

Intervention description:

The intervention I designed is an intervention to help children with ASD and other children with emotional challenges to self-regulate their emotions, which may improve some challenging emotions caused by experiencing difficult emotions. The intervention is built upon key concepts from evidence-based interventions and includes elements of Cognitive Behavioural Intervention (CBI), Functional Behaviour Assessments (FBA), Social Narratives (SN), Video Modelling (VM) and Visual Supports (VS). It also factors in elements of Sensory-Based Interventions (SBI) to help the child regulate his/her own emotions.

Overview:**Target population:**

- Students with ASD or other emotional difficulties
- Ages 6-18
- Have receptive language skills that range from slightly below average to above average, and the cognitive level of a six-year-old

Target location:

- The instruction part of the intervention is designed to take place in the school by the school counsellor or at an outside counselling center
- The instruction is meant to take place in a separate classroom where other students are not distracted or distracting
- The skills learnt through this intervention are intended to be used anywhere the child goes, including the school, home, and community.

Skills developed:

- Emotional awareness
- Emotional regulation

The intervention has three main parts; it begins with an assessment of the child, then an instruction component, the third component involves the child using the skills and tools learnt during the instruction phase of the intervention. Although the instruction phase is a set period and number of lessons, the assessment and use of skills are ongoing, may take place during any time and continue after the instruction component is over. The intervention is an individualized approach to maximize benefits for each student. However, the instruction phase can be taught in small groups of up to 4 students.

In reality, this intervention would include much more details, but for the purpose of this assignment, I have tried to minimize it with enough details that would allow someone to understand the overall idea.

The assessment:

The assessment portion of this intervention aims to understand the child and gathers information from different stakeholders to create an overall picture of the child's various emotional states and existing behaviours used to regulate emotions. Teachers and parents fill out a questionnaire and rating scale in which they identify how often the child experiences a particular emotion, how intense the emotion is, answer questions about whether or not they are able to identify specific emotions in the child and what are the signs that indicate the child is in a specific emotional state. Parents and teachers also provide information on specific problematic behaviours the child demonstrates. Parents also fill out the Sensory Checklist from Raising a Sensory Smart Child ([link](#)). The interventionist interviews the child to identify their emotional awareness and their ability to regulate behaviours. Parents and teachers are also encouraged to video record the child in different emotional states to help the interventionist understand what it looks like when a child is in a particular emotional state; children with ASD may show their emotions in ways that neurotypical individuals do not immediately understand. Understanding exactly how the child shows his/her emotions can help all stakeholders better help the child. Once the interventionist gathers all the details from the interviews, questionnaires and rating scales, he/she may choose to conduct a functional behaviour assessment to understand the triggers (antecedents) that cause difficulties for the child and the child's behaviour uses to achieve the desired consequence. After the assessment process is complete, the interventionist creates a preliminary profile of the child's emotional experiences and regulating behaviours.

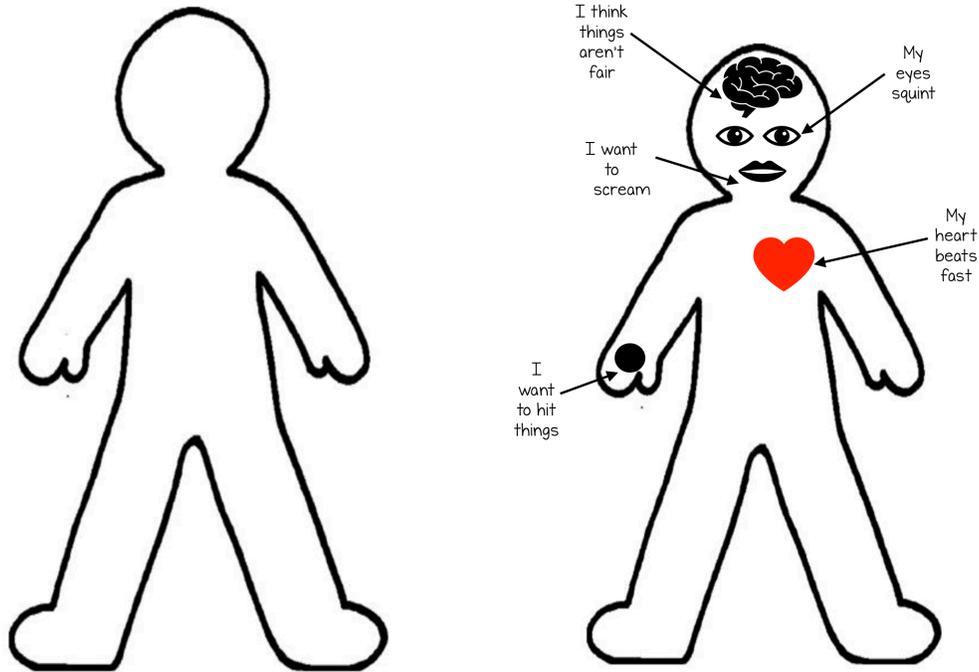
The instruction component:

This part of the intervention is the central part of the intervention. It consists of a fixed number of sessions, each lasting two hours and taking place in groups of a maximum of four students with one interventionist.

