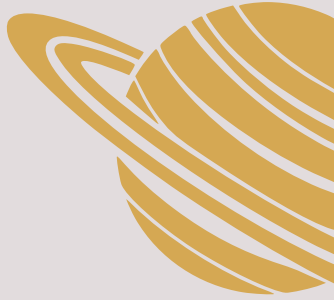
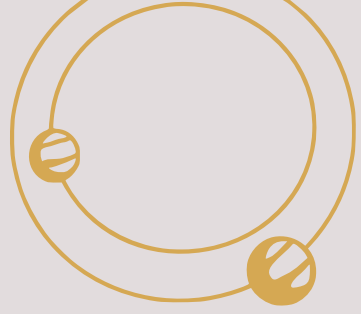




FROM SLEEP PROBLEMS TO SWEET DREAMS

PRESENTED BY HOLLY DILLEN, MS, LBA, BCBA, CERTIFIED
BEHAVIORAL SLEEP PRACTITIONER

TEXANA CENTER



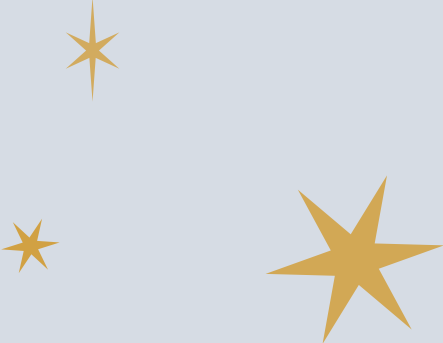
OVERVIEW

- PREVALENCE & PROBLEMS
- FRAMEWORK
- COMMON MISSTEPS
- CONSIDERATIONS FOR
SUPPORTING INDIVIDUALS
WITH IDD

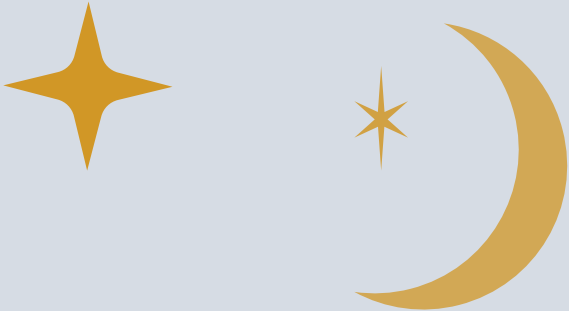
OBJECTIVES

- Use simple data collection to identify sleep pattern disruptions and individual sleep needs
- Consider impact of medications and medical conditions on sleep
- Support development of effective bedtime routines tailored to developmental level
- Implement daytime behavioral strategies that support nighttime success
- Identify sleep intervention options for specific challenges



