A Clinical Demonstration of a Treatment Package for Food Selectivity

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Abstract

This case study evaluated the effects of a treatment package consisting of contingent access to preferred food and escape extinction (EE) on food selectivity in a 3-year old boy with autism spectrum disorder (ASD). Initially, the child was exposed to a procedure in which access to preferred bites of food was contingent on the acceptance of target non-preferred foods. After five treatment sessions in which the child refused all bites of target foods, the experimenters temporarily introduced a form of EE in which, contingent upon consuming single bites of food, the child was provided with breaks from meals and refusal was not followed by meal termination. Following brief exposure to EE, the contingent access to preferred foods procedure was reintroduced and the child immediately increased his consumption of target foods with minimal disruptive behavior. Gains were maintained at 1 and 3-month follow-up. This study provides a clinical example of a specific approach to the treatment of food selectivity that emphasizes a minimization of EE.

Keywords

autism, differential reinforcement, escape extinction, feeding problems, food selectivity, Premack principle

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Food selectivity is the most commonly reported and researched feeding problem in children with autism spectrum disorders (ASD) (Seiverling, Williams, Ward-Horner, & Sturmey, 2011). Children have been found to be selective by food type, texture, color, temperature, freshness, as well as other dimensions. In children with ASD, eating a narrow range of foods has been shown to be associated with a variety of problems such as reduced bone cortical thickness (Hediger, England, Mollov, Yu, & Manning-Courtney, 2008), Vitamin A, D, and C deficiencies (Clark, 1993; Duggen, Westra, & Rosenberg, 2007; Uyanik, Dogangun, Kavaalp, Kormaz, & Dervent, 2006), and iron deficiencies (Latif, Heinz, & Cook, 2002). In addition, Lockner, Crowe, and Skipper (2008) found that parents of children with ASD were more likely to give their children non-prescription vitamin/mineral supplements when compared with parents of children without ASD whose children were not as picky and resistant to trying to new foods. This suggests that parents of children with ASD may be more concerned regarding inadequacies in their children's diet variety. Parents may also find mealtimes stressful when attempting to encourage a child with food selectivity to take bites of new or non-preferred foods, as often children will engage in high levels of disruptive behaviors when their preferred foods are not presented (Williams & Seiverling, 2010).

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The interventions described in studies of food selectivity involve multiple treatment components. These components often include the following: a) stimulus fading combined with reinforcement schedule thinning, in which some dimension of the meal is gradually changed, such as portion sizes being gradually increased; b) differential reinforcement, in which inappropriate behavior is ignored and child acceptance of the presented bites of food is reinforced with verbal praise or access to tangible reinforcers; and c) escape extinction (EE), in which the child is required to consume either a specified number of bites before exiting the eating area, and escape-maintained problem behavior does not lead to termination of the meal. The EE procedure often occurs in one of two forms: (1) non-removal of the spoon, which involves presenting the food until the child accepts it; or (2) physical guidance, which involves physically prompting the child to take a bite.

Most intervention studies for food selectivity, as well as for food refusal, have implemented treatment packages involving differential reinforcement, fading, and some form of EE (Anderson & McMillan, 2001; Freeman & Piazza, 1998; Najdowski, Wallace, Doney, & Ghezzi, 2003; McCartney, Anderson, & English, 2005). Further, component analyses have demonstrated that although positive reinforcement is sometimes sufficient, EE is often a necessary component of effective treatments for food selectivity and food refusal (Cooper et al., 1995; Hoch, et al., 2001; Penrod, Wallace, Reagon, Betz, & Higbee, 2010). Although often necessary, EE has been associated with high rates of inappropriate collateral behaviors, especially in the initial stages of treatment and when physical guidance is a component (Gentry

& Luiselli, 2008). Thus, these collateral behaviors may at times lead families and clinicians to approach the use of EE with hesitation. Although several studies have demonstrated the effectiveness of treatments of food selectivity that do not involve EE (Ahearn, 2003; Buckley, Strunk, & Newchok, 2005; Gentry & Luiselli, 2008; Levin & Carr, 2001; Patel, Reed, Piazza, Mueller, Backmeyer, & Layer, 2007) it is typically unknown whether EE will be a necessary component prior to implementing an intervention. Therefore, EE is often implemented in food selectivity cases. Given the negative side effects that sometimes accompany EE, it is worthwhile to explore alternative approaches that do not include EE or that use minimal use of EE.

