UAB The University of Alabama at Birmingham

Managing Functional Neurological Disorder (FND) from a School Perspective

Presented by Dr. Kristina McMahan-Harris

Objectives

1. Review what is FND, research on FND, and basic information about how to treat it
2. Dos and Don’ts for treating FND
3. How you can best support the students
4. Review example school plan and patient plan

FND is one of the most common diagnoses in outpatient neurology clinics

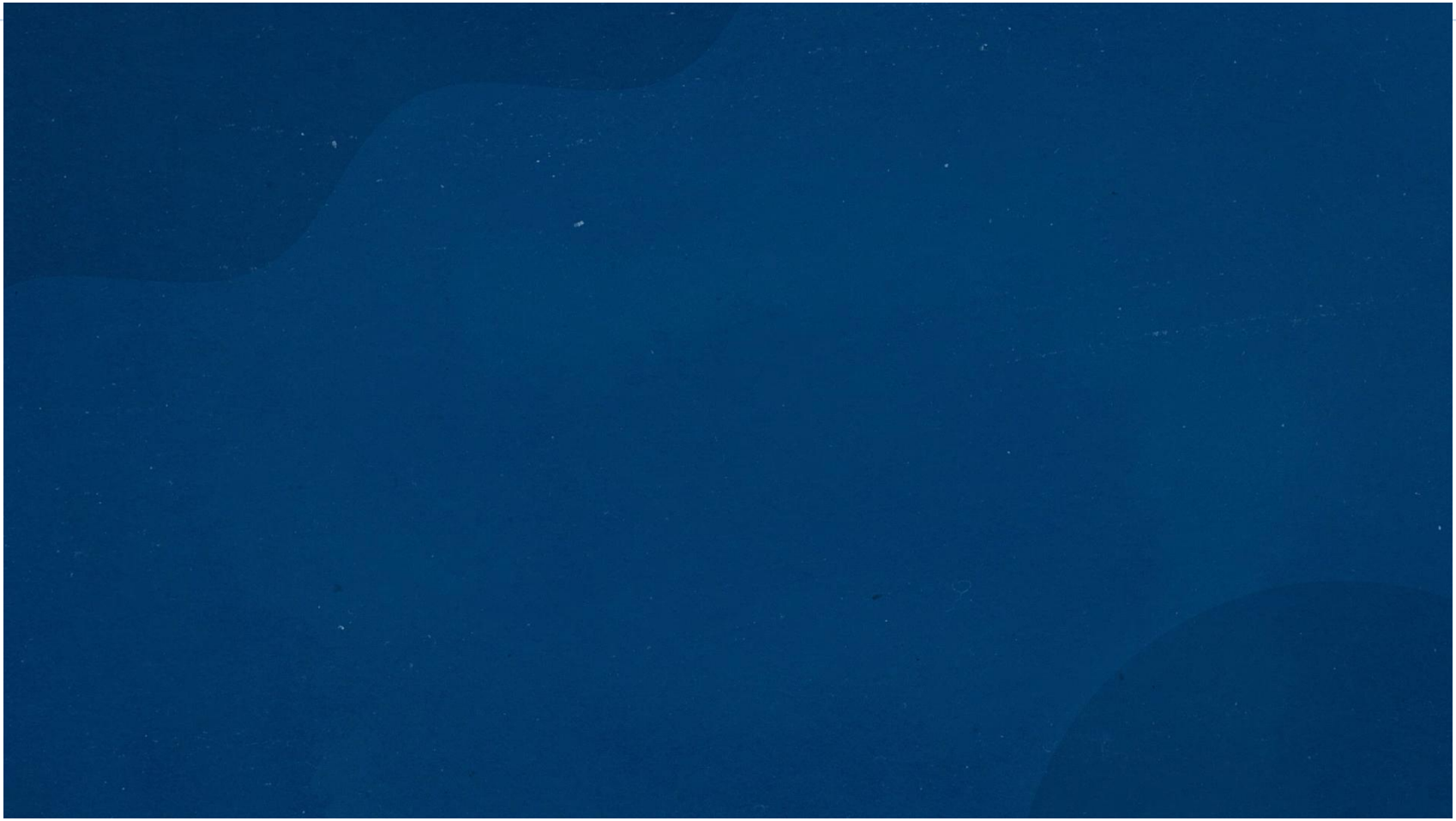
As many as 60,000 children are newly diagnosed with FND in the United States each year.

FND Diagnostics Overview

What is FND?

- Neurological symptoms (e.g., weakness, tremors, seizure-like episodes)
- Not explained by another neurological condition
- Symptoms are real and not intentional
- Diagnosed by a medical professional

What is FND?



FND DSM-V-TR Criteria

A

One or more symptoms of altered voluntary motor or sensory function.

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Clinical findings provide evidence of **incompatibility** between the symptoms and recognized neurological or medical conditions.

C

The symptom is not better explained by another medical or mental condition.

