USING FUNCTIONAL COMMUNICATION TRAINING WITH EXTINCTION TO REDUCE ATTENTION-MAINTAINED PROBLEM BEHAVIOR: A NOVEL APPLICATION TO A SPANISH-SPEAKING FAMILY WITH ENGLISH-SPEAKING THERAPISTS

by

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ABSTRACT

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Functional communication training (FCT) is a well-established treatment for problem behavior that involves arranging extinction for undesirable responses and providing reinforcement for an appropriate communicative response. However, language barriers between the therapist and the client's caregivers may inhibit the efficacy of this intervention and solutions to these language barriers have not been discussed in the research literature. The current study replicated functional analysis and FCT procedures with a child with autism and Down syndrome presenting with severe aggressive behavior whose parents were native Spanish speakers with limited English proficiency. We detail our process and procedural modifications made to address these challenges and discuss our results in the context of developing cultural competency for behavior analysts.

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Using Functional Communication Training with Extinction to Reduce Attention-Maintained Problem Behavior: A Novel Application to a Spanish-Speaking Family with English-Speaking Therapists

Functional analysis (FA) is behavioral assessment process that identifies environmental events serving as reinforcers for problem behavior. This assessment involves providing putative positive and negative social reinforcers following instances of problem behavior during test conditions to determine if these events result in an increase in problem behavior (i.e., a reinforcement effect) relative to a control condition in which the same consequences are delivered non-contingently (Iwata et al., 1982/1994). The most commonly included reinforcers are attention, access to food or leisure items, and the termination of non-preferred activities.

After an FA identifies one or more sources of reinforcement for problem behavior, behavior analysts can more effectively predict efficacious and non-efficacious behavioral interventions. Interventions that involve implementing extinction and arranging differential reinforcement contingencies to strengthen an appropriate, but functionally equivalent, alternative behavior are more likely to result in reduced problem behavior than those that leave reinforcement for problem behavior intact. Functional communication training (FCT) is one such function-based intervention that involves specifically teaching a communicative alternative to problem behavior (referred to as a functional communication response, or FCR). In a seminal study, Carr and Durand (1985) taught individuals with intellectual disability to say “Am I doing good work?” to recruit teacher attention and “I don’t understand” to recruit assistance with difficult tasks. This intervention reduced self-injurious behavior for four individuals sensitive to attention and task removal as social reinforcers.

FCT is the most thoroughly researched and empirically supported intervention for severe problem behavior with more than 90 publications demonstrating its efficacy (see Hagopian, Boelter, & Jarmolowicz, 2011 and Tiger, Hanley, & Bruzek, 2008 for reviews). The generality of FCT as a function-based intervention has been well established in terms of treating multiple topographies of problem behavior among populations with diverse psychological and psychiatric diagnoses including intellectual disability, autism spectrum disorder, Down syndrome, and attention-deficit hyperactivity disorder, (ADHD) to name but a few (Tiger et al., 2008).

The proliferation of the profession of behavior analysis has increased access to behavioral assessments and interventions such as FA and FCT, but many practical challenges remain for families needing to access such services. For instance, the clear majority of practicing behavior analysts are Caucasian and speak only English, whereas a large proportion of families seeking treatment will be from other cultures and speak other languages (Burning Glass Technologies, 2015). A recent survey estimates 16.7 million Hispanic families (17.8% of the total US population) reside in the United States and 57.5% of these households include children younger than 18 years of age (U.S. Census Bureau, 2017). Seventy-two percent of households reported Spanish as their primary spoken language, and 43.7% rated their ability to speak and comprehend English as below the common standard. (U.S. Census Bureau, 2015). Despite the robust evidence supporting FA and FCT, the literature has not addressed the efficacy of these procedures when working with non-English speaking children and families, particularly with an English-only speaking therapist.

The present case-report offers a systematic replication of FCT procedures with a young man diagnosed with autism and Down syndrome who resided in a primarily Spanish-speaking home. He was referred for the assessment and treatment of severe problem behavior. We

describe below the modifications we made to our standard procedures to address the language barrier that ultimately resulted in a successful behavioral intervention for this family.

Method

Subject and Setting

Raul was a 14-year-old boy diagnosed with autism and Down syndrome. He was referred to our program by his service coordinator for frequent and intense aggressive and destructive behavior; this service coordinator served as a translator during our initial intake interview that lasted approximately 60 min and involved obtaining a developmental, educational, and medical background, as well as descriptions of problem behavior and the relevant antecedents and consequences for these behaviors. With the assistance of this translator, we also described our assessment and intervention processes and received informed consent. From this interview, we derived that Raul's communication primarily involved gestures as requests for items, such as his iPad, and activities, such as changing his diaper. He engaged in little vocal communication, but occasionally muttered, "no." Raul's parents spoke only Spanish in their home, but Raul was exposed to English at his school. He attended a public elementary school in a special education classroom. His parents reported that he responded to both Spanish and English instructions or requests. Raul saw a pediatric psychiatrist who managed his medications including Clonidine, Risperidone, and Trazadone; his medication regimen was held constant throughout this study. The two therapists serving on this case were both Caucasian and spoke English as their first language.

We conducted all sessions in the family's living room of their two-bedroom apartment. This room measured approximately 8-m by 4-m with a door out of the apartment in one corner and one passage way into the remainder of the apartment in the adjacent corner. The room also

had three large windows on one wall that looked out to the parking lot. The room was furnished sparsely with two sofas and a television stand with no wall decorations. The only modifications we made to the space were (a) to close the window blinds to ensure privacy from neighbors and (b) to relocate one of the sofas such that its flat back was facing the therapy area and the seats were in the hallway leading to the remainder of the apartment. This created a barrier that limited opportunities for elopement and created a location for data collectors, physically separated from the session.

