From Theory to Practice: Rehearsal Strategies for Anxious Students

Autism in Education Webinar
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Thank you to those who shared examples or input for the presentation!

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Part I:
Social Narratives: Variations on a Theme

Part II:
Just Relax! Why Telling Doesn’t Work
Rehearsal Strategies

**Rationale:** Why these topics?

Are you using social narratives and/or relaxation strategies?

Do you have evidence that they are effective for your students?
Rehearsal Strategies

Goal: Deepen our knowledge

- Understand the behavioural principles involved
- Better identify which strategies are likely to be effective
- Match strategy to student skills
- More clearly differentiate and encourage correct implementation
Guiding Principles

Rule-governed Behavior: A rule is a verbal statement that implies that performing the behaviour as specified will lead to reinforcement.

A new skill or behavior may be acquired using a description of the contingencies without the person actually contacting them (in that moment).
Guiding Principles

Rule-governed Behavior: The contingency may be implied and does not have to have been experienced previously (i.e., Don’t walk on thin ice!)

(N.B. Just being able to state the rule does not mean it will be followed)
Guiding Principles

*Behaviour Rehearsal* involves practicing appropriate responses, first under simulated conditions

- may include individuals imagining or thinking about themselves performing and responding appropriately to others.
Guiding Principles

*Behaviour Skills Training* uses instruction, modelling, rehearsal and feedback to teach a new skill in a simulated context, then in the natural environment.
Focus Points

• What are social narratives?
• How do the variations compare to each other?
• How do we use and monitor these effectively?
What defines a Social Story?

Is a script the same thing?

Where does cognitive picture rehearsal fit in here?

What’s the difference?
Key Features

• **Brief** information presented in picture or text format that is descriptive of a situation or outlines steps in a sequence

• **Individualized**, written from the perspective of the learner

• Introduced and modelled through **repeated practice** until ready to be used in real-life situations
Narratives

**Key Features**

- **Topic varies** widely across learning domains
- May provide a **description** of appropriate behavioral expectations and/or an **explanation** of the perspective of others
- **Goal** – teach new skill; change maladaptive behaviour
• Approach that predates Social Stories
• Written and/or picture description of a specific skill or steps in a sequence
• Often used to teach a routine or familiar activity
• May be in outline or list format
• *Purpose: provide cues for the learner to help organize and follow a process*
Script

- Task analysis helpful as a starting point
- Topics can vary widely (e.g., cooking project; steps to go to a movie; how to tie a shoe, etc.)
- Usually practiced and/or modelled repeatedly prior to use in actual situation
- May or may not include social interaction or maladaptive behaviour
1. Peel banana
2. Cut banana.
3. Scoop ice cream
4. Pick toppings.
5. Eat and enjoy!
Script

- Carve a pumpkin
- Get Pumpkin
- Carve pumpkin top
- Scoop out inside
- Draw face
- Carve pumpkin
- Put in candle
- Put on pumpkin lid
- Finished

PictureSET
https://www.setbc.org/pictureset
Script

Time Out Steps

☐ Loud yelling, pushing materials...

☐ Teacher says, "Go to time out".

☐ Walk to Quiet Room and sit on the mat. Door is open.

☐ Timer set for 3 minutes.

☐ Three minutes done!

☐ Stand up and return to lesson.

☐ Calm and back to work!

(McLean, et al. 2014/2016)
My Quiet Area

When I yell, throw my toys, hit people, or bump my head...

...an adult says, “Go to the Quiet Area.”

I walk to Quiet Area...
...and sit on the floor.

I will stay in the Quiet Area for 3 minutes.

Then, I stand up and go back to learning.