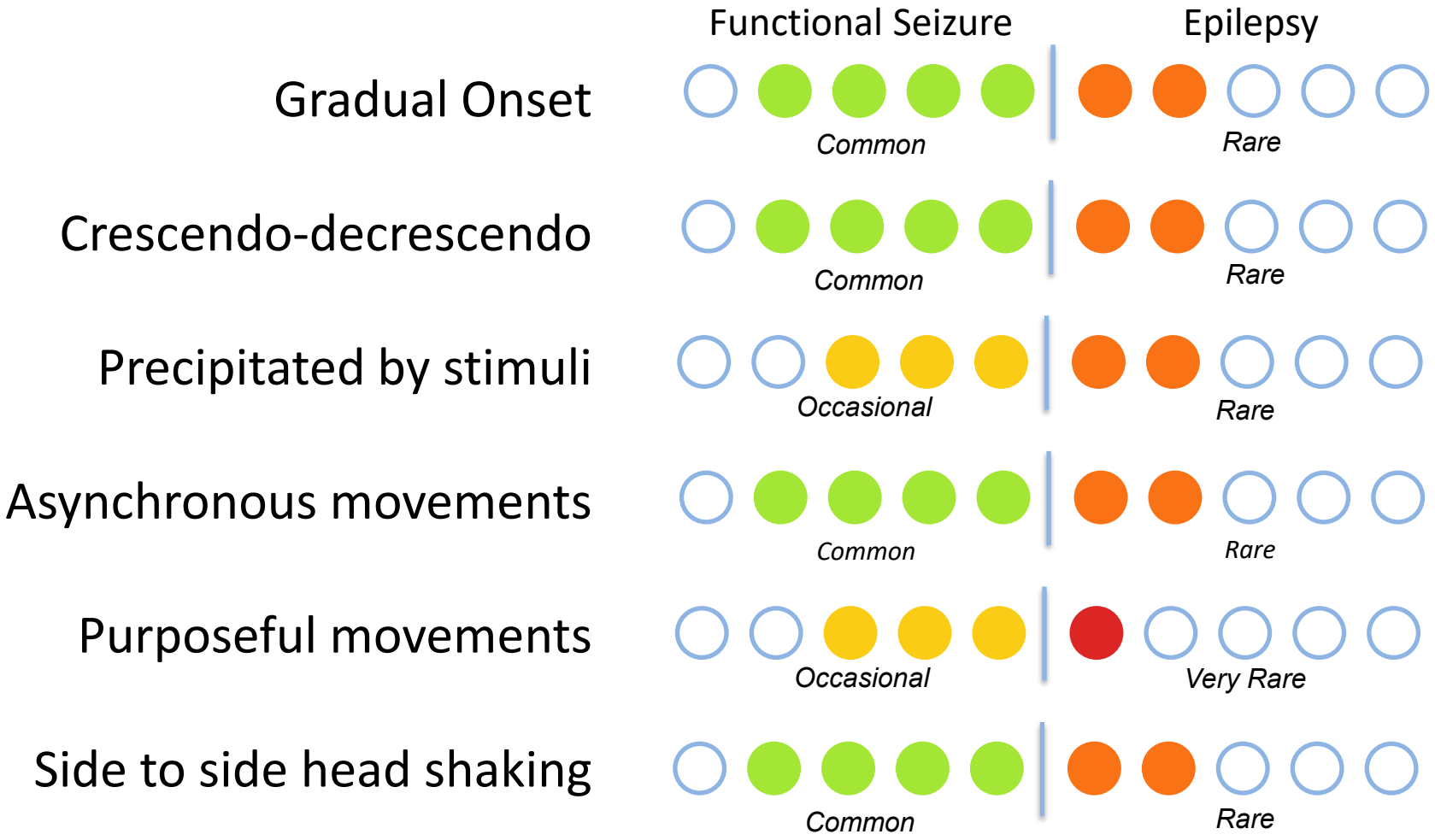
D

The symptom causes clinically significant distress or impairment.

FND Examples

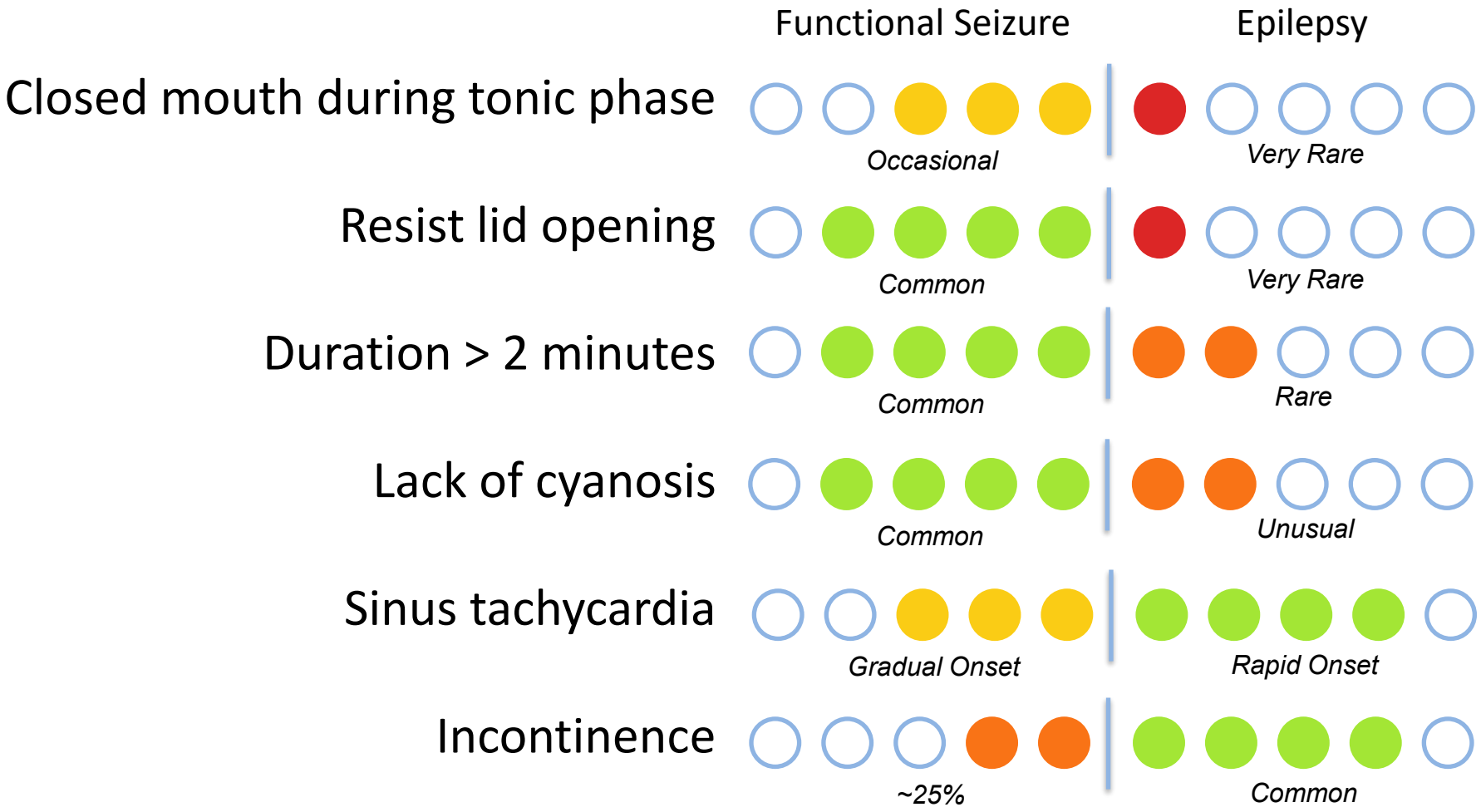
- Seizure-like attacks (e.g., functional seizures)
- Weakness or paralysis
- Anesthesia/sensory loss
- Tremors and tics
- Speech symptoms
- Vision loss
- Mixed symptoms