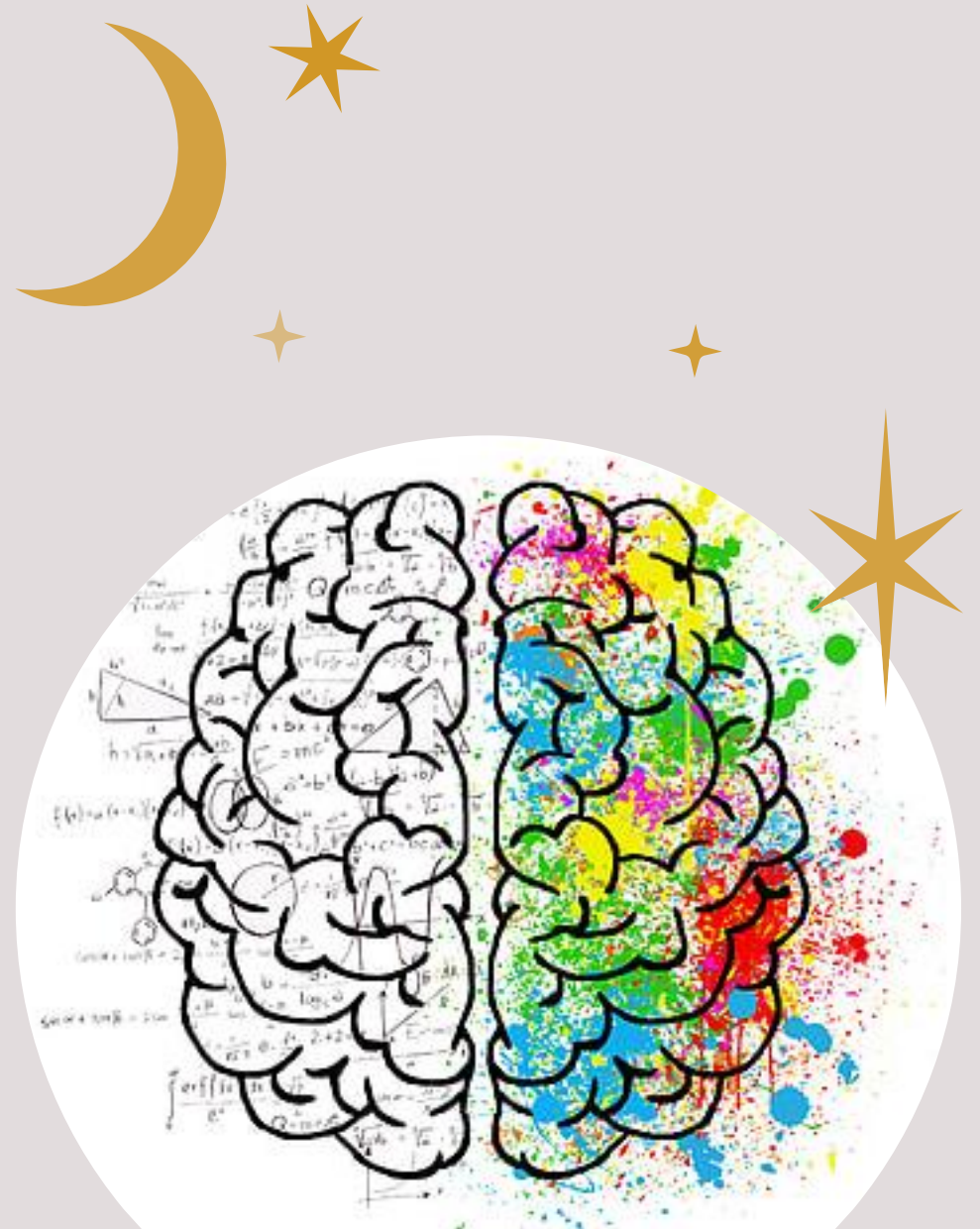


SLEEP DIFFICULTIES
AFFECT OVER 50% OF
INDIVIDUALS WITH IDD



BENEFITS OF SLEEP

- NREM 1-3
 - Tissue growth and repair; muscle repair
 - Immune system activation and regeneration
 - Brain detoxification
 - Heartbeat and breathing slow
 - Declarative and procedural memory
- REM
 - Memory consolidation
 - Emotional Processing
 - Effects our ability to respond to difficult events



ASSUMPTIONS OF A BEHAVIORAL SLEEP PRACTITIONER

- Sleep is not a behavior; it is not subject to contingencies
 - Everything leading up to sleep is though!
- The goal is to set the occasion for sleep and increase the reinforcing value of sleep
- Behavioral quietude
- Sleep problems are often due to skill deficits and can be addressed by building new repertoires and skills
- We all wake throughout the night, but “good sleepers” have the skills to easily fall back asleep



DREAM FRAMEWORK

1. Data and discovery
2. Routine development
3. Environment and expectations
4. Achieve readiness and address dependencies
5. Master and maintain





DATA AND DISCOVERY

ASSESSING SLEEP NEEDS AND PATTERNS



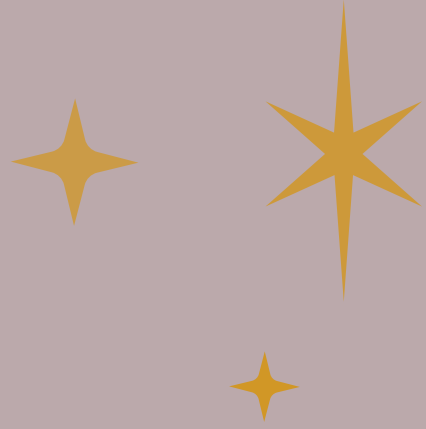
WHAT ARE THE ISSUES?

- DIFFICULTY GETTING TO BED OR BEHAVIORAL CHALLENGES
- DELAYED SLEEP ONSET
- NIGHT AWAKENINGS
- EARLY MORNING AWAKENINGS
- WHAT IS DESIRED?

ASSESSMENT

- Medical history and ruling out medical variables
- History
- Bedtime routine
- Current and desired sleep space and surrounding environment
- Prerequisite skills
- Sleep dependencies
- Client and/or caregiver goals and priorities
- Cultural considerations





IMPORTANT DATA

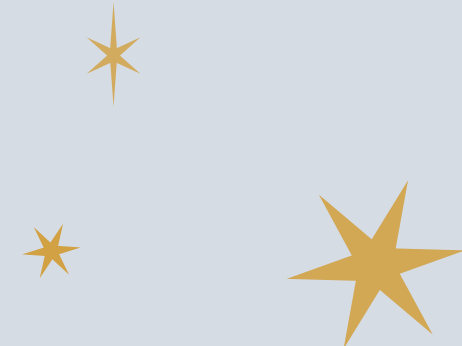
- MORNING WAKEUP
- NAP TIME(S)
- “LIGHTS OUT”
- YOUR BEST GUESS AT FINAL TIME
ASLEEP
- OCCURRENCE OF NIGHT AWAKENINGS



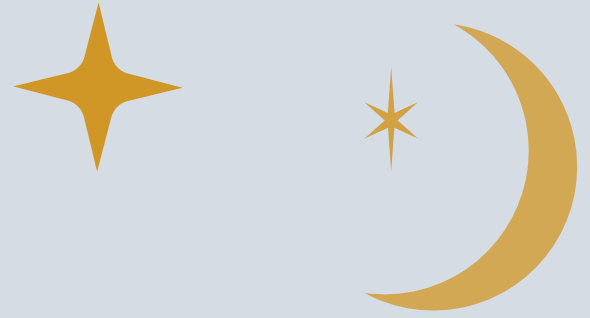
ADDITIONAL MEASURES

- Caffeine intake
- Presence of medical symptoms
- Exercise
- Timing of medication administration





