

A Preliminary Investigation: Children's Awareness of Child Sexual Abuse in Malaysia

Azliza Othman and Wan Ahmad Jaafar Wan Yahaya

Abstract—This paper reports the feedback from respondents in relation to the implementation of Persuasive Multimedia Learning Awareness in preventing child sexual abuse in Malaysia. A qualitative method using unstructured interview has been selected as a technique of gathering information in order to identify the current children awareness toward sexual abuse and current child sexual abuse prevention programs implemented in Malaysia. Four respondents have been selected to participate in this interview: a representative from the Department of Social Welfare, government agency involved in making Child Protection Policy; a representative from Women's Centre for Change (WCC), Penang, an NGO involved in prevention program, a representative from Family Law Division, Department of Islamic Affairs, State of Kedah (JAIK) and a primary school teacher. The findings from this preliminary investigation confirm that in Malaysia, there is a need to educate children about child sexual abuse and there is still lacking of educational materials that utilize multimedia and computer technology that teach children about personal safety. In conclusion, the implementation of Persuasive Multimedia Learning need to be designed and developed to educate children and to increase their awareness level of any situations that might negatively affect their personal safety and to provide guidelines for the children on how to act appropriately when these situations arise.

Index Terms—Awareness, child sexual abuse, multimedia learning, persuasive technology.

I. INTRODUCTION

Child abuse has raised worldwide attention in the recent years. Child abuse is the physical, sexual, emotional mistreatment, or neglect of children. Child abuse occurs at every socioeconomic level, across ethnic and cultural lines, within all religions and at all levels of education [1]. World statistics and study conducted by the Department of Social Welfare, Malaysia show that child abuse, molestation, and rape cases are continually increasing. Despite the alarming rates of child sexual abuse (CSA) in the United States (estimated 60,000 cases in 2007 (U.S. DHHS, 2009)), work in the area of prevention remains limited [2]. For example, in the

first seven months of 2009, 2193 cases were reported to Royal Malaysian Police (PDRM) while in 2007 and 2008 a total of 4278 child abuse cases were recorded. Analyzing the steady rise in the statistics, it is forecasted that there would be more than 10,000 cases in Malaysia over the next ten years. This serious social problem requires effective prevention

strategies since it gives a great negative impact to the children during their childhood and future adulthood in physical, emotional and psychological contexts.

This is a complex problem that requires a comprehensive solution and participation from stakeholders in multiple sectors. Although prevention efforts have been aimed at youth, parents, professionals, and the general public, the most common approach has been child-focused personal safety instruction typically occurring in schools [2]. Primary prevention of child sexual abuse and exploitation is often seen as unachievable, because, in general, prevention efforts rarely receive the level of commitment and attention required for long-term success [3].

Even though countless work has been done by researchers around the world to prevent child sexual abuse through creating public awareness, in Malaysia this effort remains inadequate. Even though there are attempts by government agencies and NGOs in creating public awareness through mass media such as forum and campaigns, there is still insufficient amount of education programs that utilize the computer technology to create awareness among children in school. In current practice, program in schools that educate children in a child-friendly way about bad touches and preventing themselves from perpetrator is far lacking. The child is not fully aware that it is wrong for an adult to abuse and neglect his or her body. As a result the child suffers in silence [4]. With regard to this, children should be exposed to appropriate educational programs so that they are aware of any situations that might negatively affect their personal safety and know the appropriate actions require when these situations arise. So, the lack of knowledge and awareness among children is the main stumbling block that needs to be tackled by the researcher and this problem could be solved by using persuasive technology and multimedia leaning.

II. RESEARCH BACKGROUND

Reference [5] states that awareness is the state or ability to perceive, to feel or to be conscious, objects or sensory patterns. In this level of consciousness, sense data can be confirmed by an observer without necessarily implying understanding. More broadly, it is the state or quality of being aware of something. In biological psychology, awareness is defined as a human's or an animal's perception and cognitive reaction to a condition or event. Awareness is a relative concept. Awareness may be focused on an internal state, such as a visceral feeling, or on external events by way of sensory perception.

Awareness can be enhanced by using appropriate computer technology. Considerable effort has gone into the

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exploration of technology to aid in changing a particular aspect of human behavior in a predefined way. Persuasive technology could be applied as a persuasive tool in influencing children behavior toward child sexual abuse and increase their awareness level of any dangerous situation that might occur. According to [6], persuasive technology refers to interactive computing systems, which are deliberately designed to change people's attitudes and behaviors. It is believed that computer applications are now able to persuade as effectively as human [7]. Currently, there are various researches that apply the persuasive technology approach in designing and developing applications with the intention to change a particular aspect of human behavior in a predefined way. Among the important current targets for persuasive technology is promoting healthy behavior [8], environmental conservation and education [9].

