



**Modeling: “Reality TV”
for Positive Behavior in
Children with Autism**

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Fitting all the pieces...
TOGETHER

CARE
Collaborative Autism Resources and Education





Abstract

- Modeling [video and live] is an established treatment for students with autism.
- Application for schools
- Presentation demonstrates how modeling was effectively used with students with autism.
- Power of embedding peers in the teaching routine



Introduction to Cases

- **Case #1**
 - 3rd grader served as peer model
 - 6-7 year-old boys
 - Low Verbal
 - **Case #2**
 - 4th grader with Autism
 - 11-year-old male
 - Non-verbal
-  **Connecting presentation of task & communication of event**
-  **Decreasing aggression & increasing pro-social behavior**



Case #1: Description

- Case 1: peer model for 6-7 year olds.
 - Three boys with autism were dependent on staff to prompt them with their transition to lunch in cafeteria with typically developing peers
 - Labor intensive for staff who had to be available to assist students either prior to or during the hand washing routine
 - Staff was also being utilized to perform lunch duty and/or to take their lunch.



Case #1: Description cont...

- A similar aged peer was used in a video model to teach students with autism a functional routine (handwashing) using a chaining procedure and task analysis
- In the restroom (out of the classroom), visual supports were used and verbal prompts were faded by adults to increase the students' level of independence



Team Actions

- Other goals:
 - Increase students' ability to simultaneously perform the task while verbally describing the steps of the routine
 - Show & Tell (Social & Communication component that is often lacking)
 - Embed into a naturally occurring transition from class to cafeteria rather than in isolation



Prevention Strategies:

- Staff were taught to utilize a video modeling approach and to coach the communication of the task.
- Staff were taught to fade their use of verbal prompts and utilize visual supports.
- Team identified the functional activity to increase independence.
- Team identified the highly reinforced time period to exhibit the task [i.e., cafeteria—lunch]



Teaching Strategies:

- Students were shown a video-tape of a typical peer performing the entire routine event.
- Students were shown the video-tape using forward chaining starting with the first step prior to transitioning to the natural setting where the routine would be performed.



Task Analyzed Taught Routines

○ Handwashing

- 1) Turn on water
- 2) Put hands under running water.
- 3) Get hands wet.
- 4) Remove hands from sink.
- 5) Pump soap one or two times with one hand while holding other hand under soap dispenser.
- 6) Rub palms of hand together (ten times)
- 7) Rub the back of the hand with the palm of the other hand (five times).
- 8) Rub the back of the other hand with the palm of the other hand (five times).
- 9) Put hands under water to rinse.
- 10) Turn off the water.



Reinforcement Strategies:

○ Natural Reinforcement:

- Increased socially competence in front of peers.
- Increased involvement with same age peers.
- Following routine, access to cafeteria line and food choices



Data Collected:

- Baseline: 3-5 sessions.
 - 1) Observe the student performing the routine event and rate the steps completed on the task analysis data sheet.
 - 2) Ask the student to “show” you how to perform the routine event and rate the steps completed on the task analysis data sheet.
 - 3) Ask the student to “tell” you how to perform the routine event and rate the steps completed on the task analysis data sheet.



Results

- ❖ Three weeks into the study the students **no longer** needed the video modeling procedure.
- ❖ Students increased their ability to transition with and perform same routines as their typical peers.
- ❖ Decrease in need for staff assistance.
- ❖ Staff continued to identify additional routines for students to learn (making a sandwich, etc.)



Conclusion & Areas for Future Study

- Staff viewed the use of video modeling as an effective and efficient way to teach students a functional routine that had both social and communicative components
- Determine other skills and routines that could be taught through the use of video modeling paired with other procedures



Case #2

- Case #2 is a non-verbal 11-year-old diagnosed with autism currently in the 4th grade.
 - He has been receiving instruction in a self-contained classroom designed for students with Autism Spectrum Disorder since age 5.
 - At the beginning of the study, he had minimal opportunities for participation with his general education peers in the least restrictive environment due to aggressive behaviors.
 - Aggressive acts were preventing him from participation in inclusive activities and limiting his access to appropriate peer relationships.
 - A review of records indicated that several reductive procedures had been employed with him in the past with minimal success.



