

Breaking Boundaries: Use of Drama Techniques for Child Sexual Abuse Prevention in Children with Down Syndrome

Yashodha Wanasinghe¹, Gunendra R.K. Dissanayake^{2*}

ABSTRACT

When compared to typically developing children, children with Down Syndrome (DS) are particularly vulnerable to sexual abuse (SA) due to a number of factors including DS children experiencing a lag in the development in social maturity, their limited verbal communication and vocabulary, lack of body awareness and boundaries, increased exposure to multiple adults and caregivers, and their vulnerability to manipulation. Sexual education has been shown to be effective in the prevention of SA, pregnancy, sexually transmitted diseases among risk populations. However, a high percentage of children with developmental disabilities do not receive any formal sex education. As DS children are typically visual learners, drama related activities have proven to be more effective in sex and relationship education for them. Thus, the present study aimed to examine the effectiveness of drama techniques in increasing the awareness of how to protect oneself from child sexual abuse. A sample of 30 children with Down syndrome (11 male and 19 female) with mild to moderate levels of severity were selected from two special education institutes in Kandy, Sri Lanka. The study used a within group pre-test post-test design with the "Be Safe" Tool designed and adapted to Sri Lanka. The tool consisted of items on the awareness of good touch - bad touch, secrets, and primary prevention strategies of sexual abuse. After the pre-test, five intervention programs using drama techniques including puppets, role play and story-telling were conducted during a three-week period preceding the post-test. The results from the pre-test and post-test indicate that drama techniques-based intervention has significantly contributed in increasing the awareness of child sexual abuse prevention in DS children including the awareness of how to protect oneself from child SA, to differentiate between good touch and bad touch, and to identify good secrets from bad secrets. Drama based interventions can be used effectively to increase awareness of SA prevention among Down syndrome children.

Keywords: Down syndrome, Child sexual abuse, Drama techniques, Be Safe program

The issue of child sexual abuse (CSA) is prevalent globally, including in Sri Lanka, where reported cases continue to rise. Children by nature are particularly vulnerable to all types of abuse because of their temporary helplessness, dependence on adults and their lack of knowledge about danger and self-protection (Othman & Yahaya, 2014).

¹Department of Psychology, University of Peradeniya, Peradeniya, Sri Lanka

²Senior Lecturer, University of Peradeniya, Peradeniya, Sri Lanka

*Corresponding Author

Received: May 20, 2024; Revision Received: July 12, 2024; Accepted: July 15, 2024

Breaking Boundaries: Use of Drama Techniques for Child Sexual Abuse Prevention in Children with Down Syndrome

Age-appropriate sexual education can minimize the risk of abuse. CSA poses significant challenges worldwide, particularly for children with disabilities like Down Syndrome (DS). Children with Down Syndrome are particularly vulnerable due to their cognitive delays and limited understanding of boundaries. Research indicates that traditional teaching methods are ineffective for DS children, who are visual learners. Due to their cognitive impairments and communication difficulties, teaching them about CSA prevention is difficult. However, it's crucial not to neglect their education on this matter. Like typical young people, children with Down syndrome need early sex education accompanied by open discussion. Innovative approaches such as drama techniques with visual aids, puppets, storytelling, and role play are being explored to increase awareness of CSA and empower children with DS to protect themselves. By engaging DS children in fun and interactive learning experiences, these techniques aim to bridge the gap in sexual education and prevention measures. Children in Sri Lankan schools rarely give proper body awareness, abuse, and at least primary prevention by the teachers and parents. In Sri Lanka, where resources for children with DS are lacking, there's a pressing need to find effective methods to raise awareness about CSA.

Child sexual abuse

Child sexual abuse is a universal problem and common occurrence that results in harm to millions of children (Murray et al., 2014). The World Health Organization defines child abuse and child maltreatment as all forms of physical and or emotional ill-treatment or commercial or other exploitation, resulting in actual or potential harm to the child's health, survival, development or dignity in the context of the relationship of responsibility trust or power (WHO, 2016). There are four types of child abuse including physical abuse, sexual abuse, emotional abuse and neglect (WHO, 2006). It is world spread social problem that negatively affects victims, families, communities and society (Wurtele, 2009). Sexual abuse includes sexual assault, molestation, rape, exposure to explicit material, and sexual acts perpetrated against the victims without their understanding or consent.

Child sexual abuse (CSA) is a universal problem. Child abuse cases keep on increasing in past years. Worldwide at least 1 out of 20 boys and 1 out of 10 girls experience some form of sexual abuse during their childhood (Walsh, Zwi, Woolfenden & Shlonsky, 2015). Globally prevalence of child sexual abuse was 11.8% (Rohanachandra, 2015). It is also widely spread in Sri Lankan society. Statistics from 2022 indicated a total of 10,497 reported child sexual abuse cases and in 2023 January 779 cases, February 703 cases, March 1026 cases and April 594 cases in Sri Lanka (NCPA, 2023).

From January to December 2022, 729 child sexual harassment cases, 167 rape cases 25 sexual exploitations of children and 185 grave sexual abuse cases were reported in Sri Lanka. Most cases were children between the ages of 10 to 18. (Weijerman, 2010).

Effects of child sexual abuse

Child sexual abuse leaves lasting effects, with severity, duration, resilience, and support systems influencing the impact. Negative outcomes encompass family and relationship issues, behavioral problems, and increased rates of post-traumatic stress disorder, depression, and anxiety (Murray et al., 2014). Mental health repercussions vary among survivors and hinge on individual experiences and available support structures. Survivors often exhibit inappropriate sexual behavior, alongside feelings of anger, guilt, shame, low self-esteem, and self-blame, persisting throughout their lifespan (Cutasar et al., 2010). Additionally, adult survivors of child sexual abuse are more prone to social and health

Breaking Boundaries: Use of Drama Techniques for Child Sexual Abuse Prevention in Children with Down Syndrome

challenges such as alcohol and drug misuse, suicide attempts, and marital and familial discord (Dube et al., 2005).

Sadly, survivors of abuse encounter violence, neglect, exploitation, exclusion, and discrimination, which heighten their vulnerability to subsequent victimization in adolescence and adulthood (Arriola et al., 2005). Both short-term and long-term impacts of CSA encompass mental health, social, sexual, and interpersonal functioning, as well as physical health (Cashomere & Shackel, 2013). Chronic pain, eating disorders, and substance abuse are among the enduring consequences. Moreover, behavioral changes, mood instability, rebellion, and shame are prevalent psychological effects experienced by children with Down syndrome who have faced abuse (Fisher, Moskowitz & Hodapp, 2013).