Measurement and Interobserver Agreement

Trained observers collected data on our dependent measures using continuous recording via laptop computers. Specifically, during each 10-min session they scored the frequency of *aggression*, defined as hitting, kicking, and pinching the therapist; *destruction*, defined as throwing items, kicking or hitting walls, or making forceful contact with stationary objects (e.g., windows), and the targeted *FCR*, a gesture involving forming a fist with either hand and tapping twice across the body on the top of the shoulder. FCRs were scored as independent if preceding a model prompt, or as prompted if following a model or physical prompt.

To assess the reliability of our measurement system, a second observer collected data simultaneously, but independently, for 13.7% of functional analysis sessions and 33.1% of treatment evaluation sessions with at least one session of a second observer in each treatment phase. We compared observers' records within 10-s intervals. Each interval in exact agreement received a score of one, and each interval without exact agreement received a proportional score by dividing the smaller number of responses by the larger number of responses and converting this quotient to a percentage. These calculations yielded reliability means of 96.8% and 99.6%, for aggression and destruction respectively during the functional analysis and 95.7%, 99.1%,

99.8%, and 97.6% for aggression, destruction, independent functional communication, and prompted functional communication, respectively, during the treatment evaluation.

Procedure

To the greatest extent possible, we maintained our standard practice for conducting functional analysis and treatment sessions. Per insurance authorization limits, we conducted functional analysis sessions during 2-hour visits in the family's home, typically five days per week, and treatment sessions during 3-hour visits, also typically five days per week. The therapists would discuss daily goals with parents at the start of each visit and then provide description of the days' sessions to the parents at the end of each visit. Parents were invited to observe sessions directly but opted to remain in other rooms in their home. Given the frequency of these visits, a translator would not be available daily. Therefore, the therapists developed a daily script in Spanish to communicate with parents using (a) Google Translate and (b) a Spanish glossary of behavioral terminology (Virues-Ortega et al., 1994). A sample from this glossary is depicted in Appendix A.

Functional analysis. We began the functional analysis using a screening assessment due to parent-report of self-injurious and self-stimulatory behavior (Hammond, Iwata, Rooker, Fritz, & Bloom, 2013). This involved conducting repeated *ignore* sessions, in which the therapists removed all leisure materials from the living room and did not provide any programmed consequences for problem behavior. Persistence of behavior under these conditions is indicative of maintenance by automatic sources of reinforcement, whereas the reduction or absence of problem behavior under these conditions is indicative of social sources of reinforcement. Following the screening assessment, we conducted a comprehensive functional analysis based upon Iwata et al. (1982/1994) including tests for (a) *escape*, in which the therapist prompted

motor imitation using sequential vocal-motor ("Do this *motor display*") and vocal-motor-physical ("Do this *motor display*" followed by physical guidance) prompts and problem behavior resulted in a 30-s break; (b) *attention* in which the therapist withheld attention except to deliver brief reprimands contingent on the occurrence of problem behavior and (c) *tangible* items in which the therapist removed or blocked access to an iPad, and re-presented it for 30 s contingent on problem behavior. The remaining test sessions were then alternated in a fixed-sequence, multielement comparison along with a control condition (*toy play*), in which access to attention and tangible items was provided non-contingently, no demands were delivered, and problem behavior resulted in no programmed consequences. These conditions and the materials presented were included based upon the parents' verbal report during an intake interview.

Treatment Evaluation. Following the functional analysis, we evaluated FCT in a reversal design. During *baseline,* sessions were identical to the attention condition of the functional analysis. That is, the therapist withheld attention except to deliver a brief reprimand following each instance of problem behavior. *FCT* sessions were similar to baseline in that the therapist withheld attention, but problem behavior no longer resulted in any form of attention. Instead the therapist provided 30 s of high-energy preferred social interaction (e.g., dancing, singing, or talking) following each instance of the FCR. During the initial sessions, following attention withdrawal, the therapist provided a combined vocal prompt with a model of the target response ("Do this *motor response*"), physically guided Raul to emit the target FCR, and then delivered reinforcement. These FCT sessions were compared with baseline sessions in a reversal design. Upon return to the FCT condition, we also began to fade our prompt to engage in the FCR. After one session with an immediate prompt, we introduced a 5-s delay between the disruption of attention and the presentation of the vocal and model prompt and an additional 5-s

delay to a repetition of the vocal and model prompt with physical guidance. Following an additional three consecutive sessions with zero levels of problem behavior, we further faded the prompt to 10 s and then to 20 s between each prompt. As a final treatment extension, we modified sessions to better match the "normative" home environment. During this phase we (a) provided Raul with free access to leisure items, (b) removed all prompting for the FCR, and (c) had the therapist and data collector engage in conversation to simulate Raul's parents having a conversation. Problem behavior continued to result in no consequence and the FCR resulted in 30 s of interaction.