COLLABORATION WITH MEDICAL PROFESSIONALS IS ESSENTIAL



PSYCHOTROPIC MEDICATIONS

- Always follow the prescribing doctor's orders, but ask how these medications and when they are taken may impact sleep
 - Stimulants
 - Delayed sleep onset
 - Sedatives
 - May reduce REM sleep
 - Can create a false sense of appropriate bedtime
 - Mood stabilizers

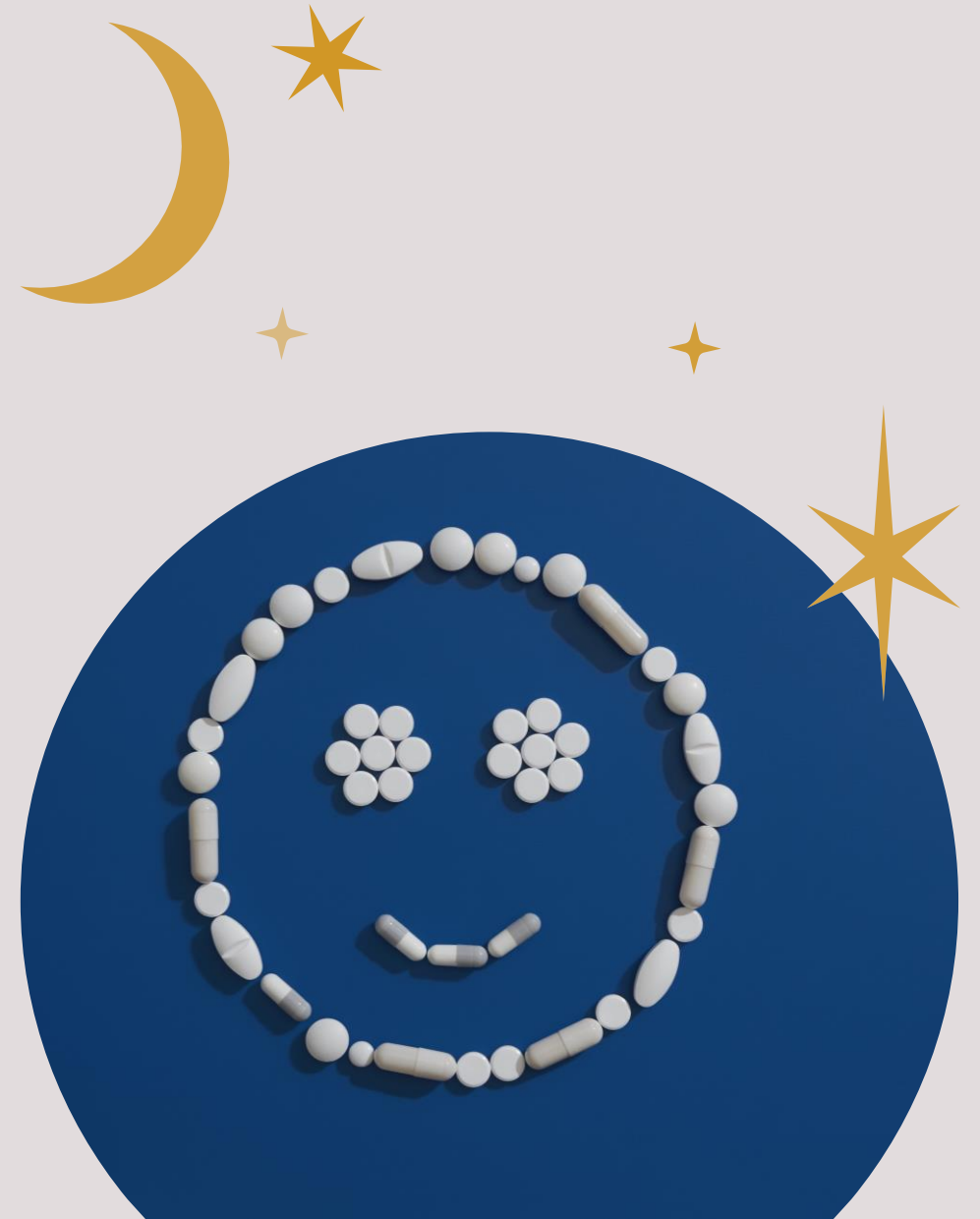
PSYCHOTROPIC MEDICATIONS

- Knowing about current medications will help determine reasonable sleep expectations
- May be falling asleep before ideal bedtime
 - This can be particularly troubling for teens
 - Extremely early bedtimes may result in early morning awakenings
- Medications may impact quality and type of sleep
- Could be leading to daytime sleep (that impacts nighttime sleep)



MELATONIN

- What it is and what it isn't
- Importance of discussing melatonin use with physician
- Melatonin should be used with behavioral and environmental modifications
- Choose brands carefully; amount of melatonin per pill and bottle can vary widely from label



COMMON MEDICAL ISSUES THAT IMPACT SLEEP

- Gut issues
 - Constipation, diarrhea, reflux, physical discomfort, gas, bloating
- Allergies
- Seizures
- Eczema
- Sleep Apnea/Airway Issues
- Restless Leg Syndrome



WHAT NOW?

