

## F.A.I.R Plan for Oppositional Defiant Disorder

### Introduction

Children and adults who are classified as neurodivergent may engage in maladaptive behaviors that stem from emotional dysregulation or a lack of behavior management. Many persons with autism spectrum disorder share comorbidities with attention deficit hyperactivity disorder or disruptive, impulse-control, and conduct disorder. Oppositional defiant disorder (ODD) can present as angry/irritable mood, defiant and argumentative, and vindictive behavior. Additionally, intermittent explosive disorder can present as “verbal aggression or physical aggression toward property, animals, or other individuals occurring twice weekly, on average, for a period of 3 months” (American Psychiatric Association, 2022). This proposed intervention will explore treatment of an individual who presents with symptomology of intermittent explosive disorder toward other persons in their immediate environment. Of note, “some students with anxiety may present with oppositional behavior” (Minihan & Rappaport, 2021, p.92). Anxiety and attention deficit hyperactivity disorder (ADHD) may contribute to ODD in students and in many cases share similar treatment strategies. One such strategy, noncontingent reinforcement, will be implemented during the intervention to assuage the frequency of hitting and any other accompanying aggressive behaviors displayed by the student. An intervallic schedule of reinforcement will be used and thinned in tandem with contingency based requirements.

### Literature Review

O’Brien et al. (2023), conducted research with three participants who exhibited high rates of off-task or low task performance. The participants were ages 8-11, two male, one female, and all diagnosed with Autism spectrum disorder. The dependent variables were defined as *task completion* during sessions. An alternating treatment design was completed across three individuals in temporally sequential order. Participant 1 required 45 sessions, participant 2, required 70 sessions during replication, and participant 3 required 145 sessions during replication. The independent variables observed compared whether differential reinforcement (DR) or non contingent reinforcement (NCR) affected outcomes of higher task completion. After assessment for highly preferred and low preferred reinforcers were conducted and implemented, the treatment of non contingent high preference reinforcers showed the most effective treatment for all three participants. During each NCR phase, the participant was allowed to interact with the highly preferred NCR on a specified interval that faded inversely with on-time task and task completion. NCR showed higher rates of task completion compared to DR intervention and against baseline conditions.

As shown in the previous research, NCR was shown effective for task completion, but has also been shown as an effective strategy to address self-injurious behavior (SIB) and maladaptive behavior toward other persons and objects. In 2017, Phillips, et al., conducted a large single-subject research with 21 participants who displayed various forms of aggressive behavior (i.e., dependent variable, see article for extensive list of behaviors) maintained by escape, attention, access, automatic, and social reinforcement. A functional analysis guided each participant's unique treatment package in a reversal, alternating treatment, or multiple baseline design dependent on the unique characteristics of the problem behaviors. Independent variables included functional NCR (determined during the FA), alternative NCR (determined by preference assessment), extinction, response blocking, and punishment conditions were used with all participants depending on the specific topographical and intensity of the participants responses. Overall, results show NCR is an effective treatment when individualized to address highly problematic, aggressive, and injurious behaviors. Depending on the function of the problem behavior (i.e., social, automatic), treatment showed 80% to 90% effectiveness in each category. The authors suggest that, "although NCR does not explicitly target adaptive behavior for increase, it seems likely that overall reductions in problem behavior might enhance opportunities for learning (Phillips, et al., 2017).

### **Participant and Setting**

**Targeted Behaviors:** hitting peers and adults with fists, headbutting, scratching, biting, kicking, elopement from classroom

"E" is a 12 year old male diagnosed with Autism, severe. He is nonverbal and exhibits aggressive behavior in the form of hitting his peers and adults in the environment. A functional analysis has been inconclusive as to the purpose the aggressive behavior serves and antecedent/setting events have not been ascertained due to the intermittent and sudden nature of the aggressive responses across individuals and settings. "E" attends a public special needs school for students with moderate to profound diagnosis and do not possess a vocal repertoire. Prior to hitting others in some instances, "E" has displayed signs of elevated or frustrated mood by emitting grunt-like sounds and reaching toward his own throat. After a multitude of observations by the staff of the school, no known function has been identified. There are times when "E" will direct his aggressive behavior to a specific peer in his class. Though attempts have been made to separate the two students spatially, "E" will run across the room and slap his peer in the face or on top of the head. This has occurred sporadically throughout the school year and will occur under attention or unattended conditions in preferred and non-preferred activities. Additionally, in the event that "E" has hit a teacher or aide his behavior will escalate to headbut, bite, scratch, and kick if a response block or physical restraint has been used to prevent escaping the room or a prolonged attack on the adult. Reinforcement strategies that have been used included access to edibles and free access to time-out.

