

Managing Avoidance and Accommodation of Tics and Related Behaviors

Webinar Series

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Learning Objectives

- Striking a balance between legitimate needs for tic accommodation and sidestepping creation of avoidance behaviors in youth with tic disorders (TD)
 - Introduction to Positive Behavior Support as an intervention to support these concerns
- Identifying specific targets for intervention through functional behavior assessments and reinforcement management

Evidence Backing Approach Discussed in this Webinar

- Main interventions in this talk are rooted in behavioral psychology
 - Research demonstrating efficacy and effectiveness largely comes from Autism and ADHD literature
- The recommended strategies have not been directly studied with the Tic Disorders (TD) population
 - Nadeau and Hieneman (2018), *“Managing Avoidance and Accommodation of Tics and Related Behaviors”* in **The Clinicians Guide to Treatment and Management of Youth with Tourette Syndrome and Tic Disorders**

Definitions

- Tic related Behaviors: social skills deficits, psychological and emotional difficulties, reduction in quality of life (QOL) – all more common in population with TDs than in neurotypical
- Quality of Life: Degree of satisfaction in, and actualization of, most important aspects of life (i.e., health and safety, self-advocacy, social relationships, productive activity, and community participation)

Definitions

- Avoidance: behavior enabling escape from a situation and/or aversive outcome (e.g., undesirable academic assignments, escape from peer teasing)
- Accommodation: changes in environment that the behavior elicits (e.g., receiving teacher attention; family routine modification)
- Why these are a problem?

Research on Accommodation/Avoidance

- Relationship between tic severity and accommodations (or consequences) of tics is mixed
 - Could be that tic severity is associated with greater consequences and accommodations (Capriotti et al., 2015) OR
 - Tic severity is predicted by co-occurring anxiety and externalizing behaviors, but not accommodations (Stoch et al., 2017)
- While more research is needed, techniques to address avoidance and accommodation of tics and tic-related behavior can be essential to increasing QOL (Nadeau & Hieneman, 2018)

Positive Behavior Supports (PBS)

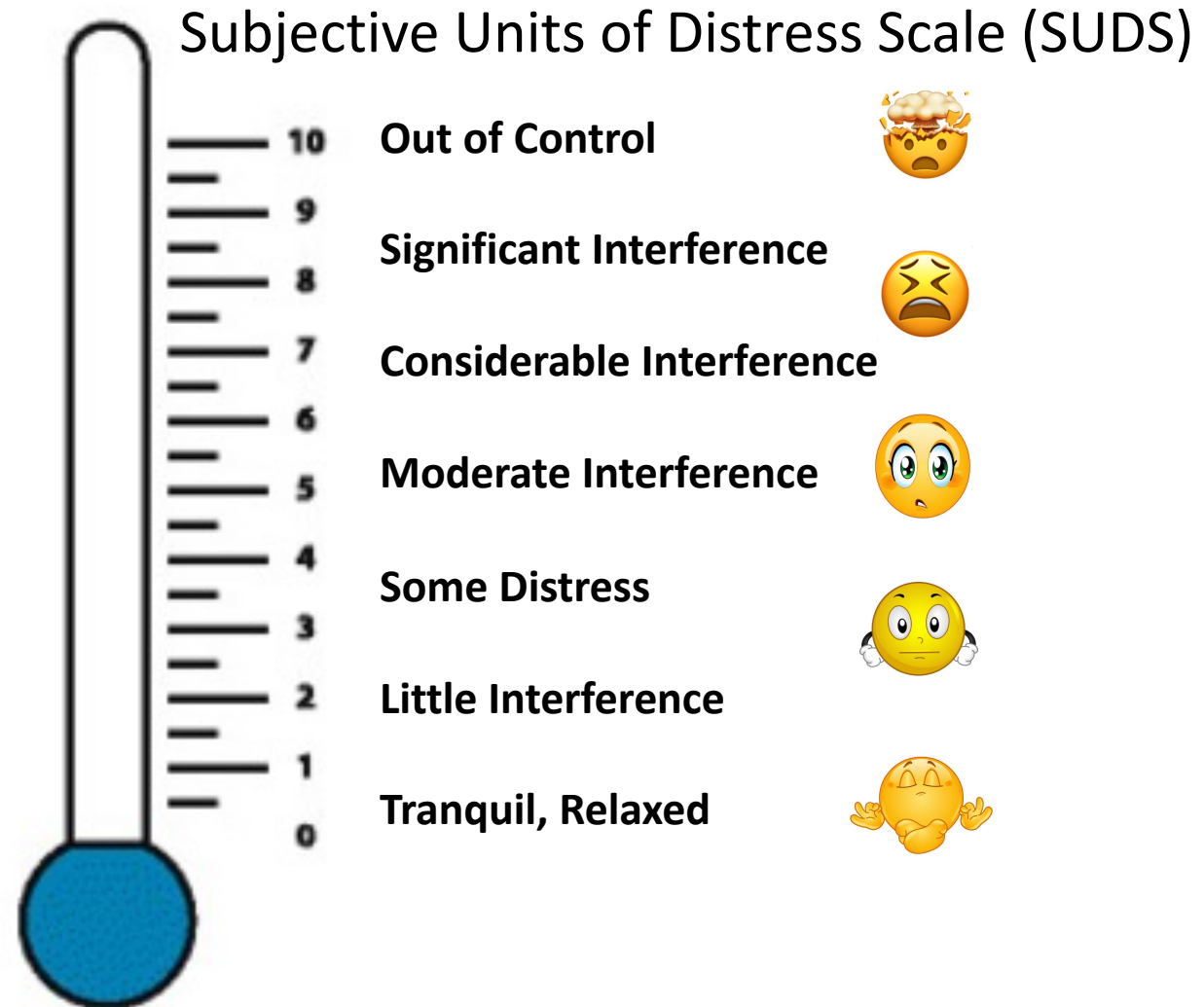
Focus of PBS: Improve QOL by assessing behavior youth and family motivated to work on and change