- Address any medical issues if advised and check in with physician
- Collect data daily
- Clean up bedtime routine
- Tweak schedule
 - Is amount of sleep appropriate and is there enough time between sleep episodes?
 - Look at 24-hour sleep
- Achieve readiness and address dependencies
 - Sleep train or support modifications that promote independent sleep.





ROUTINE DEVELOPMENT

CREATING A SUSTAINABLE BEDTIME ROUTINE THAT SETS THE STAGE FOR SLEEP



BUILDING A SUCCESSFUL BEDTIME ROUTINE

The bedtime funnel

Moving from highly preferred to less preferred

Tailoring the length of the routine to the individual

Avoiding escalation or dangerous behavior

Incorporating visuals

Predictable

FOR ALL AGES

- The bedtime routine should signal that bedtime is coming
- Should include calming activities that are done in the same order each night
 - Dr. Craig Canaperi's "Bedtime funnel"
 - "Events move physically closer to bed and emotionally closer to sleep by lowering the energy level"
- Best to minimize screens but blue light is not as bad as we once thought
- Avoid heavy exercise or stimulating activity close to bedtime

CONSIDERATIONS FOR SPECIFIC POPULATIONS

- Length of routine
 - Usually around an hour for young children and gets a bit shorter with age—but some people may need much longer than others to wind down
- Activities in routine will be based on preferences and play or leisure repertoires
- For individuals with severe interfering behaviors or a history of difficulty with bedtime or the bedtime routine, we may need to start with a routine that is calming and feasible and then work toward a long-term routine



INCORPORATING CALMING ACTIVITIES

- Deep pressure and gentle movement
 - Rocking, gliding, and swinging
 - Massage
 - “Smushing” or wrapping
 - Weighted items (up to bedtime)
 - Stretching, yoga, meditation
- Quite activities
 - Sorting, drawing, play dough, magna tiles, books, sorting, stacking, puzzles, board games, etc.



ACTIVITIES TO AVOID



Running



Wrestling



“Getting the wiggles out”



High-impact movement or anything that works up a sweat



Up and down vestibular motion such as bouncing, crashing, and jumping



Stimulating activities

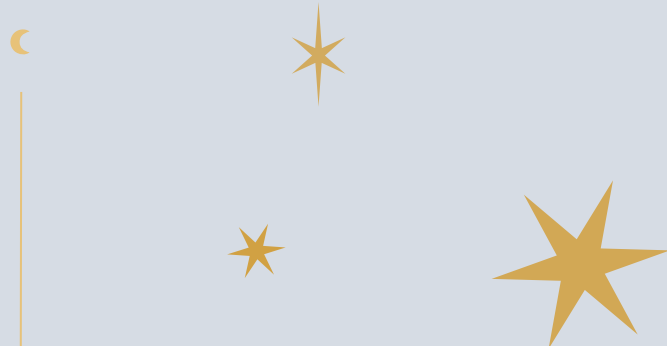


Screens within 30-minutes of lights out

ADDITIONAL SUPPORTS

- Visual supports, activity schedules, checklists, charts, social stories
- Timers
- Shaping behavior outside of the bedtime routine
 - Relinquishing preferred items
 - Increasing comfort/acceptance of non-preferred parts of the routine
 - Teeth brushing
 - If play and leisure skills are limited, we may focus on teaching new calming activities that could be incorporated into the bedtime routine





THE BEDTIME ROUTINE SHOULD END
IN THE DESIRED SLEEP SPACE, WHILE
THE PERSON IS DROWSY BUT AWAKE,
WITH THE ENVIRONMENT AS IT WILL
BE FOR THE REST OF THE NIGHT

****AND WITH CONDITIONS THAT CAN BE SUSTAINED ALL NIGHT!





ENVIRONMENT & EXPECTATIONS

OPTIMIZING CONDITIONS AND PREPARING FOR INDEPENDENT SLEEP

OPTIMIZING THE SLEEP ENVIRONMENT

- Temperature
- Sound
- Light
- Familiarity and comfort with the sleep space
- Accommodate sensory needs
- Consider “summer camp” rule
- Ensuring items that may be needed overnight are available and easy to access



SCREENS AND BLUE LIGHT



- BEST TIME AND PLACE FOR SCREENS
 - Good: Limited screen time on top of sheets with light on before lights out
 - Better: Screens early in the bedtime routine with other activities after
 - Best: No screens within 30-60 minutes of bedtime
- SCREENS CAN BECOME DEPENDENCIES
 - Falling asleep with a screen on may impact sleep all night
- CONTENT MATTERS

WHAT ARE THE EXPECTATIONS AND GOALS?

- Where will the person sleep?
- What environmental stimuli will be present?
 - Should only be things that are available all night long and do not need involvement of another person
- Who will be present?
- What skills do they need to calm and prepare for sleep?



