

Exploring Strategies for Managing Challenging Behaviors

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M E D I C I N E

Positionality



Challenging Behaviors

- Broad category of behaviors, some common examples:
- Self-injurious behaviors (forcefully hits or bites oneself)
- Aggression (throws objects, hits other people)
- Elopement (actively tries to escape)
- Property Destruction (intentionally breaks things)
- Conduct/Oppositionality (does the opposite of what they are told to do)
- Pica (eating things not commonly considered food)

High rates of challenging behavior in Autism

	Profound Autism n=15 (%)	Autism Symptom Severity			X ² (p)	Cognitive Level		X ² (p)
		Mild n=82 (%)	Moderate n=74 (%)	Severe n=13 (%)		Not Impaired (80+) n=126 (%)	Impaired (<80) n=43 (%)	
Challenging Behavior Total	9 (60%)	17 (21%)	28 (38%)	10 (77%)	17.8 (<.001)	37 (29%)	18 (42%)	2.3 (.131)
Property Destruction	5 (33%)	8 (10%)	10 (14%)	5 (39%)	7.9 (.020)	13 (10%)	10 (23%)	4.6 (.033)
Aggression	6 (40%)	18 (22%)	16 (22%)	6 (46%)	3.9 (.139)	27 (21%)	13 (30%)	1.4 (.241)
Elopement	9 (60%)	16 (20%)	33 (45%)	9 (69%)	18.5 (<.001)	39 (31%)	19 (44%)	2.5 (.115)
Conduct	9 (60%)	19 (23%)	28 (38%)	8 (62%)	9.2 (.010)	36 (29%)	19 (44%)	3.6 (.059)
Self-Injury	8 (53%)	18 (22%)	34 (46%)	12 (92%)	27.3 (<.001)	44 (35%)	20 (47%)	1.8 (.176)
Inappropriate Sexual Behavior	1 (7%)	7 (9%)	6 (8%)	1 (8%)	<0.1 (.992)	11 (9%)	3 (7%)	0.1 (.719)
Any Challenging Behavior	14 (93%)	36 (44%)	54 (73%)	13 (100%)	22.8 (<.001)	70 (56%)	33 (77%)	6.0 (.014)
Two or More Types of CB	8 (53%)	23 (28%)	32 (43%)	10 (77%)	12.6 (.002)	44 (35%)	21 (49%)	2.6 (.105)

Note. Presence of challenging behavior defined as ≥95 percentile of neurotypical score distribution

Frazier, T. W., Khaliq, I., Scullin, K., Uljarevic, M., Shih, A., & Karpur, A. (2023). Development and psychometric evaluation of the open-source challenging behavior scale (OS-CBS). *Journal of Autism and Developmental Disorders*, 53(12), 4655-4670.

Self-Injurious Behaviors (SIB) in Autistic Individuals

- Present in upwards of 40-50% of autistic people across the entire cognitive ability range
- Often persist across the lifespan
- Greatly increase likelihood of tissue damage or physical injury
- Head-banging, self-hitting, skin-scratching, hair-pulling, skin-picking, nail-biting



Impacts of Challenging Behaviors

- Challenging behaviors are present in youth and adults with a range of neuropsychiatric and neurodevelopmental disorders, including youth with ASD, ADHD, anxiety, and mood disorders



Research Spotlight: Study Aims

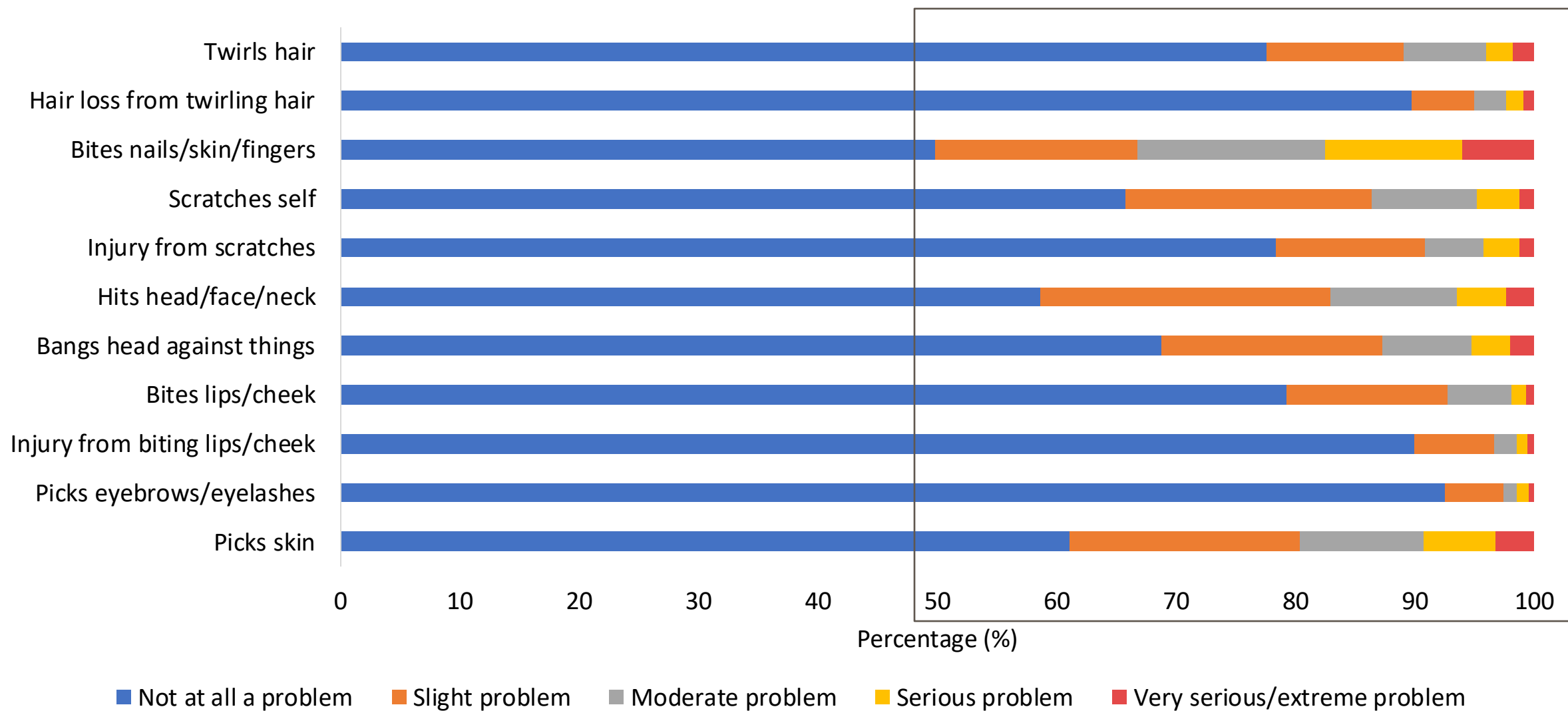
1. To identify the frequency distribution of unique SIB topographies in a large sample of autistic youth.
2. To characterize the associations between developmental and clinical characteristics and unique SIB topographies.