Children with disabilities and the risk of becoming victims of sexual abuse (SA)

Children with special needs and disabilities face a heightened risk of sexual abuse compared to their peers without disabilities due to a lack of sexual health knowledge and preventative measures. Their vulnerability stems from factors such as their level of functioning, understanding, and dependence on others for care. Research indicates that individuals with disabilities experience higher rates of mental, emotional, physical, and sexual abuse than those without disabilities. Specifically, children with disabilities are reported to be 3-4 times more likely to experience sexual abuse than their non-disabled counterparts (Taylor & Abernathy, 2022). Various studies have shown that individuals with disabilities face a significantly elevated risk of sexual abuse, ranging from 4 to 10 times greater than the general population (Fawley & Bigby, 2014; Martinello, 2014; Northway et al., 2013; Phasha, 2009; Soylu et al., 2013).

Children with disabilities are at a heightened risk of neglect and abuse, facing unique challenges in recognizing and reporting abuse. These barriers include difficulty in understanding and communicating about abuse, as well as a lack of specialized skills among child protection professionals to effectively engage with disabled children and assess their needs. Moreover, disabled children may not receive adequate training to identify and address signs of abuse and neglect. Abusers may exploit these vulnerabilities, rationalizing their behavior by blaming the challenges of caring for a disabled child (NCPA, 2014).

Children with Down syndrome

Children with disabilities, particularly those with Down syndrome (DS), are at increased risk of neglect, physical abuse, and sexual abuse. They face unique barriers to recognizing and reporting abuse, including communication difficulties and a lack of awareness of boundaries. Professionals may lack the specialized skills needed to effectively communicate with and assess the needs of disabled children, further complicating protection efforts. Additionally, societal expectations that children with DS are friendly to all individuals, including strangers, can make them more susceptible to manipulation. Research indicates that compared to typically developing children, those with DS may experience delays in social maturity, self-control, communication, abstract thinking, and problem-solving abilities, further exacerbating their risk of abuse (NCPA, 2014; Hirsch, 2022; Wellala et al., 2020; Bodear, 2021; Nyberg, Ferm & Bornman, 2023). Despite their heightened vulnerability, existing abuse prevention programs often overlook children with disabilities.

Breaking Boundaries: Use of Drama Techniques for Child Sexual Abuse Prevention in Children with Down Syndrome

Educating Down syndrome children and challenges

Seeking quality education for persons with Down syndrome and participation in social activities also challenging (Alshatti, 2021). In Sri Lanka there are limited educational resources when comparing to western countries and economic level, social stigma, and negative attitudes from society also huge problem for Down syndrome children and families and it increases the vulnerability to abused. Eight special schools and four hundred and fifty special units catering to children with teaching disabilities such as Down syndrome, cerebral palsy and autism. The number and qualities of schools and units is insufficient and requires expansion and quality improvement, meaning that children are missing out (UNICEF, 2018).

Importance of sexual and relationship education for children with Down syndrome

Sexual and relationship education is paramount for children with Down syndrome, who often face challenges in accessing quality education and participating in social activities (Alshatti, 2021). In Sri Lanka, limited educational resources, economic disparities, societal stigma, and negative attitudes exacerbate the vulnerability of children with Down syndrome to abuse (UNICEF, 2018). Despite the importance of sexual education, there is a lack of dedicated programs and resources in Sri Lanka, both for children with disabilities and typically developing children (Taylor & Abernathy, 2022). This deficiency stems from various barriers, including inadequate teacher preparation, parental anxiety, and societal misconceptions about sexuality and disability (Barnard-Brak et al., 2014; Wilson et al., 2014; Kaufman, 2016).

Given the high vulnerability of children with Down syndrome to abuse, efforts to provide comprehensive sexual education are imperative. However, cultural norms, parental discomfort, and misconceptions about intellectual disability hinder these efforts (Madan & Nalla, 2016). It's crucial to recognize that individuals with Down syndrome experience physical and hormonal changes associated with puberty, necessitating age-appropriate sexual education (Hirsch, 2022; Schwier, Hins & Burger, 2000). Sexuality education not only helps prevent abuse, pregnancy, and sexually transmitted diseases but also addresses the lack of knowledge about appropriate physical boundaries (Kok & Akyoz, 2015; Pulido, 2017). Parents of children with Down syndrome often provide additional protection but may lack adequate resources or guidance (Awaru et al., 2020). Therefore, age-appropriate education on protective behaviors is essential to empower children with Down syndrome to recognize and assert their boundaries (Hirsch, 2022).

In conclusion, sexual and relationship education is crucial for children with Down syndrome to navigate their sexuality safely and protect themselves from abuse. Efforts to address barriers to sexual education in Sri Lanka are vital to ensure the well-being and safety of individuals with Down syndrome.

Effective teaching techniques for Down syndrome children

Effective teaching techniques for children with Down syndrome, who are primarily visual learners, include drama, role play, storytelling, puppetry, pictures, and videos (Wood, 2004). *Puppets* are particularly useful as they capture children's attention, create a non-threatening environment, and encourage interaction (Zuljevic, 2005; Roselina, 2014). Research shows that puppetry can effectively teach children about sensitive topics such as sexual abuse prevention (Kemer & Dalgic, 2022). Modified puppets have been found to improve children's understanding of early sex education compared to conventional methods

Breaking Boundaries: Use of Drama Techniques for Child Sexual Abuse Prevention in Children with Down Syndrome

(Diningrat, Muksin & Pratiwi, 2022). Puppet shows act as an engaging communication platform for disseminating important information to children (Khir, Pawanteh & Stephens, 2019), and they have been shown to enhance early childhood knowledge about sexuality (Lestari Pujisri, Iswanti Indah Dwi & Haji Son, 2017). Overall, puppets are an effective tool for teaching children with Down syndrome about sexual and relationship education and abuse prevention (Wood, 2004).

Storytelling is a powerful educational tool, capable of conveying ideas, beliefs, and life lessons through narratives, evoking emotions, and stimulating imagination (Serrat, 2008). It fosters a sense of belonging, empathy, and self-confidence while facilitating learning (Zepeda, 2014). Both typically developing children and those with developmental and intellectual disabilities benefit from storytelling (Yabe et al., 2018). Research indicates that storytelling enhances imagination, improves vocabulary, and refines skills, particularly benefiting children with Down syndrome (Yabe et al., 2018). For instance, Asgari, Akhavan, and Jobaneh (2018) found that storytelling significantly improved social skills such as collaboration, assertiveness, and self-control in Down syndrome children aged 6 to 8. Additionally, linguistic and communication skills, as well as listening and comprehension abilities, were enhanced through storytelling.