Persuasive technology focuses on the computers and the persuasion, which are combined together into an assistive tool. Additionally, reference [6] introduced a captology to define how persuasive computers are designed to change ones attitudes and behaviors. This new area of study explores the overlapping of persuasion (increasing awareness, influence, motivation, behavior change, etc) and computing technologies. Fig. 1 shows a diagram of generic model for this study. This model was adapted from a model of persuasive technology as in [6] which consists of two overlapping ovals and they were interrelated between each other. According to the model, the first oval is illustrated as the use of persuasive multimedia learning which is using computer environment in solving the problem. The second oval is the intention of using persuasion in the computer environment which is increasing children's awareness which will help in reducing the problem stated. Therefore, in this model, captology is the overlap between two ovals.

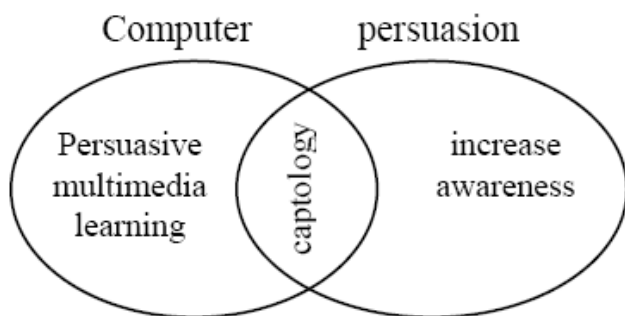


Fig. 1. Generic model adapted model of persuasive technology from Fogg (2003).

On the other hand, education and learning in this 21st century is closely related to technology. Similarly, teachers use many different formats and modes in teaching practices. Teachers normally use various combinations of lectures, texts, and hands-on teaching practices in accelerating student learning. Recently, computer-based applications have an added advantage in teaching children, because as computer itself is appealing to most children. In relation to that, with the advent of the multimedia technologies and the Internet, learning can be supported with multimedia elements such as graphic, text, animation, video and audio. This attribute, in fact, plays an important role in the use of computers to teach

children, especially when children can interact with the computer using animated characters. According to [10], multimedia can engage the human sense to inform, persuade, and entertain. The most effective multimedia provides learning experience that real mirror the real world experiences and allows learners to apply the contents in different contexts [11]. She also adds that multimedia certainly has the potential to extend the amount and types of information available to learners.

Studies have proved that multimedia have many advantages in facilitating learning. Multimedia learning allows children to play a more active role in learning. According to [12], by nature, children learn by doing. As cited by [14], Savage and Vogel (1996) agreed that multimedia helps in conveying information quickly and effectively to all students and keep them interested in learning. Other advantages of multimedia in learning as stated by [13] such as it takes less time, is enjoyed more and increases learning. Thus, in designing children learning materials in this study also can also take advantage from the advent of the multimedia.

Researchers have found that multimedia helps people learn more easily because it appeals more readily to diverse learning preferences. Multiple media can be used to take advantage of the fact that our brains access information in nonlinear ways [15]. Reference [16] agreed that the use of multiple channels can increase the amount of information that the brain can process.

Multimedia learning is the process of learning, usually in a classroom or similarly structured environment, through the use of multimedia presentation and teaching methods. This can typically be applied to any subject and generally any sort of learning process can either be achieved or enhanced through a proper application of multimedia materials [17]. The process of multimedia learning can be viewed as information acquisition (in which multimedia messages are information delivery vehicles) or as knowledge construction (in which multimedia messages are aids to sense making). According to [18] multimedia learning can occur when people build mental model from words (such as spoken text and printed text) and pictures (such as illustrations, photos, animation, or video). Mayer explains how we process information through two basic channels, verbal and visual (Fig. 2).