“How would life be different if...” or “What would you be able to do differently if....”

1. Identify the function of a behavior
2. Identify disruptions in activities and routines caused by the problem behavior
3. Adapt the behavioral intervention to work in different settings and situations

Assessing Intervention Targets

- Prioritizing problematic behaviors: family-centered intervention
- Make a 'Problem-list' and rank order how distressing each issue is to both parent and youth
 - There will be disagreements on issues and intensity
 - With parent-reported issues, ask youth *"how much difficulty do you have controlling the behavior?"* or *"what level of disruption does the behavior cause?"*



Case Example: “Kyra”

- Kyra is a 15 year old female with Tourette syndrome (TS) and ADHD. She has a supportive family engaged in therapy; however, she is not as interested in gaining therapeutic support for her TS or challenging behaviors.
- When Kyra is asked to perform lengthy, repetitive tasks such as math problems at school or home, she will rock back and forth in her chair, complaining about the work being too difficult. Her neurologist does not believe the body rocking is a tic and has conceptualized it as a coping behavior.
- Kyra’s parents report being quite bothered by the rocking and her teacher agrees it is quite disruptive to the class. Kyra reports she is aware it bothers people, but insists she cannot stop. Further, she describes it as feeling soothing and admits having little motivation to change the behavior.
- The persistent body rocking typically results in a teacher or parent either assisting her with her work (accommodation) or reducing the demands of the work and ending her study time earlier than planned (avoidance)

Implementing PBS Intervention

- Behavior of focus?
 - Parents and teacher see body rocking as main issue (8/10), but also note complaining is a concern (7/10)
 - Kyra sees the math work as the problem (7/10), denies body rocking as a problem (2/10) and sees complaining as a function of the math work
 - What would you be able to do differently if body rocking occurred less often and you could still feel soothed/comforted in those moments?
 - How would life be different if you were able to focus on your math work?