Digital storytelling has also been effectively employed to educate adolescents with Down syndrome on reproductive health concepts, leading to improved understanding of reproductive organs, reproductive health, and sexual harassment prevention (Herlanti & Anjani, 2022). Incorporating visual signs, gestures, and pictures into storytelling can further enhance its effectiveness for visual learners like children with Down syndrome (Wood, 2004). Overall, storytelling emerges as a valuable tool for creatively delivering awareness programs and educational content to children with Down syndrome, enriching their learning experiences and promoting holistic development.

Role play, a technique commonly utilized in human relationships training and psychotherapy, involves participants portraying different social roles in dramatic scenarios, fostering experiential learning and attitude change (American Psychological Association). In educational settings, role play is effectively employed to immerse students in real-life situations, facilitating interaction and skill development (Suryani, 2015). Research demonstrates the efficacy of role play in child sexual abuse prevention programs. Studies have shown that practicing prevention skills through role play leads to significant improvements in children's abilities across different age groups, indicating a tangible increase in their skills (Kraizer, Witte & Freyer, 2009). Similarly, experimental research by Kim Yu-Ri highlighted the effectiveness of role-play-based programs in enhancing sexual abuse prevention skills among children with intellectual disabilities (Kim, 2015).

Moreover, recent studies on school-based abuse prevention programs for children with disabilities have identified role play and videos as effective interactive teaching methods. The inclusion of pictorial support and manual signs further enhances understanding and participation, emphasizing the importance of teacher involvement in such programs (Nyberg et al.). Overall, role play emerges as a successful method for teaching crucial skills, particularly in the context of child sexual abuse prevention, with evidence supporting its effectiveness across various populations and settings.

Breaking Boundaries: Use of Drama Techniques for Child Sexual Abuse Prevention in Children with Down Syndrome

Objectives

The present study aims to explore the effectiveness of drama techniques in increasing awareness of CSA prevention among children with DS in Sri Lanka. By addressing this gap in research, the study seeks to contribute to better protecting children with DS from sexual abuse through innovative educational approaches.

METHODOLOGY

Research Design

Quasi-experimental research design with one group pre-test and post-test was employed in the study.

Sample

The study enrolled thirty children (N=30) ranging from 10 to 16 years old, all with mild to moderate levels of Down syndrome. Participants were drawn from both the Blue Rose Special School and Daya Homes Kandy. The selection process employed purposive sampling to ensure alignment with the research objectives. Of the thirty participants, 11 were male and 19 were female. Specific criteria were applied during participant selection, including restricting enrollment to children with mild to moderate Down syndrome within the specified age range.

Instruments

"Be Safe" Tool

The study utilized the "Be Safe" Tool, originally devised and adapted for Sri Lanka by Pathirana (2017) in collaboration with the Canadian Red Cross. This tool comprised three components: assessing awareness regarding good touch - bad touch, understanding secrets, and primary prevention strategies against sexual abuse. Vimukthi and Karunanayake (2022) also employed this instrument within the Sri Lankan context to gauge children's comprehension of child protection issues and the prevention of sexual abuse, reporting a reliability coefficient of 0.762. In the present study, the tool demonstrated a reliability of 0.789.

Tool 1: Secrets- Focusing on identifying participants' awareness of secrets, this tool involves the presentation of six sentences. Each sentence is accompanied by a child-friendly rating scale featuring three options. The researcher reads aloud the sentence and displayed corresponding images representing correct, incorrect, and uncertain responses. Participants are then prompted to select their response. For example, one sentence presents scenarios such as a man showing his private parts and warning the child not to disclose this to anyone under the threat of harm.

Tool 2: Good and bad touch- This tool is designed to assess children's understanding of the distinction between good and bad touch. This tool employs a chart featuring three rating scales and consists of six statements paired with emojis representing good, bad, and uncertain responses. Participants are provided with clear instructions before the questions are read aloud, accompanied by the display of answer options. Subsequently, participants are asked to select their responses. For instance, one statement presents scenarios such as being told to touch one's body or being touched by a doctor during a medical examination with the child's mother. These scenarios are intended to gauge the participants' comprehension of appropriate and inappropriate physical contact.

Breaking Boundaries: Use of Drama Techniques for Child Sexual Abuse Prevention in Children with Down Syndrome

Tool 3: Primary prevention strategies- Tool 3 aims to assess children's understanding of primary prevention strategies. It utilizes three story vignettes to present scenarios to the participants. The researcher narrates each story while showing accompanying images to the children. Following the storytelling, three answer images are displayed, each depicting a message: "no," "go," and "tell someone you trust." Participants are then asked to indicate their response by pointing to the corresponding image. This approach aims to evaluate the participants' grasp of appropriate actions to take in various situations, emphasizing the importance of communication and seeking help from trusted individuals.

Basic demographical data

Personal information such as gender, age, and IQ level was gathered. This information was obtained from the principal of the Blue Rose Special School and the supervisor at Daya Homes to ensure the accuracy of the data.

Intervention programs using drama techniques

The intervention program, titled "Be Safe Programs for Down Syndrome Children," incorporated three drama techniques: puppets, storytelling, and role play. These techniques, previously utilized as teaching methods for both Down syndrome children and typically developing children to raise awareness of sexual abuse, aimed to equip participants with age-appropriate prevention skills and knowledge.

Puppets: During the Be Safe programs, hand puppets were employed. Two hand puppets were used to convey information about age-appropriate prevention skills, including the concepts of "no," "go," and "tell someone you trust," the distinction between good and bad touch, and the importance of body ownership and privacy. Two puppet programs were conducted in one location over two days, with each program lasting forty minutes. Sample items included such as: Researcher: "Jony, do you know what to do if someone touches you in a hurtful or embarrassing way?", Jony Puppet: "No." Researcher: "You should say, 'I don't like that. Please stop this.'"

Storytelling: Storytelling was utilized as an effective method during awareness programs, leveraging visual gestures, signs, and pictures, particularly beneficial for visual learners like Down syndrome children (Wood, 2004). Two storytelling sessions were conducted in one location, each lasting 40 minutes. Stories included "Amalbiso" and three creatively crafted narratives suited for Sri Lankan cultural context addressing primary prevention, secrets, and appropriate touch. The storyteller actively engaged participants, using visual aids and colorful attire, and encouraged their participation by acting out scenes and allowing them to join in the storytelling process.