During the present case study, an intervention was implemented consisting of contingent access to preferred foods on "Plate B" to determine if a child with food selectivity would eat target foods from "Plate A" using an intervention that did not involve EE. This type of reinforcement which involves contingent access to the opportunity to engage in a behavior that occurs as a high rate (i.e. eating preferred foods) upon engaging in a low frequency behavior (i.e. eating non-preferred or novel foods) is also known as the Premack Principle (Premack, 1959). After five consecutive meals in which the child did not eat any bites of non-preferred or new foods, a variant of EE was briefly implemented. The contingent access to preferred foods procedure was then reintroduced to probe whether the child would begin to eat without EE. The following case study provides a possible approach for determining whether to use EE with children with food selectivity, and if EE is used, how to decide when EE is no longer necessary.

METHOD

PARTICIPANT AND SETTING

Jeremy was a 3-year-old boy with ASD. His medical history included chronic constipation and gastroesophageal reflux. All sessions were conducted in a treatment room containing a table, three chairs, and a highchair. Materials included a video camera, target foods, preferred foods, two plates, and utensils. Sessions were conducted for five days from approximately 8:30 AM to 4:30 PM as part of an intensive day treatment program and thus, exemption from the hospital's institutional review board (IRB) was granted. Approximately seven 10-min Plate A-Plate B sessions were conducted each day with 30-45 min breaks between them. Single-bite taste sessions occurred after the first five treatment meals at the end of the first treatment day (i.e. between 2:00 PM and 4:30 PM) and were completed during the morning of the second day of treatment (i.e. between 8:30 AM and 12:00 PM). The child did not eat separate breakfast and lunch sessions outside of the treatment meals. His parents were instructed to conduct two treatment meals at home during dinner meals following the same treatment protocol that was used throughout the day.

RESPONSE MEASUREMENT AND INTER-OBSERVER AGREEMENT

Data were collected on latency to child acceptance (i.e. elapsed time in seconds from bite presentation to acceptance) during taste sessions conducted first with a preferred food from Plate B, and then with four Plate A foods. Unlike during taste sessions, the child was not required to eat presented bites of target foods from Plate A during the 10-min contingent access to preferred foods meal; however, bites from Plate B were only presented if the child ate a target bite from Plate A. During the contingent access to preferred foods meals, data were collected on disruptive behavior as well as acceptance of Plate A bites within 5 s of bite presentation. Disruptive behaviors included self-injury (i.e. hitting his head against the back of the chair), aggression (i.e. hitting or pushing the spoon or hand of the feeder), negative vocalizations (i.e. crying, screaming, saying "No!"), and head turning (i.e. movement of the head away from the presented bite during food presentation). The proportion of accepted Plate A bites relative to presented Plate A bites with disruptive behavior was then calculated for each session.

PROCEDURE

Pre-treatment Food Preference Inventory Questionnaire. Prior to the baseline condition, Jeremy's parents were given a list of 86 foods and asked to identify foods eaten by him, and foods eaten by the members of the household. Jeremy's parents indicated 17 foods that he typically ate including 1 dairy, 3 fruits, 2 proteins, 9 starches, 2 sweets, and 0 vegetables. Target foods were determined by the family and experimenter and included all food groups eaten by the family, but not Jeremy.