Case # 2 Reported Behaviors

- History of non-compliant behavior resulting in removal from adult and/or instructional setting:
 - Refusal to comply
 - Physical aggression directed toward the adult:
 - hitting, kicking objects, kicking people, toppling furniture, self-injurious, stripping, throwing objects.



Function of his behavior: avoid non-preferred tasks and/or demands



Team Actions:

1. Conducted a Functional Behavior Assessment (FBA)
2. Developed and implemented a Behavior Support Plan (BSP).
 1. Focused on the use of preventative measures to decrease the likelihood the aggressive behaviors.
 2. Taught him how to request a break



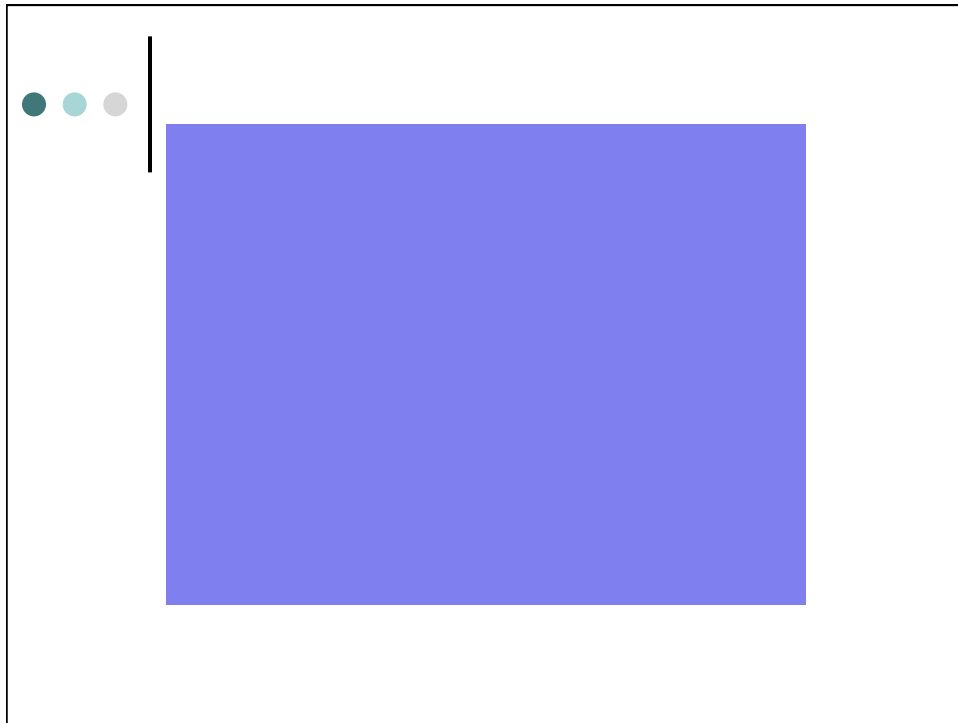
Prevention Strategies:

- Staff were taught to recognize triggers to aggression.
- Redirection was used to offer him a cool down period if he became escalated.
- Once he cooled down he would be returned to last activity to complete some portion of the activity
- Heavily reinforce the display of appropriate behavior and completion of task.
- A safety plan involved removal of classmates to another location when his aggression escalated.



Teaching Strategies:

- Teach him to request a break when he wanted to get out of a non-preferred activity or task [*functional equivalent behavior to his non-compliant behavior*]. Using:
 - Video modeling to demonstrate student being successful with requesting a break following “First work, then reward” prompt, calming himself when upset, and transitioning appropriately. (National Standards Report, 2009)
 - Social stories to address calming behavior, introduction of baby into the home, and asking for a break. (Grey & Garand, 1993)



- ● ● | **Teaching Strategies:**
- Teach him to request a break when he wanted to get out of a non-preferred activity or task [*functional equivalent behavior to his non-compliant behavior*]. Using:
 - Visual support of a transportable visual schedule to add predictability to his day.
 - Cue cards to remind him how to request a break or calm down when needed (Ganz & Flores, 2008).