GOOD SLEEP STARTS DURING THE DAY

- Daytime behavioral strategies can support nighttime success
 - Promoting healthy separation—gently!
 - Work on relinquishing technology and terminating preferred activities
 - Establish the sleep space as a safe/preferred space
 - Address comfort and fears



DETERMINING SLEEP EXPECTATIONS

- When should “lights out” be?
- When do we start the bedtime routine?
- What is an appropriate wake time?
- How often, and when to nap



START WITH SETTING A CONSISTENT WAKE TIME

- If the person is not waking at the same time every day, this should be worked on first
- It can be tempting to encourage extra morning sleep after bad nights, but that morning sleep will affect the person's ability to sleep the following night



DETERMINING SLEEP EXPECTATIONS

- When should “lights out” be?
- When do we start the bedtime routine?
- What is an appropriate wake time?
- How often, and when to nap



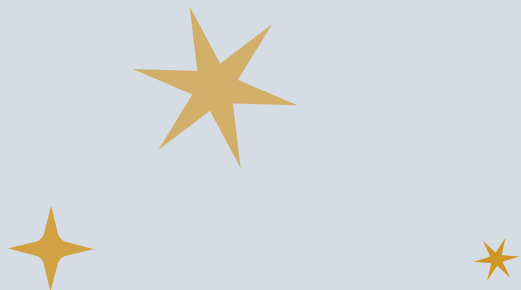


SLEEP EXPECTATIONS COME FROM

Desired wake time

Age (which
determines general
range of sleep needs)

Family or Individual
Preferences





SLEEP NEEDS

- VARY BY AGE
- 24-HOURS
- NAPPING
- SLEEP DRIVE/APPETITE

WAKING WINDOWS

- Help determine appropriate bedtimes
- We all generally need a certain amount of wake time before we will be tired enough to sleep
 - Wake windows get longer and longer until around age 12



NAPS

- Must have an appetite for sleep
 - Naps reduce sleep drive
- Remember, we are trying to increase the reinforcing value of sleep, if someone is not tired, sleep is not desired and not a reinforcer



AVERAGE SLEEP NEEDS AND WAKE WINDOWS BY AGE

Age	Total Hrs. of Sleep in 24-hours	Naps	Wake Windows and Other Considerations
1	11-14	1, ranging from 1-3 hours	Need 5 hours of awake time between sleep opportunities
2	11-14	1, ranging from 1-2 hours	Need 6 hours of awake time between sleep opportunities
3	10-13	Not necessary, most children drop nap but some still benefit	Children can tolerate about 12 hours awake before needing to sleep again
4-6	10-13 hours	Not necessary and will steal from nighttime sleep	Can tolerate 13-14 hours awake
7-11	9-12 hours	No longer needed	Can tolerate 14-15 hours awake
12-18	8-10 hours	No longer needed	Sleep needs will fluctuate based on hormonal shifts. Bedtime will shift to later.
Adults	7+ hours	No longer needed	Special considerations based on gender and older age

EXAMPLE

- Determining an appropriate bedtime
 - Start with their desired wake time and sleep needs and go from there
 - For example—they need to wake at 6:30 AM to get to school on time and they need 9-10 hours of sleep based on their age
 - Their bedtime should be between 8:30 and 9:30 PM
 - This is without naps



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Sleep Needs:

- 6 years old
 - Needs 10-13 hours in a 24-hour period
 - Does not need naps

Current Scenario and Other Considerations:

- Lots of bedtime shenanigans and curtain calls, parents aim for 7:30 bedtime but bedtime is often extended much later than intended
- Falls asleep on the drive to and from school (30-mins each way)
- Parents wake at 7:00 AM for school

WHAT WOULD YOU RECOMMEND?

USE SLEEP PRESSURE TO YOUR/THEIR ADVANTAGE

- In the beginning, you may consider extending the bedtime by an hour or so to ensure they are ready for sleep
- Then over the a few days, bump it a bit earlier (by about 20 minutes) until you are at the identified bedtime
- For example, based on age and desired wake time, you have determined their appropriate bedtime to be 8:30 PM
 - Night 1: aim for 9:30 bedtime
 - Night 2: aim for 9:10 bedtime
 - Night 3: Aim for 8:50 Bedtime





ACHIEVING INDEPENDENT SLEEP & ADDRESS DEPENDENCIES

IMPLEMENTING SLEEP TRAINING METHODS

DEPENDENCIES

- Something a person needs in place to fall or stay asleep
- Examples:
 - Physical touch or the presence of a certain person
 - Certain objects or sensory experiences
 - Pacifiers
 - Bottle or breast
 - Certain sounds
 - Television or tablet
- It's only a problem if it's a PROBLEM!



ADDRESSING DEPENDENCIES

- Sustainable versus unsustainable
 - Getting rid of unsustainable dependencies
- Methods for removing dependencies
 - How to use priming and role-playing
 - More acceptable or sustainable replacements
 - Moving access to earlier in the bedtime routine
- Alternatives to complete removal
 - Good -> Better -> Best ->

PREPARING FOR INDEPENDENT SLEEP

- We have identified the natural fall-asleep time, eliminated sleep-stealing activities, and increased motivation for sleep. If not already started, we must:
 - Create a positive relationship with the intended sleep space
 - Teach healthy separation during the day
 - Prime the child for what will be coming
 - Make sure all caregivers on the same page



FIRST...THEN

- Our first task is to get the person sleeping in their designated sleep space with whatever support is needed.
- Then we will work on getting the caregiver or other dependencies out of the room