First Session:

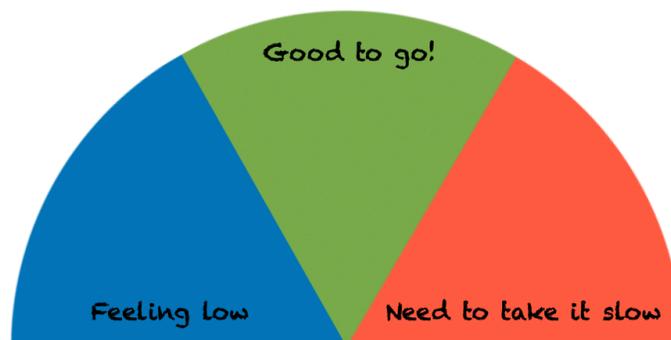
The first 90 minutes session consists of a general discussion with students about feelings. Students are asked to list different feelings they have experienced or have seen someone else experience; the idea here is to begin building emotional literacy by introducing a vocabulary of feelings.

Students are then asked to pick one emotion and think about what it feels like and looks like. The interventionist assists by describing what anger feels like and looks like to her by drawing/writing on an outline of a body (**image**). For example, she might draw a heart and write that her heart starts to beat fast; she might draw eyes and say her eyes begin to squint. She might draw a brain and write, "I think things aren't fair." She might also draw a black circle on the hand and write, "feeling angry makes me want to hit things." This activity is not meant for children to master; instead, it serves as an introduction to how our feelings and thoughts can impact our lives and behaviours.



In the same session, the children are introduced to the concept of emotional regulation by understanding that some emotional states do not need regulation, and these are "good to go" states, while others might make us feel down and low, "feeling low" states, and others might require us to "take it slow" and bring ourselves back to "good to go." Although students are not expected to identify where each emotion goes, the interventionist will model certain emotions and locating them on the chart.

For example, she might say: "When I'm sitting with my dog in front of the tv, I am happy; this is a good to go feeling! But when my sister grabs the remote from me, I feel angry; I know I need to do something to take it slow when I feel angry.



This session ends with the children receiving a blank regulation chart and several blank copies of the body outline and are asked to write on them or draw pictures on them if they recognize any feelings before their next lesson. The students each receive a personal bin labelled with their

name, an empty binder labelled with their name and a velcro choice board with the words "I feel" and "I need".

The following sessions:

The following sessions are broken down into learning about two emotions per session (the vocabulary and emotions used depend on the age and the cognitive capacity of the children involved in the sessions). Younger students might take four sessions in which they learn about Angry, Sad, Happy, Calm, Worried, Excited, Silly, Sick. While older students may expand their vocabulary and may expand their thoughts to include I feel _____ because _____ and I need. _____ which would involve several more sessions. Including the assessment, introduction session and instruction sessions (1 or 2 sessions per week), the instruction part of this intervention should not take longer than 12 weeks.

Session breakdown:

The session begins by introducing the emotions. The interventionist puts up a picture showing the emotion on the board (the same picture is given to each student to add under the "I feel" on their velcro choice board). The interventionist then reads a social story and plays a video depicting the particular emotion; the students then discuss ways they could tell the person in the story and video was feeling a certain emotion and identify any behaviours associated with the emotion.

Once the discussion is complete, the students are instructed to think about where the emotion fits on the regulating half-circle and to draw and write out what that emotion feels like to them. The child is then given a third paper to list different things that make them feel that way. If an emotion is located in either the "I need to take it slow" or "feeling low," the group discusses what are some things they can do to help them get back to the "good to go!" area. The interventionist helps the children by coming up with different ideas, teaching coping skills such as square breathing, take a walk, ask for help, talk to a friend, count to 10, use a sensory toy (based on the sensory checklist done during the assessment, the interventionist recommends different sensory objects/activities to each child). The interventionist writes down the specific tools/activities that help each child, creates cards for the choice board, and adds any items into the child's labelled box before the next session.

