

Teaching Social Skills Using Peer-to-Peer Manding

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Maureen Archer
Kara Biroscak
Rachel Kittenbrink
Lisa Putt
Nicole Verbos

Session Outline

- Review of peer manding literature, rationale, & basic procedures.
- The nuts and bolts (teacher presentations)
 - Early Intervention: consumables to structured play
 - Putt
 - Elementary: general education peers in activity-based sessions
 - Verbos
 - Middle School: working with general education peers & different response modes
 - Biroscak
 - Elementary: play-based, contrived to natural
 - Archer

Language Interventions

- ABA language interventions have proven success for children with autism (National Autism Project, 2009; Sundberg & Michael, 2001; Prelock, Paul, & Allen, 2011).
- Specifically **mand training** has been consistently highlighted as an important intervention for children with autism and IDD (Michael, 1988; Sundberg, 1993; Sigafoos, Kerr, Roberts, & Couzens, 1994; National Autism Project, 2009; Kane, Connell, & Pellicchia, 2010).
- Michael (1988) notes that mands are likely more than 50% of adult verbal interactions.

Types of Manding

- Mands for basic items & actions
- Information from others (Betz, Higbee, & Pollard, 2010; Marion, Martin, Yu, & Buhler, 2011)
- The removal of undesired things (Yi, Christian, Vittimberga, & Lowenkron, 2006).
- Items missing from the environment (Sweeny-Kerwin, Carbone, O'Brien, Zecchin, & Janecky, 2007; Hall & Sundberg, 1987)

Generalization

- Barriers to functional mand use for children with autism include difficulties with the generalization of mands to different people, places, exemplars, and the transference of skills to unprompted environments (Stokes & Baer, 1977; Prelock, Paul, & Allen, 2011, Charlop et al., 1985).

Considerations for Generalization

- Strength of Motivation
 - If MO is weak, it may appear that mands have not been acquired or generalized, when MO strength is really the issue. (Fragale, O'Reilly, Aguilar, Pierce, Lang, Sigafoos, & Lancioni, 2012).
- Contrived Approaches
 - A recent meta-analysis evaluating the generalization of language interventions for children with autism found that despite the intent of naturalistic interventions, this format demonstrated less generalization than contrived interventions (Kane, Connell, & Pellicchia, 2010).

Peers

- Issues with generalization could have effects on socialization, if mand targets taught by instructors do not generalize to peers (Higbee & Sellers, 2011; Lora, Gilroy, & Hineline, 2013; Pellicchia & Hineline, 2007; Taylor et al., 2005).
- Failure to mand to peers significantly limits the opportunity to participate in social interactions and to gain access to desired items and activities (Kodak, Paden, & Dickes, 2012; Lora, et al., 2013; Pellicchia & Hineline, 2007; Taylor et al., 2005).
- Manding to peers is a foundational skill needed for the development of other social skills.

Manding

PROCEDURES

Procedures for Teaching Manding

- **Interrupted Chain Procedure** (Hall & Sundberg, 1987; Sigafoos, Kerr, Roberts, & Couzens, 1994; Albert, Carbone, Murray, Hagerty, & Sweeny-Kerwin, 2012)
 - Activities are taught using a series of items for a task that when combined result in a terminal reinforcer.
 - Once the items are strongly conditioned as a part of the activity, one of the items is removed prior to the session resulting in an interrupted chain and providing a naturalistic opportunity for a mand (Betz, Higabee, & Pollard, 2010)
 - Missing Items & Mands for Information

Procedures for Teaching Manding

- **Incidental Teaching/Naturalistic Approaches** (Hart & Risley, 1975; Kaiser & Hester, 1994; McGee, Almedia, Sulzer-Azaroff, & Feldman, 1992; Shafer, 1994)
 - Hart and Risley (1975) describe incidental teaching as “the interaction between an adult and a single child, which arises naturally in an unstructured situation such as free play and which is used by the adult to transmit information or give the child practice in a developing skill” (p. 411).
 - Proven to increase compound sentences, specific language targets (including mands), and peer initiations.

Procedures for Teaching Manding

- **Time Delay (TD)**
 - Delayed assistance, otherwise known as a time delay (Charlop, Schreibman, & Thibodeau, 1985; Hall & Sundberg, 1987; Halle, Marshall, Spradlin, 1979; Sigafoos, Kerr, Roberts, & Couzens, 1994; Sweeny-Kerwin, Carbone, O'Brien, Zecchin, & Janecky, 2007) offers an additional approach to mand training.
 - Benefit: TD frees the mand from the intraverbal control of another speaker (Hall & Sundberg, 1987).

Time Delay (2 types)

- **Progressive TD (or rolling time delay)**
 - Instructors gradually increase the amount of time between the presentation of the stimulus and the delivery of a prompt (Neitzel & Wolery, 2009).
- **Constant TD**
 - Often no time between the presentation of the stimulus and the delivery of the prompt first learning a skill.
 - As the learner becomes proficient with the new skill, a fixed amount of time is used between the presentation of the stimulus and the prompt (Neitzel & Wolery, 2009).

Manding

IMPORTANT CONSIDERATIONS**Motivation (MO/EO)**

- Effective use of establishing operations (EOs) key to mand training (Hartman & Klatt, 2005; Sundberg, 1993; Sundberg, 2005; Sweeny-Kerwin et al., 2007; Taylor, et al., 2005).
- An establishing operation as defined by Michael (1993), "is an environmental event... that affects an organism by momentarily altering (a) the reinforcing effectiveness (value) of other events, and (b) the frequency of occurrence of that part of the organism's repertoire relevant to those events and consequences" (p. 192).

Motivation (MO/EO)

- Application to teaching mands
 - Both the SD and EO evoke behavior, but for different functional reasons (Sundberg, 2005).
 - Motivation is also affected by the frequency and duration of access to items (Hartman and Klatt, 2005).
 - Instructor must be able to identify changes in MO while teaching and make adjustments to procedures and materials as indicated (Sundberg, 2005).

Prompt Procedures

- Factors that effect development peer mands:
 - Instructor manipulation of materials
 - Instructor prompt rate (Falcomata, Ringdahl, Christensen, & Boelter, 2010; Sweeny-Kerwin et al., 2007; Hartman & Klatt, 2005; Charlop et al., 1985).
- Mands must be controlled by EO, peer, and (at first) presence of item
 - not prompt procedures of instructor or other environmental cues (Falcomata, Ringdahl, Christensen, & Boelter, 2010).

Differential Reinforcement

- Differential reinforcement can be used to help teach mand skills as well as to condition peers as reinforcers.
- Generally delivered for unprompted delivery of preferred items to peers and unprompted mands
 - Duration with items
 - Additional consumable reinforcement
- Differential reinforcement should be faded away as quickly as possible.

Literature on Peer Manding

- Five intervention studies are available in the literature that support peer-to-peer manding.
 - Taylor, Hoch, Potter, Rodriguez, Spinnato, and Kalaigan (2005)
 - Pellecchia and Hinline (2007)
 - Paden, Kodak, Fisher, Gawley- Bullington, and Bouxein (2012)
 - Kodak, Paden, and Dickes (2012)
 - Lorah, Gilroy, and Hinline (2014)

Peer Manding

CLASSROOM PRESENTATIONS

Peer Manding

QUESTIONS**References**

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Contact Information

Rachel Kittenbrink
rkittenbrink@me.com