## Methods

- Prepared Environment: The music room will be augmented to include a curtain room divider that will separate “E” from the non-preferred peer. Additionally, a small lightweight music instrument display on wheels will be positioned between “E” and the auxiliary door that is located in his direct line of sight. Both props will be used to deter “E” from seeing stimuli (i.e., non-preferred peer, escape door). See Appendix A for diagram.
- NCR (walking outside with preferred adult when requested): This strategy had been used as a default and in place a year prior to intervention. “E” would request a walk by grabbing the hand of the attending aide and pulling them toward the door. This strategy will be augmented by requiring “E” to use a PECS icon that indicates “I want” and “to walk.”
- NCR (iPad cooking shows): This strategy will be used upon entering the music room and sitting in his assigned seat. The iPad will be given for 5 minutes immediately. After such time, a choice of tasks will be offered before the iPad will be given for another 5 minutes. Seven to nine curricular activities are planned for every music session. Duration of the iPad will be thinned according to frequency of the target behavior being observed (see appendix B).
- Choice: This strategy will be used throughout the music class for “E”. He will be allowed to choose one of seven to nine activities ranging from “Hello Song”, “Stretch Song”, musical potato, body percussion, drumming, instrumental playing, drum walking (gait training and synchronization), and composition.
- Merit Sticker Chart: “E” will be awarded a star at the conclusion of every class period. Gold will represent full engagement and compliance, silver will indicate engagement in some activities and partial compliance, and red will represent displays of problem behavior and a lack of engagement and compliance. The card will provide a visual representation for the student to view during every session of music class (see appendix C).
- FCT: “E” will be instructed to use the PECS icons of “I want” and “to walk” if a break is needed during the class session. If stimming is displayed, “E” will be prompted to use the PECS cards if a break is needed.

- Reinforcement: “E” will be reinforced with generalized conditioned reinforcers of praise, high-five, and fist bump for displaying emotion regulation, behavior management, compliant, and engagement behaviors.
- Transitions: “E” will be told when two minutes and one minute remain during the timed NCR periods to prepare for the upcoming transition and allow him time to determine what upcoming task he will prefer.
- Behavioral Tracking Chart: School staff will observe and record instances of problem behavior on a weekly basis. Staff will also record potential antecedents, setting events, environmental, or scheduling conditions that may have precipitated the behaviors (see appendix D).
- A behavioral skills training program and behavioral strategizing chart will be implemented with the primary caregivers to promote continuity of service and treatment integrity (see appendix E).

### **Generalization and Maintenance**

The schedule of reinforcement and task requirements will be inversely proportional before fading. As compliance and engagement increases, the interval of reinforcement will recede. This strategy will be implemented in conjunction with the other specialists and classroom teachers. Due to the severity of the problem behavior, a frequency chart will accompany “E” to all daily activities at school and be maintained by his primary aide that is with him throughout the day. This will be used to determine efficacious practice and investigate potential setting events that show a correlation with corrected or adverse behaviors. The charts will be compiled weekly and will include areas for anecdotal description for the behavioral team to review. Additionally, BST will be offered to the caregivers if any of the maladapted behaviors are present outside of school. Including the primary caregivers is paramount to provide a holistic and socially significant change in well being for the student and promote consistency of reinforcement and corrective strategizing.