Baseline. During each baseline meal, four of 12 target foods were presented on Plate A. Target foods included yogurt, chicken nuggets, corn, waffles, ham, broccoli, pancakes, apple, hamburger, cereal, macaroni and cheese, and white American cheese. The duration of each meal was 10 min. Initially, Jeremy was presented with a pea-sized bite of a target food on a spoon for 5 s; if he accepted the bite, praise was provided. If he did not accept the bite within 5 s, the bite presentation was terminated and a bite of another target food on the plate was presented within 30 s. The four target Plate A foods presented in a meal were rotated from one food to the next (e.g. yogurt chicken nugget waffles apple→back to yogurt) for the 10 min session duration. When the timer rang after 10 min, meals were terminated regardless of whether or not the child accepted any of the presented bites. All twelve foods were presented across baseline sessions (i.e. four target foods presented during the first baseline session, four different target foods presented during the second baseline session, etc.) and the same target foods were not presented in consecutive sessions.

Contingent Access to Preferred Foods. Following baseline, a condition was implemented in which four target foods were presented from Plate A and four to five preferred foods were presented on a second plate, Plate B. Preferred foods were determined by asking Jeremy's mother and grandmother as well as by the pre-treatment food preference inventory. The four to five foods presented on Plate B during each meal were selected from the following foods: goldfish, Pop-tarts, Nutri-Grain® bar, chocolate, corn puffs, cookies, and Teddy Grahams®. Sessions were again 10 min in duration. Prior to each bite presentation, Jeremy was told, "When you take a bite from this plate (Plate A), you can take a bite from this plate (Plate B)." A pea-sized bite from Plate A was presented for 5 s and if Jeremy did not take a bite, the next food on Plate A was presented and the contin-

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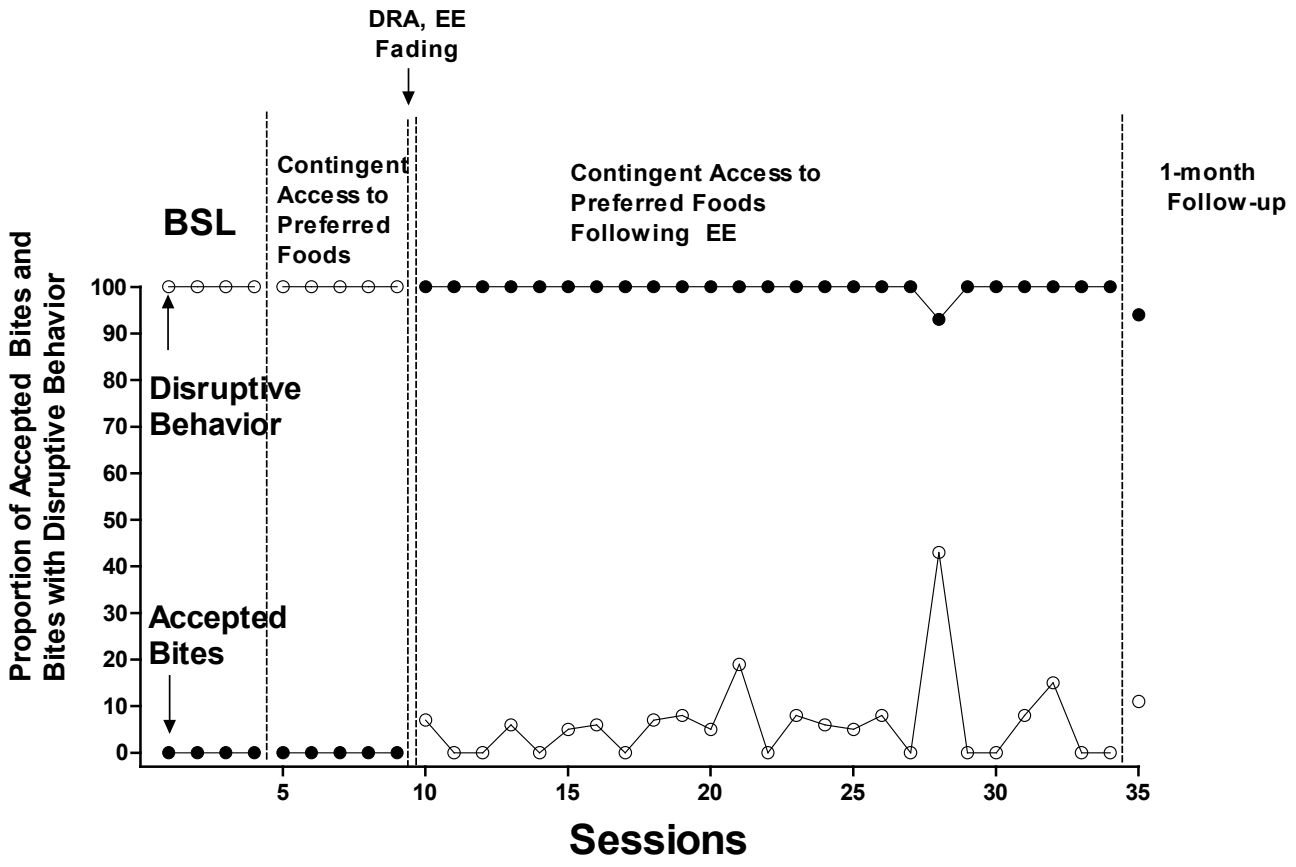