Functional Seizures vs. Epilepsy Symptoms



Adapted from **(Watson, Sivaswamy, et al. 2019)**

Functional Seizures vs. Epilepsy Symptoms



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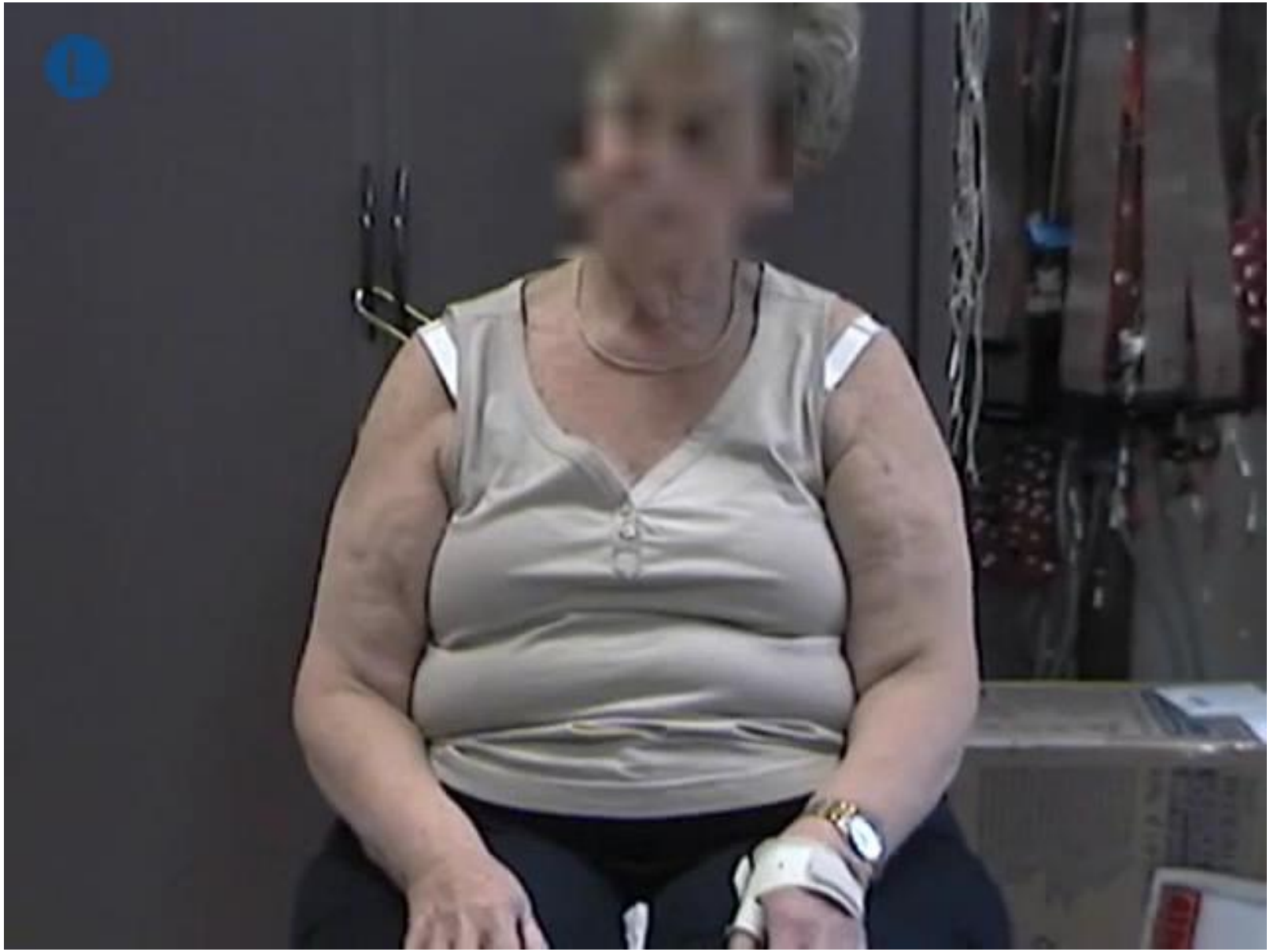