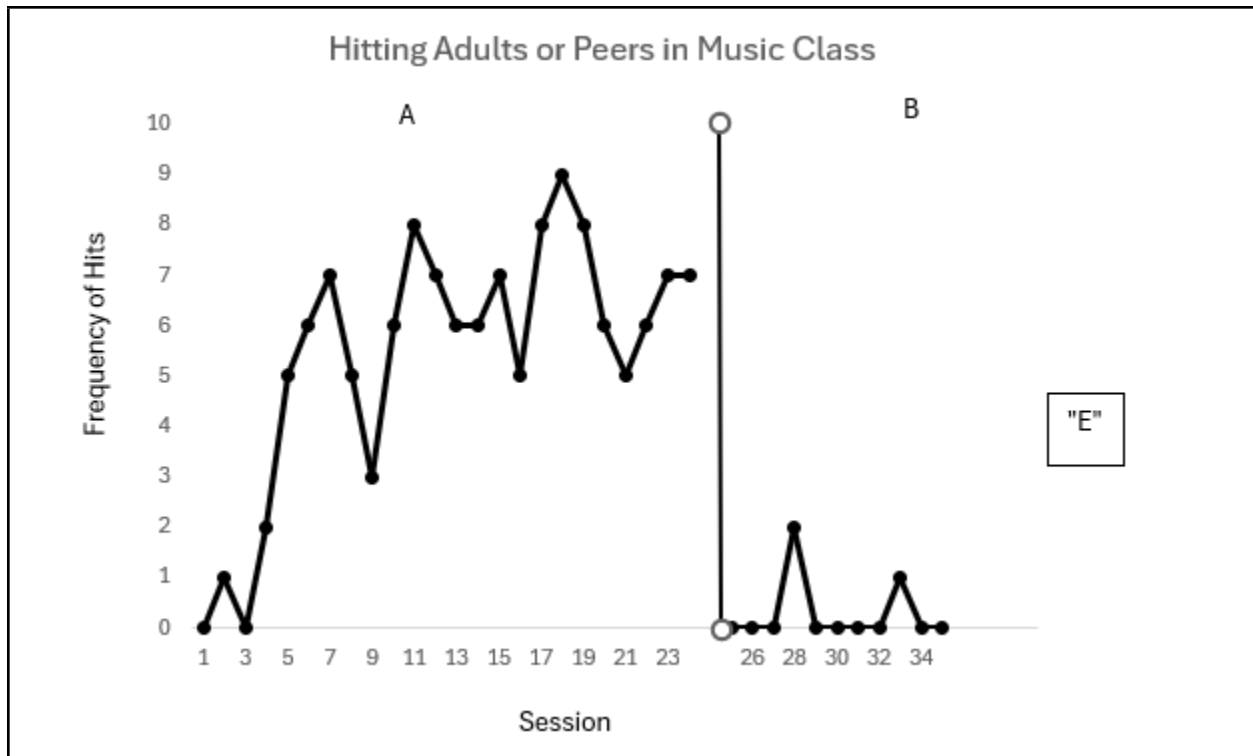
### **Projected Graph**

An AB design will be used during the primary intervention phases. Due to the nature of the target behaviors, it is expected to maintain all intervening strategies over the majority of the school year. As the rates of hitting and aggressive behavior absolves and a steady trend is shown, intervening strategies will be faded, thinned, or omitted if corroborating evidence from school and home indicate as such. An ABA reversal design is not recommended for severe injurious

behavior to show experimental control when the participant or others in the environment may sustain physical harm and tissue damage. Before considering removal of any intervening strategy months and/or years without the problem behaviors may need to be shown.

**Figure 1**

*Projected Graph of Hitting Adults or Peers in Music Class by "E"*



### Accommodations

**Environmental:** For lunch periods, providing the student with seating choice or alternative lunch. During music, allowing the student to choose which instrument they prefer to perform. During group activities (PE, Art, music), allowing the student to work with a preferred peer. These environments may require physical adaptations to the seating, lighting, sound, and temperature to maintain a calming environment.

- Modified classroom (divided)
- Alternative lunch
- Allow for breaks
- Calming area
- Make necessary adjustments in the environment to prevent stress, frustration, et al.

- Avoid triggering topics of discussion.

**Executive Function:** “E” exhibits very limited communication due to the severity of his cognitive delay. Simplistic communication (manding for breaks, bathroom, food, et al.) will be considered a milestone of achievement for emotional regulation and self advocacy. Additionally, identifying what preferred activities and reinforcers he would prefer would also be considered an achievement in self-management.