SUPPORTING SLEEP IN THE DESIRED SLEEP SPACE WITH QUALITY FADING

- Quality fading when the dependency is another person
 - Gradually changing the topography of the dependency and fading it out
 - Priming is VERY important
 - Take very small gradual steps and be consistent
 - May result in behavioral escalation
 - Caregivers follow through but continue to support in the new way
 - If behavior persists:
 - More daytime practice
 - More priming
 - Social Stories
 - Programmed reinforcer for accepting alternative



QUALITY FADING EXAMPLES

- Teen is used to parent laying in bed with arm around him to fall asleep
 - Priming
 - Steps for fading
 - Offer replacement
- Child likes to play with mom's hair until she falls asleep
 - Priming
 - Steps for fading
 - Offer replacement



SLEEP TRAINING



EXTINCTION



QUIET BASED
VISITING



CAMPING OUT

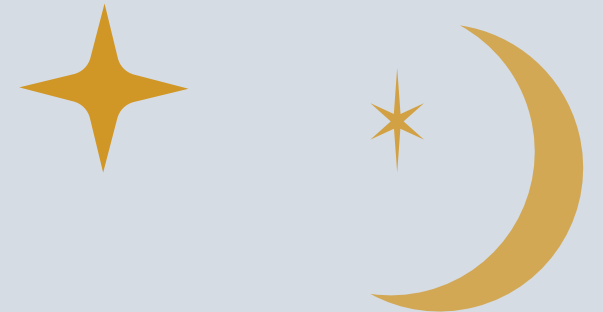
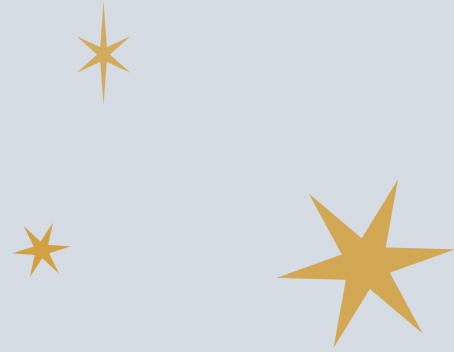


BED-TIME PASS

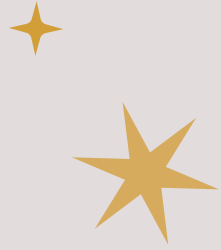


LET'S TALK ABOUT EXTINCTION!

CAN BE INCREDIBLY EFFECTIVE—BUT OFTEN NOT PREFERRED



CAMPING OUT



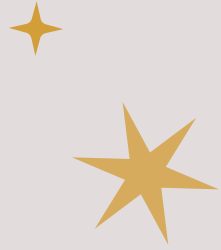
- Short-term goal: Gradual removal of parent presence while child is falling asleep
- Long-Term goal: Support independent sleep at bedtime and throughout the night
 - One must be able to fall asleep at the beginning of the night to maintain sleep throughout the night
- Often need to do quality fading to get to the starting point of camping out

CAMPING OUT



- Protocol in a nutshell
 - Parent says goodnight and sits in a chair in the child's room until they fall asleep. If the child gets up, the parent repeats the bedtime cue directs back to bed. The parent gradually moves the chair out of the child's room
 - There are many variations, including the parent on a bed or air mattress

CAMPING OUT



- Start with practice and priming during the day
- 1-3 days beforehand
 - Priming them by telling them what will be coming
 - Do this during the day when they aren't tired!
 - Consider showing them or practicing during the day
 - Identify your bedtime cue

CAMPING OUT



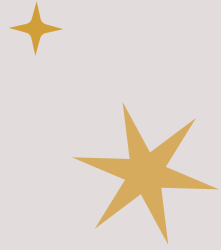
- Complete the bedtime routine and bid them goodnight when they are awake and in the sleep space (as it will be for the rest of the night)
- Remind them what will be happening (that you have already discussed and practiced before this)
- Position yourself in a chair or mattress near the child's bed
- Once the child has fallen asleep you may leave the room
- Over time, gradually move the mattress toward the door and eventually out of the room and out of sight

EXAMPLE 1

CHAIR METHOD

- **Days 1–3:** Sit in a chair next to the bed without physical touch.
- **Days 4–6:** Relocate your chair halfway between the bedside and the bedroom door.
- **Days 7–9:** Move your chair to the doorway of the room.
- **Days 10–12:** Sit just outside the doorway where you remain visible to your child.
- **Days 13–15:** Position yourself out of view while offering vocal reassurance, either just beyond the threshold or through a two-way audio monitor.

EXAMPLE 2



- **Days 1-2:** Sit in a chair next to the bed without physical touch.
- **Day 3-4:** Relocate your chair to 3 feet closer to the doorway
- **Days 5-6:** Move your chair 3 feet closer to the doorway of the room (6 feet from starting point).
- **Days 7–8:** Move your chair 3 feet closer to the doorway of the room (9 feet from the starting point).

EXAMPLE 2



- **Days 9–10:** Move your chair 3 feet closer to the doorway of the room (12 feet from the starting point).
- **Days 11–12:** Move your chair the final 3 feet so you are outside the doorway. Sit just outside the doorway where you remain visible to your child.
- **Days 13–14:** Position yourself out of view while offering vocal reassurance, either just beyond the threshold or through a two-way audio monitor.