Parent Training. Following our treatment evaluation, we arranged a meeting with Raul's family and their service coordinator, who again served as a translator to discuss discharge information and future planning. During this meeting, both parents were provided with a summative behavior plan detailing our treatment components. This document was provided both in English and in Spanish (Appendices C and D) and was pre-checked by a translator to ensure consistency. The document was walked through thoroughly with all participants of the meeting with the translator providing additional explanations to accompany the written text for clarification purposes. This time was also used to provide the parents with an opportunity to ask any questions they had regarding our work with Raul as well as advice on hypothetical scenarios regarding handling problem behavior in varied settings such as the grocery store or a restaurant. We then arranged a training on the safe management of aggressive behavior including hitting, kicking, grabbing, biting, and hair pulling while minimizing the delivery of attention in these situations. We conducted this training using a behavioral skills training approach in which after reviewing a written procedural description prepared in Spanish (and reviewed by the translator for accuracy), Raul's parents observed the therapists model the appropriate responses, and then

role-played sessions with a therapist. To aide in providing feedback, we used Google Translate to prepare anticipated feedback statements. These resulted in accurate implementation of aggressive behavior management. We then supplied home-based data sheets (Appendix B) for Raul's parents to record any problem behavior and surrounding relevant events. There were no reported episodes of problem behavior for the two-month period following our discharge.

Results and Discussion

Within the screening assessment we did not observe any occurrences of self-injury or self-stimulatory behavior, and, instead, saw a persistence of aggressive and destructive that resembled a socially-maintained extinction burst. Thus, we determined that Raul's problem behavior was likely maintained by social sources of reinforcement, and we moved forward with the multielement comparison between the remaining test conditions. Raul's responding differentiated rapidly, with high levels of problem behavior during attention sessions and low levels across all other conditions. This assessment showed that problem behavior was sensitive to attention as a social positive reinforcer.

Figure 2 depicts the results of our FCT treatment evaluation. During baseline, Raul engaged in a mean of 23 instances of problem behavior per min (range, 19 to 54 per min). We then set our treatment goal and discharge criterion as a reduction to below 10% of this baseline (2.3 per minute). Upon initiating FCT with a 0-s delay to prompting, we saw an immediate reduction in problem behavior to near zero levels. We then returned to baseline conditions and saw an immediate increase in problem behavior (M = 19.4 per min), followed by the same reduction after moving back to FCT. We then successfully faded our prompt delay to 20 s without evoking increased problem behavior. Finally, we implemented our treatment extension

to better emulate the natural environment and again saw sustained low levels of problem behavior (M = 0.4 per min), well below our treatment goals.

Interestingly, when we began fading the prompt, the FCR began to occur less frequently while levels of problem behavior remained near zero. Because of the continued occasional independent FCR use ($M < 0.1$) and the absence of problem behavior, we did not see it necessary to add a schedule-thinning component to our treatment.

There were a few changes from baseline to FCT that may be responsible for the reductions in FCRs. First, the attention delivered in baseline (i.e., verbal reprimands) was changed to pleasant social interaction (e.g., singing and dancing) during FCT. It is possible that pleasant social interaction was not a substitutable reinforcer for reprimands (i.e., reprimands were more effective as a positive reinforcer). In that case, it is possible that the integral component of our intervention was the use of extinction for problem behavior rather than the delivery of attention for the FCR. Second, the magnitude of reinforcement changed across phases. Whereas reprimands were typically brief statements occupying 3 to 5 s of time, the pleasant interaction during FCT lasted for 30 s. Thus, it is also possible that this increased exposure to reinforcement decreased the value of contingent attention via satiation, and as a result, the FCR occurred only when properly deprived of attention. We believe this account to be the more plausible. When attention was sufficiently established, Raul engaged in independent requests via his FCR throughout the treatment evaluation. Further, if reprimands alone functioned as a reinforcer to the exclusion of social interaction, we expect problem behavior would have been evoked as reprimands were withheld. That is, it would have been necessary for Raul to experience that his problem behavior no longer resulted in reinforcement in order for extinction alone to have resulted in this behavior change. Instead, the reduction in problem

behavior was immediate following the introduction of FCT, which suggests the role of decreased reinforcer value (i.e., an abolishing effect) rather than extinction. Thus, despite low levels of the FCR, the response occurred independently when appropriate motivating conditions were in place and problem behavior remained at levels commensurate with our discharge goals.

This data extends the literature on FCT in that we, English-speaking Caucasians, were able to effect behavioral change for a family who did not speak English. It is important to consider, however, that Raul's prior exposure to both English and Spanish interactions may have impacted our treatment successes. It is unclear whether or not this dual repertoire was beneficial, but it seems less likely that such substantial effects would be acquired if the client themselves was also non-English-speaking, as the reinforcing properties of therapists' attention may lessen. Ultimately, the ability of FCT to be effective as a long-term intervention is dependent upon caregivers' capacity to maintain these procedures long-term. This relies on successful training, which is hindered by communication barriers. We used a number of resources to overcome these barriers.

First, when possible, we included a translator to assist with parental communication. This was essential during our intake interview both to allow us to understand the extent and nature of Raul's problem behavior and to obtain informed consent for our assessment and treatment process. As well, a translator was present for our discharge meeting prior to parent training. While incorporating a translator into these sessions was beneficial, there are a few practical challenges associated with this approach. First, there are a limited number of translator services available and those services are typically not provided for by family's' insurance plans. Thus, the cost of arranging a translator may fall upon the family or upon the behavior analyst. We were fortunate that the family's service coordinator volunteered to serve as a translator to minimize

cost to the family, but expense is a concern moving forward. Second, similar to behavior analysts' difficulty in correctly translating English to Spanish, professional or non-professional translators are unlikely to be proficient with the technical terminology of behavior analysis. Because of this, their translations during meetings may not be accurate. Unfortunately, we did not have a means of assessing the accuracy of translation within the course of this evaluation. Future research may consider having translators independently translate a passage or a verbal description of a behavioral procedure (e.g., a functional analysis) to determine the reliability of these translations.