- Utilize PECS to communicate
- Signal future events and activities
- One-on-one tutoring sessions with an educator or preferred peer
- Provide alternative performance medium (e.g., instrument preference, et al.)
- Reduce timed activities
- Provide opportunities to build executive functioning skills
- Establish a schedule for predictability in each class

**Curricular:** Check lists and task analysis charts have not been an effective strategy for “E” thus far, but would be a good practice to maintain as it will inform the behavioral team (aides in the rooms) of specific activities and assignments during the school day. Also, when learning a new concept or skill, it may benefit “E” to utilize a "less is more" or "quality over quantity" approach for homework and in-class assignments. For instance, ten math problems may have a higher success rate of achievement than 35 until the skill has reached an appropriate level of proficiency. Additionally, completion, feedback, and correction opportunities may improve Student A's confidence in not only completing assignments but also the desire for skill acquisition. Another strategy the text recommends is *previewing*. This technique prepares the student for what is to come during at some point in the future (e.g., during that class period, next class, next week, et al.). By drawing attention to these activities, the student can prepare for potential problem behaviors that may arise and forecast what intervening self-management strategies can be used.

- Preferred activities
- Previewing
- Evaluate the appropriateness of the task to determine if it is too difficult or inappropriate length of time scheduled for the task.

**Replacement Behaviors:** Teaching the student to use various forms of functional communication to indicate how she is feeling when non preferred activities or tasks are required. As an example, the student can tell the supervising adult that a moment to relax in a calm spot would be preferable over running out of the classroom to go to the bathroom. Other techniques would be the ability to advocate for themselves when task demands, or skill levels are too high for their current repertoire.

- Utilize FCT alternatives
- Change of environment

**Training Underdeveloped Skills and Self-Management:** As referred to in the introduction, the use of NCR does not provide a replacement for skill acquisition. However, compliance and attending are required before skill acquisition can occur with students who present with ODD. Due to the nature of “E’s” lack of self-management and engagement, assessment of skill levels by the behavioral team have not produced substantial results. Toileting, feeding, and other vocational and life skills training curriculum and instructional strategies have not been completed and/or implemented due to the frequency of behavior. As an initial step of self-management “E” will be encouraged to use the PECS communication device to indicate desired activities. When used correctly, a form of preferred reinforcement will follow.

- PECS communication

### **Interaction Strategies**

The adults will maintain high levels of positive interaction with “E” throughout the day. NCR and GCR may provide alternatives to unstructured downtime and transitions. Eventually, a graduated exposure to non-preferred peers and activities may result in higher rates of flexibility and cooperative engagement.

- One-on-one tutoring by the teacher
- Teacher provided accommodations
- Eventually a graduated exposure exercise with non-preferred peers
- Multiple check-ins with a preferred adult
- Generalized conditioned reinforcement (e.g., praise, high-five, et al.)
- Use of NCR by attending adults ("Catch 'em being good!")
- Reduce situations that contribute to anxiety (e.g., loud and over-stimulated environments, novel persons, group gatherings, et al.)
- Allow students to perform operational tasks for interaction with other students and for the teacher (e.g., pass out instruments, attend the SmartBoard et al.).
- Well-defined network of persons for wrap-around support (e.g., parents, caregivers, select peers, teachers, aides, et al.)

**Response Strategies:** Demand duration for non-preferred activities should be reduced to shape skill acquisition and confidence.

- Avoid punitive measures: time-out, response cost, over-correction, et al.
- Avoid restraint measures if possible: response cost and restraint
- Use noncontingent reinforcement
- PECS

- Graduated exposure to non-preferred activities and peers
- Activity for expressing frustration (e.g., walking the track)
- Teacher cues for self-management
- Provide alternative activities