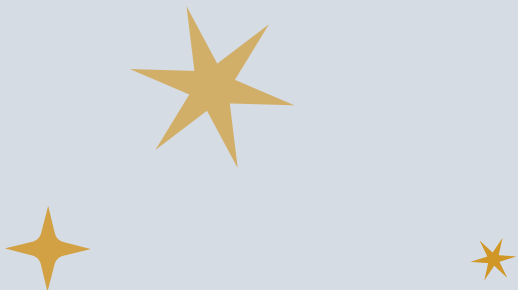
WHAT TO DO IF CHILD GETS UP ✨



- Option 1:
 - Do the same thing you did at the beginning of the night; re-deliver the bedtime cue, as calmly and quietly as possible, and with as little physical touch as possible, escort them back to bed
 - Sit back in the chair until they fall asleep
- Option 2:
 - Re-deliver the bedtime cue and soothe the child back to sleep as quickly as you can so you can both get back to sleep
- Option 3:
 - Sometimes families report that they have been able to walk their child back to bed during night awakenings and leave the room without issue. If this is working, do it!

QUIET BASED VISITING

- Opposite of Ferber Method—instead of checking in based on crying, you are reinforcing quietude
- Once the child has mastered at least 2-minutes of healthy separation during the day, begin to add separation during the bedtime routine



QUIET BASED VISITING

- To increase sleep pressure, extend bedtime routine so you are putting to bed 30-60 mins later than usual to create “sleep drive”
- Near the end of the bedtime routine, but before they are in bed and are engaged in a preferred activity, deliver cue and leave for short amount of time
- Deliver praise upon returning and reengage
- Continue to do this gradually increasing the amount of time you are away until you are away with the child remaining calm for 2-3 minutes



QUIET BASED VISITING

- Bid the child goodnight (tuck in, hugs, kisses, the usual) and say “I’ll be right back”
 - Leave the room for a short amount of time. Upon returning provide a small amount of attention quietly such as a gentle kiss, pat o the shoulder, rub on the back
- After the quick check-in say, “I’ll be right back” and leave again. Gradually increase the amount of time you are gone just as you did during daytime practice
- Thin the check-ins over the next few nights



THE BEDTIME PASS

- Make sure bedtime and total sleep time are appropriate 1st!
- Create a cool ticket and explain what child can exchange it for and when
 - One quick small request (another hug, kiss, water, etc.) after lights out
 - Or a reward in the morning if not used
- After it has been used, further requests are met with a repeat of the bedtime cue, with a calm but firm return to bed





MASTER & MAINTAIN

BUILDING LONG-TERM SUCCESS

ADJUST AS NEEDED

- Pay attention to sleep latency
- Sleep needs change quickly and what was appropriate a year ago may not be appropriate now
- More nuanced issues may call for more further intervention
 - Accidents
 - Fears
 - Anxiety or racing thoughts



GET BACK ON TRACK

- Some days of poor sleep are totally normal
 - Don't panic or over correct!
 - Go back to what works
- Mentally prepare for times when sleep goes on the backburner
 - Holidays
 - Family visits
 - Illness



MISSTEPS AND MISCONCEPTIONS

- Ignoring 24-hour sleep needs
- Underestimating the impact of naps and inconsistent wake times
- Unawareness of sleep dependencies or encouraging unsustainable sleep dependencies
- For teens and adolescents: Expecting them to go to sleep way earlier than their body is ready to
- Failure to prime and practice during daytime

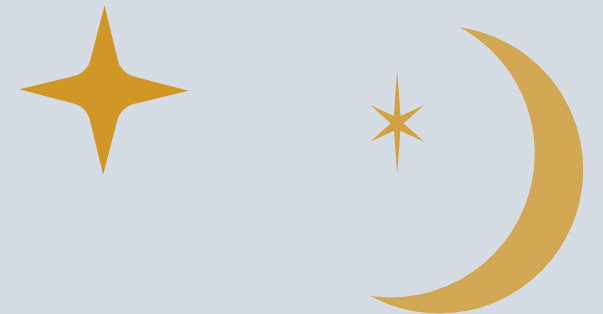
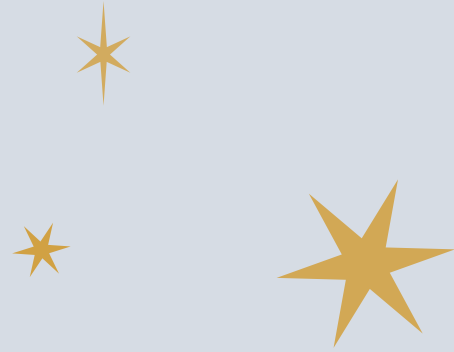


MISSTEPS AND MISCONCEPTIONS

- Changing the sleep environment after falling asleep
 - Moving a child to the sleep space
 - Turning off a light
 - TV with a timer
 - Falling asleep listening to a podcast
- Misconception 1:
 - Middle of the night awakenings are due to sensory seeking or the desire for food, toys, etc.