Ferguson, E. F., Spackman, E., Cai, R. Y., Hardan, A. Y., & Uljarević, M. (2024). Exploring the Heterogeneity of Self-Injurious Behaviors in Autistic Youth: Patterns, Predictors, and Implications for Intervention. *Autism Research*.

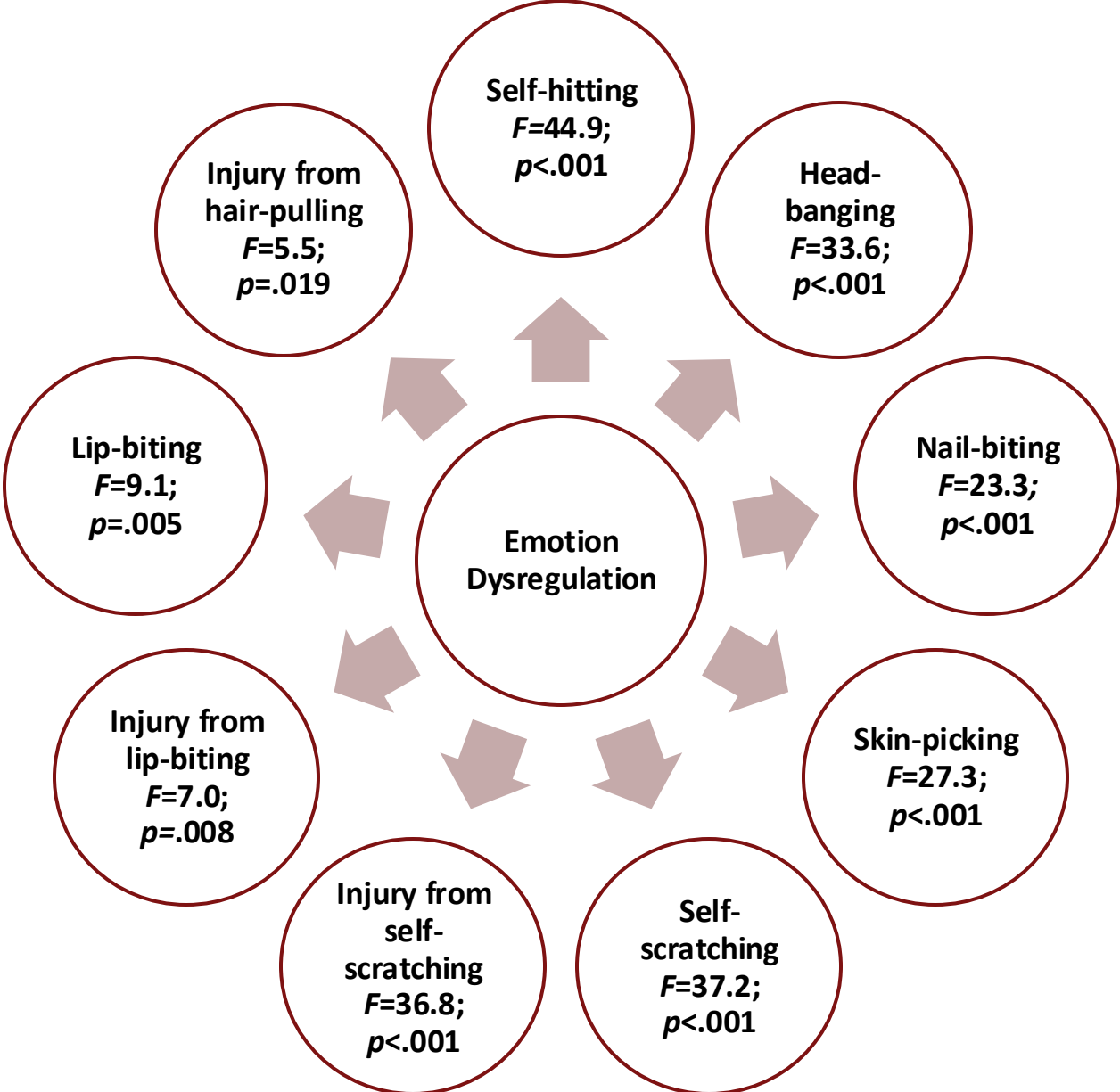
Methods

- Parents of 593 autistic youth (Mage = 12.16; range: 3-18 years; 13% females; 24% IQ < 70) completed survey measures (Uljarević et al., 2023)
- We explored speech level, cognitive functioning, emotion dysregulation, and sensory hypersensitivity as predictors of 11 types of SIB