Figure 1. Proportion of accepted bites and bites with disruptive behavior during baseline, contingent access to preferred foods, and contingent access to preferred foods following DRA, EE, and Fading. The closed circles indicate accepted bites and the open circles indicate disruptive behavior.

gency was re-stated. If Jeremy accepted a presented Plate A bite, the feeder presented Plate B to Jeremy for between 5 and 30 s and he was told to select one bite to eat from the presented plate of preferred foods. If Jeremy did not select a bite from Plate B, the plate would have been removed after 30 s; however, Jeremy selected a preferred bite from Plate B every time the plate was presented. As in baseline, meals were terminated after 10 min regardless if the child accepted any presented bites from Plate A.

Differential Reinforcement of Alternative Behavior (DRA), EE, and Fading. Following the initial contingent access to preferred foods condition in which no bite acceptances were observed, EE was implemented in which Jeremy was required to accept a single bite to access breaks from meals and food refusal did not lead to meal termination. This form of EE has been termed exit criterion and has been used in a series of studies targeting food selectivity (Paul, Williams, Riegel, & Gibbons, 2007; Pizzo, Williams, Paul, & Riegel, 2009, Seiverling, Williams, Sturmey, & Hart; 2012). After the child mastered eating four non-preferred foods (i.e. eating a half-spoonful of the food for three consecutive taste sessions without disruptive behavior), the EE procedure was removed. During initial taste sessions, the feeder presented a pea-sized bite of preferred food to Jeremy's mouth and said, "When you take a bite, you're all done." The feeder repeated the rule approximately every 30 s until Jeremy accepted the bite. When Jeremy finished the bite, the feeder said "take a break" and allowed him to leave the room for a 3 min break. After the break, another taste session was conducted. During each taste session, all disruptive behavior was ignored and the therapist represented a new bite of the same food if the presented bite was expelled by the child. Following three consecutive bite presentations in which Jeremy accepted the preferred food within 30 s of presentation without engaging in disruptive behavior, taste sessions were conducted with four non-preferred foods in a rotating format. Following three consecutive bite presentations in which Jeremy accepted a specific non-preferred food within 30 s of presentation without disruptive behavior, bite sizes were increased to a half-spoonful for that particular food. Following three consecutive bite presentations at the half-spoonful level in which Jeremy accepted the bite of a particular food within 30 s without disruptive behavior, the food met mastery criterion. When the four target Plate A foods met mastery criterion, taste sessions were terminated and the contingent access to the preferred foods condition was re-implemented.

Contingent Access to Preferred Foods II. This condition was similar to the initial contingent access to preferred foods condition with several minor procedural differences. During the first meal, the Plate A target foods presented in prior taste sessions were placed on Plate A. In subsequent sessions, four foods were presented on Plate A from the list of the 12 original target foods. When Jeremy started eating pea-sized bites of these 12 target foods, an additional 12 foods were added into the rotation of foods presented on Plate A. Thus, 24 pea-size servings of foods

