What is an Environmental Manipulation?

Environmental manipulations can involve comparing events that occur either before or after the child’s challenging behavior.

- Antecedent-based environmental manipulations involve carefully controlled comparisons of two different antecedent events.
- Consequence-based environmental manipulations involve carefully controlled comparisons of two different consequences of the child’s behavior.

With either approach, an environmental manipulation involves carefully controlled arrangements of aspects of the child’s environment believed to influence his or her challenging behavior.

Conducting an Environmental Manipulation May be Helpful When:

- The interventionist is not able to isolate the social function the behavior is serving via direct observation assessment methods.
- Planning intervention.

When Conducting an Environmental Manipulation, You Should:

- Be able to readily control the situation.
- Have thoroughly assessed any potential risk to the child, interventionist, or others in the child’s environment. For example, when a child engages in self-injury or significant aggression toward peers, proceeding with an environmental manipulation that will evoke the child’s behavior is contraindicated.
- Have obtained permission from the child’s parents.
- Have a specific hypothesis regarding social function to evaluate.

General Guidelines in Conducting an Environmental Manipulation

- Select a single challenging behavior (or cluster of behaviors) to assess.
- Select one hypothesis regarding social function to test or verify.
- Select one environmental event based on hypothesized function to examine.
- Keep all other environmental events consistent.
- Anticipate and visualize how implementing the different arrangements will influence the child’s behavior if your hypothesis is correct.
Example of an Antecedent-Base Manipulation with Joey

**Hypothesis:** Joey engages in screaming and dropping to the floor during circle time to obtain one-on-one adult attention

**Antecedent:**
- **High Attention During Circle Time**
- **Low Attention During Circle Time**

**Effect on Joey’s Screaming and Dropping to Floor?**

**High Attention:** Staff will provide Joey one-on-one attention for the duration of circle time by holding him on their lap, verbally and/or physically interacting with him during songs and fingerplays, and providing frequent smiles and praise.

**Low Attention:** Circle time is conducted per usual. No special arrangements are be required.

Staff record the frequency of Joey’s screaming and dropping to the floor during Circle Time and graph his performance.

During high attention circle time conditions, Joey only produced a single occurrence of challenging behavior across circle time opportunities. In contrast, Joey engaged in numerous occurrences of the target behavior during the low attention conditions. These
data would suggest that Joey’s target behaviors serve the social function of *obtaining adult attention*.

**Advantages to use of Antecedent Environmental Manipulations:**

- Allow the interventionist to evaluate the hypothesis regarding social function maintaining the child’s challenging behavior.
- Lead directly to intervention by illustrating the environmental triggers that provoke the child’s challenging behavior.
- Less likely to have to deal with the large amounts of challenging behavior during the assessment.