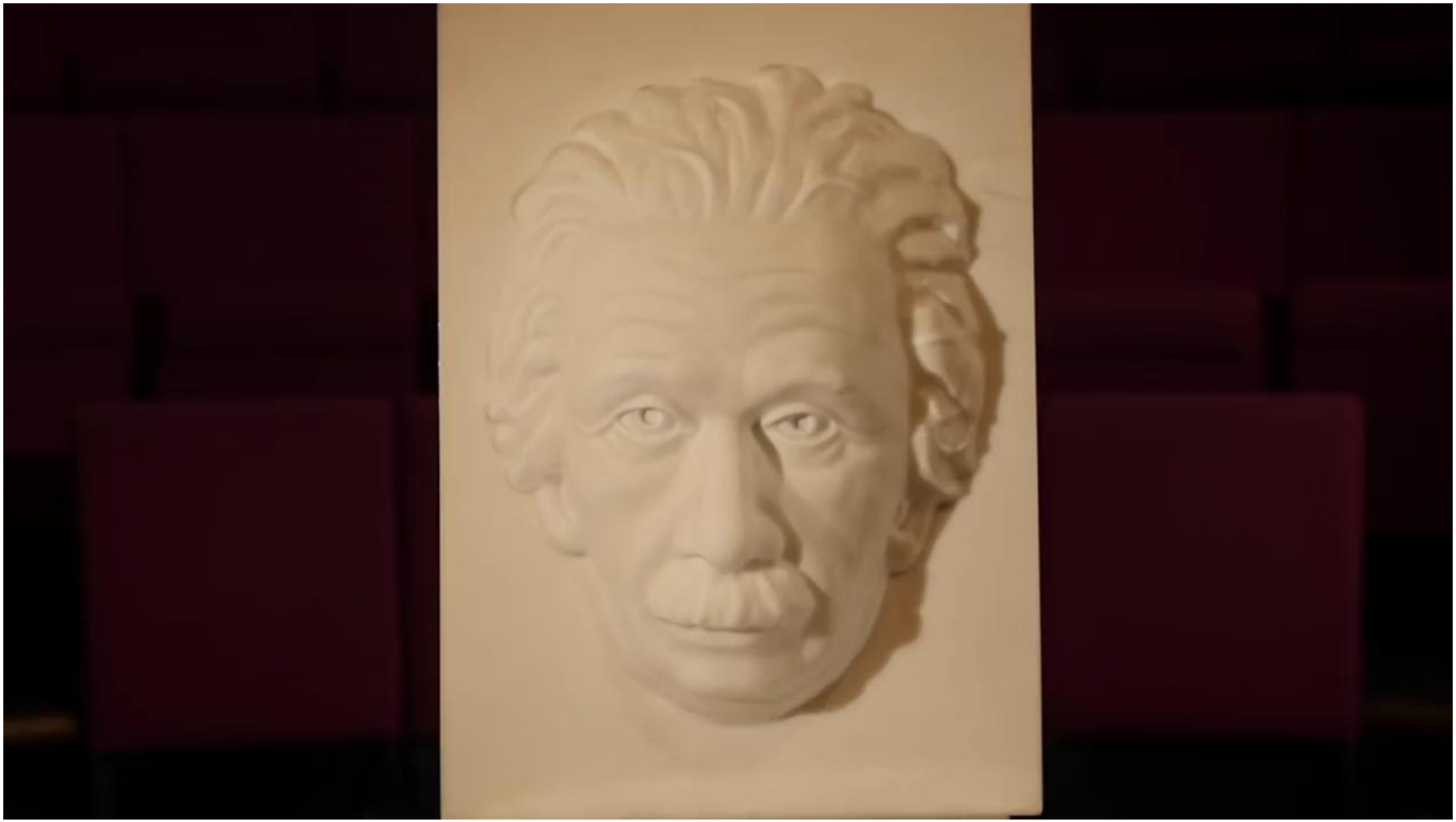
From **(Hallett et al. 2022)**

Review of Common FND Myths and Learning Model of FND

Common FND Myths

- Myth #1: Trauma is associated with Pediatric FND (Stager, Morriss et al. 2022)
- Myth #2: If we treat mood/anxiety, FND symptoms will go away. (Goldstein et al., 2020; LaFrance et al., 2010)

Takeaway: By simply targeting mood, it does not resolve FND symptoms.



Learning Model of FND

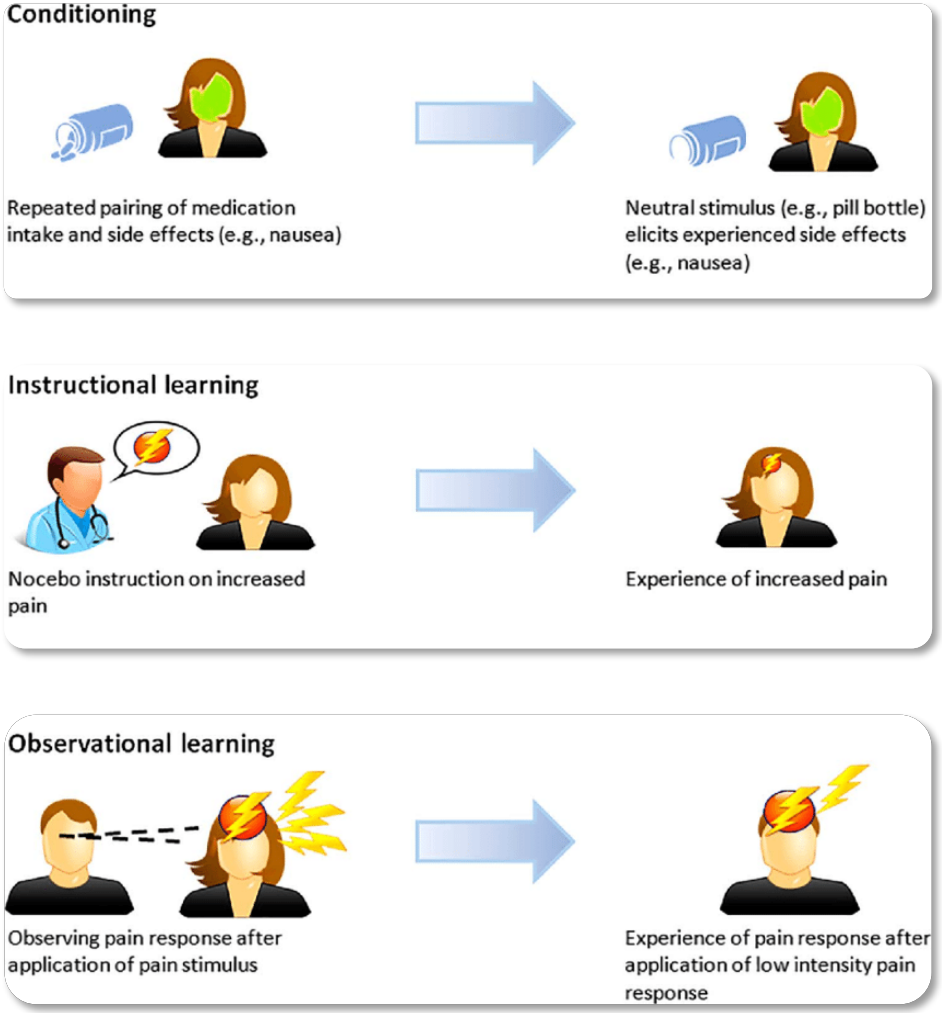


Figure from **(Manaï et al., 2019)**

Retraining and Control Therapy (ReACT)