Due in part to cost, it is unlikely that a behavioral intervention team would have a translator present daily for communication with families. Therefore, we used both the glossary offered by Virues-Ortega and the Google Translate website to prepare Spanish-language descriptions of our daily intervention plans such that Raul's parents were able to provide informed consent. These materials are of substantively reduced cost and promote communication between the therapy team and caregivers. We used similar means of translating our final behavioral recommendations into Spanish and providing feedback to parents during training. We recruited the assistance of our translator to ensure the accuracy of these materials prior to providing them to Raul's caregivers.

These modifications resulted in a successful reduction in Raul's problem behavior, but it is not clear that this treatment model was socially valid. That is, although we saw substantive reductions in problem behavior, the difficulties of communicating with the family on a daily basis likely reduced the acceptability of this intervention relative to the availability of a native Spanish speaking therapist. To be clear, neither of Raul's family expressed any displeasure or dissatisfaction with these efforts, but it seems likely they would have had greater comfort with a

native speaker. Assessing parents' preferences for native speakers and intervention satisfaction from native and non-native speakers would be a valuable area of future research.

The long-term solution is to train multilingual individuals to be behavior analysts. However, this need is unlikely to be met in the near future and despite the growing availability of behavioral services, the vast majority of therapists are English-only speaking. Thus, the ability of behavior analysts to access resources to serve culturally diverse clients will be an essential skill as the population continues to diversify. We hope this project provides some guidance to these practitioners.

It is also important to note that although there is a large Spanish-only speaking population in the United States, there are many other non-English speaking communities that also would need to access behavior-analytic services. In particular, the populations of Mandarin- and Arabic-speaking families are also growing (U.S. Census Bureau, 2018). Further, it is important to note that cultural competence extends beyond language. At current, cultural diversity training is not a required part of either ABAI or BACB training models for behavior analysts. However, as the population continues to grow and diversify, the likelihood of behavior analysts being accepted into these families as well as serving them effectively will likely be impacted by the cultural competence of those practitioners.