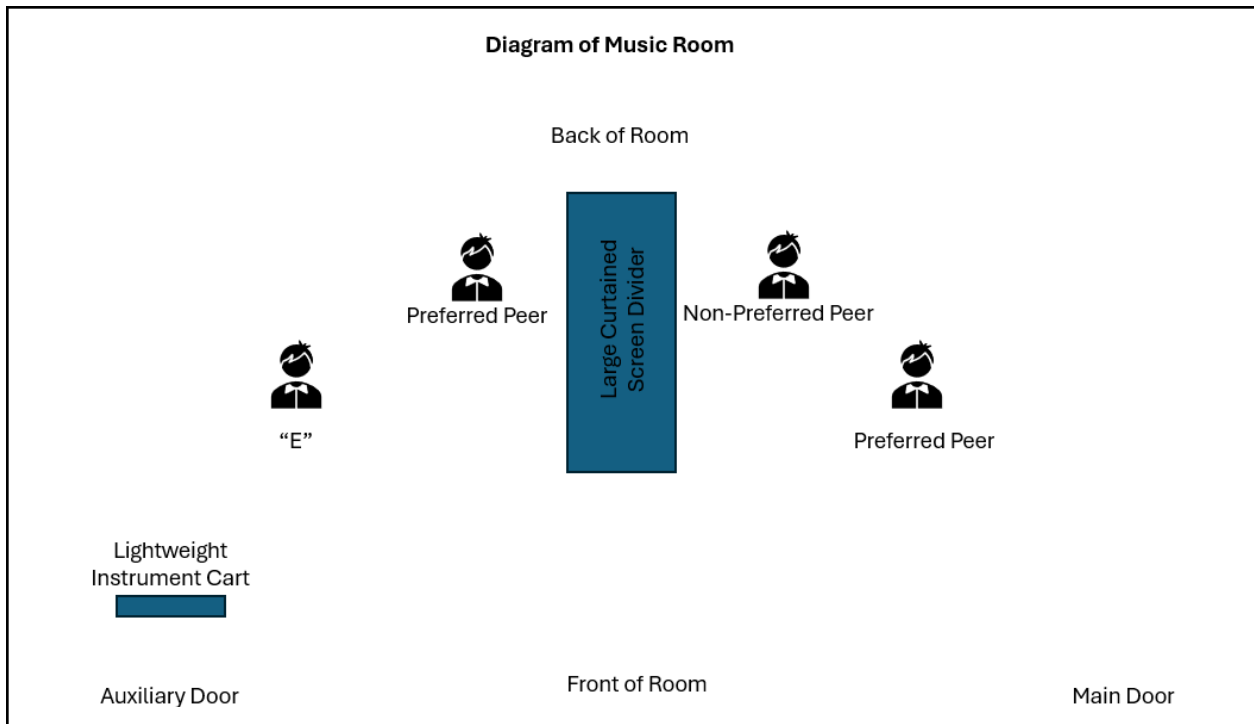
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## Appendix

### Appendix A

#### Music Room Diagram



## Appendix B

### Music Class Intervention Schedule

**Intervention Schedule, Initial Phase**

	<b>Activity</b>	<b>Reinforcement</b>
1.	Attend seat in classroom	5 minutes (iPad, walk)
2.	2 to 3 Minute Preferred Musical Activity (with or without completion)	5 minutes (iPad, walk)
3.	2 to 3 Minute Preferred Musical Activity (with or without completion)	5 minutes (iPad, walk)
4.	2 to 3 Minute Preferred Musical Activity (with or without completion)	5 minutes (iPad, walk)
5.	2 to 3 Minute Preferred Musical Activity (with or without completion)	5 minutes (iPad, walk)
6.	2 to 3 Minute Preferred Musical Activity (with or without completion)	5 minutes (iPad, walk)
7.	2 to 3 Minute Preferred Musical Activity (with or without completion)	Awarded sticker and “Goodbye Song”

**Intervention Schedule, Thinning Phase I**

	<b>Activity</b>	<b>Reinforcement</b>
1.	Attend seat in classroom	4 minutes (iPad, walk)
2.	2 to 3 Minute Preferred Musical Activity (with or without completion)	4 minutes (iPad, walk)
3.	2 to 3 Minute Preferred Musical Activity (with or without completion)	4 minutes (iPad, walk)
4.	2 to 3 Minute Preferred Musical Activity (with or without completion)	4 minutes (iPad, walk)
5.	2 to 3 Minute Preferred Musical Activity (with or without completion)	4 minutes (iPad, walk)
6.	2 to 3 Minute Preferred Musical Activity (with or without completion)	4 minutes (iPad, walk)
7.	2 to 3 Minute Preferred Musical Activity (with or without completion)	Awarded sticker and “Goodbye Song”