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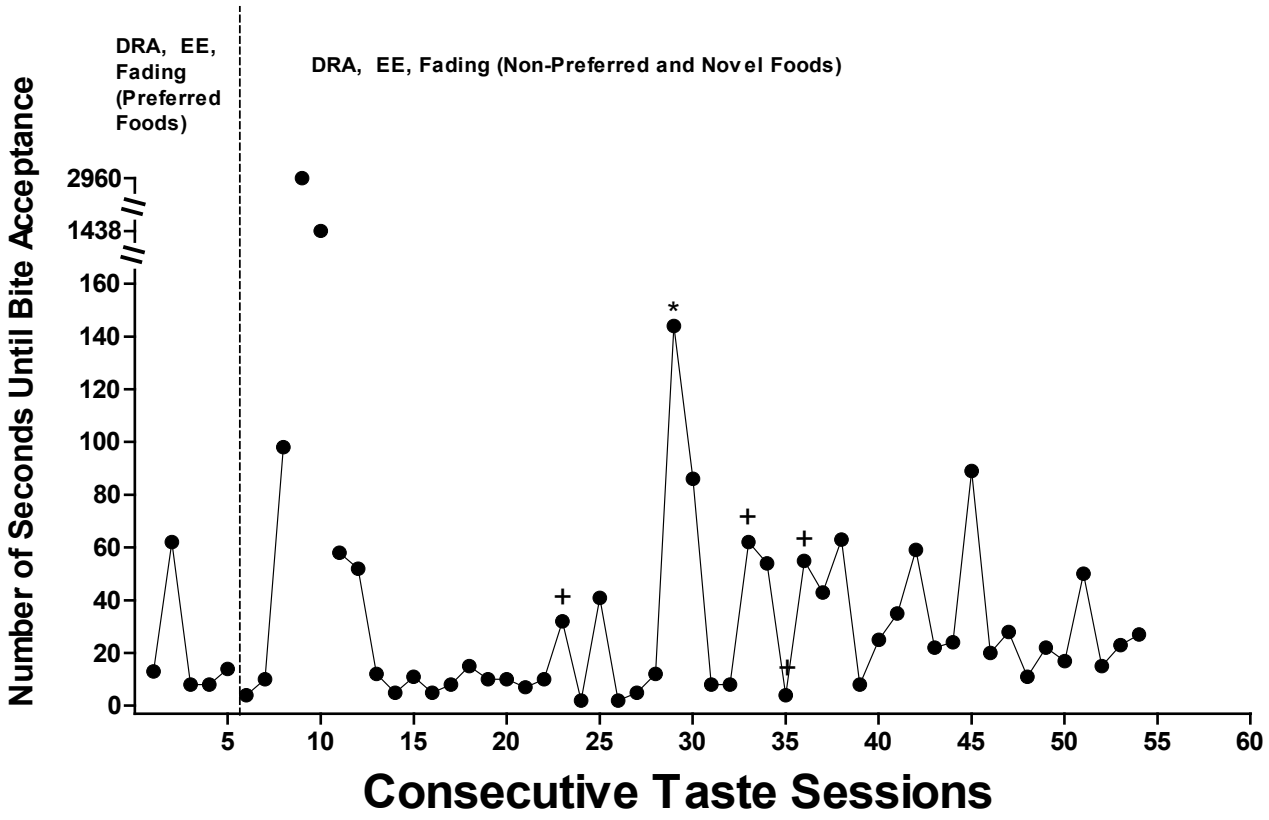

Figure 2. Number of seconds until bite acceptance for each single-bite taste session using DRA, EE, and fading with preferred and non-preferred foods. The + indicates when bite sizes were increased to half spoonful for a particular food and the * indicates the first taste session of the second treatment day.

were rotated throughout meals before bite-sizes were increased. When Jeremy ate at least three bites of pea-sized portions of a food on Plate A for three meals in which that food was presented, we increased bite-sizes for that food to a half-spoonful. Because Jeremy ate almost every bite presented during this phase, portion sizes increased for all foods at the same time.

Home Plan. Across the course of treatment, the family conducted two contingent access to preferred foods meals during the evening at home. During home meals, either Jeremy's mother or grandmother conducted the meal and collected data on bite acceptances.

