is by having fictional characters (like cartoons or avatars) in the applications. According to Rosset, Ronda, Fonseca, Santos, Assouline and Deruelle (2008), children with autism show greater improvements in emotion recognition when programs include cartoons rather than photographs of real faces. Moreover, clinical and parental reports also state that autistic children spend long periods of time looking at cartoons.

Accordingly, as existing applications in the market right now did not consider the needs of autistic children, hence our objective is to develop a new interactive digital storytelling application that specifically aimed to educate children with autism about Safe Touch.

3. NOVELTY & INVENTIVENESS

Cikgu Lili Care application is a dual language platform that consists of English and Bahasa Melayu, so that children with autism can choose to learn about Safe Touch in a language that they can understand better. In addition, subtitle also provided to assist the teachers, tutors, parents and guardian to deliver the content without having difficulties to translate the words. With the appearance of 2D animation and good User Interface (UI) and User Experience (UX) design, we believe this Cikgu Lili Care application has very attractive and engaging features that able to grab autistic children attention for a longer time span to learn about the subject matter.

The information, learning resources and the content of the videos provided in this application has been validated and approved by experts. Besides, the appearance of Quiz section with rewards and score can be helpful for teachers, tutors, and parents to measure the children understanding about the topic as well as to keep them engaged and entertained with the content of the application.

4. PRACTICALITY & USEFULLNESS

As literatures shows that around half of autistic children may have a learning disability, we believed this application would be very helpful for teachers (especially *Pendidikan Khas*) or parents and guardian to assist their children to learn about Safe Touch. Using this Cikgu Lili Care application, autistic children can get a clear understanding of their private body parts and different types of touches (safe and unsafe), besides establishing the role and responsibilities of both genders in protecting their bodies. This eventually would able to improve their knowledge, social attitude and skills in dealing with body touches' consent.

In fact, the development of this Cikgu Lili Care application also align with SDG 4 which is to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. This application also support the goal of SDG 16 which is to promote

peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels, to protect themselves from being a victim for sexual abuse.

5. CONCLUSION

Our motivations for developing this Cikgu Lili Care application is mainly towards the safety and security of children with autism who had been very vulnerable towards sexual abuse and harassment by irresponsible predators. We become even more concerned as children with autism spectrum also reported to have lack of communication skills to report any abuse towards them. Thus, with the humble effort of this project, our team hope that this multimedia project can educate autistic children regarding Safe Touch to assist them in protecting their bodies and dignity.

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