Functional Assessment of Behavior
EDS 240
Introduction to, & Overview of, Assessment (Quiz)
Defining the Behavior
Reviewing Student Records

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Fieldwork/Syllabus

Everyone should have found an FBA setting/supervisor by today.

Conducting the Functional Assessment:
Four Basic Assumptions of Functional Assessment

1. Behavior is supported by the environment
2. Behavior serves a function
3. Behavior can be changed with positive interventions that address the function of behavior
4. Functional assessment should be conducted by a team

Chandler & Dahlquist (2010)
Conducting the Functional Assessment:
Three general approaches

- Indirect Assessment
  - Asking about behavior
- Direct/Descriptive Assessment
  - Observing behavior
- Functional or Experimental Analysis (FAA)
  - Testing relationships between interventions and behaviors

Conducting the Functional Assessment:
Three general approaches

- Indirect Assessment (Asking)
  - Quick and easy, but data sources can be subjective (and thus not highly reliable).
    - Interviews are based upon retrospective recall.
    - Triangulating a number of different data sources minimized these disadvantages.
  - Goal is to identify which of the many antecedent and consequence events in the environment are linked to behavior.
    - To identify how the environment (not the individual) should be changed to better ensure student success (adaptive behavior).

Conducting the Functional Assessment:
Three general approaches

- Indirect Assessment (Asking)
  - Not always accurate or highly reliable.
    - Why?
      - Subjective opinions, rater bias, etc.
Conducting the Functional Assessment: Three general approaches

- Indirect Assessment (Asking)
  - Areas of Inquiry (ABC)
    - What are the problem behaviors? (Target Behavior)
    - What individual characteristics predispose behavior (O)
    - What events or physical conditions occurring well before the behavior appear to predict its occurrence? (A, or MO)
    - What events/situations occurring just before the behavior appear to predict its occurrence/nonoccurrence? (A, or SD)
    - What consequences appear to maintain the behavior? (C)
    - What adaptive/appropriate behaviors might produce the same consequences as the problem behavior? (Replacement Behavior)
    - What is the behavior intervention history and what does it tell us about the problem behavior?

- Direct/Descriptive Assessment (Observing)
  - Advantage (relative to indirect assessment): Should improve accuracy of data.
  - Disadvantage (relative to indirect assessment): Requires significant professional time and resources (requires the observer to be present when the behavior occurs in order to observe/record the antecedents and consequences).
    - Therefore, it is important to know the times of day when the behavior is most likely to occur so that observations can be planned at those times.
    - Use of a scatter plot is one way of determining when to observe.

Conducting the Functional Assessment: Three general approaches

- Direct/Descriptive Assessment (Observing)
  - Scatter plot
<table>
<thead>
<tr>
<th>Time</th>
<th>Day 1</th>
<th>Day 2</th>
<th>Day 3</th>
<th>Day 4</th>
<th>Day 5</th>
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<tbody>
<tr>
<td>8:00-8:15</td>
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<td>etc.</td>
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Conducting the Functional Assessment:
Three general approaches

- Scatter plot sample (Target: Hitting others)

<table>
<thead>
<tr>
<th>Time</th>
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<th>Day 3</th>
<th>Day 4</th>
<th>Day 5</th>
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<tbody>
<tr>
<td>8-9 am</td>
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<td>9-10 am</td>
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<td>10-11 am</td>
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<td>11 am-12 pm</td>
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<td>12-1 pm</td>
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<td>1-2 pm</td>
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<tr>
<td>2-3 pm</td>
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Count one every time the student strikes someone else. Each strike counts as one.

Conducting the Functional Assessment:
Three general approaches

- Direct/Descriptive Assessment (Observing)
  - Often done by “familiar” observers.
  - Must not interfere with normal daily events.
  - Observers must strive to be objective.
  - The more data collected the better.
  - Allows for discovery of behavioral patterns.
    - What problems occur at the same time?
    - Where, when, with whom are the problems most likely to occur?
    - What consequences appear to be maintaining the behavior?

