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Using FBA for Diagnostic Assessment in Behavior

Handout 3a: Functional Behavior Assessment (FBA) Process

In the school setting, a functional assessment is conducted when teachers are faced with serious and/or chronic challenging behavior. A basic assumption of functional assessment is that behavior serves a purpose: It is performed to obtain a desired outcome or goal. The outcome could be access to attention, tangibles, or a preferred activity or sensory stimulation (positive reinforcement), or to avoid tasks, specific environment or situations, social interaction, or unpleasant sensory stimulation.

Functional assessment is a process of identifying the environmental events that predict and maintain patterns of problem behavior in order to alter those variables and promote more adaptive, acceptable skills to access desired outcomes.

Many tools and protocols exist to guide the process of conducting a functional assessment. The process is comprised of five steps:

1. Gather indirect and direct data
2. Analyze the data
3. Formulate a hypothesis about the function of the behavior
4. Develop Positive Behavior Support Plan (PBSP) [1]
5. Monitor and adjust the plan as needed

This document is part of a series (i.e. Handouts 3a-d) to provide information and tools that can be used by collaborative student Behavior Support Teams as a resource to supplement your existing process, or in its entirety to complete a functional assessment.

The Functional Behavior Assessment Process

The following provides a brief outline of the process. The questions provided in the boxes can be used by the collaborative Behavior Support Team to determine if the process currently in use should be supplemented by additional procedures or tools.

Step 1: Gather indirect and direct data
The purpose of gathering information is to identify any contextual setting events, antecedents and consequences that influence the occurrence of behavior. Two methods are used to gather

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[1] The Positive Behavior Support Plan is not described in detail in the PowerPoint 'Using FBA for Diagnostic Assessment in Behavior'. Please refer to p.3-4 in this document, Handout 3d – PBSP Worksheet and NCII's Designing and Delivering Intervention for Students with Severe and Persistent Behavior Needs module for more information (http://www.intensiveintervention.org/resource/designing-and-delivering-intensive-intervention-behavior-dbi-training-series-module-8)

relevant information about the student and the behavior: (1) direct observation strategies and, (2) indirect informant assessment.

Indirect assessment procedures are used to gather information from individuals who know the student well or who work with the student. Rating scales and structured interviews are frequently used for indirect informant assessment.

Does your Behavior Support Team currently have a structured informant interview that is used to identify:

❒ the challenging behavior?
❒ the frequency and intensity of the behavior?
❒ possible setting events that contribute to the behavior?
❒ antecedents that predict when the behavior will occur?
❒ maintaining consequences and perceived function of the behavior?

If No, use Parts A, B, C and D of the Functional Assessment Interview.

The challenging behavior should be operationally defined so that it is observable and measurable. The interview should also obtain information about the behavior's frequency (how often it occurs) and the intensity (e.g., description of severity of self-injury), when possible. It should also identify events that occur at an earlier time and influence the occurrence of problem behavior (e.g., hunger, difficulty sleeping). In addition, the interview should solicit information about events that occur immediately prior to the behavior (antecedents) and immediately after (consequences), and the assumed function of the behavior problem.

Direct data collection involves observing the student in situations and settings associated with occurrences of challenging behaviors, and is a critical component of functional assessment. Information gathered from the interviews can guide decisions on the best time to conduct observations. Observation data are used to determine the conditions under which the behaviors do and do not occur. Many formats for structuring observations exist including the A-B-C Descriptive Reporting Format.

Does your Behavior Support Team currently use a structured observation format that can place behavior within context (e.g. what happens just before the behavior and what happens just after the behavior) as part of the FBA process?

❒ Yes
❒ If No, use the A-B-C Report Form or other existing observation documents.

Step 2: Analyze the data
The next step is to analyze all data (indirect and direct methods) to identify consistent patterns of when problem behaviors occur (antecedents and/or setting events for behaviors) and consequences that follow the behaviors (indicating functions of behavior). First, review the indirect data sources (interviews and check-lists) to identify any common responses or

observations. Second, review all direct data sources (observations) to identify patterns in how the student responds to different antecedents and what happens after each occurrence of inappropriate behavior as well as appropriate behavior. Look for patterns in ways the adults and peers in the environment respond. Also look for similar patterns in antecedents and consequences across observations. Third, compare direct observation data with indirect data assessments. When the information is in agreement, the data suggest a strong explanation for the student's behavior. If the observations do not corroborate the information gathered through indirect assessments, further observations under targeted conditions should be conducted.

Step 3: Formulate hypothesis about the function of the behavior
The team develops a four-part summary statement (hypothesis) based on the results from the FBA. These parts are: (1) setting events (slow triggers) relevant to the occurrence of problem behaviors, (2) predictor events (antecedents/fast triggers) for problem behaviors, (3) the problem behavior, and (4) the maintaining consequences (perceived function) of the problem behavior.

Upon completing an FBA, can your team consistently develop a specific hypothesis statement using the following format: *Given the circumstances when (fill in setting events / slow trigger), and when (fill in antecedents/fast triggers) occurs, the student does (fill in problem behaviors) in order to (fill in perceived function).*

   ❐ Yes
   ❐ If no, use the Functional Assessment Interview to conduct the functional assessment.