Role play: Participants engaged in role play sessions, acting out simple scenarios related to the program's objectives. With the researcher's guidance, they addressed situations such as encountering a stranger asking a child to accompany them after school. These role plays focused on everyday situations concerning primary prevention, body ownership, good and bad touch, and secrets. Most participants actively participated and independently performed role plays without assistance. Each role play session lasted 40 minutes, conducted in a single location.

Breaking Boundaries: Use of Drama Techniques for Child Sexual Abuse Prevention in Children with Down Syndrome

Procedure

All data were gathered from Down syndrome children aged between 10 to 16, exhibiting mild to moderate IQ levels, enrolled in Blue Rose School and Daya Homes within the Kandy district. Before commencing data collection, a pilot test was conducted on five children to assess the clarity, feasibility, and applicability of the research procedures. In adherence to ethical principles, obtaining consent from participants and their guardians was paramount. As the sample comprised children with Down syndrome, consent was obtained from both their parents or guardians and the respective school or home authorities. Only children with consent participated in the experiment.

Following the consent process, a pretest was administered, with each participant taking approximately 10-15 minutes to complete. The researcher read out the questions and displayed images of answer options, allowing participants to make their selections. Subsequently, Be Safe awareness programs were conducted using drama techniques, with a resource person from the National Child Protection Authority assisting in implementing the intervention programs. Five Be Safe sessions were conducted over a two-week period, each lasting approximately an hour. Various drama techniques, including puppets, storytelling with visual images, and role plays, were employed to raise awareness about concepts such as good touch and bad touch, body ownership, and primary prevention strategies such as "no, go, tell" and privacy.

Two weeks after the intervention programs, a posttest was administered using the same tools as the pretest to evaluate the effectiveness of the intervention. Both locations adhered to the same procedure and timetable throughout the experiment. Ethical considerations were carefully observed throughout the research process adhering to the APA ethical guidelines.

Hypotheses

- Hypothesis 1: Down syndrome children's awareness about Secrets increases after the Be Safe intervention programs.
- Hypothesis 2: Awareness about good touch and bad touch increases after the Be Safe intervention programs on sexual abuse prevention.
- Hypothesis 3: Awareness about primary prevention strategies increases after the Be Safe intervention programs on sexual abuse prevention.
- Hypothesis 4: Drama techniques are effective in increasing the awareness of child sexual abuse in children with Down syndrome.

RESULTS

Descriptive characteristics of the sample

A total 11(36.7%) male children with Down syndrome and 19 (63.3%) female children with Down syndrome participated in this study. All participants in the study fell within the age range of 10 to 16 years (Figure 1).

Breaking Boundaries: Use of Drama Techniques for Child Sexual Abuse Prevention in Children with Down Syndrome

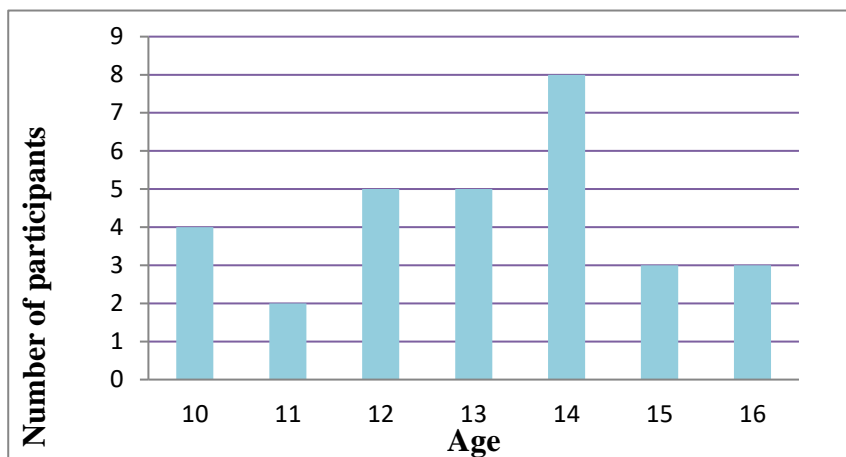


Figure 1- Age distribution of the participants

As the study only recruited children with Down syndrome who possessed IQ levels categorized as mild to moderate considering their ability to pay attention and grasp what is taught, the present study included 40% of participants with moderate intelligence level and 60% of mild intelligence level (Figure 2).

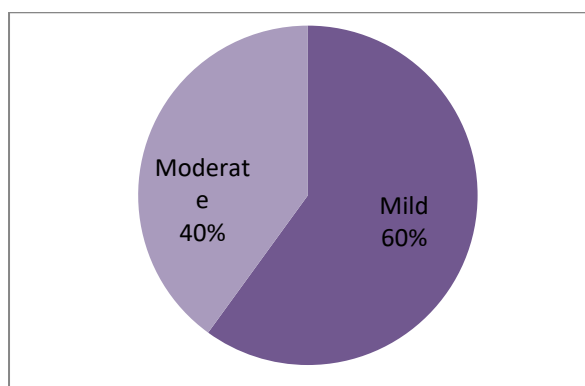


Figure 2- IQ level of participants

Responses on secrets in pre-test and post-test

To educate about the secrets which are all right to keep without telling someone, and also of the secrets which should not be kept without telling someone the Tool 1 which included six statements related to good and bad secrets was used. There, the sentences 1, 3, and 4 represented good secrets and 2, 5 and 6 represented bad secrets. A significant increase in the responses could be observed in the post-test after the intervention related to differentiation between good touch and bad touch. Table 1 represents summary of responses including the percentages.

Breaking Boundaries: Use of Drama Techniques for Child Sexual Abuse Prevention in Children with Down Syndrome

Table No 1. Responses on secrets in pre-test and post-test

	Questions	Before			After		
		Good	Bad	Don't Know	Good	Bad	Don't Know
01	Nimali's father buys some gift for her mother and says 'don't tell mother! It's our secret.	13 (43.3%)	8 (26.7%)	9 (30%)	27 (90%)	3 (10%)	-
02	Chamath's was at his friend's house, and his friend's father asked him if he could take pictures of him. His father said he would give Chamath sweets, but only if he promised not to tell his parents.	16 (53.3%)	8 (26.7%)	6 (20%)	4 (13.3%)	20 (66.7%)	6 (20%)
03	Your mother is a making special cake for your sister's birthday and tells you to keep it a secret.	10 (33.3%)	5 (16.7%)	15 (50%)	22 (73.3%)	8 (26.7%)	-
04	The teacher asked two students to stay in for recess to help decorate the classroom for a surprise party in the afternoon. The teacher asked the students to keep the surprise a secret.	11 (36.7%)	12 (40%)	7 (23.3%)	18 (60%)	4 (13.3%)	8 (26.7%)
05	A man show his private parts to you and says never to tell anyone or else he will really hurt you	20 (66.7%)	1 (3.3%)	9 (30%)	4 (13.3%)	22 (73.3%)	4 (13.3%)
06	Someone has told you to keep a secret about touching you and bring you some toy.	15 (50%)	6 (20%)	9 (30%)	4 (13.3%)	22 (73.3%)	4 (13.3%)