The session's final part is optional, depending on the children involved and the time remaining in the session. It involves either roleplaying emotions with dolls/action figures for younger children or filming a clip roleplaying the feeling.

When the session is done, children are encouraged to try and identify the emotions in themselves and others and practice some of their coping skills at school and home.

***Each session focusing on teaching the emotions follows the same structure mentioned above; however, it includes a brief review of the previous session's emotions.

The final two sessions:

In the final two sessions, the children go over all the emotions they learned and the coping skills learnt. They watch videos and try to identify feelings a character may be having and pause to suggest a coping skill. The children end up with a binder filled with their emotion mapping on the body and a list of things that make them feel a particular emotion. They also receive the choice board filled with the emotions and coping skills that work best for them and a container of sensory toys and cards to remind them how to use a skill such as the square breathing skill. They also receive a key ring with different coping skills to use and the "good to go" regulation circle, so the children have a visual reminder that is portable and easy to use no matter where they are.

Throughout the different sessions, the interventionist collects data on students by observing their responses to certain emotions and noting down how the emotion feels for every child, including the triggers identified and the coping strategies that work best for each student. The interventionist then uses all the information gathered to create a personalized book for each child to be given to the parents and teachers; this book includes a description of the "good to go" regulation circle so that the parent/teacher can help the student identify where they are feeling the emotion, it also provides them with personalized pages for each emotion and how the child feels it, what are things that may trigger the child and what the child might need at that moment. This helps the adults identify emotions in children who may show the emotion much differently than other children in the classroom and can help the child self/co-regulate in the class or at home and in the community.

Use of skills:

As the children go through the different sessions, they begin to learn coping skills to help them regulate their emotions, they are also provided with a choice board and a container of coping items/skills card, as children become more familiar with these skills, they begin to use them at home, in school and the community to self regulate healthily and safely and reduce instances of challenging behaviours that result from challenging emotions.

Role of parents, teachers and other stakeholders in the child's life

The stakeholders in the child's life play an essential role in this intervention's success and in helping the child generalize and maintain the skills learnt. The personalized book helps the parents and teachers receive help the assist the child in using the skills across different settings. It is also crucial that the other stakeholders provide the interventionist with valuable information on how a child responds to emotions, displays emotions, and if any troublesome behaviour needs to be assessed.

What is the evidence that supports this intervention?

Children and adolescents with ASD have more difficulty regulating their emotions than their non-disabled peers (Samson et al., 2013); therefore, they may need added direct instruction in emotional literacy to help them overcome some of the struggles that result from difficulties to regulate their emotions and help them regulate difficult emotions that are a result of other characteristics of the disorder. The basis of this intervention is built upon principles of Cognitive Behavioral Interventions (CBI). The goal of the intervention I designed is to help children identify their emotions, identify how these emotions manifest in their bodies or through their behaviours and finally identify ways to self-regulate those emotions in a healthy way. CBI is an intervention that is based on the principle that thoughts, emotions and behaviour are all connected and that our thoughts impact our feelings, and our feelings influence our behaviour (Mussey et al., 2017). The intervention I created aims to give the child room to think and respond to the feeling differently, so they have a better behavioural outcome. CBI is listed on the NPDC list of evidence-based interventions and is supported by one single-case design study and 3 group design studies and has evidence supporting its use to improve behaviours of children between the ages of 6 and 22 and to improve social, communication and cognitive skills in children ages 6-14 (Mussey et al., 2017).

The instruction format in my intervention is supported by evidence and consists of interventions also found on the NPDC list of evidence-based interventions. Children with ASD learn best through the use of visual supports (Bennie, 2020); therefore, the use of social stories/social narratives and video modelling to teach children with ASD about their emotions and different coping skills is an effective way to support children in improving their emotional awareness and regulation furthermore, the intervention also uses visual supports such as the choice board, the "good to go" regulation semi-circle and the body mapping. Social Narratives is listed on the NPDC list of evidence-based interventions and is supported by 17 single-case design studies. The studies showed a range of positive outcomes for children ages 3-11 which include social, communication, adaptive and academic skills and showed improvement in behaviour across children between the ages of 3 and 22 years old (Sam & AFIRM Team, 2015). Visual supports showed similar outcomes and were supported by 18 single-case design studies showing improvements in social, communication and behaviour of children ages 3-14 (Sam & AFIRM Team, 2015). Video modelling, which is also used during the emotion instruction phase of the intervention, is listed on the NPDC list of evidence-based interventions and is supported by 31 single-case design studies and 1 group design study, which showed positive outcomes in social skills and behaviour in children ages 6-14 (Cox & AFIRM Team, 2018) Considering that the intervention aims to improve self-regulation and identification of emotions, the positive

outcomes in social, communication and behaviour of the previously mentioned interventions are a good fit for teaching the target skill.