ReACT for FND

1

CBT-based and short-term therapy

2

1st session is typically 1.5 hours

3

Follow-up sessions are typically 1 hour

4

Aim for 8-12 sessions on average

ReACT for Pediatric Patients with Functional Seizures

- Randomized Controlled Trial (RCT)

ReACT vs. Supportive Therapy

17 participants	15 participants

Results:

- ReACT → greater reduction in FS than supportive therapy
- 100% no PNES in 7 days after ReACT

From **(Fobian et al., 2020)**

Other RCT Outcomes

82% Full Remission for at least 60 days

57% Full Remission for at least 1 year

All Returned to School and Social Activities

From **(Fobian et al., 2020)**

ReACT via Telehealth for Mixed FND

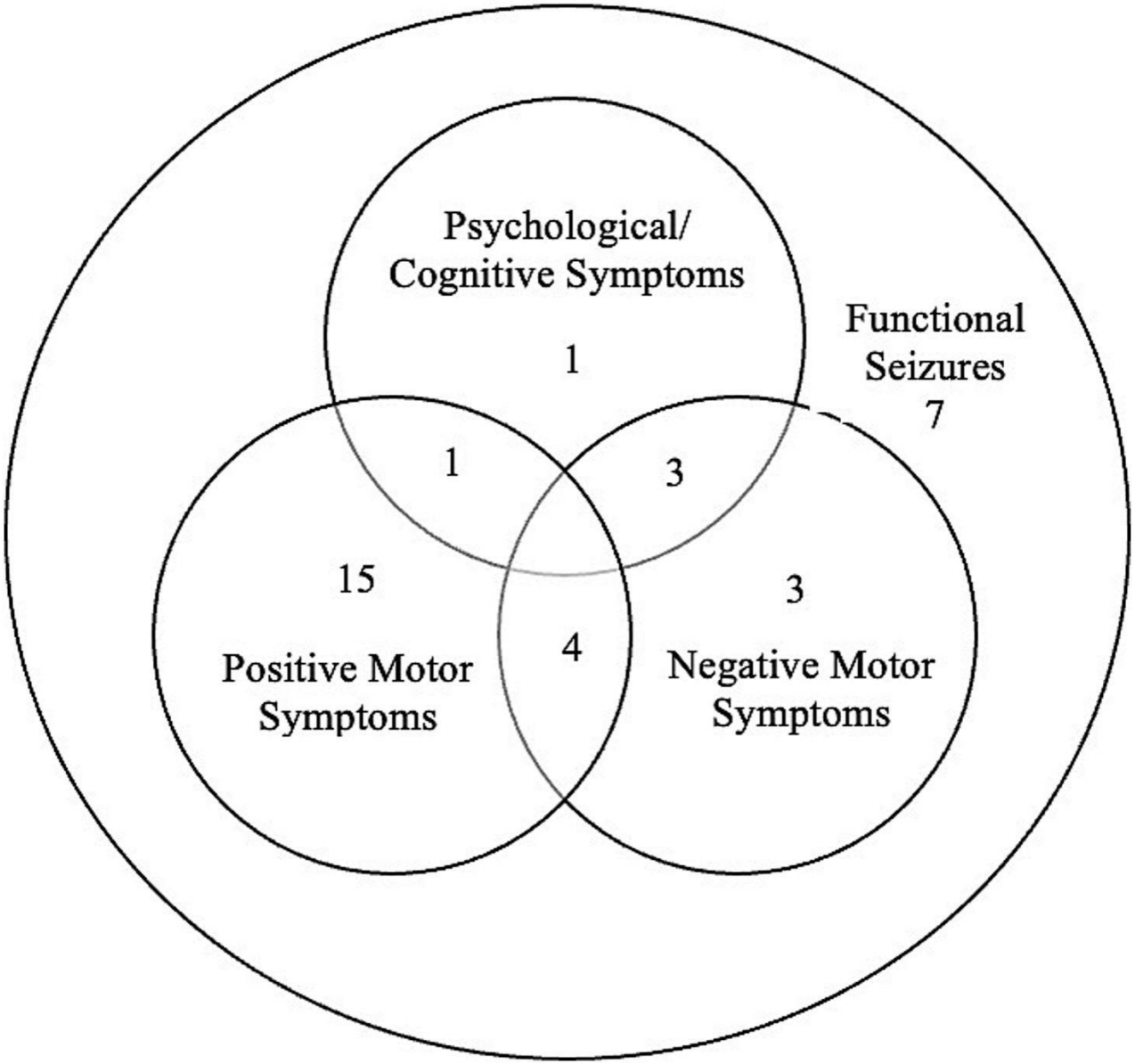
- 34 adolescents with FND

12 sessions of ReACT

Intake in person & 11 sessions via telehealth

- FND symptoms self-reported at baseline, 1-week post-treatment, and 6-months post-treatment

From **(Watson, et al. 2025. Journal of Psychosomatic Medicine)**



From **(Watson, et al. 2025. Journal of Psychosomatic Medicine)**

Baseline Information

- 79% mixed FND symptoms
- 68% had comorbid MH diagnosis
- Compared to original RCT:
  - More clinically significant anxiety (33% vs. 28%)
  - More clinically significant depression (27% vs. 10%)
  - Longer duration of FND symptoms (1.18 years vs. 7.9 months)
- 42% were previously in unsuccessful FND treatment before ReACT
  - 29% with at least 2 previous unsuccessful treatments
  - 25% CBT or another outpatient psychotherapy