Before the intervention program, only 43.3% of participants identified the first sentence as a good secret, while 26.7% recognized the second sentence as a bad secret. After the intervention, 90% correctly identified first sentence as a good secret, and 66.7% recognized sentence two as a bad secret. In both the pretest and posttest, 20% of participants didn't know the correct answer for the second sentence. Additionally, 66.7% of children didn't identify the fifth sentence as a bad secret initially, with only 30% of children with Down syndrome recognizing it as such before the intervention. However, after the intervention program, 73.3% correctly identified it as a bad secret. Before the intervention, 50% of children considered the sixth sentence as a good secret, but after the intervention, 73.3% recognized it as a bad secret. Even after the intervention, some participants remained confused about the other four sentences, indicating a need for further clarity or awareness.

Hypothesis 1: Down syndrome children’s awareness about Secrets increase after the Be Safe intervention program

The intervention program utilizing drama techniques led to a notable increase in the awareness level of secrets among children with Down syndrome. Paired sample statistics revealed significant findings: the pretest mean was $M= 15.1333$, whereas the posttest mean was $M= 24.1667$, with a p-value of less than .001. Standard deviation in the pretest was 3.61733, while in the posttest it was 2.49252. The mean difference between pre and posttest secret scores was -9.033, indicating a considerable improvement post-intervention (Figure 3).

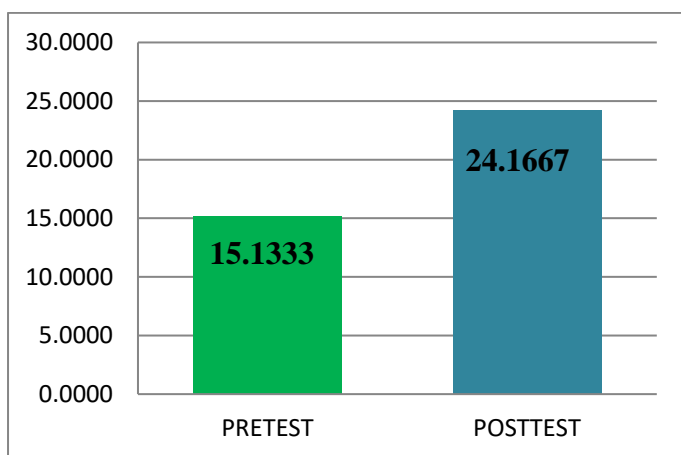


Figure 3- Mean differences of secrets in pre and post tests

Awareness about good touch and bad touch

Among the thirty participants, initially, all identified the first sentence as being about good touch. After the intervention, all participants correctly identified it as such. For the second sentence, initially, 66.7% considered it good touch before the intervention, which increased to 73.3% in the posttest. The third sentence, initially perceived as good touch by 30% of participants, was correctly identified as bad touch by 66.7% after the intervention. Before the intervention, 30% of participants were uncertain about the third sentence, which reduced to 13.3% after the intervention. In the fourth sentence, initially, 46.7% perceived it as good touch, 30% as bad touch, and 23.3% were unsure; after the intervention, 66.7% identified it as good touch. Only 23.3% correctly identified the fifth sentence as bad touch in the pretest, increasing to 63.3% in the posttest. Initially, 60% considered the sixth sentence as good touch, but after the intervention, 76.7% correctly identified it as bad touch. Some participants still struggled to discern appropriate actions for the situations presented in these sentences even after the intervention, as shown in Table No.2.

Breaking Boundaries: Use of Drama Techniques for Child Sexual Abuse Prevention in Children with Down Syndrome

Table No.2- Total number of responses about Touch in pretest and posttest

	Questions	Before			After		
		Good	Bad	Don't Know	Good	Bad	Don't Know
01	Your mom hugs you when you wake-up in the morning	27 (90%)	-	3 (10%)	30 (100%)	-	-
02	Daddy kisses you as you go to bed.	20 (66.7%)	8 (26.7%)	2 (6.7%)	22 (73.3%)	3 (10%)	5 (16.7%)
03	Someone says you, need to touch your body.	12 (40%)	9 (30%)	9 (30%)	5 (16.7%)	21 (66.7%)	4 (13.3%)
04	When you go to take medicine with your mother, doctor touches your stomach	14 (46.7%)	9 (30%)	7 (23.3%)	20 (66.7%)	7 (23.3%)	3 (10%)
05	Someone tells you to touch his/her body	13 (43.3%)	7 (23.3%)	10 (33.3%)	8 (26.7%)	19 (63.3%)	3 (10%)
06	Any adult can touch your body	18 (60%)	4 (13.3%)	8 (26.7)	5 (16.7%)	23 (76.7%)	2 (6.7%)

Hypothesis 2: Awareness about good touch and bad touch increases after the Be Safe intervention programs on sexual abuse prevention

Hypothesis 2 posited that awareness of good touch and bad touch would increase following the Be Safe program on sexual abuse prevention. The intervention program, incorporating drama techniques, indeed resulted in a significant improvement in awareness among Down syndrome children. Paired sample statistics revealed compelling evidence: the pretest mean was $M= 7.1333$, whereas the posttest mean was $M= 9.9000$, with a p -value of $.000$, indicating a substantial increase. Standard deviation in the pretest was 1.92503 , and in the posttest, it was 1.49366 . The mean difference between pre and posttest scores was -2.76667 , further highlighting the effectiveness of the intervention in enhancing awareness regarding good touch and bad touch.