Reinforcement Strategy:

- Allow him to earn mini-breaks contingent on the display of appropriate behavior responding to “First work, then reward.”
- Staff targeted him for “*caught being good*” across the school day.



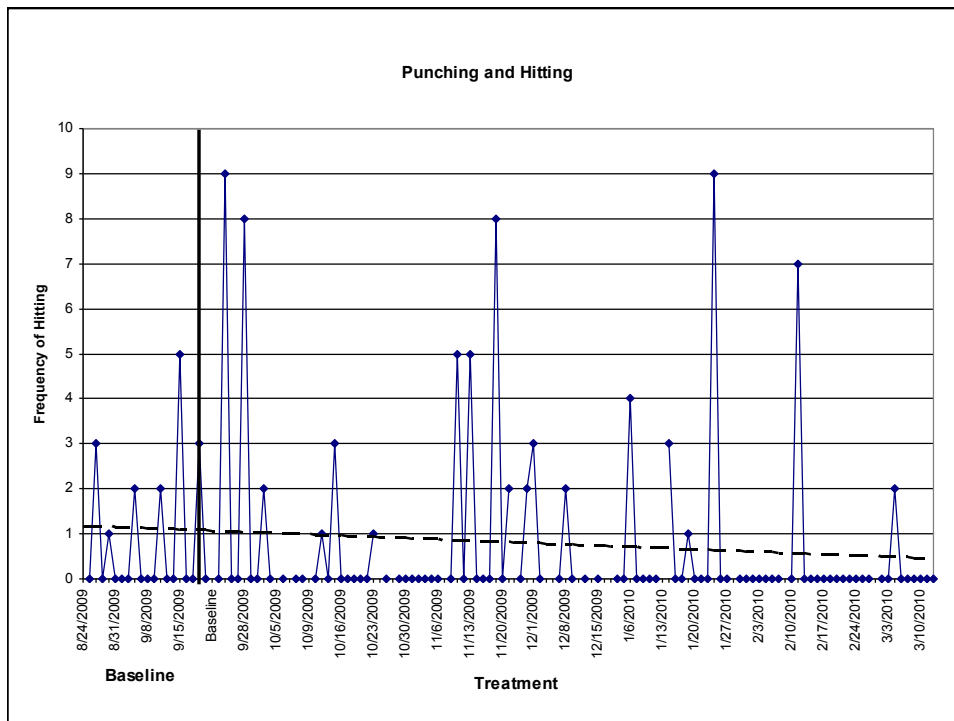
Increase in socially meaningful opportunities