Now I am calm and ready to learn and play!
**Script**

Let's tell............a joke

<table>
<thead>
<tr>
<th>Ben</th>
<th>Buddy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knock Knock</td>
<td>Who's there?</td>
</tr>
<tr>
<td></td>
<td>![Knock Knock Image]</td>
</tr>
<tr>
<td>Boo</td>
<td>Boo who?</td>
</tr>
<tr>
<td>![Boo Image]</td>
<td>![Boo who? Image]</td>
</tr>
<tr>
<td>Don't cry...</td>
<td>Ha Ha Ha ! Good one!</td>
</tr>
<tr>
<td>It will be okay.</td>
<td></td>
</tr>
<tr>
<td>![Don't cry... It will be okay Image]</td>
<td>![Ha Ha Ha ! Good one! Image]</td>
</tr>
<tr>
<td>Can you tell me one?</td>
<td>Sure. ___________</td>
</tr>
</tbody>
</table>
Comparing Strategies

Scripts

Uses task analysis
Teaches sequence of new skill or routine
Pictures and text serve as cue for each step

Social Stories™

Cognitive Picture Rehearsal
Social Story™

- Based on work of Carol Grey
- Main purpose is to **describe, explain and suggest rather than direct** specific behavior
- Addresses ‘theory of mind’ problems
- Describes social situations, highlighting relevant cues
- **Social Story™** follows specific formula of types of sentences
Social Story™

- Narrative based on teacher/parent observation and interpretation of what the social misunderstanding is
- Learner encouraged to read the story often and memorize the text
- May be more effective with children with language and self-awareness
- Definition affects research outcomes regarding effectiveness
Social Story Components

- **Descriptive** – objectively define where, who, what and why
- **Perspective** – describe reactions and feelings of others in the situation
- **Directive** – positive statements of desired responses
- **Control** (optional) – written by the student identifying strategies for recalling info
Picking Up My Towel

When I take a shower, I use a towel. Towels help me dry off my body. Towels keep water off the floor.

After I use my towel, it is wet. If I leave it on the floor, then it gets the floor wet. It may begin to smell.
It will make Monica happy if I pick up my towel and put it in the hamper.

I will try to pick up my towel after my shower.
My Dad is a carpenter.

He lives far away from me.

Sometimes I miss him. He works near here now.

Then I miss Daddy. Daddy.
Social Story

When I'm thinking, I can... for a hug.

Daddy is coming home one day.

I will be happy to see Daddy...

and he will be happy to see me.
The Mommy Story

My name is Joey. My family is Mommy, Daddy and my brother, Peter. We have lots of fun together. We like going camping and to the pool.

One day, Mommy’s heart stopped working. This is called dying. That means Mommy is not coming home. Mommy went to heaven to be with Grandma.
This makes me sad. Daddy and Peter are sad too. Sometimes we cry if we are sad. When I am sad, I can ask for extra hugs. I can jump on my trampoline. I can look at pictures of Mommy. I can remember she loves me. Remembering will help me feel better.
Social Story

Daddy and my family will take good care of me now. Friends will still come on Friday. We will give each other extra hugs. After a while we will feel better. Mommy will watch us from heaven and send us her love.
### Comparing Strategies

<table>
<thead>
<tr>
<th>Scripts</th>
<th>Social Stories™</th>
<th>Cognitive Picture Rehearsal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uses task analysis</td>
<td>Uses specific formula</td>
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</tr>
<tr>
<td>Teaches sequence of new skill or routine</td>
<td>Describes social situation</td>
<td>Describes social situation</td>
</tr>
<tr>
<td>Pictures and text serve as cue for each step</td>
<td>Includes social perspectives</td>
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Cognitive Picture Rehearsal

• Instructional strategy closely aligned with the use of relaxation and visual imagery
• Based on covert conditioning research of Dr. Joseph Cautela, Dr. June Groden, and others
• Used with people with significant developmental disabilities as a means of replacing maladaptive behaviours
Cognitive Picture Rehearsal

- Text (rehearsal script or scene) is written and illustrated following functional assessment of the problem behavior.
- Pictures or line drawings illustrate the antecedent, the target behaviour and the consequences (reinforcement).
- Relaxation and/or visual imagery is often incorporated into the script.
- Relaxation steps are taught first as a separate skill.
When I am calm, I come back to work. My voice is quiet again. Time for a HIGH FIVE!!
I feel proud when I stay safe.
The Wrong Mailbox

I work in the college mailroom. I match all the names and the addresses. I like to put all the letters and packages in *just the right slot*.

Sometimes someone puts a package in the **WRONG SPOT!!!** I start to feel **REALLY ANGRY!**
I stop what I am doing and sit down.

I close my eyes and breathe long and slow.