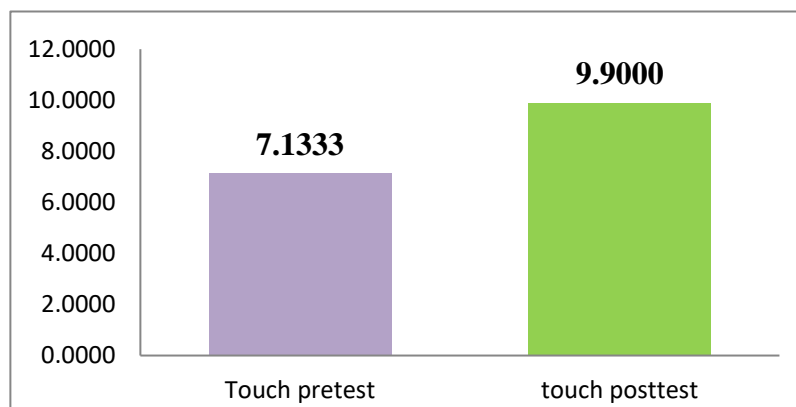


Figure 4- Mean differences of good touch and bad touch in pre and post tests

Awareness about primary prevention strategies

Under this category, data was collected using Tool 3, which comprised stories illustrating primary prevention strategies. Each story presented a conflict and three options related to

Breaking Boundaries: Use of Drama Techniques for Child Sexual Abuse Prevention in Children with Down Syndrome

primary prevention: run, say No, and tell someone you trust. Before the intervention program, only 20% of participants (6 individuals) correctly chose the option to run away from the aunt. However, after the intervention, this number significantly increased to 73.3% (22 participants) selecting this primary prevention strategy. Before the intervention, 11 participants appeared confused about the correct option, while after the intervention, this confusion reduced to 4 participants. In the pretest, 43.3% of participants (13 individuals) stated they would go with the aunt, but after the intervention, only 13.3% (4 participants) chose this answer. This indicates a notable shift in understanding and decision-making towards safer primary prevention strategies following the intervention program (Table No. 3).

Table No. 03- Total number of responses (Scenario1) about Primary prevention strategies in pretest and posttest

Senario 1 (Raja)	Pretest	Posttest
Look confused or unhappy	11 (36.7%)	4 (13.3%)
Run away from Aunt	6 (20%)	22 (73.3%)
Go with Aunt	13(43.3%)	4 (13.3%)

Hypothesis 3: Awareness about primary prevention strategies increases after the Be Safe intervention programs on sexual abuse prevention

Hypothesis 3 proposed that awareness of primary prevention strategies would improve following the Be Safe program on sexual abuse prevention. The intervention program, utilizing drama techniques, indeed led to a significant enhancement in awareness among Down syndrome children regarding primary prevention strategies. Paired sample statistics demonstrated compelling results: the pretest mean was $M= 2.7$, while the posttest mean was $M= 4.633$, with a p-value of .000, indicating a substantial increase in awareness. The standard deviation in the pretest was 1.29055, and in the posttest, it reduced to .999. The mean difference between pre and posttest scores was -1.933, highlighting a notable improvement in understanding and awareness of primary prevention strategies following the intervention program.

Effectiveness of Drama techniques in increasing the awareness of child sexual abuse in Children with Down syndrome

Hypothesis 4: Drama techniques are effective in increasing the awareness of child sexual abuse in children with Down syndrome

Table No. 4 Mean difference in pretest and posttest total scores

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 PRETEST - POSTTEST	-8.200	4.05480	.74030	-9.71409	-6.68591	-11.077	29	.000

Breaking Boundaries: Use of Drama Techniques for Child Sexual Abuse Prevention in Children with Down Syndrome

The results from the pre-test ($M=13.5$) and post-test ($M=21.6$) indicate that drama techniques have significantly impacted increasing the awareness of child sexual abuse prevention in children with DS, $t(29)=-11.0, p<.001$. Therefore, it can be concluded that there is a highly significant difference between pre and posttests, demonstrating that the intervention has been effective in leading to increase Down syndrome children's awareness of sexual abuse prevention and protection.

DISCUSSION

This study aimed to assess the efficacy of drama techniques in enhancing awareness of child sexual abuse prevention among children with Down syndrome. Over three months, 30 participants from two special centers in the Kandy district underwent experimental research involving drama-based intervention programs. The study aimed to increase awareness of primary prevention strategies, good and bad touch, and the concept of secrets.

Results revealed a significant improvement in participants' awareness levels post-intervention. They demonstrated increased understanding of good and bad touch, primary prevention, and the distinction between good and bad secrets. Comparisons with existing research, such as studies by Vimukthi (2022) and Pathirana (2004), supported the effectiveness of intervention programs like "Be Safe" in enhancing children's awareness of primary prevention and body safety. Pre- and post-test assessments showed that while children had a clear understanding of good and bad touch concerning parents, they lacked awareness regarding unfamiliar individuals, indicating a need for increased awareness in protecting themselves from strangers. Similar findings were observed in studies by Kumalasari & Kurniawati (2018), highlighting the effectiveness of intervention programs in improving safety skills.

The "Be Safe" intervention programs utilized drama techniques like puppets, storytelling, and role play, resulting in a significant increase in awareness of child sexual abuse prevention among participants. Similar positive outcomes were reported in studies by Kemer and Dalgic (2022) and Diningrat, Muksin, & Pratiwi (2022), underscoring the effectiveness of drama techniques in sexual abuse prevention programs for both typical preschoolers and children with Down syndrome. While most participants demonstrated improved awareness post-intervention, some remained confused about how to protect themselves from sexual abuse, suggesting the need for additional intervention programs and creative drama techniques. Overall, the study highlights the importance of tailored teaching methods for children with Down syndrome to increase their awareness of sexual abuse prevention. The study's methodology, which included the use of rating scales to assess participants' knowledge of abuse prevention, added strength to its findings. The results confirmed the study's hypotheses, demonstrating that drama techniques effectively enhance awareness of child sexual abuse prevention among children with Down syndrome.

CONCLUSION

In the context of Sri Lanka, where a significant number of Down syndrome children are vulnerable to abuse, it's imperative to employ effective teaching methods tailored to their needs. Drama techniques, such as puppets, role play, and storytelling, can be particularly impactful in educating these children about age-appropriate sexual and relationship knowledge. By utilizing these engaging methods, we can effectively minimize the rates of abuse among Down syndrome children while empowering them with essential knowledge and skills to navigate interpersonal relationships safely.