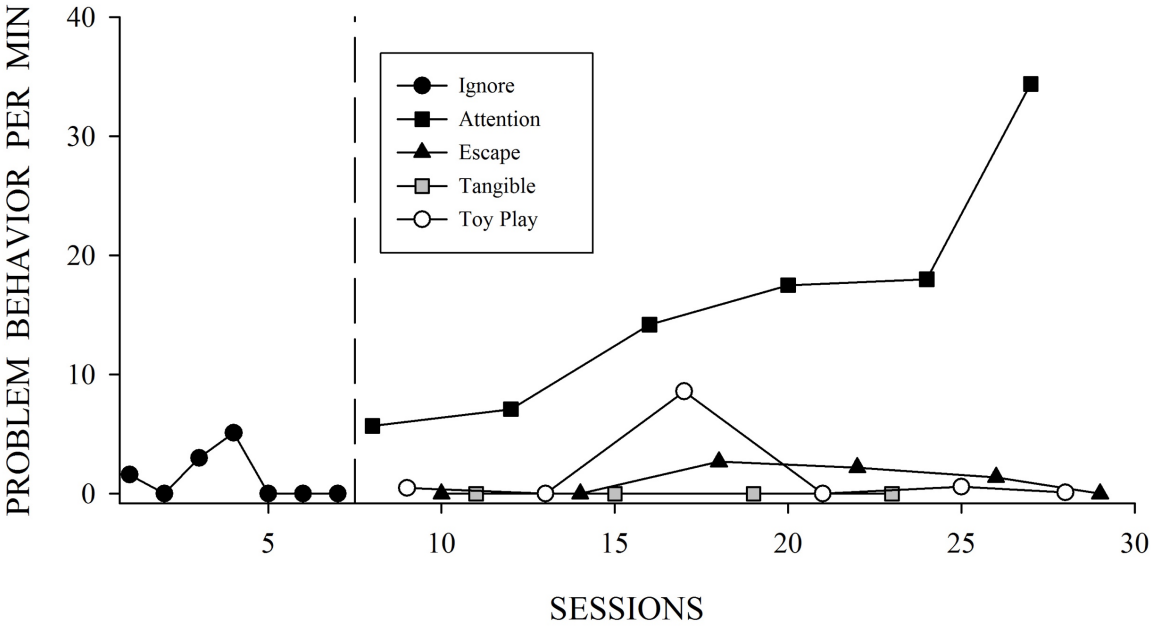

Figure 1: Results of Raul's functional analysis

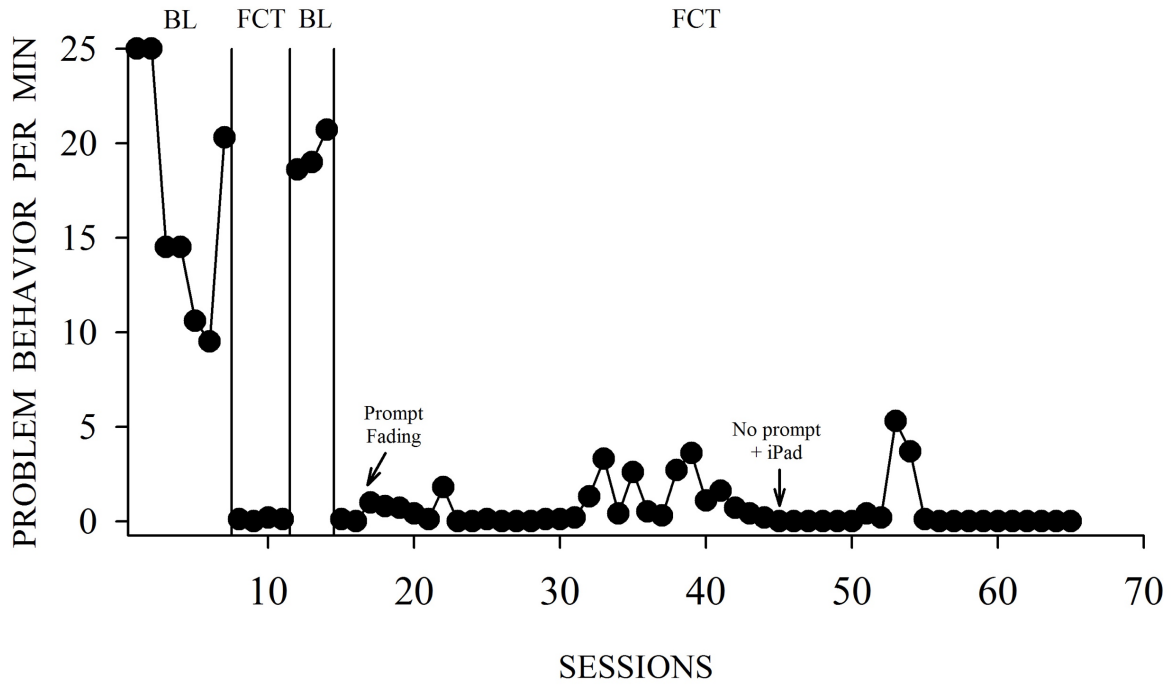

Figure 2: Problem behavior during FCT

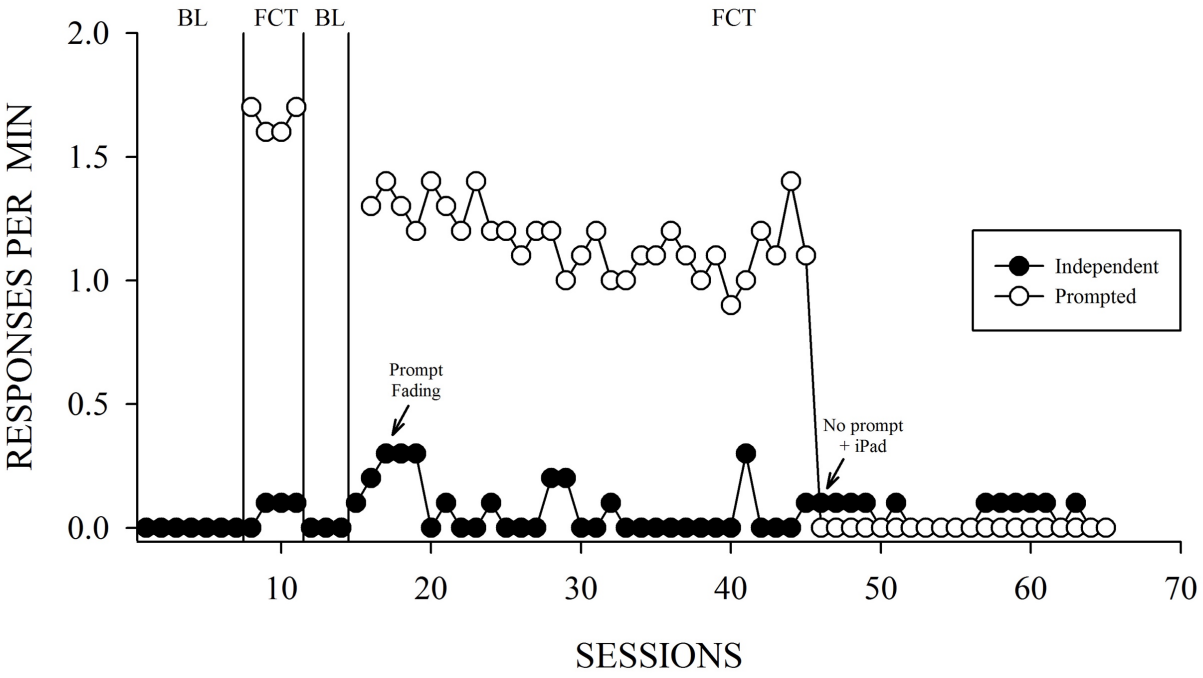

Figure 3: Functional communication responses during FCT

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APPENDIX A:
Sample page taken from Virues-Ortega et al. (2014)