Functional Behavior Assessment (FBA)

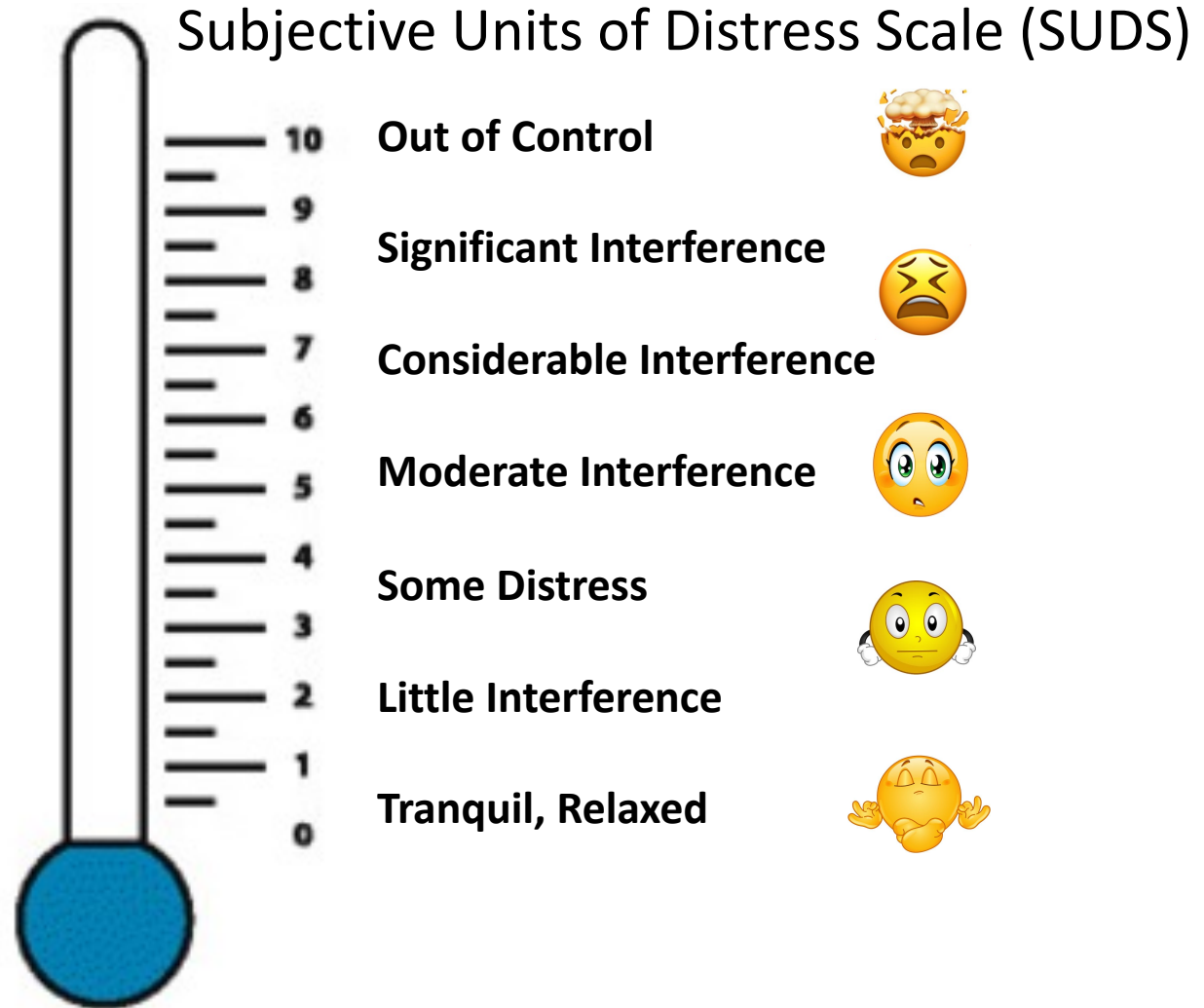
- Process of figuring out a behavior's function and context in which it occurs (A-B-C's)
- **Antecedents** – These trigger the behavior
 - Under what circumstances are behaviors most/least likely to occur
 - Who/what/where/when and during which activities?
- **Behavior** – The identified problematic behavior
- **Consequences** – These maintain the behavior
 - What happens after the behavior occurs? Accommodation? Avoidance? Both?

Functional Behavior Assessment Process

1. **Define the Problem**: Be clear about the behavior(s) you are intervening on to ensure focus of FBA is explicit
 2. **Information Gathering**: Gather information about the behavior's A's and C's through direct and indirect assessment methods (i.e., observation; questionnaires; verbal reports/interviews)
 3. **Data Analysis & Recommendations**: Analyze and summarize the behavior's patterns of occurrence to inform intervention
- **ASSESSMENT GOALS**: Confirm function of avoidance/accommodation of behaviors AND identify immediate antecedents to the behavior
 - Use this to inform evidence-based intervention aimed at modifying the problematic behavior, which usually leads to avoidance or accommodation

FBA: Information Gathering...