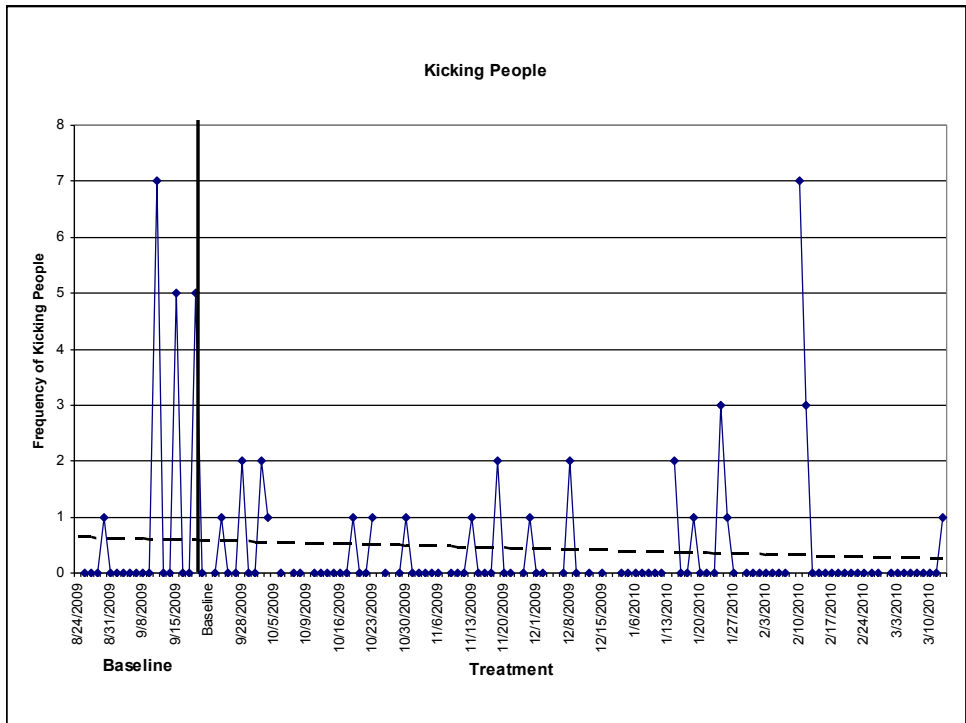
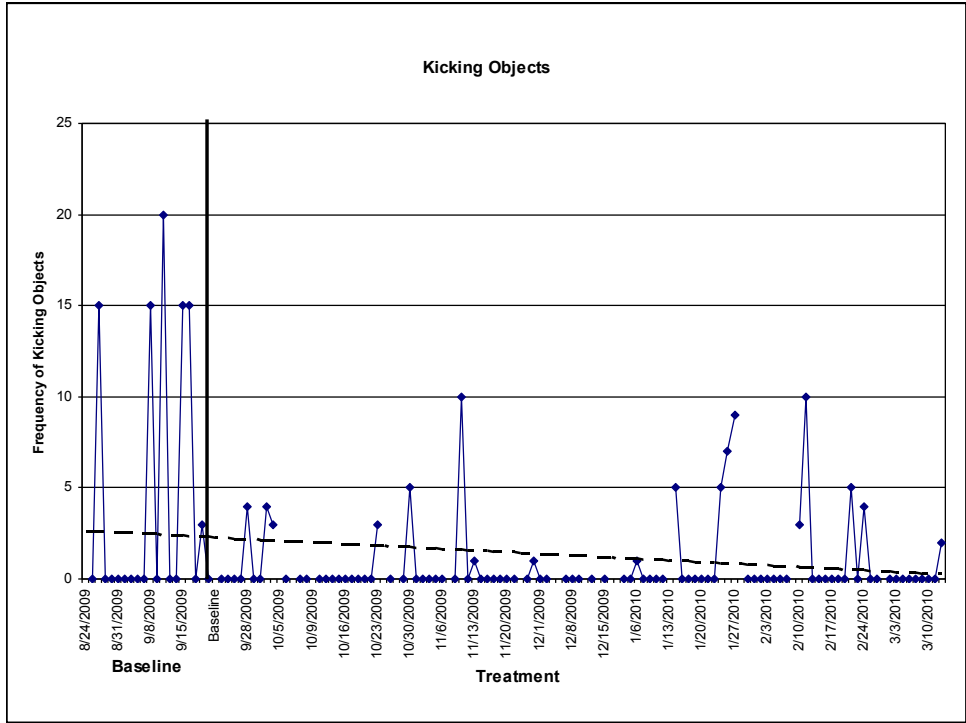
I like working in my class.