From **(Watson, et al. 2025. Journal of Psychosomatic Medicine)**

Outcomes

94% Reduction in FS Symptoms

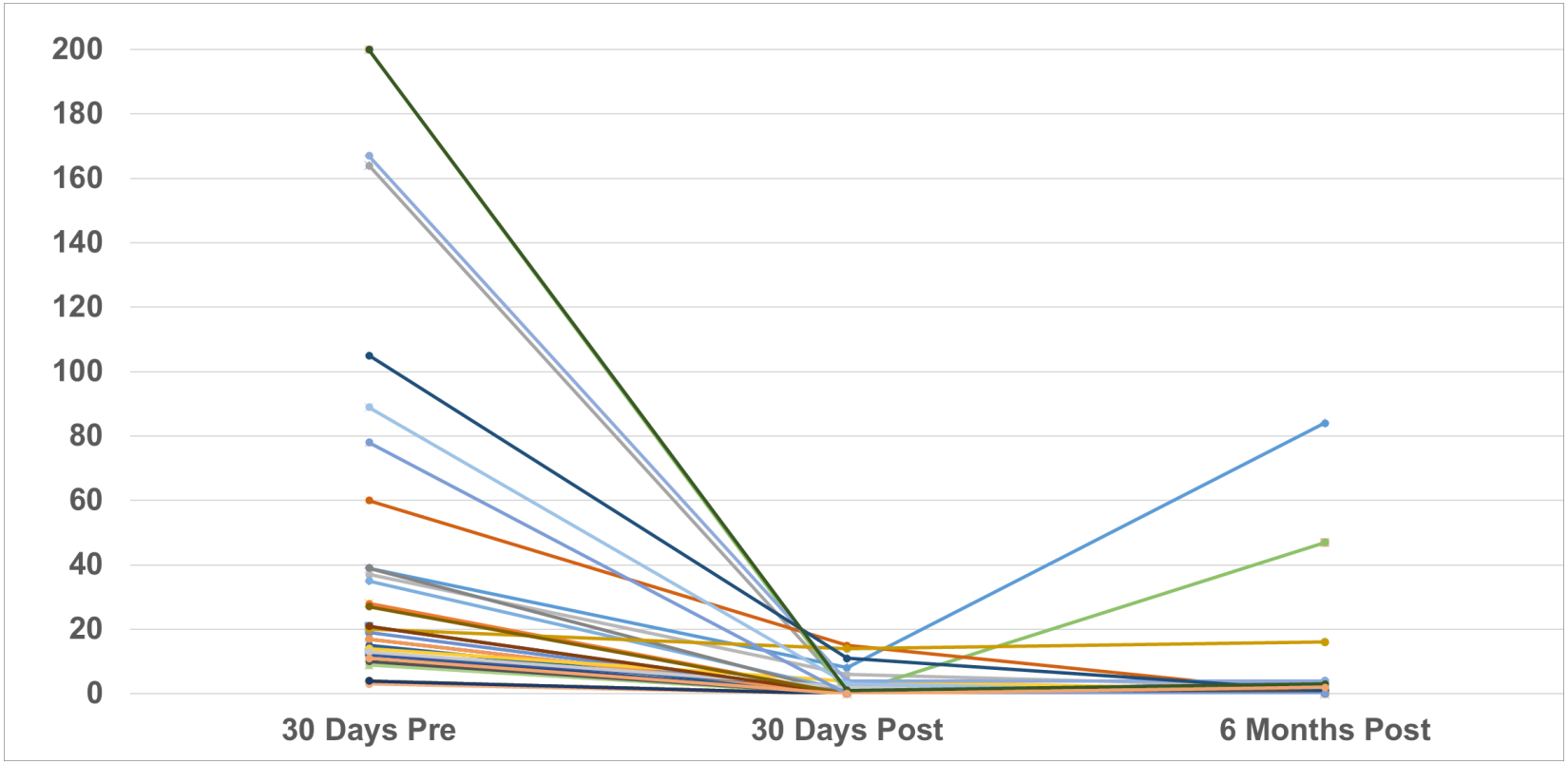
59% Full Remission for at Least 6 Months

94% Had at Least 50% Reduction in FS Symptoms

97% Clinically Significant Improvement via Therapist and Parent Report, 88% via child report

From **(Watson, et al. 2025. Journal of Psychosomatic Medicine)**

FS Frequency Before and After ReACT



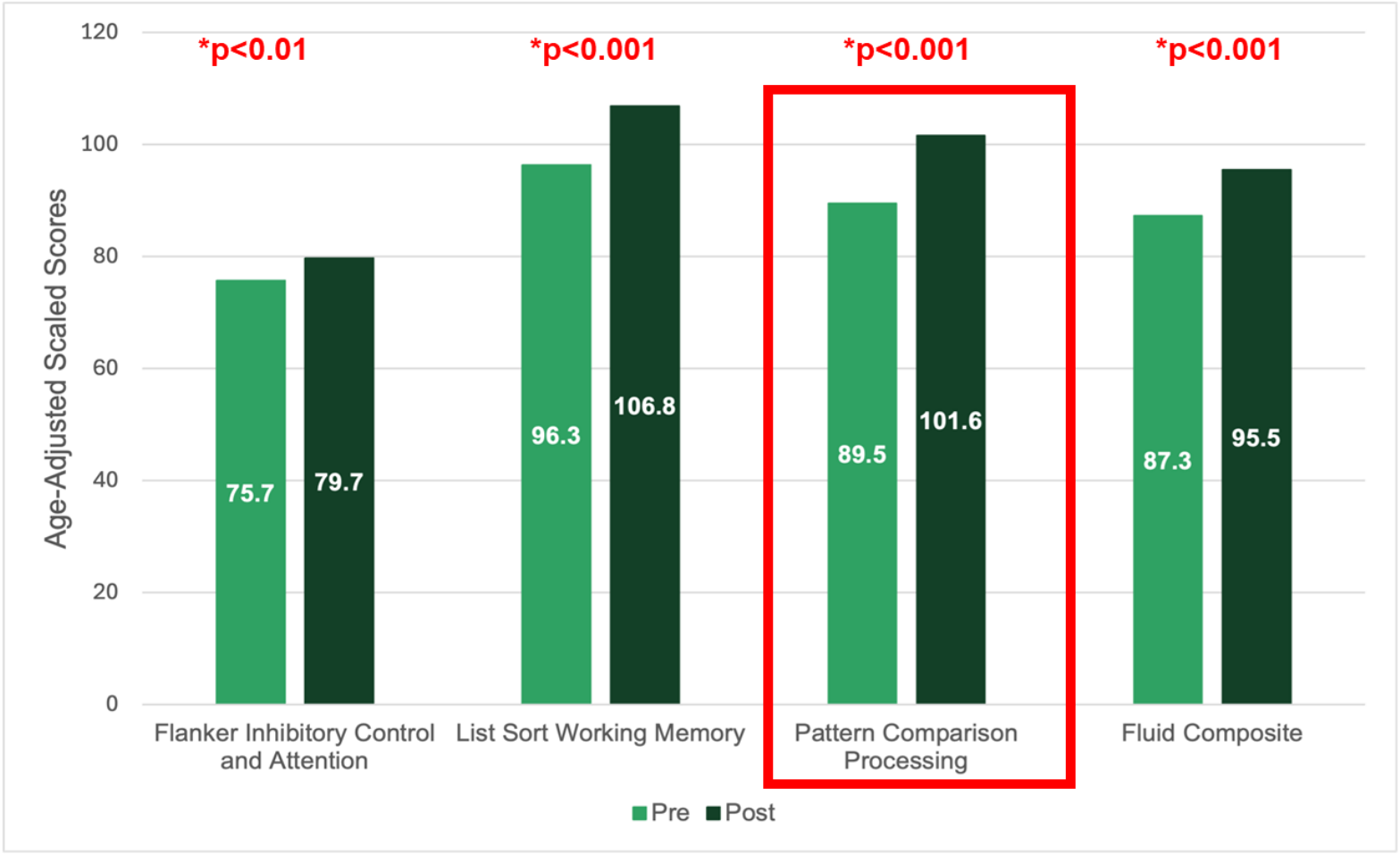
From **(Watson, et al. 2025. Journal of Psychosomatic Medicine)**

