Title: Collateral Effects of Object Labeling of Children with Autism

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Introduction: Language acquisition interventions are an integral part of an early intervention program for children with autism spectrum disorder (ASD). These interventions target specific skills such as requesting preferred items to improve the language deficit. However, specific interventions may also occasion collateral effects that occur coincidentally and are not specifically targeted (Plavnick & Ferreri, 2012). For example, teaching children with ASD behaviors such as joint attention (Whalen, Schreibman & Ingersoll, 2006) has led to increases in positive non-targeted collateral effects. The purpose of the present study was to review videos from a prior language skill acquisition intervention (LaLonde et al, 2016) and to record the collateral effects during pre- and post-tests that were conducted in a tabletop versus play-based format.

Method: Participants included two boys and one girl ages 3-4 with diagnoses of ASD, enrolled at the Early Learning Institute, an Early Intensive Behavior Intervention program for children with ASD associated with a Midwestern university. Behaviors were coded from video recordings of either a pre or post probe that was either one of two conditions: a highly structured teaching environment, or a play-based environment. Average video lengths were 2 min, 32 s for the structured setting and 16 min, 25 s for the play-based setting. Collateral effects were operationally defined for the following behaviors: orienting toward researcher, labeling non-target objects, labeling events, vocal requesting, and vocal and motor stereotypy. The rate of occurrence for labeling non-targets, labeling events, and vocal requesting was collected, and the proportion of time was collected for orienting, and both vocal and motor stereotypy. Data were analyzed for differences in target behaviors within each individual across the two different environments over time.

Results: Results were varied across subjects, but with some common themes. One participant demonstrated labeling of non-target objects as well as vocal requesting exclusively within the naturalistic environment. The mean rates per minute were 0.14 and 0.05 respectively, with each of the mean rates in the structured setting for these two behaviors being a 0. However, he showed a slightly higher occurrence of labeling events in the structured setting than the naturalistic setting, with mean rates per minute being 0.05 versus 0.03, respectively. The results for the female participant for these three behaviors were consistent in that each occurred only in the naturalistic settings and not at all during the structured probes. Mean rates per minute for the three behaviors in the naturalistic condition were recorded as follows: labeling of a non-target object, 0.56; labeling of events, 0.14; vocal requesting, .05. The third participant also presented with consistent results across the same three behaviors. In the naturalistic environment labeling non-target objects occurred at a mean rate per minute of 0.18, labeling an event at 0.40, and vocal requesting at 0.5. This contrasts with the structured setting in which said behaviors did not occur at all.

Discussion: Overall, participants demonstrated higher levels of collateral social behavior during the naturalistic and play-based sessions than during the highly structured sessions. Differences between the two conditions are discussed, comparing and contrasting the potential effects they may have had on social interaction. Implications for the present study are viewed in the light of the potential for play based environments to impact a variety of behaviors during naturalistic interventions.

References/Citations:
• LaLonde, Plavnick, Dueñas, Neil & Wawrzonek (manuscript in preparation)
September 6th, 2016

Laraine Masters Glidden Undergraduate Student Award

50th Annual Gatlinburg Conference

Dear Gatlinburg Award Committee,

I thank you for your consideration of my application for the Laraine Masters Glidden Undergraduate Student Award. I am very passionate about the research I have been exposed to and have been able to conduct as an undergraduate, and I am thankful for awards such as these that make conferences more accessible to students such as myself. My poster presentation is titled “Collateral Effects of Object Label Acquisition of Children with Autism” and I recently submitted an abstract. This award would allow me to travel from Michigan to Texas to present this poster and learn from others.

I am in my third year as an undergraduate at Michigan State University, pursuing a degree in Neuroscience with a concentration in Cognitive and Developmental Neuroscience, and an accompanying minor in Bioethics, Humanities, and Society. I have been involved in research for the past three years, and spent the past year in an Applied Behavioral Analysis Clinic for preschool age children with an autism diagnosis. I have assisted with various ongoing research projects, collecting video data, coding said videos, and conducting IOA among other tasks received guidance regarding conducting my own research.

Attending the 50th Annual Gatlinburg Conference will not only allow me to share and receive feedback respecting my own work, but gain exposure to experts in the field of developmental disabilities and how different perspectives can be approached simultaneously. I believe presenting at this conference, particularly with the emphasis on the treatment of disabilities in both the behavioral and pharmacological sense this year in particular will be a great fit. I am eager to share the interesting findings of my research, and I look forward to finding inspiration in the work of others as I embark on new research and make decisions about my future as a medical student.

Thank you again.

Sincerely,

Erica Lydey