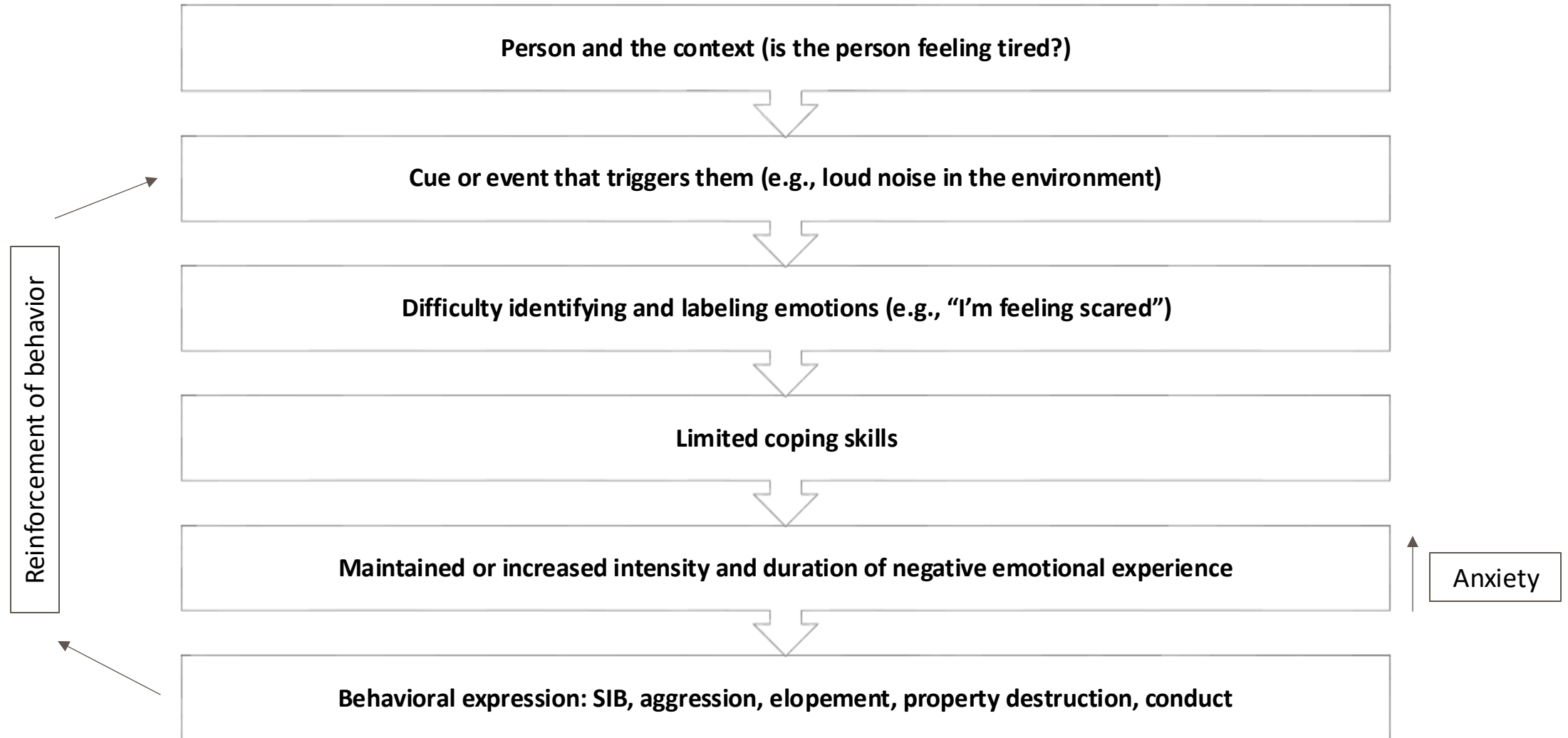
Endorsement Frequency Across SIB Topographies



