



# The Effects of Game-Based Cognitive-Behavioural Therapy for Child Sexual Abuse Victims

---

Laura McLean

EasyChair preprints are intended for rapid dissemination of research results and are integrated with the rest of EasyChair.

June 23, 2021

# The effects of Game-Based Cognitive-Behavioural Therapy for Child Sexual Abuse victims

Laura McLean

*Fundamentals of Computational Intelligence*  
Flinders University

McLe0352@flinders.edu.au

## Abstract

Game-Based Cognitive-Behavioural Therapy is Cognitive-Behavioural Therapy that uses gameplay to help children overcome mental health disorders and or abuse. Child Sexual Abuse is commonly treated with this method, particularly for young children. Games are more engaging to children than speaking with a Psychologist, especially if they have lost the ability to trust anyone. The games are made to educate children about sexual abuse and teach them coping strategies for everyday life. Many children who have participated felt satisfied with this form of treatment.

## 1 Introduction

Cognitive-Behavioural Therapy is to help patients to process their abuse and find coping strategies to help them when they are in an uncomfortable situation. This method is usually with a Psychologist face-to-face. Children may decide to speak with the Psychologist by themselves or with one or both of their parents. The Psychologist will provide the parent(s) with strategies to help their child deal with their abuse. Cognitive-Behavioural Therapy has been very effective and has helped treat various mental health disorders (Springer, Misurell, 2010).

Game-Based Cognitive-Behavioural Therapy uses the same techniques as Cognitive-Behavioural Therapy except the methods are provided through gameplay instead of one-on-one discussions with a Psychologist. Game-Based Cognitive-Behavioural Therapy is a short-term group-based therapy program to help children who have been sexually abused, and or have anxiety, depression, post-traumatic stress disorder and other mental illnesses (Hiller et al.,

2013). Games help children to feel engaged and to not feel threatened, they may find it easier to understand through gameplay rather than having a discussion (Springer, Misurell, 2010).

## 2 Child Sexual Abuse

Sexual abuse often occurs after the child has been groomed through being given attention, gifts, affection, toys and or lollies. A few types of sexual acts the victims may encounter are touching of genitalia or other private areas, sexual kissing, oral sex and or penetration (Hiller et al., 2013). On average, 1 in 4 females will be sexually abused before they turn 18 years old compared to 1 in 7 males. Females, in particular, are more at risk of sexual abuse than males by three times as much. Although, females are more likely to report sexual abuse than males. Most child sexual abuse victims are abused between the ages of 4-15 years old (Misurell, 2010). Children who have been sexually assaulted may feel anxious, depressed, humiliated, guilty, struggle to sleep, have nightmares and avoid social situations. These children may experience flashbacks to the time of abuse and blame themselves for what happened to them (Springer, Misurell, 2010). They feel vulnerable and betrayed and that they cannot trust anyone anymore. It is important that the child has a supportive relationship with their parent(s) and feel they can trust them (unless a parent or both parents were involved in the abuse) (Hiller et al., 2013). Commonly, children who have been sexually assaulted may also live in an abusive household (Springer, Misurell, 2010). The children may be aggressive to other people and stop performing in school because they feel powerless. They may re-enact the acts that were performed on themselves to process and understand what happened to them. These children may develop the feeling that sex and love are equivalent. These children usually do

not develop the same social skills as their classmates and may socially isolate themselves from others. They may not understand what behaviours are socially acceptable and unacceptable (Springer, Misurell, 2010). Sexual abuse as a child may have effects on their adult life such as they may be unable to have non-toxic relationships or any serious relationships at all due to trust issues (Misurell, 2010).

### 3 Treatment

The games used for Game-Based Cognitive-Behavioural Therapy are usually interactive virtual worlds, where they get introduced to different characters and get to play lots of mini-games. Factors that need to be considered when treating a child who has been sexually abused are the severity, invasiveness, duration and relationship to the abuser (Hiller et al., 2013). Game-Based Cognitive-Behavioural Therapy sessions are to help the children understand sexual assault, how to cope and protect themselves, develop social skills by working with others and learn to build trust (Springer, Misurell, 2010). The earlier the child gets treatment, the easier it will be to decrease the anger, depression and anxiety they feel (Hiller et al., 2013).

A group of forty-eight children aged between 5-10 years old, who were victims of sexual assault underwent the treatment. All the children improved in internalising their symptoms, externalising their behaviours, using less sexually inappropriate behaviours and had an increase of knowledge in personal safety skills. These improvements varied between the children, some improved a small amount and some significantly improved in these areas (Springer et al., 2012). Another study had a group of 4-17-year-olds and had similar results. The children's behaviour had improved, they used less sexual behaviour and were coping better with their trauma. The children were more informed about Child Sexual Abuse and felt very satisfied with this treatment method (Misurell et al., 2014).