Inter-Observer Agreement (IOA). A second observer was present during 66% of meals and 32% of taste sessions. Latency to accept agreements for taste sessions were defined as both observers indicating a total latency from bite presentation to acceptance within 3 s of each other. Interobserver agreement for latency to accept during taste sessions was calculated by dividing the number of bites in which both observers indicated a total latency within 3 s of each other by total number of bites. Agreement for acceptance during baseline and treatment meals was calculated by dividing the number of bites in which both observers recorded that the presented bite was accepted within 5 s by the total number of presented bites. IOA for disruptive behavior was calculated by dividing the number of bites in which both observers indicated that disruptive behavior occurred by the total number of presented bites. IOA for child acceptance of bites and disruptive behavior was 96% (90%-100%) and 98% (79%-100%) respectively during baseline and intervention meals. IOA for child latency during taste sessions was 94%.

RESULTS

Figure 1 shows the proportion of accepted bites and bites with disruptive behavior during baseline, contingent access to preferred foods, and contingent access to preferred foods following DRA, EE, and fading. During baseline, Jeremy accepted no bites and engaged in disruptive behavior during all presented bites. When the contingent access to preferred foods condition was implemented, zero acceptances were again observed and disruptive behavior occurred during each bite presentation across five consecutive meals. Following the initial contingent access to preferred foods condition, a series of single bite taste sessions were conducted in which EE was implemented with DRA and fading (see Figure 2). When Jeremy accepted a pea-sized bite of a non-preferred/novel food for three taste sessions under 30 s with no disruptive behavior, the bite size was increased to half-spoonful (indicated by a +). During initial taste sessions with a preferred food (i.e. cookie), Jeremy's average latency until food acceptance was 21 s. Next, single bites of four different foods (i.e. pancakes, waffles, yogurt, and macaroni and cheese) were rotated across taste sessions. Although Jeremy accepted his first three bites of non-preferred foods in less than two min, his fourth and fifth taste sessions lasted 49 min 20 s and 23 min 58 s respectively. The remainder of taste sessions lasted under three min with the longest latency occurring on the first taste session of the second day of treatment (indicated by a *) in which Jer-

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emy's latency to accept the bite was 144 s. During the second contingent access to preferred foods condition, Jeremy accepted 100% bites presented with the exception of one meal in which he did not accept one bite of broccoli. Additionally, disruptive behavior decreased considerably during the second contingent access to preferred foods condition (i.e., disruptive behavior occurred during less than 10% of presented bites with the exception of three meals in which disruptive behavior was observed during 19%, 43% and 15% of presented bites respectively).

HOME MEALS – SELF REPORT BY FAMILY

With regard to home meals, Jeremy's family reported that he ate no bites of food during the first two contingent access to preferred foods meals at home during the first day of treatment. During the second day, Jeremy's parents reported that he ate 43 bites of Plate A foods during the first evening meal and 10 bites during the second meal. On the third evening, Jeremy's family only conducted one meal in which he reportedly ate 37 bites of Plate A foods. On the fourth day, his parents reported that he ate 34 bites of Plate A food during one Plate A-Plate B meal at home during the evening.

At 1-month follow-up, Jeremy's father was observed conducting a contingent access to preferred food meal. During the meal, Jeremy accepted 94% of Plate A bites while engaging in disruptive behavior during 11% of presented bites. Jeremy's parents also filled out a post-treatment food inventory questionnaire at 1-month follow-up and reported that he currently was eating 39 foods: an increase of 22 foods compared to pre-baseline levels. Of these 39 foods, six were dairy, seven were fruits, 10 were protein, 14 were starches, and two were vegetables. At 3-months follow-up, Jeremy's parents reported that he was continuing to eat a wide variety of foods.