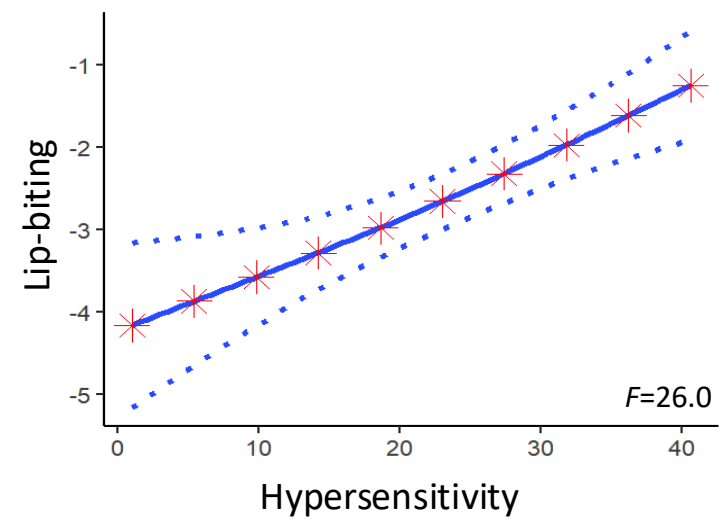
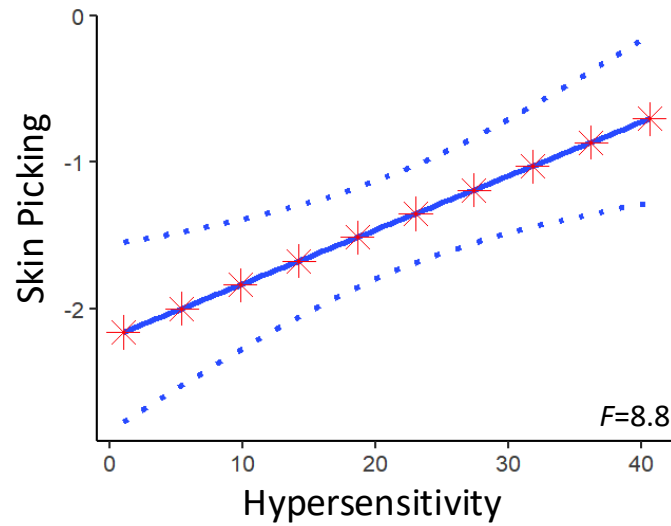
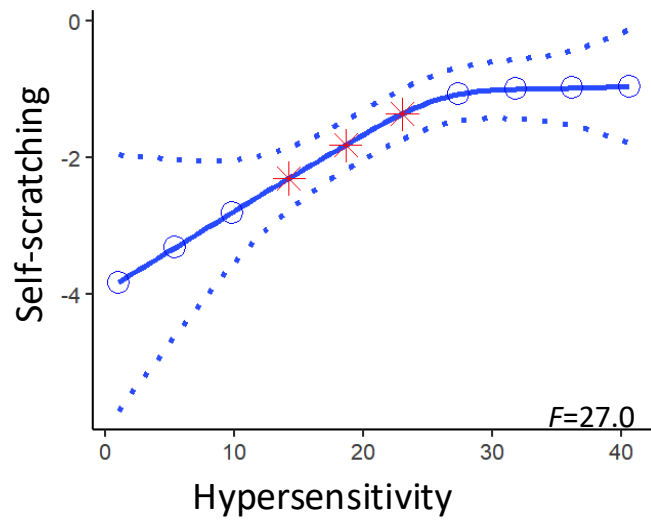
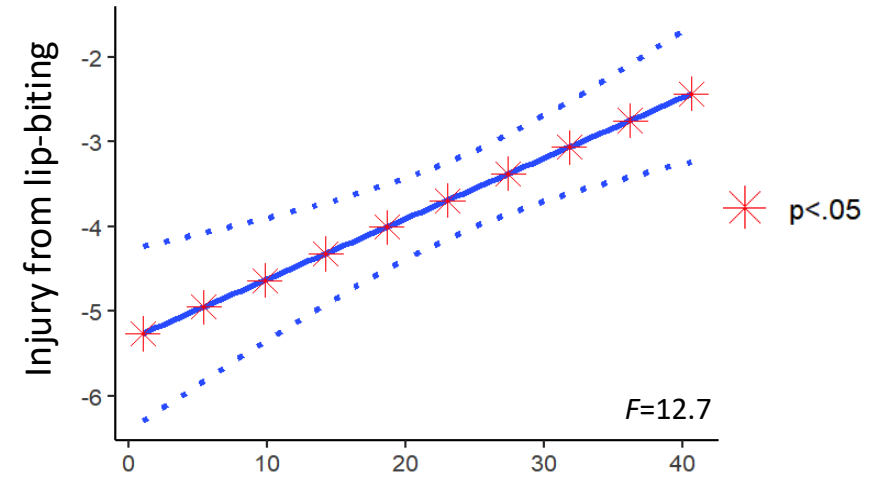
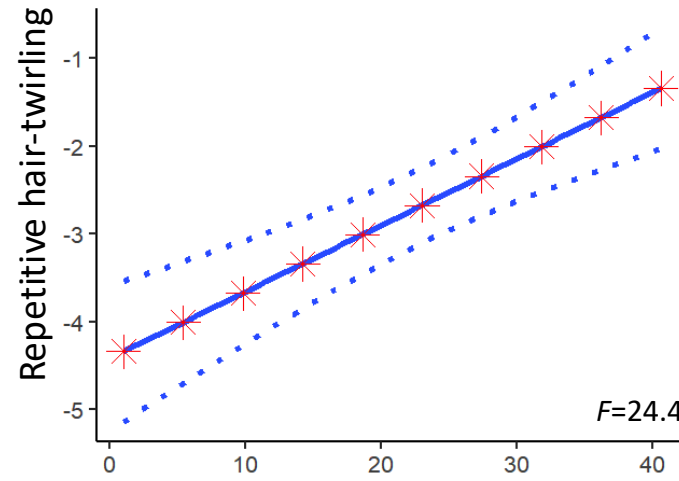
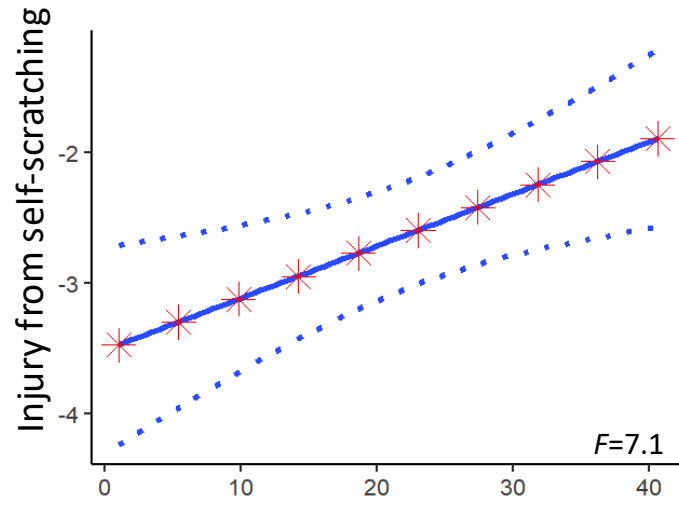
Higher Emotional Dysregulation Associated with Greater Severity of SIB