Other FND Outcomes

	Baseline	1-Week Post	6-Months Post
Positive Motor Symptoms Other than FS			
% Reporting Symptoms	58.8% (20)		
% Reporting Freedom from Baseline	—	60.0% (12)	75.0% (15)
Negative Motor Symptoms			
% Reporting Symptoms	29.4% (10)		
% Reporting Freedom from Baseline	—	60.0% (6)	70.0% (7)
Psychological/Cognitive Symptoms			
% Reporting Symptoms	14.7% (5)		
% Reporting Freedom from Baseline	—	80.0% (4)	100.0% (5)
Overall Functional Tics			
% Reporting Symptoms	47.1% (16)		
% Reporting Freedom from Baseline	—	62.5% (10)	87.5% (14)
Functional Motor Tics			
% Reporting Symptoms	41.2% (14)		
% Reporting Freedom from Baseline	—	71.4% (10)	85.7% (12)
Functional Vocal Tics			
% Reporting Symptoms	17.7% (6)		
% Reporting Freedom from Baseline	—	83.3% (5)	100.0% (6)

From **(Watson, et al. 2025. Journal of Psychosomatic Medicine)**

NIH Toolbox Cognition Battery Differences



From **(Watson, et al. 2025. Journal of Psychosomatic Medicine)**

How We View FND

- FND symptoms are automatic (reflexive), not faked, not dangerous
- Body has learned patterns of responding
- Symptoms can be retrained and improved using ReACT
- FND has several names:
  - Functional Neurologic Disorder, Conversion Disorder, Psychogenic nonepileptic seizures, Functional Movement Disorder

What Causes FND?

- Learned automatic responses of the body
- May follow illness, injury, or stress
- Triggers such as environments, emotions, or expectations
- Not always linked to trauma

Course of Treatment

- Education about FND (ReACT Research)
- Retraining the body's responses
- Gradual return to normal activities
- Changing thoughts/expectations about symptoms
- Multidisciplinary care (psychology, PT/OT, neurology)

Example Retraining Plan – Part 1

Sit

Change Thoughts

Calm Thoughts:

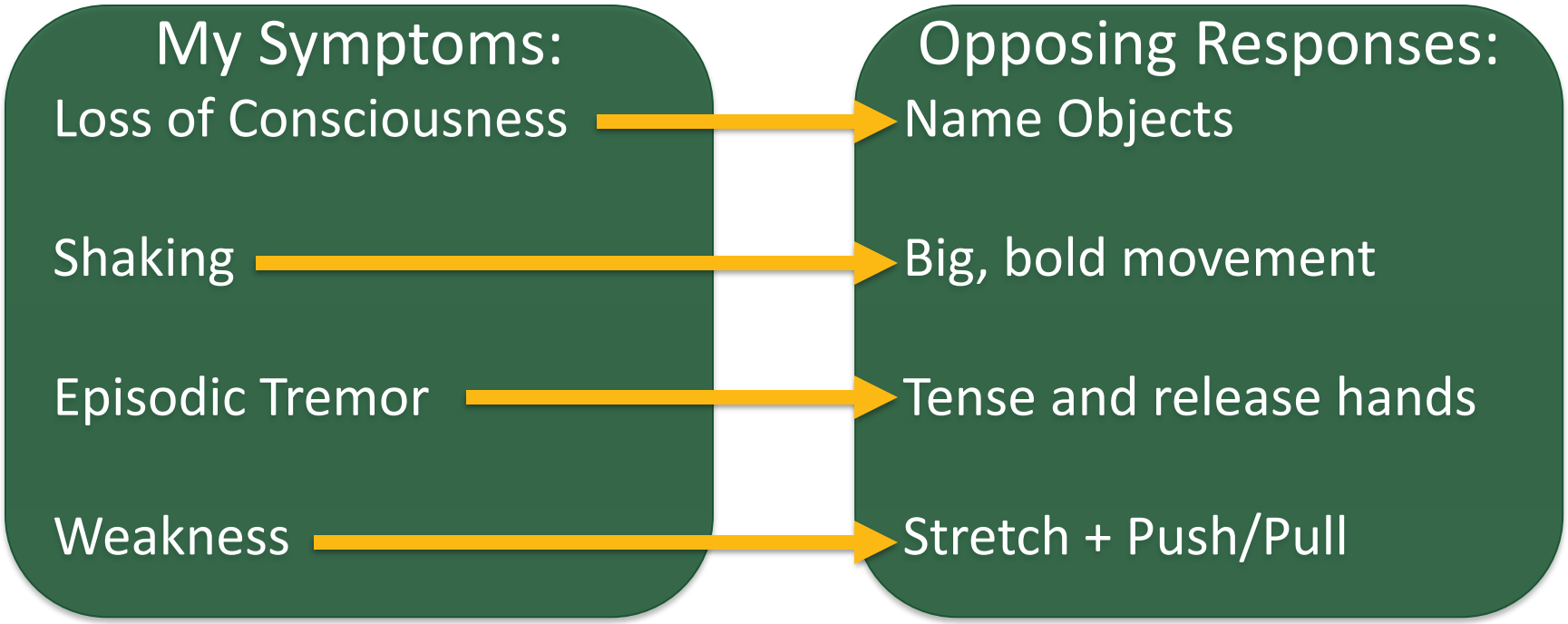
1) I have been evaluated by doctors, and they told me this won't harm me.
2) I have had a lot of these episodes and I'm always eventually okay.
3) I am okay.