DISCUSSION

In this case study, we found that child acceptance of non-preferred and novel foods did not increase after five meals in which preferred foods were offered for taking bites of target non-preferred and novel foods. After briefly implementing EE, DRA, and fading, child acceptance of non-preferred and new foods increased in subsequent meals using the original treatment plan without EE. Introducing EE was done to encourage tasting single bites, first of one preferred food and then four non-preferred foods before re-implementing the original intervention. Presenting single bites of preferred foods prior to non-preferred foods during taste sessions was done for a number of reasons. First, it was not clear whether Jeremy would understand the stated rule "when you take a bite, you're all done" due to his limited expressive and receptive language skills. Thus, we wanted him to experience the contingency in which he was only required to eat one bite of food prior to exiting the treatment room. We predicted that using preferred foods first would most likely lead to shorter latencies to accept bites compared to presenting non-preferred and novel foods first and that by starting with requiring Jeremy to accept preferred before non-preferred foods, behavioral momentum could develop. In contrast to the Premack Principle in which the opportunity to engage in high probability responses serves as a reinforcer for engaging in lower-probability responses, behavioral momentum develops through using a high probability request sequence, which involves presenting a series of easy-to-follow requests (e.g. eating preferred bites) for which the participant has a history of compliance before giving a low-probability request (i.e. eating non-preferred and new or novel bites; Cooper, Heron, & Heward, 2007). The results showed that in fact, Jeremy's latencies to accept preferred foods were shorter than when non-preferred and novel foods were presented. While behavioral momentum developed from presenting preferred foods prior to presenting non-preferred or novel foods in taste sessions may have resulted in increased compliance in eating non-preferred and novel foods, we are limited in our ability to draw conclusions about the role of behavioral momentum within the context of the current design because latencies to non-preferred foods in the absence of preferred foods were not established.

This case study demonstrates that an intervention which only temporarily implemented EE was successful at increasing the number of foods eaten by a child with food selectivity. Component analyses have shown that although EE is often a necessary treatment component for food selectivity and food refusal, this is not always the case (Cooper et al., 1995; Hoch, et al., 2001; Penrod, Wallace, Reagon, Betz, & Higbee, 2010). Thus, clinicians interested in attempting to treat these feeding problems first without EE may find this study useful because it provides a potential method to determine if a child will begin to eat foods without the use of EE. Further, when a child does not begin taking bites without the use of EE, this study provides suggestions for how to temporarily introduce EE before re-probing the original intervention. Although Jeremy ate almost all bites when reintroduced to the contingent access to preferred foods procedure, some children may begin to refuse taking bites when reintroduced to the intervention without EE. If this occurs, clinicians may want to present single-bite taste sessions with foods not eaten during meals and then re-present those foods during contingent access to preferred foods meals during which the child has a choice of taking bites during the meal.

REFERENCES

Ahearn, W. H. (2003). Using simultaneous presentation to increase vegetable consumption in a mildly selective child with autism. *Journal of Applied Behavior Analysis, 36,* 361-365.

Anderson, C. M., & McMillan, K. (2001). Parental use of escape extinction and differential reinforcement to treat food selectivity. *Journal of Applied Behavior Analysis, 34,* 511-515.

Buckley, S. D., Strunck, P. G., & Newchok, D. K. (2005). A comparison of two multicomponent procedures to increase food consumption. *Behavioral Interventions, 20*, 139-146.

Clark, J. (1993). Symptomatic vitamin A and D deficiencies in an eight-year-old with autism. *Journal of Parenteral and Enteral Nutrition, 17*, 284-286.

Cooper, J. O., Heron, T. E., & Heward, W. L. (2007). Applied Behavior Analysis (2nd Edition). Upper Saddle River, NJ: Pearson Education, Inc.

Cooper, L. J., Wacker, D. P., McComas, J. J., Brown, K., Peck, S. M., Richman, D., Drew, J.,

Frischmeyer, P., & Millard, T. (1995). Use of component analyses to identify active variables in treatment packages for children with feeding disorders. *Journal of Applied Behavior Analysis, 28*, 139-153.

Duggen, C.P., Westra, S. J., & Rosenberg, A. E. (2007). Case records of the Mas-

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This article is intended solely for the personal use of the individual user and is not to be disseminated broadly.

sachusetts General Hospital. Case 23-2007--A 9-year-old boy with bone pain, rash, and gingival hypertrophy. *New England Journal of Medicine, 357*, 392-400.