The assessment portion of the intervention also uses evidence-based practices because challenging behaviours sometimes occur from emotions that are difficult to cope with. It is essential to identify which behaviours result from specific emotions and the consequences that benefit the child. Therefore using Functional Behaviour Assessments, which is also listed on the NPDC list of evidence-based interventions, is another area to support the effectiveness of the intervention I designed. Functional Behaviour Assessments, which aim to understand behaviour by studying the antecedent and consequences and collecting data, is supported by ten single case studies showing positive behavioural outcomes for children ages 0-22 (Sam & AFIRM Team, 2015).

Finally, my intervention builds on the characteristic of children with ASD in which they have difficulties processing sensory information, which may impact their behaviours where they might seek out sensory stimuli for comfort or avoid certain stimuli that overwhelm them (Wan Yunus et al., 2015). Although sensory-based interventions are not evidence-based, there is some research to support the use of sensory-based interventions to help children with ASD manage and improve their behaviours (Wan Yunus et al., 2015). Using sensory-based interventions within the intervention, I designed as a tool for students to self-regulate their emotions can possibly improve the outcomes of the intervention.

How can the intervention's outcomes/success be measured?

There are several ways to look at the outcomes of this intervention. One way would be to look at the number of emotions and feelings a child can recognize and explain during the first session and compare it to what the child can do after all instruction is completed. Other ways to measure outcomes are taking frequency data of engagement in coping skills and engaging in challenging behaviour. If a child can identify more emotions and uses more healthy coping skills, the intervention's success becomes evident.

Ease of usage:

I designed this intervention with the hopes of it being an easy-to-use intervention that benefits the child without subjecting him/her to aversive or uncomfortable activities. When it comes to the person implementing the intervention, my hopes would be to create a package that includes all the worksheets, the individualized student pages, the images used for the choice boards, the videos and social stories and all other material needed that would be sold to a school counsellor, parent, or other people capable of implementing the intervention to make it as easy for them as

possible. The package would also include scripts for the interventionist to help her/him begin discussions and instructions for each session.

Time commitment:

The student:

The time commitment for this intervention in which the child has to participate in sessions can range from 7 hours for younger children to 10 hours for older children or children who may need to go over a certain lesson to improve their understanding and ability to use the skill. The 7 - 10 hours can be completed in a month if several sessions are completed each week or done over two and a half months.

Although the student only takes part in several hours of sessions where instruction is being given, it is highly recommended that the other stakeholders in the child's life encourage the child to identify emotions and use coping skills outside of class.

The interventionist:

The time commitment for the interventionist goes beyond the 7-10 hours of instruction given. The interventionist has to take the time to send out the assessments, conduct his/her own assessments, design specific coping skills for each child based on their difficulties and their sensory profiles (may also have to locate or purchase items for each child's coping box), she/he has to make copies from the package for each session and has to prepare the documents that are given to the parents and teachers; this may add up to 3 extra hours per week depending on the number of students in the group.

Financial commitment:

The financial commitment for this intervention ranges but can be very low. If looking at this intervention from the perspective of a teacher who wants to implement it in the classroom, all the material needed can be self-made and printed out on the school computer. Other materials can be purchased at the local dollar store, such as the binders, velcro for the choice boards and sensory items for children's coping boxes/bins. If this were to become an intervention that is sold in packages, it could be sold at low prices since the materials to create each package are expensive.

Special training:

If sold in a package with a specific script, special training may not be necessary, as the interventionist would be provided with information on how to specifically teach each lesson,

which questions to ask and how to direct the child to understand his/her own emotions. However, if this intervention is to be used without a guide or script, it would be best if an individual has a background in cognitive behaviour therapy (CBT), psychology, counselling, or a related field to provide the intervention.

Consideration of stakeholders:

Stakeholder	Considerations
Student	This intervention can not cause any harm to the child. Though the child learns skills he/she will practice and use for a lifetime, the time commitment is not too extreme and does not take away too much time away from being able to engage in other activities and play. The intervention is also personalized to provide each child with a skill set that most suits their needs and is centred around the child feeling better and coping better to help him/herself.
Parent	<ul style="list-style-type: none"> ○ The financial commitment the parent has to make is not entirely clear; if an intervention like this is provided in the school, the parent has no financial burden. If provided by an outside therapist, a parent may have to pay a fee for it. In terms of time commitment, the parent does not have to commit too much time unless he/she is the one who is implementing the teaching portion (through the use of a manual). If not teaching the child, the parents' involvement would not be more than the typical amount of time spent helping their child through difficult emotions. ○ The parent would benefit from this intervention as the child begins to benefit and learns how to regulate emotions; activities that were avoided or challenging in the past may become more enjoyable and more manageable.
Siblings & Extended Family	There is no direct impact on these stakeholders; however, they may benefit from enjoying better relationships and more time with the child who is involved in the intervention. Furthermore, siblings may begin to pick up some of the coping skills their sibling uses and benefit from a healthier emotional state.

