DISCRETE TRIAL INSTRUCTION VS. MAND TRAINING FOR TEACHING CHILDREN WITH AUTISM TO MAKE REQUESTS

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EPSE 512
Mand Training

- **Manding**
  - First type of language to develop in typically developing infants

- **Motivating Operations**
  - Stimuli that alter the value of an item or activity as a reinforcer
Discrete Trial Instruction (DTI)

- **Three-Term Contingency:** SD – R – SR
  - Traditional approach to teaching language and communication to students with autism
Procedural Differences

**Mand Training**

- Instructional materials are selected by the student
- Student moves around the environment with the instructor nearby
- Controlling variable is the motivating operation
- Teaching procedure:
  - Immediate full model prompt and provide item if correct
  - If incorrect or non-response after 5 seconds provide a model prompt
  - As long as student indicates interest, prompts continue every 5 - 10 seconds
  - If student engaging in inappropriate play or stereotypy for more than 2 minutes, items removed
- Prompts are completely faded within sessions
Procedural Differences

- Example Clip of Mand Training
  - (link to YouTube video clip)
Procedural Differences

- **DTI**
  - Instructional materials are selected by the instructor
  - Student sits at a table across from the instructor
  - Controlling variable is the SD
    - High-probability tasks interspersed
  - **Teaching Procedure:**
    - Immediate full model prompt and provide item if correct
    - Then, full model prompt after 2 seconds, then 5 seconds, then removed
    - Errors and non-responses ignored and SD re-issued with an immediate full model prompt
  - Prompts are faded across sessions
Procedural Differences

- Example Clip of DTI
  - (link to YouTube video clip)
Results and Conclusions

- Mand training conditions resulted in higher frequencies of independent requesting.
  - Though prompts decreased and independent requests increased in both conditions, prompted requests remained higher than independent requests in DTI.
  - When mand training was run as the first condition, students engaged in several independent requests during the DTI baseline.
Results and Conclusions

- Mand training conditions took much less time for students to meet mastery criteria
  - Some students did not meet criteria in DTI
- DTI conditions taught a higher number of items
Results and Conclusions

- DTI higher levels of eye contact
- Less challenging behaviors in mand training for 2 students and equal levels for the remaining 4 students across all conditions
- Social validity measures higher for mand training
- No maintenance or generalization measure
Advantages of Mand Training

- Student chooses what to use in teaching
- Natural context for teaching
- Natural controlling variable
- Prompts faded within session
Mand Training vs DTI

- **Disadvantages of Mand Training**
  - Continued prompting may cause frustration
    - Prompt 2-3 times, then provide item to student instead
  - Prompt fading should be more systematic/gradual
    - Full model prompt, then partial, then independent
    - Also, need to explain response requirements
  - Removal of item if engaging in inappropriate play or stereotypy may cause frustration
    - Model appropriate play instead
  - Criteria for item removal was not well defined
    - Consecutive or interspersed
    - Define stereotypy and inappropriate play
Mand Training vs DTI

- Advantages of DTI
  - Instructor chooses what items to use in teaching
  - Prompt fading is more systematic/gradual
  - Table setting does not allow student to engage in inappropriate play or stereotypy
Mand Training vs DTI

- Disadvantages of DTI
  - Instructor chooses what items to use in teaching is artificial
  - Table setting is artificial
  - Artificial SD, “What do you want?”
  - Need to use high-probability tasks during teaching
  - Prompts are faded across sessions
Overall Critique

- Organized well
- Easily understood
- Comparative research
- Highly relevant to students with autism
- Procedural drawbacks
- Social validity concerns
- Lacking a measure of maintenance or generalization
Discussion Questions

- Has anyone used mand training in a school setting? Does it lend itself to this type of setting? If not, could modifications be made to make it more suitable? Would DTI work better in a school setting?

- What type of student characteristics do you think would ensure success with the mand training procedure? Or do you think all students would benefit from this type of procedure?