Freeman, K. A., & Piazza, C. C. (1998). Combining stimulus fading, reinforcement, and extinction to treat food refusal. *Journal of Applied Behavior Analysis, 31*, 691-694.

Gentry, J. A., & Luiselli, J. K. (2008). Treating a child's selective eating through parent implemented feeding intervention in the home setting. *Journal of Developmental and Physical Disabilities, 20,* 63-70.

Hediger, M. L., England, L J., Molloy, C. A., Yu, K. L., Manning-Courtney, P., Mills, J. L. (2008). Reduced bone cortical thickness in boys with autism or autism spectrum disorder. *Journal of Autism and Developmental Disabilities, 38,* 848-856.

Hoch, T. A., Babbitt, R. L., Farrar-Schneider, D., Berkowitz, M. J., Owens, C. J., Knight, T. L., et al. (2001). Empirical examination of a multicomponent treatment for pediatric food refusal, *Education and Treatment of Children, 24*, 176-198.

Latif, A. H., Heinz, P., Cook, R. (2002). Iron deficiency in autism and Asperger syndrome. *Autism, 6,* 103-114.

Levin, L., & Carr, E. G. (2001). Food selectivity and problem behavior in children with developmental disabilities: Analysis and intervention. *Behavior Modification, 25*, 443-470.

Lockner, D. W., Crowe, T. K., Skipper, B. J. (2008). Dietary intake and parents' perception of mealtime behaviors in preschool-age children with autism spectrum disorder in typically developing children. *Journal of the American Dietetic Association, 108,* 1360-1363.

McCartney, E. J., Anderson, C. M., & English, C. L. (2005). Effect of brief clinic-based training on the ability of caregivers to implement escape extinction. *Journal of Positive Behavior Interventions, 7,* 18-32.

Najdowski, A. C., Wallace, M. D., Doney, J. K., & Ghezzi, P. M. (2003). Parental assessment and treatment of food selectivity in natural settings. *Journal of Applied Behavior Analysis, 36,* 383-386.

Patel, M., Reed, G. K., Piazza, C. C., Mueller, M., Bachmeyer, M. H., & Layer, S. A. (2007). Use of a high-probability instructional sequence to increase compliance to feeding demands in the absence of escape extinction. *Behavioral Interventions, 22*, 305-310.

Paul, C., Williams, K. E., Riegel, K., & Gibbons, B. (2007). Combining repeated taste exposure and escape extinction. *Appetite, 49,* 708-711.

Penrod, B., Wallace, M. D., Reagon, K., Betz, A., & Higbee, T. S. (2010). A component analysis of parent-conducted multi-component treatment for food selectivity. *Behavioral Interventions, 25*, 207-228.

Pizzo, B., Williams, K. E., Paul, C., & Riegel, K. (2009). Jump start exit criterion: Exploring a new model of service delivery for the treatment of childhood feeding problems. *Behavioral Interventions*, *24,* 195-203.

Premack, D. (1959). Toward empirical behavioral laws: I. Positive reinforcement, *Psychological Review, 66,* 219-233.

Seiverling, L. J., Williams, K. E., Ward-Horner, J. C., & Sturmey, P. (2011). Feeding problems in those with autism spectrum disorders; A comprehensive review. In J. Matson & P. Sturmey (Eds). International Handbook of Autism and Pervasive Developmental Disorders. New York, NY: Springer.

Seiverling, L., Williams, K., Sturmey, P., & Hart, S. (2012). Effects of behavioral skills training on parental treatment of children's food selectivity. *Journal of Applied Behavior Analysis, 45,* 197-203.

Uyanik, O., Dogangun, B., Kavaalp, L., Korkmaz, B., & Dervent, A. (2006). A food faddism causing vision loss in an autistic child. *Child Care, Health and Development, 32*, 601-602.

Williams, K. E., & Seiverling, L. (2010). Eating problems in children with autism spectrum disorders. *Topics in Clinical Nutrition, 25,* 27-37.

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