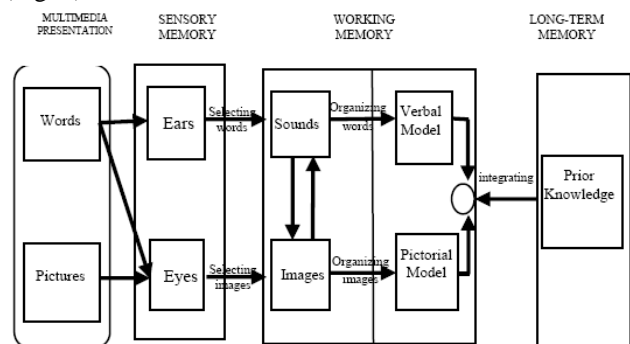


Fig. 2. Cognitive theory of multimedia learning by mayer (2001).

Realizing the important impacts of applying multimedia elements and persuasive technology in learning environment, this study attempts to help children in learning about child

sexual abuse and help in enhancing children's awareness of any dangerous situations and provide a guideline on the appropriate actions to take when these situations arise.

III. RESEARCH METHODOLOGY

This study is carried out in several steps as illustrated in Fig.3. The methodology comprises of four main phases: research, prototype design, prototype development, testing and collecting data.

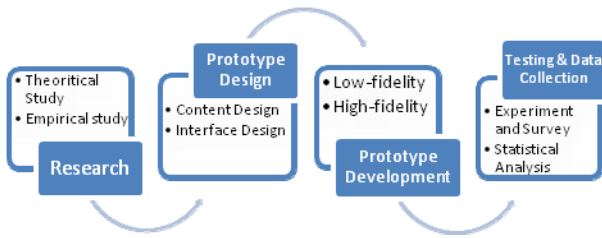


Fig. 3. Research Methodology.

A. Phase I: Research

In the first phase, the theoretical and empirical studies will be carried out. This is important in understanding and gathering appropriate and sufficient requirement.

In defining the problem, a preliminary investigation was conducted through unstructured interview with government agency, NGOs and primary school teacher. In theoretical study, relevant literature on current issues of child sexual abuse, child sexual abuse prevention program implemented in Malaysia and other countries, concept and theories about multimedia learning and design guidelines are studied and reviewed. This information and knowledge were obtained by reading printed and reviewed references which consist of journals, books, and proceeding papers.

In terms of content, an empirical study will be conducted through interviews involving suitable respondents. In detail, the respondents of this study will be experts on content requirement and children who will use the prototype. The purpose of this study is to gather the content requirement for inclusion in the learning materials. Then, the outcome will be used for the next phase.

B. Phase II: Prototype Design

The next phase is to design the prototype of persuasive multimedia learning based on the preferred theoretical framework. In this phase, the appropriate theoretical framework chosen in the previous stage will be used as the basis in designing the interface and contents of the prototype. The outcomes will provide guidance and support in developing the intended prototype.

C. Phase III: Prototype Development

In this phase the tentative design from the previous phase is translate into the program codes to build the prototype. Reference [19] addresses that prototype is an initial version of the real system. It is usually contains the feel and look of

the real system. There are two types of prototype which are low-fidelity and high-fidelity. Low-fidelity prototype could be built using any materials such as foam or card. Storyboard is one example of a more detailed low-fidelity prototype that designs the screen layout using hand sketching or computer software. In contrast, a high-fidelity prototype is a real working system but with limited functions. In this study, both types of prototype will involve. Storyboard which is a low-fidelity prototype will be used in designing the content and interface layout. Meanwhile, for designing and developing the functionality and content, the high-fidelity prototype will be used. This phase also include the functionality test of the prototype.

D. Phase IV: Testing and Collecting Data

Validating instrument and testing of the prototype will be conducted to ensure the validity of the prototype developed. In this stage the effectiveness of the multimedia learning prototype that applies the persuasive technology will be evaluate in term of determine the level of children's awareness regarding the CSA. Data collection phase is a crucial part in this study. Data will be collected through experiment and questionnaires. After that, the data will be analyzed using appropriate statistical techniques.

IV. FINDING

The findings below are based on the literature review and preliminary investigation that have been conducted through unstructured interview.

A. Literature Review

Child Sexual Abuse is a form of child abuse in which an adult or older adolescent abuses a child for sexual stimulation [20]. It was found that most sexual abuse offenders are acquainted with their victims; approximately 30% are relatives of the child, such as brothers, fathers, mothers, uncles or cousins; around 60% are other acquaintances such as friends of the family, babysitters, or neighbors; strangers are the offenders in approximately 10% of CSA cases. Based on National Child Abuse Statistic (2009), over 90% of CSA victims knew their perpetrator in some way and 68% of them are abused by family members. In Malaysia, from the cases reported to Social Welfare Department in 2008, 72% from 733 cases were incest cases [4]. Table. 1 shows the types of child sexual abuse.