Conducting the Functional Assessment:
Three general approaches

- Functional or Experimental Analysis (Testing)
  - Experimental manipulation of antecedents and/or consequences to demonstration a functional relationship between one or more of the antecedents and consequences and the occurrence of the challenging behavior.
  - Three steps:
    1. Objective measurement of the challenging behavior.
    2. Demonstration of a change in the level of the challenging behavior following the manipulation of variables.
    3. Replication.
Conducting the Functional Assessment:
Three general approaches
- Functional or Experimental Analysis (Testing)
  - The most precise, rigorous, and controlled functional assessment method.
  - Expensive and time consuming.
    - Should be employed only when it is truly needed.

Preparing for the Functional Assessment
- Functional Assessment requires a team approach
- Who will participate in the assessment?
  - Teachers
  - Teacher aides
  - Parents
  - Counselors
  - Principals
  - Language Specialists
  - Physicians
  - Occupational Therapists
  - An IEP team
- Determined by the needs of the student and the behavior!

Conducting the Functional Assessment
1. Identify and define the target (problem) and replacement (adaptive alternative) behaviors.
   - Observable and Measurable.
     - Countable, ideally with a clear beginning and end.
2. Review student records.
3. Select and administer behavior rating scales.
   - A quick and inexpensive way to begin to understand the caregivers’ view of the problem behavior.
Conducting the Functional Assessment

   - Typical Functional assessment interview questions.
     - Who is present when the problem occurs?
     - What is happening just before the problem behavior occurs (SD), and what happens immediately after the problem behavior (SD)?
     - What influences expression of the behavior (MD and I)?
       - Internal
         - Physiological
         - Psychological
       - External
         - Environmental
         - Curricular and Instructional
     - When does the problem behavior occur?
     - Where does the problem behavior take place?

Conducting the Functional Assessment

5. Conduct systematic behavioral observations.
   - Should not interfere with classroom functioning or normal daily events.
   - Should strive to be objective not subjective (what you see not what the behavior means).
   - 2-5 days worth of observations is typically necessary to identify patterns.
     - However, the more data the more accurate the picture of the behavior!!!

Conducting the Functional Assessment

5. Conduct systematic behavioral observations.
   - Types of data
     - Frequency counts
     - Interval data
     - Duration data
     - ABC forms

<table>
<thead>
<tr>
<th>Time</th>
<th>A</th>
<th>B</th>
<th>C</th>
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Conducting the Functional Assessment

6. Analyze the data (look for relationships among establishing (or motivating) operations, antecedents or triggering events, target behaviors, behavioral consequences).
7. Formulate a hypothesis regarding the function of the behavior (consequences that support it) and the environment.
   - Does the behavior get something (positive reinforcement)?
   - Does the behavior escape or avoid something (negative reinforcement)?

Conducting the Functional Assessment

8. Write the functional assessment of behavior report.
9. Develop the positive behavior intervention plan (BIP)
   - The result of the FBA
   - Intervention elements may include
     - Modifying the physical environment
     - Adjusting the curriculum or instructional strategy
     - Changing the antecedents and/or consequences for the students behavior
     - Teaching a more adaptive/appropriate replacement behavior that serves the same function as the target behavior.

The Functional Assessment “Process”

Collect Data
Continue or Modify
Identify function & Develop BIP

It involves assessment & reassessment throughout BSP development

Introduction to the Functional Assessment
Defining the Target Behavior
Reviewing Student Records
Jan is a kindergartener with Downs Syndrome who likes being the center of attention. During morning calendar time she often pokes other students. Her teacher manages this by placing Jan in her lap. As the school year progresses, the teacher has observed that Jan’s problem behaviors are increasing.

- What is the behavior?
- What are the individual variables (O)?
- How will you assess the behavior (what are the antecedents & what do you think is a likely function of the behavior)?
- What do you recommend?
- How would an FAA for Jan be different from an FBA?
- Who is involved in the BIP?

Jan is being taught maladaptive/inappropriate ways to obtain attention.

- Possible interventions
  - Give Jan lots of attention when she sits appropriately.
  - Use carpet squares to clearly define seating areas.
  - Teach Jan to ask for attention.
  - Stop putting Jan on her teacher’s lap when she misbehaves.

Take ten minutes to complete the quiz to be passed out by the instructor.

- Use the quiz as an opportunity to assess your understanding of the material.
- Quiz results will be reviewed at the start of our next class meeting.
Writing Behavioral Definitions

Consider each of the inadequate descriptions of possible target behaviors on the worksheet found in the Week 3 course materials.

Use your imagination to consider exactly what behaviors a given student might be displaying.

