

Operant Procedures for the Acquisition of Early Social Skills (workshop on research, procedures, clinical cases, class exercises, etc. on the acquisition of various early social repertoires, eg eye contact, JA, Soc.Ref., play, theory of mind, etc.).

1. Operational analysis of mentalistic terms – joint attention. Make behavioral sense of each of the following phrases:
 - a. According to Baldwin (1995), “the simultaneous engagement of two or more individuals in **mental focus on one and the same external thing**” (p. 132).
 - b. Bruner (1995): “**involves knowing that another is looking at experiencing** something in the visual world” (p. 7).
 - c. Tomasello (1995): “both participants are monitoring the other’s attention to the outside entity,” and “the coordination that takes place in joint attentional interactions is accomplished by means of **an understanding that the other participant has a focus of attention to the same entity as the self**” (p. 105-107).
 - d. Mundy, Hogan, & Doehring (1996): “the function of [joint attention] behaviors is to **share attention** with the interactive partner or to monitor the partner’s attention. They differ from Requesting bids in that they **do not appear to serve an instrumental or imperative purpose.**”
 - e. Corkum & Moore (1995): “**joint attention plays an integral part in both the protodeclarative and protoimperative gestures**” (p. 64).

2. Respond to the following objections to a behavior-analytic view of Joint Attention:
 - a. Tomasello (1995) contended that: . . . while the conditioning explanation can never be ruled out completely, children’s spontaneous gaze alternations, and the way they are coordinated with their ongoing social interactions at around 12 months of age, **makes less plausible the conditioning explanation and more plausible the view that the child understands that the adult is a separate person who has intentions and attention that may differ from its own** (p. 109).
 - b. Bruner (1995): “. . . it was . . . inevitable that we grew uncomfortable with learning theory explanations of how eye-to-eye contact came into being, or how it shifted over to shared attention on common objects. With respect to the former, there were even studies indicating that eye-to-eye contact itself was reinforcing in learning tasks” (p. 2).
 - c. Tomasello (1995):, “in [the case of declaratives] **the child simply shows or shares something with an adult, which would not seem amenable to a conditioning explanation as there are no apparent rewards involved** . . . If human beings are rewarded by smiles and other signs of acknowledgement from adults, then they might be conditioned in their use of protodeclaratives as well [but] **this stretches the conditioning explanation somewhat out of shape**” (p. 111).

3. Demonstrate each of the following behavior principles and explain how they may be relevant to joint attention:
 - a. Operant reinforcement
 - b. Operant discrimination
 - c. Conditioned reinforcement and behavioral chains
 - d. Conditional discrimination
 - e. Joint control
 - f. Conjugate reinforcement
 - g. Continuous repertoires
 - h. Observing responses

4. Describe procedures for establishing conditioned reinforcers
 - a. Pairing
 - b. Contingent pairing
 - c. Operant discrimination (S^D)
 - d. Demonstrate and explain procedures that can produce long-lasting conditioned reinforcers.

5. Behavioral Assessment of Joint attention (MacDonald et al., 2006)
 - a. Setting
 - b. Reinforcer assessment
 - c. Responding to JA
 - i. Following a point to proximate pictures
 - ii. Following a point to distal pictures
 Response definition:
 Head orientation within 5s
 - d. Initiating JA
 - i. Toy activation task (proximate)
 - ii. Book presentation task
 - iii. Toy activation task (distal)
 Response definitions:
 Gaze shifts – from examiner to object or from object to examiner
 Gestures – pointing toward toy or activated object
 Verbalizations – intelligible comment/question while looking at object or examiner
 - e. Interobserver agreement:

$$\frac{\text{agreements}}{\text{agreements} + \text{disagreements}} \times 100$$
6. Describe the difference between protoimperatives and protodeclaratives. How are the different functions established?
7. Give an example and demonstrate how to establish observing responses reinforced by social stimuli, such as facial expressions.
8. Demonstrate how to establish IJA skills in conjunction with mands.
9. Give examples and demonstrate how to create a child's "interest" in novel events. Explain why this is important in social interaction.
10. What are some pros and cons of having reinforcers visible to the child during training sessions?
11. Describe and demonstrate a series of steps that can move performance from occurring only during discrete trial training at the table to occurring in the natural environment:
 - a. Gaze following
 - b. Initiating Joint Attention – proto imperatives
 - c. Initiating Joint Attention – proto declaratives
12. Describe and demonstrate an experiment on "theory of mind". Explain how JA skills seem to be a prerequisite.
13. Explain why behavioral variability is important, and describe and demonstrate how to produce behavioral variability.
14. Make a list of additional research issues and explain the importance of each of them.

Readings:

Baldwin, D. A. (1995). Understanding the link between joint attention and language. In C. Moore & P. J. Dunham (Eds.), *Joint Attention: Its Origin and Role in Development*, pp. 131-158. Hillsdale, N. J.: Lawrence Erlbaum.

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Jones, E. A., Carr, E. G., & Feeley, K. M. (2006). Multiple effects of joint attention intervention for children with autism. *Behavior Modification*, 30, 782-834.

MacDonald, R., Anderson, J., Dube, W.V., Geckeler, A., Green, G., Holcomb, W., Mansfield, R., Sanchez, J. (2004). Behavioral assessment of joint attention: A methodological report. *Research in Developmental Disabilities*, 27, 138-150.

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Whalen, C., Schreibman, L., & Ingersoll, B. (2006). The collateral effects of joint attention training on social initiations, positive affect, imitation, and spontaneous speech for young children with autism. *Journal of Autism and Developmental Disorders*, 36, 655-664.