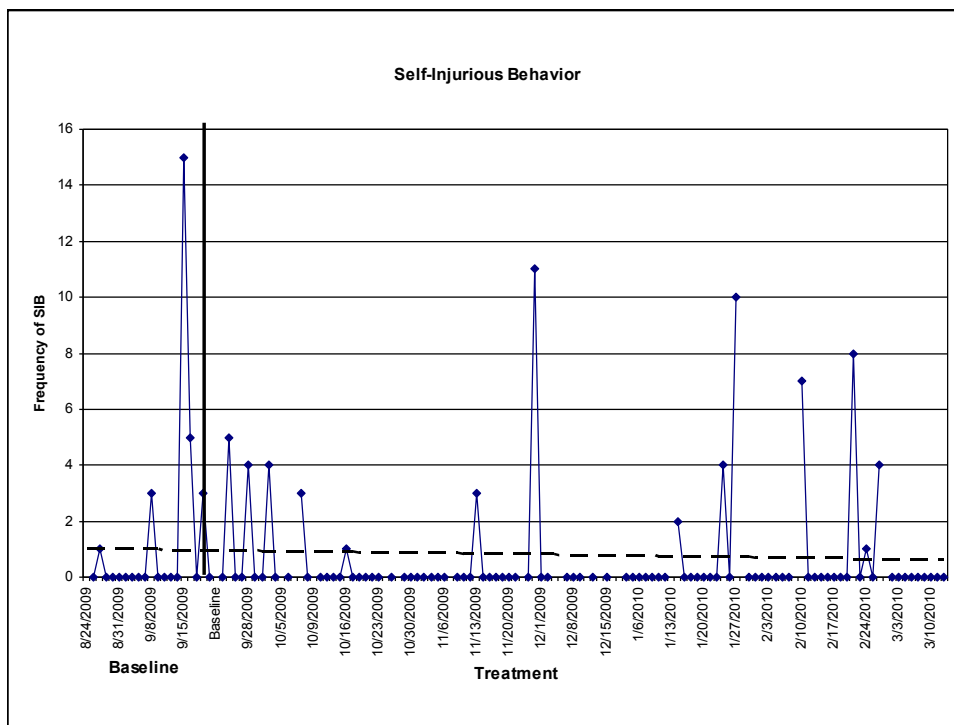
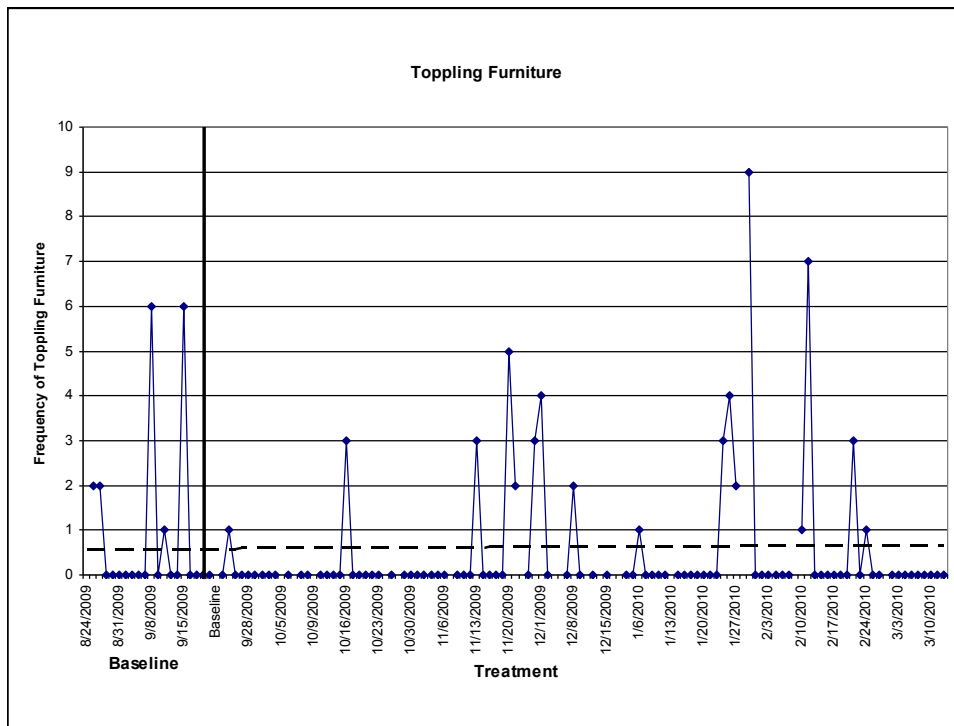