Example of pathway from poor emotion regulation to challenging behaviors

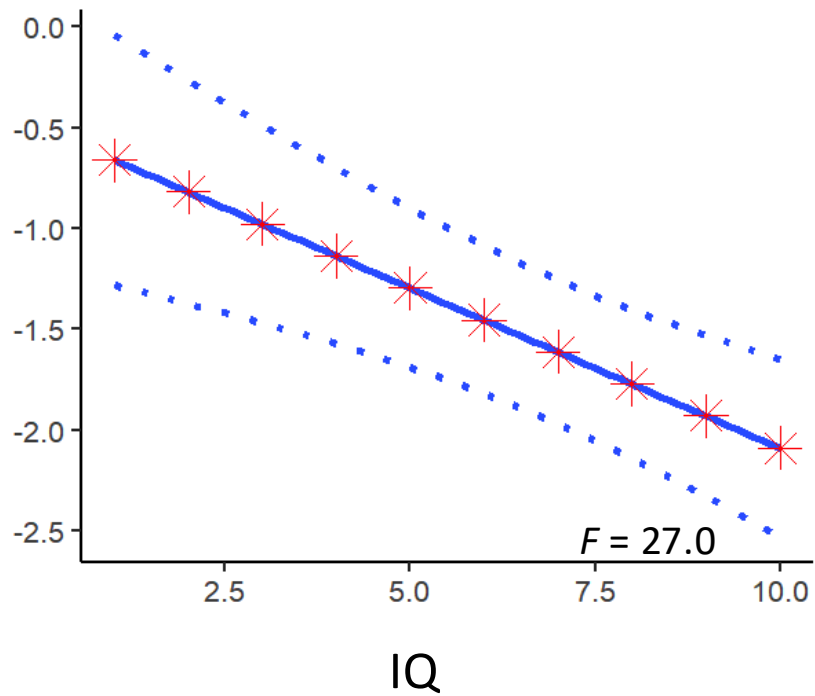


Higher Hypersensitivity Associated with Greater Severity of 6 Types of SIB

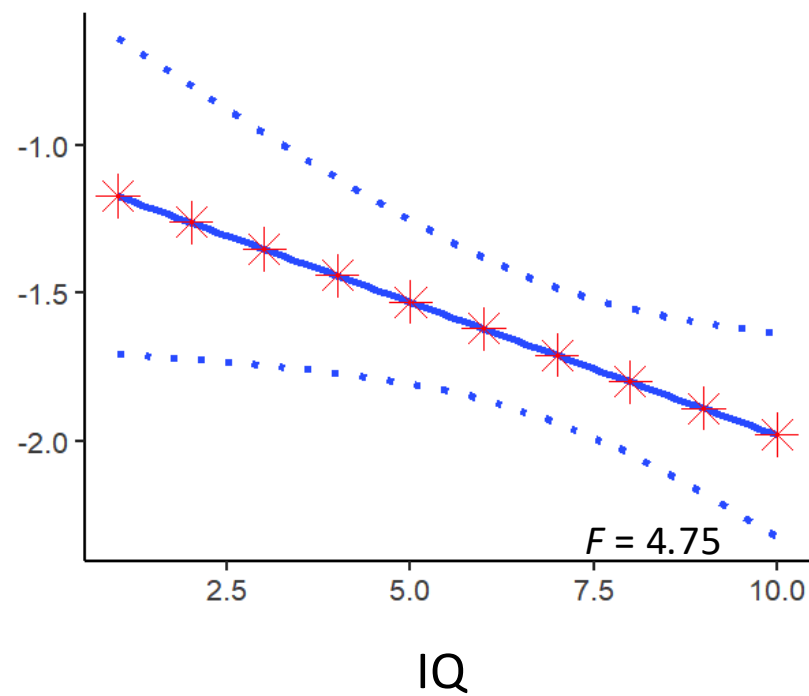


Lower IQ Associated with Greater Severity of 3 Types of SIB

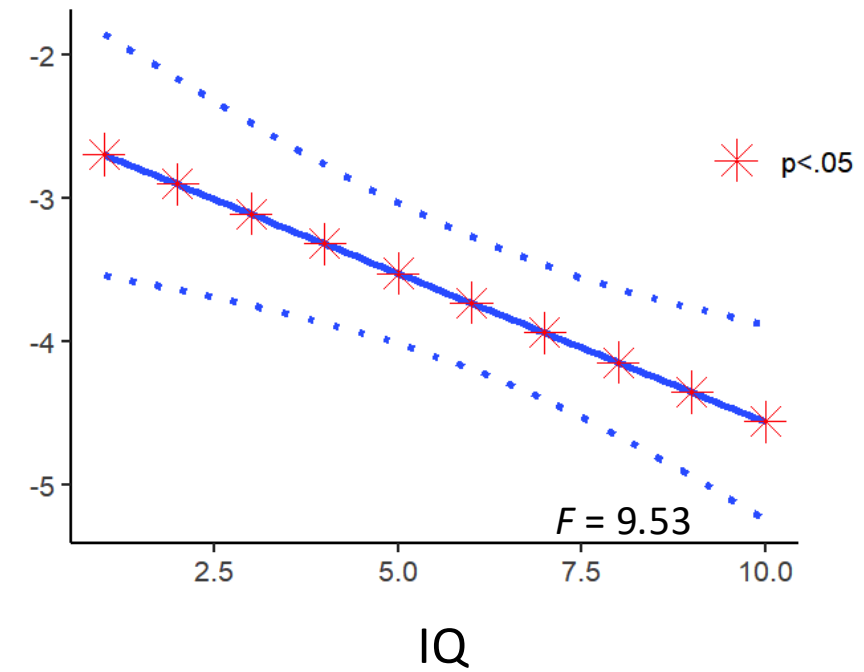
Self-scratching



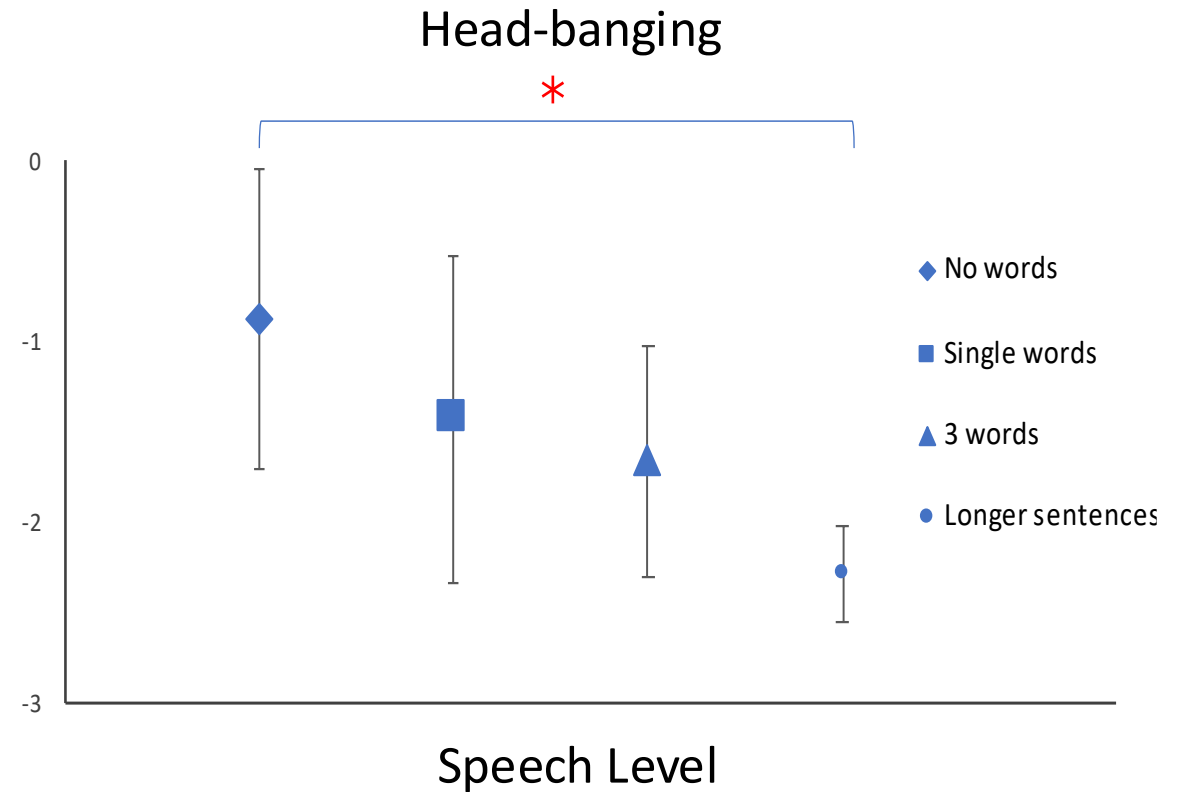
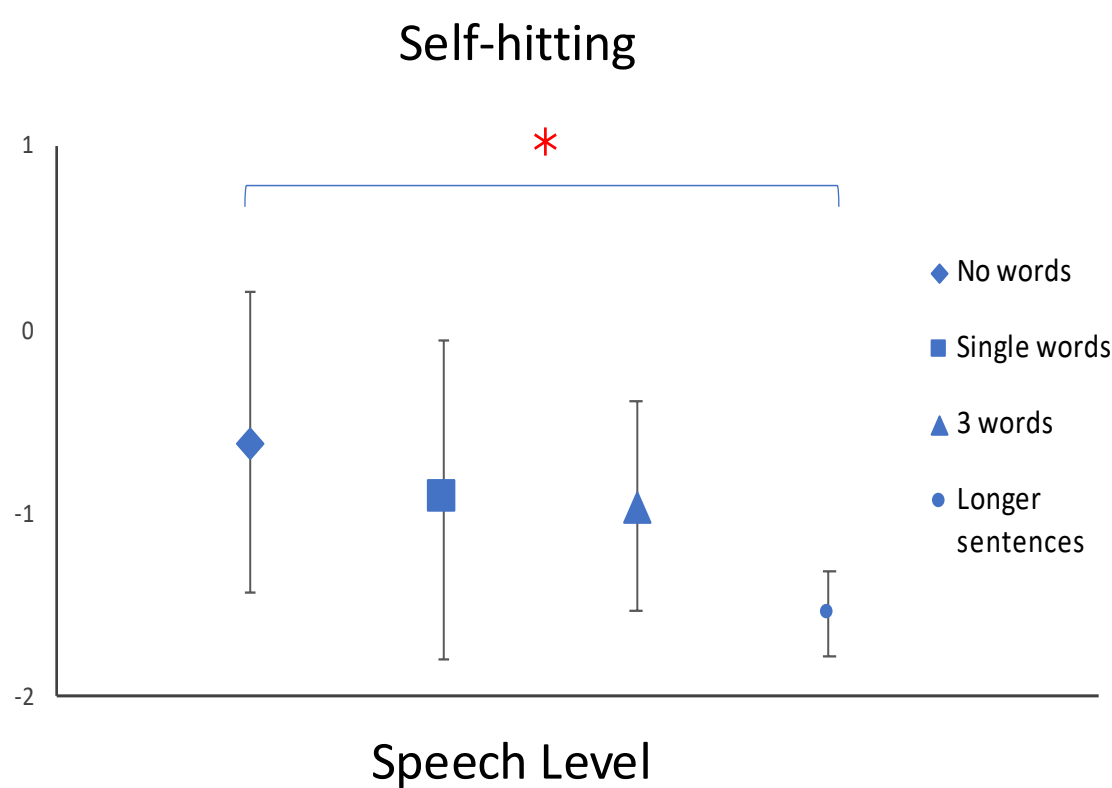
Self-hitting



Lip-biting with tissue damage



Speech Level Associated with Greater Severity of 2 Types of SIB



Summary

SIB Topography	Dysregulation	Hypersensitivity	IQ	Speech Level
Hair-twirling	n.s.	Positive	n.s.	n.s.
Pull or twists hair forcefully	Positive	n.s.	n.s.	n.s.
Nail-biting or picking	Positive	n.s.	n.s.	n.s.
Self-scratching	Positive	Positive	Negative	n.s.
Injury from self-scratching	Positive	Positive	n.s.	n.s.
Self-hitting	Positive	n.s.	Negative	No words > full sentences
Head-banging	Positive	n.s.	n.s.	No words > full sentences
Lip-biting	Positive	Positive	n.s.	n.s.
Injury from lip-biting	Positive	Positive	Negative	n.s.
Pull eyebrows or eyelashes	n.s.	n.s.	n.s.	n.s.
Picks skin	Positive	Positive	n.s.	n.s.