REFERENCES

- AlShatti, A., AlKandari, D., AlMutairi, H., AlEbrahim, D., AlMutairi, A., AlAnsari, D., & Ahmed, J. (2021). Caregivers' perceptions and experience of caring for persons with Down syndrome in Kuwait: a qualitative study. *International Journal of Developmental Disabilities*, 67(5), 381-390.
- Antonarakis, S. E., Skotko, B. G., Rafii, M. S., Strydom, A., Pape, S. E., Bianchi, D. W., & Reeves, R. H. (2020). Down syndrome. *Nature Reviews Disease Primers*, 6(1), 9.
- Arriola, K. R., Loudon, T., Doldren, M. A., & Fortenberry, R. M. (2005). A meta-analysis of the relationship of child sexual abuse to HIV risk behavior among women. *Child abuse & neglect*, 29(6), 725-746.
- Asghari, F., Akhavan, M., & Ghasemi Jobaneh, R. (2018). Effect of storytelling method on social skills in children with Down syndrome. *Quarterly Journal of Child Mental Health*, 5(3), 1-10.
- Awaru, A. O. T. (2020). The Social Construction of Parents' Sexual Education in Bugis-Makassar Families. *Society*, 8(1), 175-190.
- Awaru, A. O. T., Idris, R., & Agustang, A. (2018, October). Sexual education at high school sinjai east. In *1st International Conference on Social Sciences (ICSS 2018)* (pp. 944-947). Atlantis Press.
- Bittles, A. H., & Glasson, E. J. (2004). Clinical, social, and ethical implications of changing life expectancy in Down syndrome. *Developmental medicine and child neurology*, 46(4), 282-286.
- Bull, M. J. (2020). Down syndrome. *New England Journal of Medicine*, 382(24), 2344-2352. doi:10.1056/NEJMra1706537
- Cashmore, J., & Shackel, R. (2013). The long-term effects of child sexual abuse. Congenital Anomaly Multistate Prevalence and Survival Collaborative. Prevalence of Down syndrome among children and adolescents in 10 regions of the United States. *Pediatrics*, 124, 1565-1571.
- Cunningham, C. (1996). Families of children with Down syndrome. *Down Syndrome Research and Practice*, 4(3), 87-95.
- Cuskelly, M., Hauser-Cram, P., & Van Riper, M. (2008). Families of children with Down syndrome: What we know and what we need to know: doi:10.3104/reviews.2079.
- Davis, M. K., & Gidycz, C. A. (2000). Child sexual abuse prevention programs: A meta-analysis. *Journal of clinical child psychology*, 29(2), 257-265.
- Diningrat, S. W. M., Muksin, M., & Pratiwi, I. A. (2022). Improving Children's Understanding of Early Sex Education through Modified Puppet. *JurnalObsesi: Jurnal Pendidikan Anak Usia Dini*, 6(5), 4839-4846.
- Dube, S. R., Anda, R. F., Whitfield, C. L., Brown, D. W., Felitti, V. J., Dong, M., & Giles, W. H. (2005). Long-term consequences of childhood sexual abuse by gender of victim. *American journal of preventive medicine*, 28(5), 430-438.
- Esbensen, A. J. (2010). Health conditions associated with aging and end of life of adults with Down syndrome. *International review of research in mental retardation*, 39, 107-126.
- Fisher, M. H., Moskowitz, A. L., & Hodapp, R. M. (2013). Differences in social vulnerability among individuals with autism spectrum disorder, Williams syndrome, and Down syndrome. *Research in Autism Spectrum Disorders*, 7(8), 931-937.
- Fung, K., & Allison, P. J. (2005). A comparison of caries rates in non-institutionalized individuals with and without Down syndrome. *Special Care in Dentistry*, 25(6), 302-310.

Breaking Boundaries: Use of Drama Techniques for Child Sexual Abuse Prevention in Children with Down Syndrome

- Herlanti, Y., & Anjani, D. R. (2022). Developing Digital Storytelling on the Concept of The Reproduction System for Down Syndrome Adolescents in Muslim Society. In *International Conference on Education in Muslim Society (ICEMS) (Vol. 8)*.
- Homma, Y., Wang, N., Saewyc, E., & Kishor, N. (2012). The relationship between sexual abuse and risky sexual behavior among adolescent boys: A meta-analysis. *Journal of Adolescent Health, 51*(1), 18-24.
- Irving, C., Basu, A., Richmond, S., Burn, J., & Wren, C. (2008). Twenty-year trends in prevalence and survival of Down syndrome. *European Journal of Human Genetics, 16*(11), 1336-1340.
- Kemer, D., & İşler Dalgıç, A. (2022). Effectiveness of sexual abuse prevention training program developed by creative drama for preschoolers: An experimental study. *Journal of child sexual abuse, 31*(1), 9-32.
- Khair, R. J. M., Pawanteh, M., Stephens, J., & SM, S. F. A. (2019). Puppetry As A Platform For Body Safety Awareness Campaign. *Advances in Social Sciences Research Journal, 6*(10). doi:10.14738/assrj.610.7224.
- Kim, H. I., Kim, S. W., Kim, J., Jeon, H. R., & Jung, D. W. (2017). Motor and cognitive developmental profiles in children with Down syndrome. *Annals of rehabilitation medicine, 41*(1), 97-103.
- Lestari, S. P., Iswanti, D. I., & Haji, S. (2017). Optimizing Sexuality Education in Early Childhood Based on" Puppet Show". *Health Notions, 1*(4), 321-323.
- Logan, D. (2018). Resource Needs, Availability and Use amongst Children with Down syndrome and Their Caregivers in Galle, Sri Lanka (Doctoral dissertation, Duke University).
- Luen, L. C., Cheng, G. E., & Ta, M. (2019). Conceptual Puppetry in Malaysia. *International Journal of Academic Research in Business and Social Sciences, 9*(1).
- Madan, M., & Nalla, M. K. (2016). Sexual harassment in public spaces: Examining gender differences in perceived seriousness and victimization. *International criminal justice review, 26*(2), 80-97.
- Malak, R., Kotwicka, M., Krawczyk-Wasielewska, A., Mojs, E., & Szamborski, W. (2013). Motor skills, cognitive development and balance functions of children with Down syndrome. *Annals of Agricultural and Environmental Medicine, 20*(4).
- Marzook, S. (2023). Over 3,000 child abuse incidents reported from Jan to April –NCPA.
- McDaniels, B., & Fleming, A. (2016). Sexuality education and intellectual disability: Time to address the challenge. *Sexuality and Disability, 34*(2), 215-225.
- Murray, L. K., Nguyen, A., & Cohen, J. A. (2014). Child sexual abuse. *Child and Adolescent Psychiatric Clinics, 23*(2), 321-337.
- National child protection authority, (2023) Statistical data from 1st of Jan. 2022 to 31 Dec.2022 District –district no of cases 2(1).
- Noll, J. G. (2008). Sexual abuse of children—Unique in its effects on development?. *Child Abuse & Neglect, 32*(6), 603-605.
- Nyberg, A., Ferm, U., & Bornman, J. (2023). School-based abuse prevention programs for children: A scoping review. *International journal of disability, development and education, 70*(2), 137-155.
- Ocal, E., Karademir, A., Saatcioglu, O., & Demirel, B. (2021). Preschool Teachers' Preparation Programs: The Use of Puppetry for Early Childhood Science Education. *International Journal of Educational Methodology, 7*(2), 305-318.