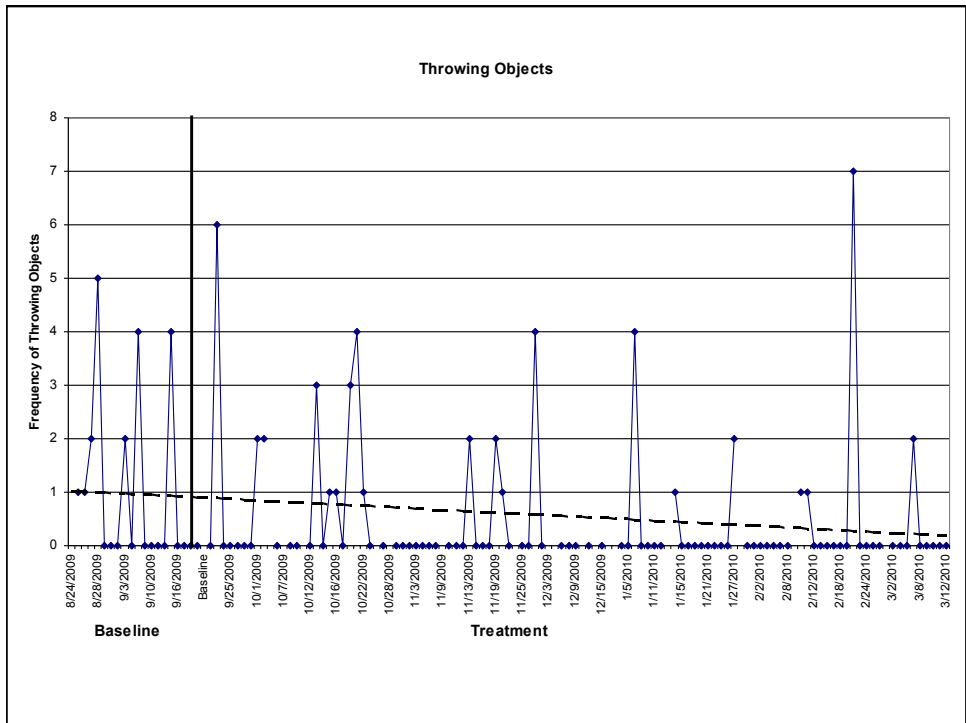
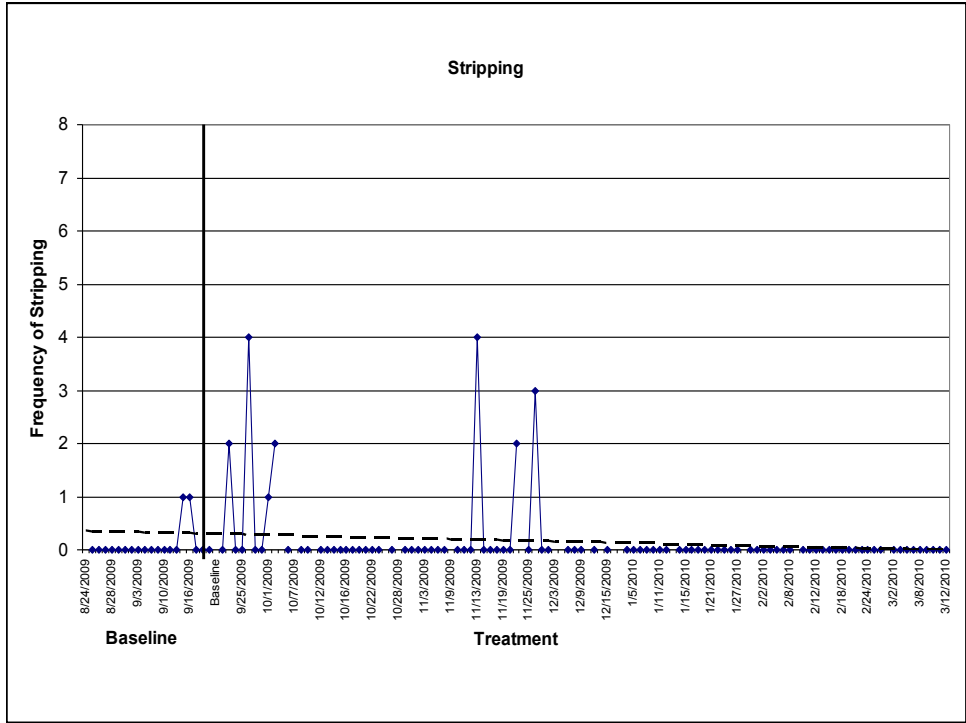
Data Collection