Origins of SIB are Complex and Multifaceted

Potential Area of Focus	Questions to Ask
Coping skills and mental health	Is the situation placing demands that exceed emotion regulation and coping skills? Anxiety? Low mood?
Sensory dysregulation	Is the behavior in response to unmet sensory needs or sensory overload?
Cognitive capacities	Are the demands on the individual too high or too low for their cognitive level?
Adequacy of communication system	Does this person have a functional way to communicate?
Medical	Could this person be in pain? Does this person get enough sleep?
Environmental	Has there been a change in routine or school/ family dynamics?

Autistic Adults Report on Self-Injury

Functional role of NSSI	Example answers to the question 'I hurt myself ...'
Affective imbalance–low pressure (4 items)	'... to feel something.' '... to change my emotional pain into something physical.'
Affective imbalance–high pressure (3 items)	'... to relieve stress or pressure.' '... to deal with frustration.'
Social communication and expression (3 items)	'... in hopes that someone would notice that something is wrong or that so others will pay attention to me.' '... to shock or hurt someone.'
Self-retribution and deterrence (4 items)	'... as a self-punishment or to atone for sins.' '... so I do not hurt myself in other ways.'
Sensation seeking (4 items)	'... because I get the urge and cannot stop it.' '... to get a rush or surge of energy.'

What are the functions of challenging behaviors?

The function of a child's behavior varies but often falls into one of these categories:

Escaping or avoiding tasks or demands	Getting attention from other people
Seeking access to a favorite item or activity	Doing the problem behavior makes the child feel good

Specialists collect information on the **A, B and C** of your child's behavior

A is the **antecedent** or what happens before or with the problem behavior

B is the problem **behavior** you would like to change

C is the **consequence** or what happens after the behavior

Source: ECHO Autism: A Parent's Guide to ABA

Perspectives from Dialectical Behavior Therapy (DBT)

- Helpful framework for parenting and understanding challenging behaviors
- “People are doing the best they can”
- AND how can we help them to grow and improve?
- Acceptance and change
- Identifying behaviors to address and change






Wisdom from DBT Creator Marsha Linehan

- "People are doing the best they can."
- "People may not have caused all of their own problems, but they have to solve them anyway."
- "Figuring out and changing the causes of behavior is a more effective way to change than judging and blaming."
- Patients cannot fail at therapy (but the therapy can fail the patient).

Intervention Implications

- **Emotion Regulation Skills:**
 - Emotion identification and awareness (“I am feeling sad”)
 - Emotion regulation strategies (coping skills, co-regulation)
 - Prevention strategies

My Self -Management Plan

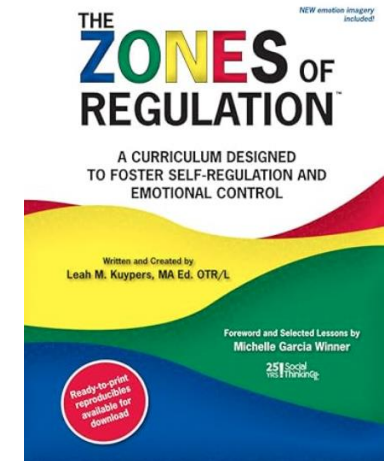
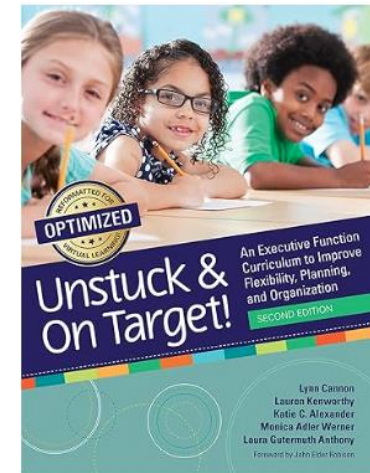
	The behaviors I exhibit when I feel this way	What I need to do-
 I AM HIGH	<ul style="list-style-type: none"> ■ I grab others ■ I hit and bite ■ I yell loud ■ I cry loudly 	<ul style="list-style-type: none"> ■ Sit and breath- deep breaths ■ I need to be in a safe place ■ go to the beanbag and stay there! ■ Get to yellow
 I AM LOW	<ul style="list-style-type: none"> ■ I look tense, my shoulders and body are tense ■ I bite my tongue ■ I click my neck and fingers ■ I look red and sad ■ I need everything to be in its place 	<ul style="list-style-type: none"> ■ Take a sensory break ■ Ask for help ■ I need someone to write and explain what's going on! ■ I need to take DEEP breaths
 I AM CALM	<ul style="list-style-type: none"> ■ I can sit and focus ■ I can follow my schedule ■ I can answer with my voice ■ I do respond to others and I look relaxed! 	<ul style="list-style-type: none"> ■ I can earn my points and get preferred breaks

Intervention Implications






- **Executive Functioning:**
 - Does the individual understand and use information about risk to change behavior?
 - Is the individual able to order information and hold it in their mind?
 - Importance of tailoring to cognitive and speech level

Development and validation of the Executive Functioning Scale

Mirko Uljarević^{1*} Ru Ying Cai² Antonio Y. Hardan¹ Thomas W. Frazier³



Emotion Recognition

Feelings Chart			
	How I Feel	Looks/ sounds/ feels like:	An adult can help/ I can try to:
5		Full meltdown Usually when sick, super hungry, tired, thirsty Or when <i>very aversive demand</i> is placed	Use calm tone Provide space Wait
4		Biting Harder hitting Tense	Usually needs space Music
3		Grunts/ vocalization Banging Little self-tapping	Decide: need space or help with something? Water play, music, food, maybe books
2		Little more jerky More repetitive Biting Posture changes slightly	Asking/ figuring out what he needs Music Book reading
1		Smiles Moves repetitive Straight posture Exploring the room Sensory exploring	Low verbal demands Favorite activities Quiet alone time Everyone is calm

Coping Strategies

- Family practice of coping skills
- Parent modeling using coping skills
- Co-regulation
- TIPP skills (change your temperature, intense exercise, paced breathing, progressive muscle relaxation):
<https://www.youtube.com/watch?v=0cq5RuE8SXk>
- Can this person learn to use coping skills independently?