Step 4: Develop Positive Behavior Support Plan
The hypothesis statement is used to guide the development of the Positive Behavior Support Plan (PBSP). The plan should directly address the function that was identified by the FBA process and include strategies adults will implement that (a) address antecedents for problem behavior, (b) teach new skills and replacement behaviors, and (c) allow student to access the consequences that are maintaining the problem behavior in a more appropriate way.

   ❐ Use the Function-Based Intervention and Positive Behavior Support Plan Worksheet to guide the development of a plan that adequately and accurately addresses the identified function of the behavior (refer to Handout 3d).
   ❐ Use the Function Related Interventions chart to identify evidence based strategies that can be used to manipulate antecedent conditions or maintain desired behaviors based on the identified function of the behavior (refer to Handout 3c, p.2).

A support plan should contain the following components:

   a) Clearly defined target and replacement behaviors.
   b) Function of the behavior taken directly from the work completed during the FBA.
   c) Strategies for prevention, including antecedent strategies and modifications that will be made to the environment, curriculum, instructional delivery, schedule, etc., to reduce the probability the target behavior will occur. Antecedent conditions should represent

effective practice (e.g. classroom rules established and taught, clear transition routines, high rates of opportunity to respond) and be directly linked to the assessment information.

d) Instructional strategies that teach functional replacement behaviors, adaptive skills, and build general competencies. These should serve the same purpose as the problem behavior.

e) Extinction strategies that ensure the target behavior is no longer reinforced. In other words, what must happen so that the target behavior is no longer an effective means to access the desired reinforcer? Also identify any reductive procedures, based on the function of the behavior, which will reduce the occurrence of the target behavior.

f) Fading and generalization procedures

g) Data to be collected and the frequency with which the measures will be collected.

h) Program review date to determine effectiveness.

i) Personnel and roles for implementing and evaluating the plan.

j) Crisis management procedures, if needed.

Step 5: Monitor and adjust the PBSP as needed

Target behaviors are monitored on an ongoing basis to track the effectiveness of the intervention. Methods of measurement can be grouped into uniform (event-based) or non-uniform (time-based). Uniform behaviors are those in which every performance takes about the same length of time as every other (e.g., hitting) and are usually measured by event-based methods. Non-uniform behaviors are those which vary in length (e.g., off-task) and are usually measured by time-based methods. To determine which data collection system is appropriate for a particular target behavior, ask yourself a series of questions:

1) Is the target behavior uniform or non-uniform?
2) If it is uniform:
   a) Is it discrete or continuous?
   b) Is the behavior expected to occur at a high, moderate, or low frequency?
   c) Will you be able to collect the data during intervention or instruction, or will you need a third party to collect the data?
3) If it is non-uniform, do you want to measure the time before the behavior starts or the length of time behavior is observed?

There are five observational recording systems that can be used:

1) *Event Recording* (Behavior Count) involves observing for a predetermined amount of time, and recording each time that the behavior of interest occurs. At the end of the observation period, the number of times that the behavior occurred during the observation is totaled. In order to be able to record each time that the behavior occurs, you need to be able to tell exactly when the behavior begins and when it ends. In addition, this behavior should not occur at such a high rate that it is too difficult to keep a count on it.

2) *Interval Recording* involves dividing your observation time into intervals and recording if the behavior did or did not occur during each interval. At the end of the observation period, the number of intervals in which the behavior occurred is totaled. Interval recording is usually

used when it is difficult to tell when the behavior begins or ends and occurs at a very high rate.

3) *Momentary Time Sampling* allows for only one observation per interval. Similar to interval recording, the observer selects a time period in which to observe the behavior and divides this period into equal intervals; however intervals for time sampling are usually minutes rather than seconds. The observer notes whether or not the behavior was occurring at the end of each interval. When using time sampling, the data collector observes the student only at the end of the interval and records whether or not the behavior is occurring at that particular time.

4) *Duration recording* is used when the primary concern is the length of time a student engages in a particular behavior. It is suitable for behaviors that have a discrete beginning and end. Duration can be recorded as either average duration or total duration. Average duration is used when the student performs the behavior with some regularity. Total duration recording measures how long a student engages in a behavior in a limited time period, such as "on-task" during a 20 min. interval. An advantage of time sampling is that it can measure behaviors that occur at extremely high rates and/or extended periods of time.

5) *Latency Recording* (Time to Respond) is used when the time that it takes from the onset of an instruction to the time when the behavior occurs is important. Latency Recording involves observing each time that the behavior is expected, recording the time when the instruction to engage in this behavior is given, and recording the time when the behavior actually begins. At the end of the observation, the time that it took for the behavior to actually begin is calculated.

Graphing data. In addition to measuring the behavior, it is important to graph the measurements, as this allows you to have a visual image of the status of the behavior at any point in time. A graph allows you to determine, on average, how often the behavior occurs, times when the behavior is lower (e.g. frequency, duration, intensity) and times when the behavior is higher. By looking at a graph, you can tell if the behavior is increasing or decreasing. The information can be used to assess the adequacy and effectiveness of the support plan.