- Data were collected on the seven externalizing behaviors (hitting, kicking objects, kicking people, toppling furniture, self-injurious behavior, stripping, throwing objects)
- Frequency count was used during baseline and intervention on a daily basis.
- Data were collected by numerous staff members across the school day.











Results

- Duration of externalizing behavior episodes decreased over time. The average duration of episodes was 50 minutes.
- Decrease in overall frequency of all externalizing behaviors.
- Trend lines show gradual decrease in 6 of 7 externalizing behaviors with the exception of toppling furniture that happened at high rates during infrequent occurrences.
- During periods of time teacher was absent, behaviors occurred at higher rates. Behaviors occurred at higher rates when parent did not administer correct medication regimen.



Limitations

- Inconsistency in application of prevention and teaching strategies when teacher was absent or on professional leave.
- The student's mother had a new baby in the fall 2010, resulting in the average duration of each episode of externalizing behavior (hitting, kicking people) being 83 minutes for two weeks following the baby's introduction in the home.
- Parent inconsistently administered psychotropic medication and intermittently used fast-acting anxiolytic to manage behaviors at home, which resulted in withdrawal behaviors in the school setting.
- Family's rejection to accept frequent in-home training to address similar behaviors being exhibited in the home that included intermittent reinforcement of student's avoidance behavior.



Conclusions

- The use of Functional Behavior Assessment (FBA) and the development of a Behavior Support Plan (BSP) that identified prevention, teaching, and reinforcement strategies was an effective tool for developing a manageable plan for the student.
- Despite decreased frequency and duration of episodes, intensity of student's externalizing behavior (i.e., namely targeting other students and staff) impacted the student's ability to be instructed in the school setting. Students were frequently cleared from the room to reduce likelihood of being targeted, which negatively impacted their access to instruction in their classroom. The student was placed in a more restrictive setting for the remainder of the school year with a transition plan to return at the beginning of next school year.



Further Study

- Ongoing provision of in-home training for parents for implementation of the behavior support plan.
- Fostering a relationship between parent-doctor-school to determine best course of medical treatment considering that medication was used incorrectly.
- Student responded positively to video modeling by placing objects in the "reward" box in lieu of externalizing behavior. Video modeling should likely be continued as a behavior intervention.



References

Butz, J., Ryan, G. & Roth, D. (May 2010). *Video Modeling paired with visual schedules to teach a student with autism to request a break. A presentation given at ABA International Conference – San Antonio, TX*

- o Iovannone, R., Dunlap, G., Huber, H., & Kinkaid, D. (2003). Effective educational practices for students with Autism spectrum disorders. *Focus on Autism and Other Developmental Disabilities, 18*(150). DOI: 10.1177/10883576030180030301.
- o Ganz, J. B., & M.M. Flores. 2008. Effects of the use of visual strategies in play groups for children with autism spectrum disorders and their peers. *Journal of Autism and Developmental Disorders 38: 926–40. DOI: 10.1007/s10803-007-0463-4.*
- o Gray, C.A. & Garand, J.D. (1993). Social stories, Improving responses of students with autism with accurate social information. *Focus on Autistic Behavior, 8*, 1-10.
- o National Standards Report (2009). Randolph, MA: National Autism Center.



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