I think about how I feel when I am painting a picture of the sky.
I say to myself, “It’s NO BIG DEAL!”.

Time to get back to work (and put the package in the right spot).
Pairing Concrete Cues
Comparing Strategies

Scripts
- Uses task analysis
- Teaches sequence of new skill or routine
- Pictures and text serve as cue for each step

Social Stories™
- Uses specific formula
- Describes social situation
- Includes social perspectives
- Non-directive

Cognitive Picture Rehearsal
- Requires FBA
- Describes contingency
- Includes replacement behaviour and reinforcement
- May include relaxation/imagery
Similarities

• Use pictures and text
• Individualized
• Teaching procedure
• Need for monitoring

Differences

• Purpose
• Preparation needed
• Prerequisite skills
• Content
Considerations

• Understand the behaviour first!
• Select the type of narrative to use based on the purpose and name it accurately
• Match the number and level of statements and illustrations to the learner
• Don’t assume understanding of emotions in the text
• Provide adequate daily practice
Cautions

- Avoid introducing several strategies at the same time as it will make effectiveness unclear.
- Use of narratives brings increased attention to specific situations and behaviours. Sometimes ignoring is better.
- Choose wisely. Social narratives are not effective for everyone and may be inadequate when used as the sole intervention.
Summary

• Rehearsal of useful and functional skills with the aid of social narratives can be effective strategies, especially for learners who benefit from visual supports

• As with any evidence-based practice, careful planning, individualization and monitoring is needed


National Professional Development Center for ASD Information and free tutorials on evidence based practices  
http://autismpdc.fpg.unc.edu/evidence-based-practices


Just Relax!
Why Telling Doesn’t Work
Anxiety develops out of worry and becomes a problem when people change their behaviour to avoid a feared person, place or event.
Stress is the body's reaction to a perceived, anticipated or imagined danger or threatening situation. The stressful situation can be happy or unhappy.
How do we cope?

**Buffers** - adaptive responses to stress

- Talking with friends
- Participating in sports, hobbies
- Exercise
- Restful, calming activities
- Sleep
- Medical intervention
Challenges

• Communication skills may be compromised
• Difficulty understanding and expressing emotions
• Limited number of friends or support system
• Lack of self awareness
• Group sports often difficult
Challenges

“I taught my student to use the relaxation steps, but he doesn’t use it when he needs it”

“One on one? How do I build in time for this? Who should teach this?”

“My student thinks the breathing is silly and won’t use it.”
Relaxation

• Why teach relaxation?

• Which strategy do we use?

• How do we teach effectively?

• How do we target generalization?
Why teach relaxation?

- Functional skill with lifelong impact
- Can be used across environments
- Non-stigmatizing
- Perceived as neutral or pleasant in general
- Can be guided by parents or teachers
- Demonstrated effectiveness
Which strategy do we use?

• Progressive Relaxation (PR)
• Behavioral Relaxation Training (BRT)
• Controlled Breathing
• Guided Imagery

Goal:
The Relaxation Response
(physically calm and mentally alert)
Progressive Relaxation (PR)

- Focuses on teaching to *recognize and label the difference between muscle tension and muscle relaxation*
- Apply tension to each body part in top-down or bottom-up sequence, release and pay attention to the feeling
- Longer exercise, more conspicuous
- Flexible (use with as many or few body parts as appropriate)
Behavioral Relaxation Training

- PR techniques modified for developmentally disabled learners with limited verbal skills
- Observable responses defined and measurable; shortened sessions
- Rationale: engaging in the motor responses alone produces the relaxation response; no verbal reporting from the learner needed

(Groden, 2978; Poppen, 1998; Paclawskyj, 2006)
Modelled/trained ten behaviours in specific order from large to small muscle groups (body, head, shoulders, feet, hands, throat, mouth, eyes, breathing, quiet)

Able to acquire relaxation response more rapidly than other forms of relaxation training

Average session, 7 minutes; average mastery, two hours

(Poppen, 1998; Paclawskyj, 2006)
RELAXATION ROUTINE

1. SIT ON A CHAIR...

2. "SCRUNCH" UP YOUR FACE... THEN... RELAX IT...