- When your teacher gives you a math problem to work on, where are you on the SUDS scale?
- When you have several math problems, does it change where you are?
- If your teacher or parent is there to help, where are you on the scale?
- Where are you when you do a reading worksheet?
- Where would you be if you asked for help?
- How hard (on the SUDS) would it be to ask for a break?



FBA: Information Gathering...

- Parents to track Kyra's behavior

Date/ Time	Antecedents (all that apply)	Behavior (body rocking; complaining)	SUDS (1-10)	Consequences

Some FBA Tips

- Attend to 'Setting Events'
 - Contributing factors, like poor sleep, arguments, unexpected changes in schedule, etc.
- Many behaviors serve more than one function
 - Makes for a complex assessment of different contexts

FBA: Data Analysis and Recommendations

Intervention Steps

1. Identify an appropriate replacement behavior
 - Working with youth and family to identify this
2. Reduce/remove opportunities for avoidance of and accommodation for, the problem behavior (i.e., take away the reinforcement)
3. Structure environment so youth is given opportunity to use the preferred/new behavior (especially in beginning of intervention)
4. Reinforce the new behavior!

Replacement Behaviors for Kyra

- Problematic Behavior: Complaining about math work being too difficult
 - This leads to her engaging in self-soothing behavior of body rocking
 - The body rocking signals to others she is struggling; it's frustrating for others to observe; they immediately accommodate or allow for avoidance
- Replacement Behaviors: Once Kyra feels the math work is too difficult, she should...
 - Ask for an explanation
 - Ask for assistance in completing the problem
 - Request a 5-minute break
- End Result: If followed through, Kyra will no longer engage in body rocking in this context, will be less likely to avoid her work, and will gain self-efficacy in the end as well as see reduced distress in interactions with teacher/caregivers

'Pivotal Skills' Building

- Examples of pivotal skills
 - Relaxation strategies
 - Assertive communication
 - Self monitoring and self-advocacy
 - Independent emotion regulation
 - Social skills training
- Pivotal Skills can increase likelihood of future social success:
 - Have high natural reinforcement
 - Lead to development of additional skills
 - Generalize easily to other aspects of daily life

Example's of Pivotal Skills for Kyra

- Pivotal Skill #1: Increase ability to remain on-task (boredom tolerance)
 - Method: Gradually increase task demands while fading external reinforcement
 - Rationale: Naturally reinforced by decreased teacher prompts and increased behavioral marks; provides scaffolding foundation for higher-level academic and/or study skills; boredom tolerance generalizes to non-academic tasks (waiting in line, completing chores at home, etc.)
- Pivotal Skill #2: Increase independent work/study schedule planning
 - Method: Introduction of a planner/scheduler and incorporate visual reminder cues.
 - Rationale: Naturally reinforced by decreased external prompts, increased productivity, and concretely scheduled “free time”; provides scaffolding foundation for academic and non-academic executive functioning skills, including task analysis/decomposition; independent planning generalizes to school, work, and recreational settings.

Examples of Pivotal Skills for Kyra

- Pivotal Skill #3: Increase distress tolerance
 - Method: Using stepped or gradual approach to increasing exposure to undesired or uncomfortable tasks, while fading reinforcement. Teaching relaxation skills (e.g., deep breathing, mindfulness, meditation, etc.)
 - Rationale: Naturally reinforced by decreased feelings of anxiety/discomfort, and increased opportunities for positive associations to be made with doing work; increased self-efficacy; provides scaffolding foundation for higher-level emotional regulation skills; distress tolerance generalizes to other settings due to natural prevalence of anxiety-inducing situations

Environmental Modifications vs. Accommodations

- Beginning of intervention
 - Want to limit known triggers so youth can practice adaptive behavior more frequently and with more success
- Environmental Modifications: changes that promote use of adaptive, appropriate, and preferred behavior
- Accommodations: Changes in environment that the problem behavior elicits and are reinforced (e.g., getting more attention for disruptive tics)