Interventionist	The intervention is the most time-consuming for the interventionist, and he/she has to dedicate time outside of the instruction sessions to prepare materials and evaluate student learning. Other than the time commitment, which can be easily managed, there aren't any negative impacts on the interventionist. He/she may gain from seeing the children improve and develop healthier coping skills.
Classroom teacher	The classroom teacher may have to take some time initially to learn the student's profile and the language used, such as "are you in the low zone." However, learning about how a child displays emotions and what the child needs can be a great advantage to the teacher as he/she becomes better able to help the child and manage any behaviours that are disruptive to the learning of the child and his/her peers.
Classmates (who are not receiving the intervention)	Classmates who do not receive the intervention may be able to form better social relationships with the peer. They may also pick up on some of the coping skills. If the child who received the intervention often responded to emotions in ways that disrupted the learning of their peers, the classmates might benefit from a more calm and regulated environment.
School Administration	If this is an intervention that is bought in a package, the school administration might have some financial decisions they have to make about purchasing the program or not. If this is an intervention that is not purchased, but that is implemented and designed by the school counsellor, the school administration will have to organize the time and location for the intervention to take place. If this intervention shows benefits for the children who use it, the administration may choose to implement it as part of their School-wide Positive Behavioural Interventions and Supports (PBIS)
Other community members	Other community members are not directly impacted but may benefit from interacting with a child who can self-regulate and handle challenging environments in the community.

Potential Barriers:

Barrier	Possible Solution
School wants to implement the intervention but share the school counsellor with other schools in the district and can't find the time to provide the instruction sessions	The counsellor could take time to work with the resource teacher or special ed teacher and teach them how to teach each emotion
The child is not responsive during the instruction part	The interventionist can identify any prerequisite language skills or adaptive skills the child may need to work on before participating in the intervention
The child chooses not to use any of the coping skills learnt although he/she shows an understanding of emotions and can identify how he/she feels	Conduct preference assessments and look at the sensory checklist to identify alternative coping skills that are soothing for the particular child
The other stakeholders (such as parents and teachers) are supportive of the child taking part in the intervention but do not take part in helping the child practice the skills. For example, a teacher may want to use her classroom's typical behaviour plans and classroom expectations and may give a child a consequence after exhibiting a behaviour that is caused by a difficult emotion rather than helping the child use a regulation skill learnt	The interventionist can meet with the other stakeholders and find a way to find a middle ground where the teacher can incorporate his/her own classroom expectations while allowing the child the opportunity first to try and self regulate
The child is not responding to the intervention and requires more one-on-one attention from the interventionist.	The child can take part in individual sessions or remain in the group but take supplementary individual CBI sessions

Comparing the intervention to SCERTS

I have chosen to compare my intervention to the SCERTS intervention. SCERTS which stands for **S**ocial **C**ommunication - **E**motional **R**egulation - **T**ransactional Support, aims to support the child in the mentioned areas and is an intervention that is supported by research. The intervention starts with an assessment process that identifies the child's current level of functioning in terms of their social competence and communication ability and develops an individual program for each child based on goals determined through the assessment process aimed at improving social communication and emotional regulation through aided by transactional support. The intervention consists of components of different interventions to create the best program for the child. (Prizant et al., 2016) The main differences between SCERTS and my intervention are that

my intervention does not focus on social communication and has a specific protocol to teach emotional regulation skills instead of the SCERTS model, which provides more flexibility in how emotional regulation skills are taught.

The most evident way the two interventions are alike is the focus on emotional regulation and co-regulation, such as asking someone for help and focusing on these factors individually. Both interventions also provide the child with a choice of coping skills. Other ways in which they are similar include the focus on assessment; both interventions stress the importance of assessing where the child is at before the intervention begins; parent involvement is also essential in both models, and parents have a role in supporting their child and providing input into the therapy. Both interventions also encourage sharing resources and information between the home and school. Both interventions build upon components of other evidence-based practices and appreciate the child's involvement in other therapies. The final way they are both alike is using transactional supports such as co-regulating with another individual in the environment and modifying the environment, including visual cues and supports within the environment.

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