Co-Regulation Techniques

TECHNIQUE	DESCRIPTION
 <p>Label Feelings</p>	<p>Help your child identify big feelings by labeling your child's feelings in a neutral tone of voice. For example, "It seems like that really frustrated you," or "I can see it made you feel sad when . . ."</p>
 <p>Breathe Together</p>	<p>Calmly take deep breaths so your child can see you practicing self-calming. If it does not make your child more upset, sit next to or hold your child while you breathe deeply so your child can feel the rhythm of breathing.</p>
 <p>Body Calming</p>	<p>Slowly and rhythmically rub your child's back, feet, etc. when they are recovered. Connecting like this lets them know that you will be there when they are ready to talk or interact.</p>
 <p>Back Stories</p>	<p>Tell your child a story while drawing on the top half of your child's back. For example, draw a circle with rays for the sun, draw triangles for mountains, tap your fingers to walk up the mountain, and brush your hand back forth to make wind. Then, switch places and let your child tell a story on your back.</p>
 <p>Music</p>	<p>Sing or play relaxing songs. Model how to sing/dance/play an instrument. Your child will learn to use music as an active calming tool.</p>
 <p>Sensory Activities</p>	<p>Creating a soothing environment can reduce distress. Try lowering lights and turning off noisy toys and devices. Weighted blankets or other objects that children can touch or feel can help them focus and calm down. A cold washcloth over the eyes can reduce visual stimulation and calm an overly stressed system.</p>


Other Coping Skills Links

- Belly breathing:
https://www.youtube.com/watch?v=_mZbzDOPYlA
- Muscle relaxation (melting):
<https://www.youtube.com/watch?v=fTzXFP6CPI>
- Freeze dance:
https://www.youtube.com/watch?v=A1vdKfXIB_g
- A little spot of emotions [books](#)
- Sensory soothing time

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Prevention Strategies from RUBI Intervention

Activity Sheet 2.1a

Examples of Categories of Prevention Strategies

Avoid situations or people (don't go to movies or house of worship)	We never take our child to the movies. He can't sit that long.
Control the environment (put locks on doors)	We have alarms on our front door, in case our son attempts to leave the house.
Do things in small doses (go shopping for less than an hour)	When we go to my other son's basketball games, my husband takes our son for a walk after being in the gym for 15 minutes.
Change order of events (child must dress before TV)	We used to let the kids watch TV while they eat. But they never seemed to finish, and we kept yelling at them to eat. So now we have a rule: no TV until after dinner.
Respond to early signs of the problem (distract child or change demands)	We can usually tell when our son can no longer sit in a restaurant. As soon as we see him becoming antsy, my husband will take him for a walk.
Change how you ask or respond (don't say "no"; give choices)	With our son, giving choices often lessens noncompliant behavior. For example, before bedtime we offer the choice between two books.
Address setting events (sleep loss, illness, hunger)	School staff reported that our son was becoming more irritable and aggressive between 11 am and noon every day at school. We came up with a plan to give him a small snack around 10:30 am, and the problem has been eliminated.
Use visual or auditory cues (pictures, lists, timers)	Our son used to be cranky during transitions at school. His teacher gave him a picture schedule showing all the activities for the day. She had him check his schedule before each transition.

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Behavioral Interventions

- **Functional analysis of problem behaviors**
 - Identifying antecedents, behaviors, consequences
- **Behavioral therapies** to teach alternative strategies
- **Mental health therapy** (e.g., Cognitive Behavior Therapy)
- **Parent-training** in behavior management
 - Research Units in Behavioral Intervention (RUBI)
 - Parent-Child Interaction Therapy (PCIT)

ABC SHEET

Student: _____ Observer: _____

Target Behavior: _____

Antecedent: The event that occurs immediately before the behavior

Behavior: The occurrence of the target problem behavior (record frequency)

Consequence: The event that immediately follows the occurrence of the behavior

Date	Time	Antecedent	Behavior	Consequence	Comments

The **RUBI** Autism Network
Building evidence-based tools for ASD



Challenging Behavior Resources

[Clinician Guide: Program Development and Best Practices for Treating Severe Behaviors in Autism](#)

[Challenging Behaviors Tool Kit](#)

[Autism Safety Kit](#)

Contact the Autism Speaks Family Services Team with questions

- Contact the Autism Response Team (ART) at 888- AUTISM2 (288-4762), or by email at familyservices@autismspeaks.org
- ART En Español al 888-772-9050
- <https://www.autismspeaks.org/autism-response-team-art>

ECHO Autism Challenging Behavior Resources

- <https://echoautism.org/>



Brief Overview of Managing Crisis Situations

- Talk to your child’s teachers, doctors, other support professionals to develop a plan
- Have a plan for home, school, community:
 - Defined events, triggers, or signs that a crisis may develop
 - Tools to keep individual and others safe
 - Steps to promote de-escalation
 - Hands-on training and practice
 - Knowledge of the best prepared facility if hospitalization or an Emergency Room visit is necessary
 - Determine whom to contact in crisis or an emergency
 - See “Autism Speaks Challenging Behaviors Toolkit” for more information: [Challenging Behaviors Tool Kit](#)



Thank you!

Research Team

- Antonio Hardan, MD
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- Emily Spackman, PhD
- Ru Ying Cai, PhD

Funding

- R21MH121876-01 (Hardan & Jo)

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