Adduction. *Noun.* Aducción.
Adjunctive behavior. *Noun.* Conducta inducida por programa.**Adjusting schedule.** *Noun.* Programa de ajuste.
Adquisition (of an operant response). *Noun.* Adquisición (de una respuesta operante).
Adventitious reinforcement. *Noun.* Reforzamiento adventicio.
Affirmation of the consequent. *Noun.* Afirmación del consecuente.
Ainslie-Rachlin principle. *Noun.* Principio de Ainslie-Rachlin.
Ainslie-Rachlin theory. *Noun.* Teoría Ainslie-Rachlin.
Alternating treatments design. *Noun.* Diseño de tratamientos alternantes.
Alternative behavior. *Noun.* Conducta alternativa.
Alternative schedule. *Noun.* Programa alternativo.
Analysis of behavior. *Noun.* Análisis de conducta.
Anecdotal observation. *Noun.* Observación anecdótica.
Antecedent. *Noun.* Antecedente.
Antecedent control. *Noun.* Control por el antecedente.
Antecedent event. *Noun.* Evento antecedente.
Antecedent intervention. *Noun.* Intervención sobre el antecedente.
Antecedent stimulus class. *Noun.* Clase de estímulos antecedentes.
Anticipatory contrast *Noun.* Contraste anticipatorio.
Appetitive stimulus. *Noun.* Estímulo apetitivo.
Applied behavior analysis (ABA). *Noun.* Análisis aplicado de la conducta o análisis de la conducta aplicada (el término inglés admite ambas traducciones).
Approximation. *Noun.* Aproximación.
Arbitrary matching. *Noun.* Igualación arbitraria.
Arbitrary stimulus class. *Noun.* Clase de estímulo arbitraria.
Artifact. *Noun.* Artefacto.
Artificial reinforcer. *Noun.* Reforzador artificial.
Ascending baseline. *Noun.* Línea-base ascendente.
Associationism. *Noun.* Asociacionismo.
Associative learninig. *Noun.* Aprendizaje asociativo.
Associative strength *Noun.* Fuerza asociativa.
Attention-maintained behavior. *Noun.* Conducta mantenida por atención.
Audience. *Noun.* Audiencia.
Auditory matching. *Noun.* Igualación auditiva.
Auditory stimulus control. *Noun.* Control de estímulo auditivo.
Augmentative communication systems. *Noun.* Sistemas comunicación aumentativa.
Augmenting stimulus. *Noun.* Estímulo aumentativo.
Autoclitic frame. *Noun.* Marco autoclítico.
Autoclitic. *Noun.* Autoclítico.
Automaintenance. *Noun.* Automantenimiento.
Automatic punishment. *Noun.* Castigo automático.
Automatic reinforcement. *Noun.* Reforzamiento automático.
Automatic reinforcer. *Noun.* Reforzador automático.
Automaticity. *Noun.* Automaticidad.
Autoshaping. *Noun.* Automoldeamiento.
Aversive control. *Noun.* Control aversivo.
Aversive counterconditioning. *Noun.* Contracondicionamiento aversivo.
Aversive stimulus. *Noun.* Estímulo aversivo.
Aversive. *Adj.* Aversivo.
Avoidance contingency. *Noun.* Contingencia de evitación.
Avoidance. *Noun.* Evitación.

BAB design. *Noun.* Diseño BAB.
Backup reinforcer. *Noun.* Reforzador de intercambio.
Backward chaining. *Noun.* Encadenamiento hacia atrás o retrógrado.
Backward chaining with leaps ahead. *Noun.* Encadenamiento hacia atrás con saltos o encadenamiento retrógrado con saltos.
Backward conditioning. *Noun.* Condicionamiento hacia atrás o retrógrado.

APPENDIX B:
Data sheet for parents to record problem behavior that occurred outside of therapy

Formulario para supervisar el progreso

Instructions: Grabe un episodio de comportamiento problemático usando una marca de conteo en el día indicado

Fecha de la semana	lunes	martes	miércoles	jueves	viernes

APPENDIX C:
Redacted discharge summary and recommendations for Raul's parents (Spanish)

Resumen de Admisión

[redacted]

Estimados Sr. & Sra. X:

Muchas Gracias por darnos la oportunidad de trabajar con Raul y su familia. Raul fue referido al programa por X.Y., su coordinadora de servicios, debido a sus preocupaciones sobre la agresividad y la conducta de autolesión de Raul (comportamiento problemático). Inicialmente nos reunimos con su XXXXXXXX, y empezamos a dar los servicios de terapia en casa XXXXXXXX.

Nuestra meta inicial era conducir una evaluación de comportamiento llamado: análisis funcional. Esto requiere que se organice diferentes factores detonantes en su ambiente para saber la razón por la cual Raul emplea esos comportamientos problemáticos. En esta evaluación pudimos aprender que es más probable que Raul utilice esta clase de comportamientos cuando no tiene la atención los adultos; la razón por la cual el emplea estos problemas de comportamientos es para captar reacciones de las personas que lo cuidan.

Basado en los resultados de esta evaluación, hemos diseñado una intervención de comportamiento que consiste de dos componentes importantes. El primero es tratar de minimizar las reacciones de los adultos ante estos comportamientos y segundo enseñarle métodos alternativos para recibir la atención de los adultos, específicamente mediante lenguaje de señas. Hemos evaluadoesta intervención de comportamiento durante dos meses, 3 horas diarias y hemos visto una reducción de comportamientos negativos hasta casi 0 problemas de comportamiento. Es por esto que estamos ofreciendo las siguientes recomendaciones para ayudarlo a mantener sus niveles de agresión al mínimo durante el día.

1. Cuando Raul tenga cualquier forma de comportamiento problemático/negativo, la meta es que no haya ningún tipo de respuesta. Ustedes deberán evitar hacer reprimendas, regañar o inclusive hacer algún tipo de expresión facial. La respuesta perfecta ante estas situaciones seria simplemente darse la vuelta y alejarse de él.
2. Busquen que Raul utilice otras formas de comunicación más apropiadas, específicamente la nueva seña que le enseñamos para llamar la atención. Cuando el haga la seña, ustedes deberán acercase a él y darle la atención que el requiere cuando la haga. Piensen que la seña; es como si el dijera "Hola, mamá" o Hola, papá." Use eso como un indicador que él quisiera interactuar con usted. Él es capaz de utilizar señales adicionales para indicar exactamente lo que él quiere hacer.

Si puede hacer esto constantemente, esperamos que Raul continúe con sus bajos niveles de comportamientos agresivos durante el día. Es importante que sepan, que nosotros no hemos hecho nada para cambiar a Raul. Nosotros simplemente le hemos enseñando una nueva técnica y nos

hemos asegurado responder a esta nueva técnica y no a la conducta problemática. Sin embargo, si nosotros empezáramos a responder al comportamiento negativo de nuevo, nuestra expectativa es que el comenzara a tener problemas en su conducta otra vez. De este modo, el éxito será determinado basado en la consistencia en la cual sus profesores y padres mantengan este plan. En este fase, a nosotros nos gustaría incluirlos a ustedes formalmente en el entrenamiento de implementación en este plan de comportamiento en case y para ofrecer un entrenamiento similar a los maestros de Raul y ayuda en la escuela. Estamos contentos de trabajar con ellos y con ustedes hasta que ustedes se sientan seguros en su habilidad para implementar este plan de comportamiento.