Example Environmental Modifications for Kyra

- Establish homework area with all necessary supplies (free from distraction)
- Create work schedule to facilitate task decomposition and goal-setting
- Review assignments when preparing schedule to build Kyra's understanding of expectations
- Arrange to have a peer buddy (at school), sibling, or parent available to help as needed when working
- Have timer and task-related resources on hand
- Create contract to engage in preferred activities once work is completed (i.e., positive reinforcement)

Managing Reinforcement Access

- Behavioral patterns maintained by consequences that follow (A-B-C's)
- Some desirable or more adaptive behaviors offer minimal natural reinforcement (or none)
 - May need to identify reinforcers that are stronger than the results of avoidance and accommodation
 - This could mean using more tangible or explicit reinforcement at first
- Withhold or minimize access to reinforcers following problem behaviors
 - Eg, if Kyra begins complaining and body rocking, she should be expected to stay with her math work until she uses an adaptive behavior previously identified before ending the task

Positive Reinforcement

- Can use charts/schedules of reinforcement or a more naturalistic approach – though this might require training too!
 - E.g., parent to move a button from one pocket to the other each time they praise
- Make it a fun and positive experience
 - Goal is to focus on what your child does right – not wrong
 - Eg: “Kyra stops body rocking while doing math” vs. “Kyra sits quietly while doing math for 5 minutes”
- Make expectations attainable, realistic, timely
- Don’t expect perfection, but aim for consistency

Types of Positive Reinforcement

- Natural reinforcement is ideal
 - Completing good assessment of patient's regular activities/routines helps to get ideas for integrating these
- Parental Time/Attention
 - Eg: trip to the park, special movie night, time at the pool, special play time
- Privileges (especially for teens)
 - Eg: the internet password, cell phone time, night off from chores, night out with friends, use of the family car, etc.
- Make the 'usual routine' rewarding
 - Eg: choosing what everyone has for dinner, choosing what clothes mom wears to work, 'get out of chores free' pass,
- Tangibles
 - Eg: small prize bin, things from the dollar store; or, earn stickers to save for a large prize

Positive Reinforcement

- Why does praise, attention, rewards, etc. work?
 - Children and youth want their parent's approval VERY BADLY
- Be specific AND sincere in praise:
 - “Good job!” vs. “Good job getting your homework finished. I really like seeing that kind of dedication”
- When adults notice and comment on specific positive behavior and provide natural, logical rewards, children and youth will:
 - Feel noticed, validated, and approved of
- As a consequence, good behavior increases
 - With appropriate management of ‘misbehavior’, this too will decrease

Example of a chart for 10 to 12 years:
 Make it more complex; Negotiate the terms; make it fun;
 incorporate prizes that don't always cost money!

Task/Points	Sun	Mon	Tues	Wed	Thurs	Fri	Sat
Practice Deep Breathing (2)							
Complete therapy homework (3)							
Complete 10 minutes of math quietly (5)							
40 points = night off of chores; 30 points = 20 minutes extra iPad time; 20 points = you pick out supper for the whole family to eat; 10 points = pick out mom's clothes							

Reinforcement Management Guidelines

- When Kyra appropriately asks for assistance, teachers should provide assistance without “taking over” or lessening demands
- If Kyra requests a break after the required work is done, teachers should instruct her to set a timer (or otherwise signal her return), then allow her to exit the task
- When Kyra is supposed to be engaged in assigned work, teachers (and parents) should withhold preferred activities (e.g., texting, video games, playing with pets or peers) until her work is completed
- If Kyra works “extra hard” (e.g., completing more problems than required or working quickly), teachers/parents should reward her by removing one problem from her workload

Behavior Contract

I, _____, agree to make the following positive behavior changes:

My efforts at meeting this goal will be considered complete when:

When I successfully complete this contract, I will be rewarded by:

GOAL DESCRIPTIONS

Set three goals that you would like to see your child work on each day/week. After each goal, list the expectations that go along with that particular goal (the criteria for that goal). Post this worksheet/for some that is visible to your child as a reminder of what he/she is supposed to be working on each day/week.

GOAL #1:
1.
2.
3.
4.

GOAL #2:
1.
2.
3.
4.

GOAL #3:
1.
2.
3.
4.