Sexual abuse impacts negatively to the children during their childhood and future adulthood in physical, emotional, and psychological context [21]. Studies found that the victims of the sexual abuse are traumatized greatly in life compared to other types of child abuse [22]. Reference [23] adds that a child who is abused will be traumatized and will need counseling and professional intervention by a child psychologist or psychiatrist. It is important because when a child is sexually abused they are scared, frightened, and do not know what to do.

In addition, children who are sexually abused often do not tell anyone that they have been sexually abused, because they feel ashamed and guilty. Also, they are afraid of causing the perpetrator's anger, or because the perpetrators have

threatened them to stay quiet, or convinced the children that no one will believe them. This can often lead for the abuse to last for years. The most effective way to minimize the negative consequences of abuse is through prevention [1]. An effective method in preventing child from being abused is through education in schools [24].

TABLE I: TYPE OF CHILD SEXUAL ABUSE

Types	Description
Sexual assault	A term defining offenses in which an adult touch a minor for the purpose of sexual gratification; for example rape (including sodomy), and sexual penetration with an object.
Sexual exploitation	A term defining offenses in which an adult victimizes a minor for advancement, sexual gratification, or profit; for example, prostituting a child, and creating or trafficking in child pornography.
Sexual grooming	Defines the social conduct of a potential child sex offender who seeks to make a minor more accepting of their advances, for example in an online chat room.

Prevention of abuse can be seen as a process of altering the potential perpetrator, the potential victim, and the environment in which both exist. According to the public health model as in [25], prevention can occur at any of the following three different levels with regard to sexual abuse: primary, secondary, and tertiary.

1) Primary

Primary prevention methods focus on the community in general, attempting to prevent the abuse before it actually occurs. These efforts may be directed at potential sex offenders, sending the message that child sexual abuse is illegal and urging potential offenders to seek help.

2) Secondary

Secondary prevention methods focus on individuals who are at risk, attempting either to prevent the abuse before it occurs or to identify and intervene early enough to minimize its harmful effect. In addition, this prevention programs often encourage the disclosure of abuse by child victims so that the child receive supports and therapeutic services and make attempts to improve adult responses to such disclosures.

3) Tertiary

Tertiary methods include the treatment for the survivors of the abuse to minimize any long term negative consequences of the abuse. Tertiary efforts also target the abuser’s deviant sexual behavior in an attempt to prevent future occurrences of the CSA by individuals already identified as offenders.

According to [26], the prevention of child sexual abuse has followed a different developmental path in two critical aspects; the targeting of the potential victim rather than the potential perpetrator and an emphasis on primary rather than secondary or tertiary prevention. The prevention of child sexual abuse has largely focused on altering the behavior of children, through group based instruction for children on how to protect themselves from or respond to sexual assault

or abuse. This type of education is normally provided in elementary and secondary schools. Thus, empowering the children to protect themselves from harm has a certain practical demand.

B. Child Sexual Abuse Prevention Programs

A review has been done about existing and current prevention programs around the world regarding to this field. The prevention programs are grouped into four major areas which are the United State of America and Canada, Australia and New Zealand, Europe and Malaysia and discussion covers the aspect of technology, domain of research and target users.

School based programs are the primary means of addressing the prevention of CSA in the USA. These programs [27] were originally developed in the late 1970s and early 1980s during a time of increased awareness of the problem of CSA. Referring to technology, almost all prevention programs in the USA and Canada have implemented external facilitated presentation and teacher offered classroom curriculum. Stories or narrative, song, video, role-plays, and group discussion, were among methods used in external facilitated presentation. While, teacher offered classroom curriculum employs modeling, rehearsal, social reinforcement, shaping and feedback, script, picture card, story book, booklet and audio cassette as their methods for teaching. Besides that, video based classroom curriculum, peer education, psycho education are also implemented in a few prevention programs in USA and Canada.

CSA prevention program in Australia [28] and New Zealand [29] also implements school based workshop for children aimed for educating school aged children to protect them from sexual abuse using small group discussions, creative art workshops and country retreat as their method of teaching. In creating public awareness, community education programs were implemented through media campaigns, information materials and training programs for professionals and community group. Prevention programs in Australia also include after care services such as Family support programs, Child focused programs, offender programs and Child and Family Centers.