**Intervention Schedule, Thinning Phase II**

	<b>Activity</b>	<b>Reinforcement</b>
1.	Attend seat in classroom	4 minutes (iPad, walk)
2.	2 to 3 Minute Preferred Musical Activity (with completion)	
3.	2 to 3 Minute Preferred Musical Activity (with or without completion)	4 minutes (iPad, walk)
4.	2 to 3 Minute Preferred Musical Activity (with completion)	
5.	2 to 3 Minute Preferred Musical Activity (with or without completion)	4 minutes (iPad, walk)
6.	2 to 3 Minute Preferred Musical Activity (with completion)	

7.	2 to 3 Minute Preferred Musical Activity (with completion)	4 minutes (iPad, walk)
8.	2 to 3 Minute Preferred Musical Activity (with or without completion)	Awarded sticker and “Goodbye Song”

**Intervention Schedule, Initial Phase III**

	<b>Activity</b>	<b>Reinforcement</b>
1.	Attend seat in classroom	4 minutes (iPad, walk)
2.	2 to 3 Minute Preferred Musical Activity (with completion)	
3.	2 to 3 Minute Preferred Musical Activity (with or without completion)	4 minutes (iPad, walk)
4.	2 to 3 Minute Preferred Musical Activity (with completion)	
5.	2 to 3 Minute Preferred Musical Activity (with or without completion)	4 minutes (iPad, walk)
6.	2 to 3 Minute Preferred Musical Activity (with completion)	
7.	2 to 3 Minute Preferred Musical Activity (with or without completion)	4 minutes (iPad, walk)
8.	2 to 3 Minute Preferred Musical Activity (with or without completion)	
9.	2 to 3 Minute Preferred Musical Activity (with or without completion)	Awarded sticker and “Goodbye Song”

**Intervention Schedule, Initial Phase IV**

	<b>Activity</b>	<b>Reinforcement</b>
1.	Attend seat in classroom	3 minutes (iPad, walk)
2.	2 to 3 Minute Preferred Musical Activity (with completion)	
3.	2 to 3 Minute Preferred Musical Activity (with or without completion)	3 minutes (iPad, walk)
4.	2 to 3 Minute Preferred Musical Activity (with completion)	
5.	2 to 3 Minute Preferred Musical Activity (with or without completion)	3 minutes (iPad, walk)
6.	2 to 3 Minute Preferred Musical Activity (with completion)	
7.	2 to 3 Minute Preferred Musical Activity (with or without completion)	3 minutes (iPad, walk)
8.	2 to 3 Minute Preferred Musical Activity (with completion)	
9.	2 to 3 Minute Preferred Musical Activity (with or without completion)	Awarded sticker and “Goodbye Song”

### Appendix C

#### Music Room Engagement & Compliance Star Chart



### Appendix D

#### Hitting and Aggressive Behavior Chart for School Staff

Frequency of Hitting and Aggressive Behavior Chart					
Student: _____ Dates: _____					
	M	T	W	TH	F
1st period					
2nd period					
3rd period					
4th period					
Lunch					
5th period					
6th period					
7th period					
<b>Homeroom Teacher Comments:</b>					
<b>Specialist Teacher Comments:</b>					

### Appendix E

#### Caregiver Behavior Strategy Chart

Caregiver Behavior Strategy Chart								
Observed Frequencies	S	M	T	W	R	F	S	Week: _____
Preventive strategies					Notes			
Structure the environment to prevent opportunities for the child to become physically aggressive toward others (e.g., interact frequently with child to prevent him from becoming frustrated)								
Reduce activities which might be threatening to the child (e.g., alone time, with non-preferred persons or activities)								
Make the necessary adjustments in the environment to prevent the child from becoming overstimulated								
Teach the child alternative ways to deal with the situation (e.g., FCT, cool down)								
Provide structured and scheduled activities at home to eliminate an excessive amount of down time								
Provide NCR and GCR as much as possible								
Other: _____								
<b>Consequences: must be done with preventive strategies above</b>								

Extinction (Ignore)								
DRI: occupy hands and body								
Take away preferred item for specified duration								
Other: _____								
<b>Reinforcement:</b>								
iPad immediately (NCR)								
Preferred edibles								
Preferred activity at home								
Other: _____								
<b>If hitting and aggression are present:</b>								
Response block until the episode abates								
Physical restraint until the episode abates								
Time-out (short duration)								
Response cost if token economy is used at home								