Control Thoughts:

1) I don't have to have an episode
2) I can learn to control this
3) I have a plan.
4) I can prevent my symptoms.

Example Retraining Plan – Part 2

Retrain the Symptoms



Breathe

Example General School Plan

- Return and remain at school
- If they have an episode:
  - Make sure they're not in an unsafe place
    - Don't move them unless they're in an unsafe place
  - Make sure they're not hitting their head
    - Can slip a jacket under their head
  - Don't try to talk or shake them out of an episode
  - Don't send them home or to the hospital
- Can manage symptoms inside or outside classroom
- Can participate in all activities

Other Example School Plan

- **Continuous Gait Disorder**
  - Leave classroom with classmates and allow more time (e.g., 5 min) to travel to next class
  - Leave classroom early (e.g., 5 min) to walk independently without bumping into peers
- **Episodic Paralysis**
  - Allow them to stay seated even if classes are changing to manage the episode
  - Other students should continue their work

Other Example School Plan

- **Functional Vomiting**
  - Go and stay in school even when vomiting
  - Their plan is to work on swallowing regurgitated food instead of vomiting
- **Fatigue and Cognitive Problems**
  - Redirect attention to the task and continue typical routine even if they can't fully participate
  - Temporary accommodation: Give 24-48 hours to complete assignments

Other Example School Plan

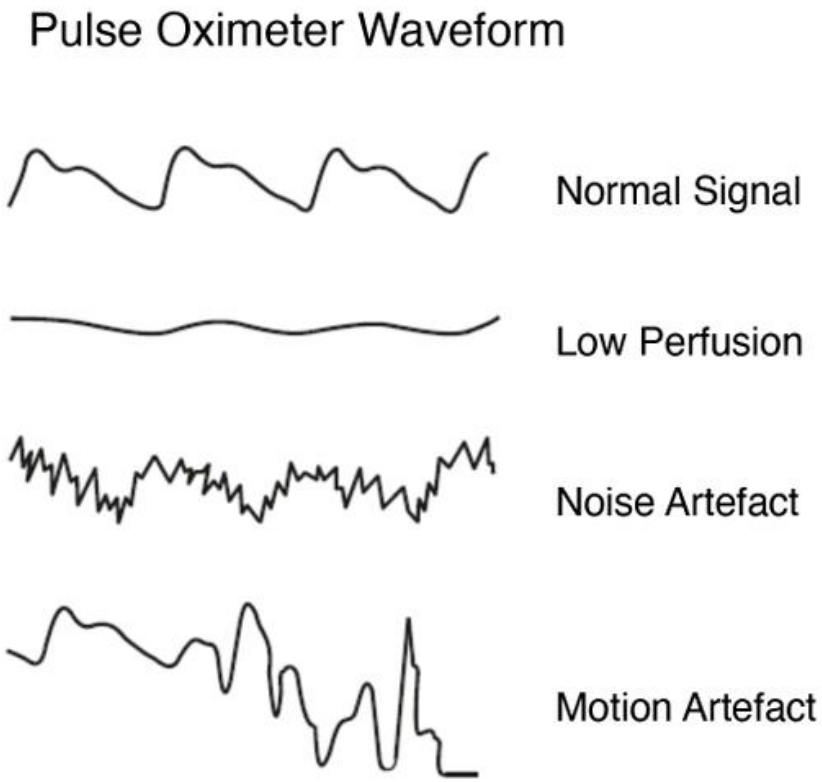
- **Missing a lot of one class period**
  - Allow them to complete missed school-work during non-core class later in the day
  - Rearrange schedule, temporarily, and once there are no episodes, return to regular schedule
- **If episodes are long**
  - Whoever is monitoring the student, try to work on other things if possible
  - If there's a time when the student isn't jerking/moving (e.g., 10 minutes), you can provide a single prompt "Remember to do your plan"

Nursing Role During Episodes

- Ensure safety (prevent injury)
- Do NOT restrain or excessively intervene
- Do NOT try to stop the episode verbally
- Give space and remain calm
- Do not panic or show alarm
- Do not provide excessive attention
- Do not repeatedly ask questions during episode
- Do not send to ER unless safety concern (i.e., risk of concussion from falling)

Do Not Monitor Vitals

- You do not need to monitor vitals during episodes
  - BP
  - Oxygen
  - HR
- What can happen if you monitor
  - Reinforcing
  - Prolong duration of episode



From **(Kanbayashi, et al. 2026. Practical Neurology)**

After the Episode

- Wait for patient to re-engage first
- Allow brief recovery (e.g., water)
- Encourage return to normal activities
- Avoid reinforcing the episode

Key Takeaways

- FND symptoms are real but reversible
- Independence is core to treatment
- Watch what you say while they're in episodes because many can hear you
- Consistency across staff is critical
- Goal = return to normal functioning
- Keep them at school all day. Don't send them home.
- This is a short-term increased effort to reduce frequency and severity very quickly

If you have a patient with FND

- UAB FND Clinic
  - Administrative Scheduler – Michelle Bumpers
    - Phone: 205-996-6425
    - Fax Records and Referrals: 205-975-6559

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Thank you!
Questions?