3. TENSE YOUR ARMS... THEN... RELAX THEM

4. TENSE UP YOUR SHOULDERS AND CHEST... THEN... RELAX THEM

5. TENSE UP YOUR LEGS...

6. BREATHE IN RELAXATION...

...THEN RELAX!

...BREATHE OUT TENSION
Controlled Breathing

• Commonly taught in school settings
• Easy; focuses on breathing alone without any other activity
• Can be done unobtrusively, anytime, anywhere
• Slow, calm, “secret” breathing
• Practices are brief but frequent
Controlled Breathing

1. Sit comfortably
2. Breathe slowly and evenly
3. Breathe in through the nose, (slow count three)
4. Breathe out through the mouth, (slow count three)
5. Continue until calm
Controlled Breathing

When I take a deep breath,
I smell a flower, Then blow out a candle.

breathe in through nose

blow out of mouth
Controlled Breathing

SQUARE BREATHING

1 2 3 4
breathe in for 4 seconds

1 2 3 4
hold for 4 seconds

1 2 3 4
breathe out for 4 seconds

1 2 3 4
hold for 4 seconds

PictureSET
www.setbc.org/pictureset/
1. **Identify situations** or events that are associated with the problem behavior

2. **Teach, model and practice** until fluent in calm situations (BST)

3. **Prime and prompt** in identified target situations. Reinforce!

4. **Prime and prompt** in identified target situations across settings. Reinforce!

5. **Reinforce** spontaneous use
How to teach relaxation effectively

• Use role play and practice together with the learner a minimum of three times a day when NOT anxious
• Use visual, text or concrete supports if helpful for understanding
• Provide checklists or reminders to ensure practice occurs
• Involve parents!

(Chalfant, 2011)
How can we make relaxation more accessible to learners with language and/or cognitive challenges?

- Teach fewer or simpler steps by combining them (e.g., hug yourself tight and release; teach only gross muscle groups first)
- Teach through imitation or with physical prompts
- Combine teaching with visual supports or concrete reminders
- Use simple and consistent language when teaching (1-2 words)
My student has difficulty with the breathing...sounds very loud and inappropriate.

- Use gestural or number/symbol prompts to help slow and quiet the breathing.
- Use more physical prompts to help the learner identify which body parts are involved.
- Use physical props to illustrate the way the breathing should look/sound (e.g., windmill toys, candle, balloon, fat straw)
Tips from the Field

The teacher/parent starts to teach this to the learner but gives up. “It isn’t working”.

• Has there been adequate and consistent practice (6-8 weeks)?
• Have the steps for effective teaching been followed?
• Do the steps and/or the visual supports need to be changed?
My student is in high school and thinks this is too babyish.

- Pair with a peer model; Use video modelling
- Emphasize as a powerful and private strategy - “top secret breathing”
- Use imagery; build in special interest
- Identify concrete reinforcers or positive outcomes
The teacher doesn’t recognize early enough when they should prompt the learner to use the technique.

- Directly observe or involve the learner to identify the antecedents and/or precursor behaviours more clearly
- Provide many opportunities to practice evocative situations in a safe environment
Summary

• Relaxation skills can be a useful strategy
• Can be taught one on one or in a group
• Usually used to complement other intervention components
• Time involved can lead to significant positive benefits for the learner
Final thoughts.....

Breathe in.
Breathe out.
Let it be.
E-learning, Geneva Centre for Autism
http://visuals.autism.net
Video illustrating steps for relaxation and visual supports

PictureSET
www.setbc.org/pictureset
Relaxation picture sequence in French and English


References


Children’s Books

Lori Lite Books, Stress Free Kids, Publisher

- **Angry Octopus.** An Anger Management Story for Children Introducing Active Progressive Muscle Relaxation and Deep Breathing to help Control Anger
- **The Goodnight Caterpillar:** A Children's Relaxation Story to Improve Sleep, Manage Stress, Anxiety, Anger
- **A Boy and a Bear:** The Children's Relaxation Book
- **Sea Otter Cove:** A Stress Management Story for Children Introducing Diaphragmatic Breathing to Reduce Anxiety, Control Anger, and Promote Peaceful Sleep
Thank you!

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