Generalizing Learned Strategies

- Can start with contrived (and controlled) situations where you push for the undesirable behavior and manage it
 - Increases chances of success in 'real' situations, which you move increasingly toward (ie., increasing demands, reducing reinforcers)
- Providing opportunity for youth to move toward self-regulation
 - Have youth monitoring own behavior, implementing strategies with minimal reinforcement/guidance/support
 - More independent access to reinforcement
- Leads to more opportunity for naturalistic reinforcers
 - E.g., more positive peer interactions; less emotional distress in class

Ecological Interventions

- As intervention progresses, begin attending more to less immediate environmental setting events, triggers, and reinforcers (rather than keeping sole focus on the individual and immediate environment
 - How to any of these situations/contexts/people maintain negative behaviors?
- Family and parent-based interventions focused on understanding how to best support the patient
 - Community resources in Calgary: Strongest Families, Connect program through CARYA, Triple P Parenting Program, Calgary Family Therapy Centre

Ecological Interventions

Examples for Kyra:

- If necessary, complete educational assessment (or psychoeducational) to identify strengths and gaps in learning, to facilitate individualized assignments
- Increase parent-teacher collaboration to maximize consistency of academic expectations and strategies
- Identify future goals (employment and living circumstances) to build motivation – discuss immediate and short-term goals too (long-term may be challenging)
- Ask teacher to provide parents with instruction on evaluating difficulty of academic assignments, how to organize materials, and provide guidance and respond to questions (while managing frustration) to improve homework success
- Enroll her in non-academic extra-curricular activities that boost self-efficacy and are within her individual interests

Monitoring Progress

- Data-Based Decision Making
 - If the current intervention is not changing the behavior in a timely fashion and/or improving QOL, then it should be revised
- Examples for monitoring Kyra's progress:
 - Percentage of assigned items completed and total time to complete work per day
 - Engagement ratings for assigned work (e.g., 2 = focused on task, 1 = periods of distraction or repeated fidgeting; 0 = complaining and resisting work)
 - Grades per reporting periods/exam marks
 - Tracking SUDS for irritability/anxiety while completing work
- Quantitative measures:
 - Pediatric Quality of Life Inventory (PedsQL; Varni et al., 1999)); Youth Quality of Life Instrument (YZOL-R; Edwards et al., 2002); Gilles de la Tourette Syndrome – Quality of Life Scale (Cavanna et al., 2013)

Summary

- Youth with Tic Disorders often struggle with problematic behaviors related to their condition
 - Avoidance and accommodations are necessary to manage troublesome tics to some extent, but can become reinforcers of problematic behaviors
- Positive Behavior Supports can systematically reduce the problematic behaviors while increasing use of adaptive behaviors, resulting in enhanced Quality of Life as determined by the youth and caregivers
- Completion of a Functional Behavior Assessment will inform intervention and identify pivotal skills needed to address broader issues
- Positive reinforcement and monitoring progress are crucial for the intervention's initial success and likelihood of observing generalized learning

Multiple Choice Questions

- 1) A youth with disruptive tics during a math lecture is excused by his teacher for the remainder of the class. This is an example of:
 - A. Avoidance
 - B. Accommodation
 - C. Both A & B

- 2) Research examining the relationship between tic severity has shown with increased severity comes greater consequences and accommodations. However, this could be because:
 - A. Co-occurring anxiety leads to increased tic severity
 - B. Co-occurring externalizing behaviors lead to increased tic severity
 - C. Both A & B
 - D. None of the above; tic severity certainly increases the likelihood of a youth receiving more accommodations/consequences.

Multiple Choice Questions

3) 'Information Gathering' is a key part of what?

- a) Standard assessment procedures
- b) Functional Behavioral Assessment
- c) Positive Behavior Supports
- d) Monitoring Progress

4) Pivotal Skills can increase the likelihood of future social success because they:

- a) Have high natural reinforcement qualities
- b) Lead to development of additional skills
- c) Generalize easily to other aspects of daily life
- d) All of the above

Multiple Choice Questions

5) Arranging to have a peer buddy at school, or a sibling or parent available at home to help a youth with homework is an example of:

- a) Accommodation
- b) Environmental modification
- c) Avoidance
- d) Positive Behavior Support