## Embedding Social Reinforcers into Lunchtime Activities in Children with Autism Spectrum Disorders

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### Abstract

A core characteristic of Autism Spectrum Disorders (ASD) is social impairments. As more students with ASD are being educated alongside their typically developing peers, providing these students opportunities to socialize with their typical peers is needed. One line of research has suggested that embedding social reinforcers into activities can help promote socialization for students with ASD. Within the context of a multiple baseline design across participants, we assessed whether embedding social reinforcers into lunchtime activities would increase socialization between students with ASD and typical peers. Preliminary data suggest that embedding social reinforcers into lunchtime activities increases the target student’s levels of engagement with typical peers and increases the rate of initiations made by the target student to typical peers.

### Method

**Participants.** Participants included three children between the ages of 5 and 10 diagnosed with ASD according to DSM-IV-TR criteria. Selection criterion included impairments in socialization with typically developing peers. In addition, participants required language potential necessary for acquiring appropriate socialization skill, but participants were identified as socially isolated in their school setting by their teacher or counselor. **Setting.** The study took place at 3 elementary schools. **Reliability.** Reliability was measured for each child in all conditions using either in-vivo or video data. Inter-rater reliability was calculated by dividing the total number of agreements over the total number of disagreements plus agreements yielding an average of 80%. **Design.** A multiple baseline design across participants was employed. **Procedures.** During baseline, students were not instructed to socialize with typically developing peers. Intervention was implemented twice a week for Child 1 and Child 3, and once a week for Child 2 during lunch period. Specific motivational procedures of Pivotal Response Treatment, such as child choice, were embedded into social activities. Generalization will be obtained for all participants in a manner similar to the baseline condition. Participants will not be given any instructions to socialize with peers.

### Results

During baseline, all participants exhibited little to no engagement with peers during social periods. Additionally, all participants made little to no social initiatives toward peers in these conditions. With intervention, all participants increased in their level of engagement and rate of initiations made toward typically developing peers. Social validation measures suggest that both students with ASD and typically developing peers enjoyed participating in the social activities. Generalization will be obtained for all participants.

### Dependent Measures

**Social Initiations:** Number of social communicative behaviors directed to a typical peer by the students with ASD. These behaviors are non-prompted requests, questions and/or comments independent of the previous topic. **Social engagement:** the amount of time the child with ASD participated in the activity, either by facing peers, making eye contact, gesturing (e.g., pointing), responding to questions, asking questions, making comments, smiling, nodding, and/or sharing of activities or materials with peers during the interval.

### Social Significance and Discussion

Children with ASD often report greater feelings of loneliness and a desire for more meaningful friendships (Locke, Ishijima, Kasari & London, 2010). Because children with ASD yearn for close friendship and are capable of socializing with typically developing peers (Koegel, R.L., Fredeen, Kim, Danial, Rubinstein, & Koegel, L.K., 2012; Koegel, L.K., Vernon, Koegel, R.L., Koegel, B.L. & Paulin, 2012; Koegel, R.L., Kim, Koegel, L.K., & Schwartzman, in press), it is imperative that we identify environmental conditions that may help foster socialization with typically developing peers. Future research directions include friendship development outcomes, and measures of social confidence post intervention.
Acknowledgements
Thank you to the families with children with ASD who participated, and the schools that welcomed our lunch clubs, including: Hope Elementary School, Montecito Union Elementary School, and Monroe Elementary School.

Also, a special thanks to the URCA grant, Dr. Robert Koegel, Dr. Lynn Koegel, Sunny Kim, Courtney Ribnick, and the Koegel Autism Center, and to our two coders Lindsay Glugatch, and Sandra Milosevic.

References


Koegel, R.L., Kim, S., Koegel, L.K., & Schwartzman, B. (in press). Improving socialization for high school students with ASD by using their preferred interests.