



BioBehavioral States

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SPED 746

Hunter College Fall 04'

Biobehavioral States:

What Are They

- States refers to the condition of a person at a particular moment
- Biobehavioral refers to the influences on a child's state
 - Bio-Physical factors such as hunger, fatigue, comfort
 - Behavioral
 - Internal such as emotions and preferences
 - External environmental factors such as noise, temperature, materials, and social contact

Biobehavioral States

States (Caroline Record of Individual Behavior [CRIB])

- Deep Sleep
- Intermediate Sleep
- Active Sleep
- Drowsy
- Quiet Awake
- Active Awake
- Fussy Awake
- Mildly Agitated
- Uncontrollably Agitated

States (Guess et. Al. 1988)

- Sleep States
 - Asleep - Inactive
 - Asleep – Active
- Indeterminate States
 - Drowsy
 - Daze
- Preferred Awake State
 - Awake Inactive - Alert
 - Awake Active – Alert
- Other Awake States
 - Awake Active/Stereotype
 - Crying/Agitated

Biobehavioral States:

Who is it appropriate for?

For students with profound disabilities

- Who have trouble self regulating and may frequently be sleepy, irritable, or anxious, and students who over stimulate and shut down easily
- Can not effect basic change in their environment
- Can not communicate their most basic needs effectively or consistently

Biobehavioral States:

Why is it important?

- A child must be in an alert state to receive and process information – to learn
- Students do not learn when they are in lower (sleepy) and higher (agitated) states
- In order for these children to learn we must know what brings them to an optimal state where they are ready to receive and process information
- Each state has a purpose for that individual

Assessing Biobehavioral States: What Do You Assess

What do you assess

- Medical
 - Conditions, seizure disorder, medications
- Nutritional/Hydration
 - Food and liquid intake oral/tube
- Environmental
 - Temperature, lighting, positioning, social, available stimuli/activities

Assessing Biobehavioral States: Observation

What are you actually observing or what makes a state a state

- Motor?
- Vocalizations?
- Physiological?
- Self stimulatory Behaviors?

Interobserver agreement

- Guy, Guess, Mulligan-Ault (1993) .74 to .93
- Alt, Guy, Guess, Bashinski, and Roberts (1995) BBS Observation training package
 - Pre test .67 to .91 (.78)
 - Post test .66 to .99 (.85)

Assessing Biobehavioral States: What are the steps?

Part 1

Should be gathered at home and school for the 24hrs preceding part 2 of the assessment (Gathered by parents ideally but if not possible through interview)

- Food and liquid
- Medication
- Seizures
- Sleep
- Elimination

Assessing Biobehavioral States: What are the steps?

Part 2

- Decide on a recording interval of between 1 to 15 m.
- Record for what is happening at the particular moment not the entire interval
- Time, Activity, State, Position, Stimuli, Ambient Conditions, Social Conditions

Part 3

- Summarize information for alert states, sleepy states, and agitated states.
- Impact of food, liquid, and medication schedules

Biobehavioral States: Manipulating States

- The primary task for the teacher of students with profound disabilities is to use environmental management to create conditions that bring a student into an alert state and maintain it for as long as possible
- Analysis yields information on what effects states which the teacher uses to stimulate the student into an alert state
- Moderate Novelty
 - Using something different in a familiar activity, or in an unrelated context
 - Too much can cause withdrawal
 - An alert state is maintained by an attractive stimuli not an aversive one
 - Novelty wears off
 - Use enough repetition to build memory but stop when interest lost

Biobehavioral States: Manipulating States

Calming and Alerting Stimuli

Channel	Calming	Alerting
Vestibular	Slow rhythmic rocking	Fast irregular spinning
Tactual	Firm touch, warmth	Light Touch, coolness
Auditory	Soothing music, quiet rhythm	Fast, loud music
Olfactory	Pleasant scents	Strong pungent odors
Visual	Dim light	Bright light