Many studies that have examined the effects of Game-Based Cognitive-Behavioural Therapy have found that sex, race and age did not affect the results. The therapy's effectiveness is based on how badly the person was abused and how

they respond to the games (Hiller et al., 2013). However, children who come from low-income families are 18 times more likely to experience sexual abuse than children who come from higher-income families. This may be because they live in smaller spaces and they could be a part of a blended family. These children are more likely to report abuse because they have Child Protective Services checking in on them regularly (Misurell, 2010).

The groups that found the therapy most effective were children between the ages of 7-12 years old, male children in particular found it more useful than female children. Surprisingly, females who were abused with penetration and or oral sex had much more improvement with Game-Based Cognitive-Behavioural Therapy than the females who experienced inappropriate touching and kissing (Hiller et al., 2013).

Game-Based Cognitive-Behavioural Therapy must focus on exposing the children to child abuse material to lessen their anxiety when thinking back to the abuse they faced. Being informed about what Child Sexual Abuse is, helps the child and their parent(s) to understand what happened. Children need to be able to identify what behaviour is acceptable and unacceptable from other people such as appropriate and inappropriate places to touch and conversations to have. The children need to be able to confront and discuss their abuse and to use coping strategies to deal with triggers throughout the day. Coping strategies help the child to manage their anger and anxiety (Springer, Misurell, 2016). Male children are more likely to respond to the abuse with anger whilst female children are more likely to feel depressed and experience anxiety (Hiller et al., 2013). The child needs to have a plan to calm them down and help them relax at school such as having time alone (may go to the bathroom) and or a person they can go to (teacher or counsellor). They could also write down in a book how they feel throughout the day, what challenges came up and how they dealt with them, what was too overwhelming for them. This will help the parent and the child to discuss how they can cope better at school and reward successful strategies (Springer, Misurell, 2016).

## 4 Conclusion

Cognitive-Behavioural Therapy and Game-Based Cognitive-Behavioural Therapy are both highly effective forms of treatment to help with sexual abuse, anxiety, depression and more. Children may find Game-Based Cognitive-Behavioural Therapy more effective than Cognitive-Behavioural Therapy as they may find it more engaging, less intimidating and easier to understand sexual abuse through gameplay rather than a discussion. It is important to treat a child as soon as possible to help prevent issues in their adult life. It is critical that these children understand sexual assault, have some coping strategies, know how to protect themselves and are able to develop social skills. The treatment is to help the children to not go through life being constantly afraid that someone will come and abuse them again.

## References

Hiller, D, Springer, C, Rizvi, S. (2013). Predictors of treatment outcome for a game-based cognitive-behavioral group treatment for children who have been sexually abused. *Rutgers University*, 1-7, <<https://doi.org/doi:10.7282/T3SF2T63>>

Misurell, J. (2010). Clinical efficacy of a game-based cognitive-behavioral therapy group program for children who have been sexually abused and maltreated. *Fordham University*, 8-21, <[Clinical efficacy of a game-based cognitive-behavioral therapy group program for children who have been sexually abused and maltreated - ProQuest](https://doi.org/doi:10.1037/a0033411)>

Misurell, J, Springer, C, Acosta, L, Liotta, L, Kranzler, A. (2014). Game-based cognitive-behavioral therapy individual model (GB-CBT-IM) for child sexual abuse: A preliminary outcome study. *Psychological Trauma: Theory, Research, Practice, and Policy*, 6(3), 250-258, <<https://doi.org/doi:10.1037/a0033411>>

Springer, C, Misurell, J. (2010). Game-Based Cognitive-Behavioral Therapy (GB-CBT): An Innovative Group Treatment. *Journal of Child & Adolescent Trauma*, 164-169, <<https://doi.org/10.1080/19361521.2010.491506>>

Springer, C, Misurell, J. (2016). Game-Based Cognitive-Behavioural Therapy for Child Sexual Abuse. *Special Issue: Themed Issue on Interventions following child maltreatment*, 25(2), 23-26, <<https://doi.org/10.1037/14776-002>>

Springer, C, Misurell, J, Hiller, A. (2012). Game-Based Cognitive-Behavioral Therapy (GB-CBT) Group Program for Children Who Have Experienced Sexual Abuse: A Three-Month Follow-Up Investigation. *Journal of Child Sexual Abuse*, 21(6), 648-658, <<https://doi.org/10.1080/10538712.2012.722592>>