Asimismo, me gustaría hacer algunas recomendaciones adicionales al plan que creo que beneficiaran a Raul.

1) Raul aprende nuevo lenguaje mediante señas muy rápido y es eficiente al hacer pedidos mediante estas señas. Me gustaría recomendarles que trabajen con él para continuar desarrollando este repertorio. Específicamente, si él está haciendo gestos, agarrando, o indicando que quiere algo en su ambiente (ej. Comida, juguetes, música), puede usted reconocer esta situación como una oportunidad para enseñarle siguiendo los siguientes pasos a) esperar un momento, b) mostrándole la seña apropiada para el objeto (ej. Diciendo "haz esto" y demostrando la seña) y por ultimo c) dando el objeto. Puede usted utilizar el mismo método con Raul si ve que él está a punto de molestarse.
2) Habrá instancias donde Raul pida atención apropiadamente mediante señas, pero luego tiene un comportamiento negativo (agresivo) cuando le dan la atención. En caso de que esto ocurra, yo recomendaría dar la vuelta y alejarse de él.
3) Si Raul está teniendo problemas negativos con un objeto que puede ser dañado (ej. Si tira el IPad o lo golpea), le recomendamos remover el objeto hasta que el demuestre que está calmando por al menos 5 minutos. Como antes recomendado, no hay que hablarle cuando se le esté retirando el iPad, pero tratar de quitárselo con cuidado sin ninguna interacción directa.
4) Dada la intensidad de la conducta problemática que usted observe en Raul, nosotros creemos que usted puede de forma prudente ignorar sus comportamientos negativos. Sin embargo, el problema se intensifica a un nivel que ustedes ya no se sienten seguros, les recomendamos que se retiren a otro cuarto y llamen al 911 por ayuda. Por favor contacto al programa (225-436-1435) apenas se sienta a salvo para dejarnos saber lo sucedido.

Nuevamente, le agradecemos por la oportunidad de trabajar con Raul y su familia. Gracias por recibirnos en su hogar. Por favor, no duden en llamarme si tiene alguna pregunta o preocupación con estas recomendaciones. Por favor, siéntase libre de compartir esta carta con la escuela. Estamos adhiriendo a este documento un plan de compartiendo, que creemos deberían hacerle llegar a la escuela, para que lo consideren e incluyan en el Plan Individualizado de Educación (IEP) de Raul.

Plan de Intervención de Comportamiento

[redacted]

Contexto: Raul es un niño de 14 años diagnosticado con Autismo y Síndrome de Down. Raul ha sido tratado por el personal XXXXXXXX desde XXXXXXXX hasta XXXXXXXX debido a los problemas de comportamiento como agresividad, conducta de autolesión, y conducta destructiva. En el XXXXXXXX, Raul paso por un análisis funcional sobre su comportamiento problemático y lo que causaba estos comportamientos era su los utiliza como refuerzos para obtener atención. El personal del XXXXXXXX. Han desarrollado y evaluado este plan por más de dos meses y han determinado que al aplicar este plan los comportamientos se han reducido al 90% con una implementación constante.

Comportamientos Tratados: *Agresión* incluye golpes, patadas, pellizcos, y rasguños. *Destrucción* incluye: arrojar objetos y romper objetos. *Auto-lesión* incluye golpes a la cabeza y cuerpo. Pedido apropiado de atención es: Raul da palmaditas en su hombre con su mano.

Proceso:

1) Minimizar las reacciones al comportamiento problemático: Las personas que lo cuidan están fomentadas a no tener ningún tipo de reacciones ante alguna conducta problemática de Raul. Esto es, evitar hacer reprimendas, regañar o inclusive hacer algún tipo de expresión facial. La respuesta perfecta ante estas situaciones seria simplemente darse la vuelta y alejarse de él. Si este comportamiento está dirigido a algún otro estudiante, los profesores deberán asistir para que el otro alumno sea alejado mientras dándole la menor atención posible a Raul. Si este comportamiento es hacia algún objeto que se pueda romper, le recomendamos que remueva el objeto sin darle atención a Raul hasta que él se haya calmado por al menos 5 minutos consecutivos. El propósito de este componente es enseñarlo a Raul que ese comportamiento problemático/agresivo no es efectivo para llamar la atención.
2) Responder a cuando hace pedidos apropiadamente. Le hemos ensenado a Raul una forma específica para pedir atención; especialmente una señal modificada que es tocar su pino a su hombro. Cuando el haga esta señal, los profesores deberían responder los más rápido posible.

Los padres y los maestro puede responder apropiadamente a sus pedido y minimizar las respuestas a sus comportamientos inapropiados, Raul deberá mostrar mínimos niveles de comportamiento negativo.

Monitoreo de Progreso: Para evaluar el éxito o fracaso de este plan, pedimos a los profesores de la clase que documenten cualquier instancia donde Raul haya exhibido algún tipo de conducta problemática. Un simple sistema de colección de data esta adherido a este documento.

APPENDIX D:
Redacted discharge summary and recommendations for Raul's parents (English)

Admission Summary

[redacted]

Dear Mr. & Mrs. X:

Thank you for the opportunity to work with Raul and your family. Raul was referred to my program your service coordinator due to your concerns with aggressive and self-injurious behavior. We initially met with your family on XXXXXXXX and began providing therapy services in your home XXXXXXXX.