Write an appropriate behavioral definition.

Keep in mind that such definitions define behavior in such a way that it is likely any two people will agree, with a high degree of reliability, that the behavior is occurring.

<table>
<thead>
<tr>
<th>Inadequate description</th>
<th>Sample Operational Definition</th>
</tr>
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<tbody>
<tr>
<td>Student engages in self-abusive behavior.</td>
<td>Student bangs forehead on floor with increasing speed and force until restrained by an adult.</td>
</tr>
<tr>
<td>Student is belligerent and aggressive.</td>
<td>Student becomes red in the face, clenches his fist, increases his vocal volume, and moves closer and closer to people, frequently culminating in hitting them repeatedly with little attempt to aim the strikes.</td>
</tr>
<tr>
<td>Student is apathetic.</td>
<td>Student looks into space, initiates few comments.</td>
</tr>
<tr>
<td>Student is nonverbal.</td>
<td>Student gives one-word answers, talks only to the nurse.</td>
</tr>
<tr>
<td>Student has a bad attitude</td>
<td>Student verbally refuses to work, makes faces.</td>
</tr>
<tr>
<td>Student is disruptive.</td>
<td>Student hits other pupils, makes noise with pencil.</td>
</tr>
<tr>
<td>Student is hyperactive.</td>
<td>Student wanders about classroom, sits for no more than two minutes.</td>
</tr>
<tr>
<td>Student is defiant.</td>
<td>Student argues with teacher over class rules, refuses to salute flag.</td>
</tr>
</tbody>
</table>
# Writing Behavioral Definitions

<table>
<thead>
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<th>Sample Operational Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student is lazy.</td>
<td>Student writes name illegibly, completes fewer than four problems on math worksheet.</td>
</tr>
<tr>
<td>Student is not motivated.</td>
<td>Student begins work only after three reminders, habitually late to class.</td>
</tr>
<tr>
<td>Student does nothing</td>
<td>Student turns in incomplete assignments, plays with toys brought from home.</td>
</tr>
</tbody>
</table>

# Behavioral Definitions of Common Behavior Problems

- Off-task
- Fidgeting
- Vocalizing
- Playing with objects
- Out of seat
- Others?
Review Student Records

- Review of records for health and medical factors which may influence behaviors (e.g. medication levels, sleep cycles, health, diet).
- These are the individual variables (O) that predispose students to certain behaviors.
- Review of the history of the behavior to include the effectiveness of previously used behavioral interventions.
- We don’t want to reinvent the wheel
- We don’t want to waste our time

Review of Records for the Functional Assessment of Behavior

Medical or Biological Conditions That Have Behavioral Features

- Schizophrenia: Severe panic reactions or behavior that is violently aggressive and destructive toward self and others may be exhibited by students with schizophrenia.
- Klinefelter’s Syndrome: Aggressive behaviors frequently exhibited by individuals with this syndrome.
- Epilepsy: Assaultive behaviors may be exhibited by individuals with temporal lobe epilepsy or tumors on the hypothalamus or temporal lobes.
- Fragile X Syndrome: Behavior dysfunction, including self-mutilation and violent outbursts, may be displayed by individuals with this syndrome (which is a genetic disorder that is a common cause of inherited mental retardation).

1Adapted from Positive Interventions for Serious Behavior Problems, by D. Browning Wright, et al. (1998). Published by the California Department of Education, Sacramento, CA.
Medical or Biological Conditions That Have Behavioral Features

- **Prader-Willi Syndrome**: A behavior disorder that includes a lack of emotional control, as well as self-injurious (typically skin picking) or aggressive behaviors may be seen among individuals with this syndrome.
- **Autism**: Aggressive, self-injurious behaviors, and unusual responses or sensitivity to sensory stimulation are frequently seen among individuals with this disorder.
- **Tourette Syndrome**: The involuntary, recurrent stereotyped motor movements and vocal behaviors, typical of Tourette syndrome, may be exacerbated under stress and result in self-injury and/or aggressive behavior.
- **Migraine Headaches**: In some individuals, these headaches may be immediately preceded by a change of personality, leading to an exacerbation of preexisting aggressive, self-assaultive, or self-stimulator behaviors.

(Adapted from Positive Interventions for Serious Behavior Problems, by D. Browning-Wright et al. (1998). Published by the California Department of Education, Sacramento, CA.)