Breaking Boundaries: Use of Drama Techniques for Child Sexual Abuse Prevention in Children with Down Syndrome

- Othman, A., & Yahaya, W. A. J. W. (2014). A design of conceptual framework for persuasive multimedia learning application in enhancing children's awareness of child sexual abuse. *E-Commerce, E-Business and E-Service, 1*, 131.
- Parker SE, Mai CT, Canfield M, et al. Updated national birth prevalence estimates for selected birth defects in the United States, 2004 –2006. *Birth Defects Res A Clin Mol Teratol, 88*, 1008 –1016.
- Pathirana, B.D.D. & Canadian Red Cross (2017). Be Safe! Child protection as part of programming in Sri Lanka.
- Perera B, Østbye T., Prevalence and correlates of sexual abuse reported by late adolescent school children in Sri Lanka. *International Journal of Adolescent Mental Health, 21(2)*, 203-11.
- Pulido, C. M., Villarejo Carballido, B., Vidu, A., Ramis, M., & Flecha, R. (2021). “Voices against Silence”: a case study of the social impact of journalism. *Feminist Media Studies, 1-18*.
- Reidmiller, S. M. (2008). Benefits of puppet use. The Benefits of-Puppet Use as a Strategy for Teaching Vocabulary at the Secondary School Level with Students Who Have Mixed Learning Disabilities. Accessed at December.
- Roberts, J. E., Price, J., & Malkin, C. (2007). Language and communication development in Down syndrome. *Mental retardation and developmental disabilities research reviews, 13(1)*, 26-35.
- Rohanachandra, Y. M., Dahanayake, D. M. A., Pathigoda, P. A. S., & Wijetunge, G. S. (2015). Characteristics of victims of alleged child sexual abuse referred to a child guidance clinic of a children's hospital.
- Serrat, O. (2008). Storytelling.
- Shin, M., Besser, L. M., Kucik, J. E., Lu, C., Siffel, C., Correa, A., & Congenital Anomaly Multistate Prevalence and Survival (CAMPS) Collaborative. (2009). Prevalence of Down syndrome among children and adolescents in 10 regions of the United States. *Pediatrics, 124(6)*, 1565-1571.
- Steingass, K. J., Chicoine, B., McGuire, D., & Roizen, N. J. (2011). Developmental disabilities grown up: Down syndrome. *Journal of Developmental & Behavioral Pediatrics, 32(7)*, 548-558.
- Suryani, R., Pranoto, S., & Astuti, B. (2020). The effectiveness of storytelling and roleplaying media in enhancing early childhood empathy. *Journal of Primary Education, 9(5)*, 546-553.
- Taylor, S. S., & Abernathy, T. V. (2022). Sexual health education for youth with disabilities: An unmet need. doi: 10.5772/intechopen.104420
- Topping, K. J., & Barron, I. G. (2009). School-based child sexual abuse prevention programs: A review of effectiveness. *Review of educational research, 79(1)*, 431-463.
- UNICEF srilanka, (2018). Child protection in middle childhood, 12(1).
- Van Dyke, D., McBrien, D., & Sherbondy, A. (2005). Issues of sexuality in Down syndrome. *Down Syndrome Research and Practice, 3(2)*, 65-69.
- Van Riper, M. (2007). Families of children with Down syndrome: responding to “a change in plans” with resilience. *Journal of pediatric nursing, 22(2)*, 116-128.
- Walsh, K., Zwi, K., Woolfenden, S., & Shlonsky, A. (2015). School-based education programmes for the prevention of child sexual abuse: A systematic review. *Campbell Systematic Reviews, 11(1)*, 1-180.

Breaking Boundaries: Use of Drama Techniques for Child Sexual Abuse Prevention in Children with Down Syndrome

- Weijerman, M. E., & De Winter, J. P. (2010). Clinical practice: The care of children with Down syndrome. *European journal of pediatrics*, *169*, 1445-1452.
- Wellala, C. K. D., Bi, J., Liu, X., Liu, J., Lyu, J., Zhou, M., & Trych, U. (2020). Effect of high pressure homogenization combined with juice ratio on water-soluble pectin characteristics, functional properties and bioactive compounds in mixed juices. *Innovative Food Science & Emerging Technologies*, *60*, 102279.
- White, A. N., Chevette, M., Hillerstrom, H., & Esbensen, A. (2022). Parental perspectives on research for Down syndrome. *Journal of Applied Research in Intellectual Disabilities*, *35*(1), 179-187.
- WHO, (2020). World Health Report annual report.
- Wood, A. (2004). Sexuality and relationships education for people with Down syndrome. *Down Syndrome News and Update*, *4*(2), 42-51.
- Wurtele, S. K. (2009). Preventing sexual abuse of children in the twenty-first century: Preparing for challenges and opportunities. *Journal of child sexual abuse*, *18*(1), 1-18.
- Yabe, M., Oshima, S., Eifuku, S., Taira, M., Kobayashi, K., Yabe, H., & Niwa, S. I. (2018). Effects of storytelling on the childhood brain: near-infrared spectroscopic comparison with the effects of picture-book reading. *Fukushima journal of medical science*, *64*(3), 125-132.
- Yantzi, N. M., Rosenberg, M. W., & McKeever, P. (2007). Getting out of the house: the challenges mothers face when their children have long-term care needs. *Health & social care in the community*, *15*(1), 45-55.
- Zepeda, J. (2014). Stories in the Classroom: Building Community Using Storytelling and Story acting. *Canadian Children*, *39*(2).
- Zuljevic, V. (2005). Puppets-a great addition to everyday teaching. *Thinking classroom*, *6*(1), 37.

Acknowledgment

The author(s) appreciates all those who participated in the study and helped to facilitate the research process.

Conflict of Interest

The author(s) declared no conflict of interest.

How to cite this article: Wanasinghe, Y. & Dissanayake, G.R.K. (2024). Breaking Boundaries: Use of Drama Techniques for Child Sexual Abuse Prevention in Children with Down Syndrome. *International Journal of Indian Psychology*, *12*(3), 126-143. DIP:18.01.013.20241203, DOI:10.25215/1203.013