Our initial goal was to conduct a behavioral assessment called a functional analysis. This involves arranging potential "triggers: for problem behavior in the environment to learn why Raul engages in problem behavior. From this assessment we learned that he was most likely to engage in problem behavior when he did not have adult attention; that the reason he was engaging in problem behavior was to recruit reactions from caregivers.

Based on these assessment results, we designed a behavioral intervention consisting of two primary components. The first has been to minimize adult reaction to his problem behavior and the second has been to teach him alternative ways to effectively recruit adult attention., specifically a signed gesture. We have evaluated this behavioral intervention over the past two months during daily 3-hour visits and have seen consistent reductions to near zero levels of problem behavior over that time. Therefore, we are offering the following recommendations to help maintain low levels of problem behavior for Raul throughout the day.

1) When Raul engages in any form of problem behavior, the goal is that you do not respond at all. You should avoid providing any form of reprimands or even changes in your facial expression. The perfect response to these situations is to simply turn and walk away from him.

2) Look for Raul to engage in more appropriate forms of communication, specifically the new sign we taught him for attention. When he does, you should approach him and provide attention after he makes the sign. Think of the sign as if he is saying "Hi mom" or "Hi dad." Use that as an indicator that he would like you to interact with him. He is capable at that time of using additional signs to indicate exactly what he'd like you to do.

If you can do this consistently, we would expect that Raul will continue to have low levels of problem behavior throughout the day. It is important to note, we have not done anything to change Raul. We simply taught him a new skill and made sure that we responded to that new skill and not problem behavior. However, if we were to start responding to his problem behavior again, our expectation is that he would start engaging in problem behavior more often. Thus, "success" will be determined based upon the consistency with which each of his teachers and

caregivers can maintain this plan. At this stage, we would like to include you in formal training to implement this behavioral plan in your home and to offer similar training to Raul's teachers and aides at school. We are happy to work with them and with you until you are confident in your ability to implement this behavioral plan.

In additional to this behavioral plan, I wanted to make a few additional recommendations that I think would be beneficial to Raul.

1) Raul learns new language through sign very quickly and he is proficient at making many requests through signed language. I would encourage you to work with him to continue to develop this repertoire. Specifically, if he is gesturing, grabbing, or otherwise indicating something he wants in the environment (e.g., food, toys, music), you can recognize this as a teaching opportunity by (a) waiting briefly, (b) showing him an appropriate sign for the object (e.g., saying, "Do this" and demonstrating the sign), and only then (c) delivering the item. You can use the same approach if you see him becoming agitated or irritable.

2) You may have instances in which Raul requests your attention appropriately through a sign, but then engages in problem behavior when you approach him. If that is the case, I would recommend turning away from him and walking away.

3) If Raul engages in problem behavior with an object that can be damaged (e.g., if he throws or slams his iPad down), we recommend removing the item until he demonstrates calm behavior for at least 5 minutes. As before though, we recommend not talking to him when you remove the iPad, but rather gently removing it without other interaction.

4) Given the intensity of problem behavior we observed with Raul, we believe that you can safely ignore most of his problem behavior. However, if his behavioral intensity escalates to a level where you no longer feel safe, we recommend placing yourself in a separate room and calling 911 for assistance. Please contact my program as soon as you feel safe to let us know what happened.

Again, we thank you for the opportunity to work with Raul and your family. Thank you for welcoming us into your home. Please do not hesitate to call me if you have any questions or concerns regarding these recommendations. Please also feel free to share this letter with your school provider. We are enclosing a recommended behavior plan that you can provide to them for consideration and inclusion in Raul's Individualized Education Plan (IEP).

Behavior Intervention Plan

[redacted]

Background: Raul is a 14-year old boy diagnosed with autism spectrum disorder, and Down syndrome. Raul was seen by the staff of the XXXXXXXX from XXXXXXXX to XXXXXXXX for concerns with aggressive, self-injurious, and destructive behaviors. At XXXXXXXX, Raul experienced a functional analysis of problem behavior that suggested these behaviors were sensitive to attention as a reinforcer. The staff of the XXXXXXXXX then developed and evaluated this plan over a 2-month period and determined that problem behavior was reduced by more than 90% with consistent implementation,

Target Behaviors: *Aggression,* including hitting, kicking, pinching, and scratching, and *destruction,* including throwing items and breaking items. *Self-injury*, including head and body hitting. *Appropriate requests for attention* involve Raul tapping his own shoulder with his hand.

Procedures: This behavior Plan includes two components:

1) Minimizing reactions to problem behavior. Caregivers are encouraged to withhold reactions to Raul's problem behavior. That is, they should not reprimand, scold, or otherwise respond to these behaviors; these reactions serve as a reinforce for these behaviors. Instead, we recommend simply turning and walking away without talking to Raul. If his behavior is directed towards another student, teachers should assist that student in moving away from Raul while providing the least amount of attention possible. IF his behavior is directed towards a breakable object, then we recommend removing the object without providing attention until he has displayed calm behavior for at least 5 consecutive minutes. The purpose of this component is to teach Raul that problem behavior is not an effective means to recruit attention.

2) Responding to appropriate behavior. We taught Raul to ask for our attention by touching his fist to his shoulder. We also observed and taught a variety of other signs. Responding to his appropriate requests and ignoring problem behavior resulted in the successful reduction of more than 90% of Raul's problem behavior.

Progress Monitoring: To help evaluate the ongoing success or failure of this behavior plan, we ask classroom teachers to document any instances of problem behavior exhibited by Raul. A sample data collection system is appended to this document.