While in Europe, multimedia format has already been utilized in their prevention program. Stay Safe Primary Prevention Program initiate by [30] is a culturally appropriate prevention program that utilizes multimedia format, specifically designed for the Irish educational context. This program was accepted by the Department of Education in the Republic of Ireland and now becomes a part of the national school curriculum. It is focuses on cognitive, affective and behavioral dimensions of learning.

In Malaysia particularly, there has been a number of prevention programs planned and implemented by government agencies, NGOs and other societies in creating public awareness toward preventing CSA such as media advertisement, awareness week, campaigns, forums, and talk by responsible agencies. In primary school, there is also a syllabus that teaches about personal safety in general.

C. Department of Social Welfare

A content expert from Department of Social Welfare, Putrajaya was interviewed and agreed that CSA is a serious and among the highest cases of child abuse reported in Malaysia. She also added that the increasing of public awareness and effort by government in providing an easy way to report CSA cases such as through child care line and 'talian nur' were among the reasons contribute to the increasing number of CSA cases reported. In creating public awareness toward preventing CSA, government agencies constantly collaborate with NGOs and media in implementing prevention program such as advertisement using television and radio, implement awareness week, campaigns, forums, and talk. She agreed that in creating children's awareness about CSA is still lacking and children need to be provided with knowledge about personal safety in preparing them with unexpected dangerous situation so that they will always aware and know to act appropriately. She also believes that by utilizing multimedia format such graphics, animation, audio and video in children learning will helps conveying information quickly and effectively to children and keep them more interested in learning.

D. Women's Centre for Change (WCC)

An interview was also conducted with an expert from Women's Centre for Change (WCC), Penang and she agreed that child sexual abuse is a serious problem in Malaysia based on the increasing statistic of CSA cases from time to time. Realizing the negative impacts of CSA, various forms of consciousness attempts to reduce the problem of CSA and to create awareness among Malaysians. Among the prevention programs have been done by NGOs were campaigns, talks, advertisements, and training. However, she mentioned that it is difficult to prevent CSA cases as long as the perpetrators are still committing the crimes. She agreed that the children need to be provided with knowledge in creating their awareness of any dangerous situation that might affect their personal safety. However the educational materials used should be appropriate with their age.

E. Family Law Division, Department of Islamic Affairs, State of Kedah

Then, an interview was conducted with an expert from Family Law Division, Department of Islamic Affairs, State of Kedah. According to the expert, CSA is regarded as a serious problem not based on the statistics but because it happens among abusers who have been entrusted to protect and educate the children. This problem is very complex and does not happen suddenly, it is a long thread and is a result of the weakness of the family institution. Nowadays, there is no system that can be referred to in managing the marriage. So, marriage is managed by self intelligence and perception without proper guidance. He added, in order to properly manage marriage; parents must have strong knowledge, leadership skill, cooperation and deep understanding. However, it is difficult to create awareness without the appreciation of knowledge. Although pre-marriage course for future parents are made compulsory; it is still not enough since the course only focuses in general and basic knowledge of parenting education. He also agreed that children should

also be taught about CSA so that they know and are aware if any bad situations happen to them.

F. Primary School Teacher

A teacher interviewed agreed that CSA is a serious social problem that should be prevented. She said that education in school that teaches about personal safety is not enough and it depends on the effort of the teacher and the teacher's explanation to discuss this topic further. She is strongly agreed that children should be exposed to situations that might endanger them so that they are aware and know what they have to do when this situation occurs.

V. FUTURE WORK

Majority of the feedbacks given by the respondents agreed that in Malaysia, public awareness of child sexual abuse has increased in the last few years. However there is imbalance of prevention programs implemented especially in providing knowledge to children. Prevention programs should be done continuously and more research is needed in delivering knowledge to children in enhancing children's awareness of any dangerous situations that might affect their personal safety using appropriate learning material and methods. Hence, with these feedbacks, it is proven that the researcher's proposal of Persuasive Multimedia Learning will be an important approach for the children to get the knowledge about CSA easily and enhance their awareness.

VI. CONCLUSION

Based on the literature reviews and feedback from the respondents, it shows that the awareness towards children needs to be studied in order to help in the prevention of child sexual abuse in Malaysia. Currently, prevention programs in schools that educate children in a child-friendly way about bad touches and preventing themselves from perpetrator is far lacking in Malaysia. With regards to this, children should be given appropriate educational programs so that they are aware of any dangerous situations that might affect their personal safety and they would know the appropriate actions when these situations arise.

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