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Managing Behavior Dysfunction Post TBI

Part II: Behavior Management Strategies

Part II of our managing behavior dysfunction brief series addresses the evaluation and management of challenging behaviors following brain injury. In Part I we identified common challenging behaviors post-injury, causes of challenging behaviors, and a process for evaluating behaviors. In Part II we focus on specific management strategies.

What are current evidence-based guidelines for managing dysfunctional behavior post-TBI?

As described in Part I, it is essential to conduct a *Functional Behavioral Assessment (FBA)* before deciding on behavior management strategies. Effective behavior strategies involve preventing or minimizing problem behavior—*Positive Behavioral Support (PBS)* and using effective consequences—*Traditional Contingency Management (TCM)* to increase desired behavior and minimize dysfunctional behavior.

Research evidence supports the use of both PBS and TCM, separately and in combination. PBS may be better matched to the needs of individuals with TBI who, because of memory impairments, are frequently unable to recall negative responses to their previous challenging behaviors.

Specific PBS and TCM strategies are described below using our two hypothetical case illustrations—Steve and Maria.

Background:

Steve, 45 years old

Steve owned an auto-shop prior to his brain injury sustained in a fall. He is now employed in a supported work setting and experiences challenging behaviors at the end of his work shift.

Maria, 12 years old

Maria was injured in a car crash at 10 years of age. Prior to her injury, she was a straight A student. Now she has trouble initiating math problems and completing her work at school and at home.

In Part I, *Functional Behavioral Assessments (FBA)* were completed for both Steve and Maria. The next step is to use the FBA information to select at least 2-3 strategies from the lists below and **evaluate** the impact on the target behaviors. (*Note: It is highly unlikely that all of these strategies will be used all at once; however, for the sake of illustration we've provided examples of each.*)

Positive Behavioral Support (PBS):

Rather than focusing exclusively on the problem behaviors, PBS provides a holistic approach to behavior management emphasizing personally meaningful life-style changes. The activities, routines, task demands, and environment are changed with the goal of increasing the likelihood of positive behaviors and preventing dysfunctional behaviors **before** they happen. Rewards for behaving positively are built into everyday routines and behaviors are taught in the setting in which they are needed.

PBS Strategy	Steve	Maria
Provide options for choice of activities	Steve is asked what types of work activities he would like to do that are within his abilities and the work available.	Maria is asked what her favorite elective class is (music) and this is scheduled right after her math class.
Insure that activities/routines are personally meaningful	Whenever possible, Steve is provided with opportunities to mentor other workers, since this was something he did prior to his injury.	During math work group, a friend who understands her injury works next to Maria to provide support.
Negotiate daily routines	Steve is asked when he would like to do certain tasks at work and the best time for breaks.	Maria is asked what is the most helpful sequence of activities at home to insure success (e.g., snack first after school, easy homework, break, difficult homework).
Change the environment (both setting and other individuals, as appropriate)	Supervisors modify the style/ tone of their prompting to avoid frustrating Steve (clear/concise directions; not condescending). They also change his work station to make it look more like his auto-shop work bench.	Maria is asked how she would like to set up her "work station" at home and at school.
Adjust tasks and expectations to facilitate success	Steve is given less complicated tasks in the afternoon when he's more fatigued.	Maria's teacher modifies the curriculum and carefully fades her support to insure Maria's success.
Create positive behavioral momentum	Before he's given a complicated sorting task involving several items, Steve is asked to do a simpler sorting task that involves just 2 items.	Maria is given easier math problems to do first.
Teach positive communication alternatives to negative behavior	Steve is trained (coached) to ask to take a break before he gets overwhelmed.	Maria is taught to communicate when she's feeling frustrated.
Natural and logical rewards for positive behavior	Steve and his supervisors and other co-workers enjoy a post-shift soda and chat (debriefing how his day went) before they leave for the day.	Maria's entire math class is rewarded with "pizza day" when they complete all assignments in a timely manner.

Traditional Contingency Management (TCM):

This approach emphasizes decreasing dysfunctional behaviors and increasing positive behaviors by controlling what happens **after** a behavior has occurred. It is important to reinforce or praise only if it is meaningful to the person.

TCM Strategy	Steve	Maria
Reinforce positive behaviors over negative behaviors	Staff praise Steve for completed tasks and using appropriate behavior at the end of his shift.	Teacher and parents praise Maria when she initiates working on math problems on her own.
Use rewards for positive behaviors	Steve is paid an incentive bonus when he behaves appropriately and completes all his assigned tasks.	Maria earns video game time at home for completing her math homework.
Take away privileges when negative behaviors occur	Steve's incentive bonus is reduced when he behaves inappropriately.	Maria doesn't earn video game time if she doesn't complete her homework.
Give time out for negative behaviors	Steve is encouraged to go to a quiet office space when he's having difficulty.	Maria is given a day off from doing homework if she is feeling completely overwhelmed.
Planned ignoring of negative behaviors	Staff decide to ignore Steve's behaviors, as long as he's not endangering himself and others. They assume that if they pay attention to him, the behaviors will increase.	When she's frustrated and not initiating her homework, rather than intervening, teachers and parents give Maria plenty of time and space to figure out on her own what she wants to do.

Where can I find out more information?

- * LearnNet <http://www.bianys.org/learnnet/>
- * Technical Assistance Center on Positive Behavioral Interventions & Supports <http://www.pbis.org/links/default.aspx>
- * Sohlberg & Mateer (2001). Cognitive Rehabilitation: An Integrative Neuropsychological Approach. Guilford Press, New York
- * TBIEducator <http://www.tbied.org/evidence/behavior-ebp/>
- * Brainline <http://www.brainline.org>
- * Ylvisaker, M. et al. (2007) Behavioural interventions for children and adults with behaviour disorders after TBI: A systematic review of the evidence. Brain Injury. 21(8): 769-805. http://www.ancds.org/index.php?option=com_content&view=article&id=9&Itemid=9#TBI

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