CASE EXAMPLES



CASE EXAMPLE 1

GREENLY: 4-YEARS-OLD

- Scenario: Greenly's parents would like for lights out to be 8:30 PM. However, Greenly stalls bedtime with curtain calls or repeated requests and tantrums. Every time her parents try to bid her goodnight, she does something to keep them in the room resulting in a bedtime of 9:00-9:30. She often lies away in bed for at least 15-30 minutes. She wakes at 6:30 AM and takes a 2-3 hour nap.

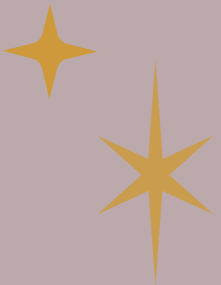
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Adults	7+ hours	No longer needed	Special considerations based on gender and older age

CASE EXAMPLE 2

Griffin: 16-years-old

- Griffin wakes between 3:00 and 5:00 AM and engages in dangerous behavior such as turning on the stove, attempting to make smoothies, etc. His parents are worried and have to get up to ensure he is safe. They are also very tired.
- He is prescribed a sedative that is given around 6:30 PM and usually falls asleep by 7:30 PM



CASE EXAMPLE 3

Jeff: 11-years-old

- Jeff snores and seems to stop breathing for short periods while sleeping
- He currently comes home from therapy and is very tired from the day and falls asleep on the couch for 1-2 hours
- He has a consistent bedtime routine
 - He gets in bed around 8:30 PM with a 3-hour YouTube video on that plays for about three hours
 - He stays in his room, but is often heard moving around in his room until after 10:00 PM
- He is very sleepy during the day

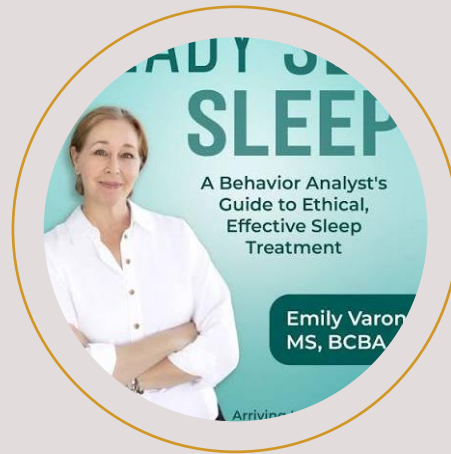


RECOMMENDED READING



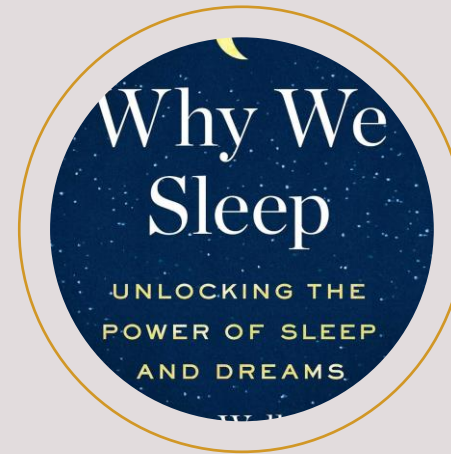
IT'S NEVER TOO LATE TO SLEEP TRAIN

Dr. Craig Canaperi



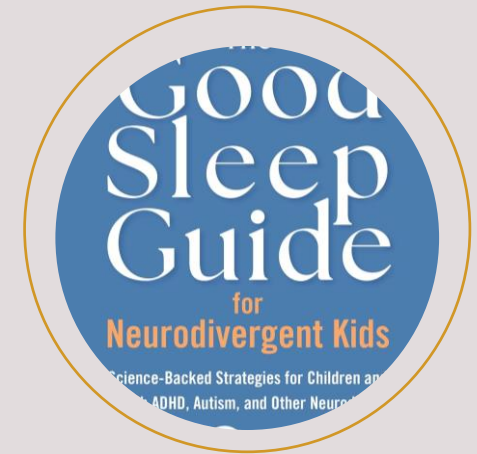
READY SET SLEEP: A BEHAVIOR ANALYST'S GUIDE TO ETHICAL, EFFECTIVE SLEEP TREATMENT

Emily Varon



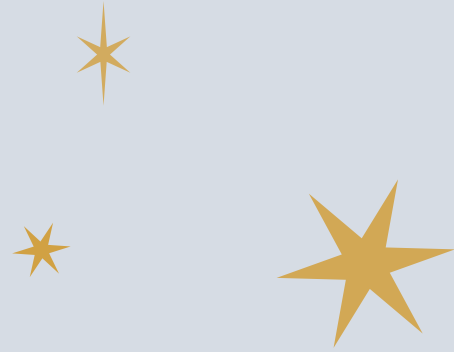
WHY WE SLEEP: UNLOCKING THE POWER OF SLEEP AND DREAMS

Matthew Walker, PhD



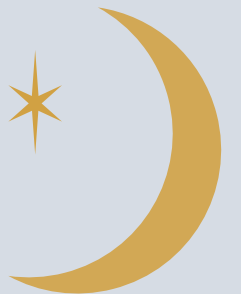
THE GOOD SLEEP GUIDE FOR NEURODIVERGENT KIDS

Dr. Melisa Moore



THANK YOU!
SWEET DREAMS 😊

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