

PSYC 587

Natural Environment Teaching Competency

Zhen Lin

3093843780

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PURPOSE

The purpose of this competency was to use Naturalistic Developmental Behavioral Interventions (NDBIs) to teach my five year old client how to appropriately control his aggressive behavior to promote daily engagement with his sibling and family members. NDBIs are interventions that utilizes the research finding and principles of Applied Behavior Analysis (ABA). Characteristic features of NDBIs include driven by a child's motivation in the natural environment, child choice of the activity or materials, and use of natural and related reinforcers. One of the primary skills that can be acquired through NDBIs was controlling negative temper when the client was getting frustrated or angry. Anger management and actively communicating in an appropriate manner are vital abilities for this client because they will immediately prevent the client physically hurting himself or people around; additionally, they will provide him alternative approaches to replace the maladaptive behaviors (such as kicking or punching), and provide him appropriate social skills when playing with his sibling and making friends in kindergarten.

METHOD

Participants and Setting

The client used for this competency is a 5-year-old boy who has participated in Applied Behavior Analysis (ABA) services for a total of thirty months. He has a diagnosis of ASD. He had a previous DTT training program for two years, and he started NDBIs from February 2019. He displayed severe physical aggression behavior (e.g., kicking, hitting, or punching) or other forms of inappropriate vocalization (e.g., making silly sounds or repeating an instructor's name). He has a 9-year-old brother who also has a diagnosis of high functioning ASD, and his family speaks English at home. Both baseline and intervention sessions occurred in the living room and backyard of the client's home. The living room contained a wall cabinet (toys inside), a TV, a coffee table, and a sofa; the backyard contained a coffee table, four chairs, a basketball stand, and a large size trampoline. Sessions occurred every afternoon from 4 pm to 6:30 pm within ABA intervention sessions.

Dependent Variable

The target behavior of interest in this competency was a temper control strategy which is taking a deep breath and asking politely (saying "Can I have it?") before he attempted to show any aggression behaviors (e.g., punching, hitting) or when he wanted to gain a preferred item in contrived or natural occurring opportunities.

Data Collection

Data were collected using the CentralReach website. Correct, incorrect, and prompted responses were measured for each opportunity to cope with aggression or frustration in a natural playing setting, the client's living room or backyard. If the client took a deep breath and asked for a turn politely when he was in the frustration situation (e.g., his brother took away his lego, or he had dislike food for dinner), this was tracked as a correct response. The client was not yet using any

appropriate temper control strategies, but any appropriate means of active communication or holding temper would also be counted as a correct response if the client happened to use a skill other than taking a deep breath. An incorrect response was recorded if the client engaged in physical aggression (e.g., biting, hitting, or kicking), self-injury behavior, or inappropriate vocalization (e.g., repeating instructor's name, making silly sounds). If the instructor prompted him to show the target behavior before he showed any means of maladaptive behavior, the trial would be recoded as "prompted response." The total percentage of correct responses was calculated for each session.

Procedure

Baseline. In baseline, the instructor contrived opportunities in which the client wanted to avoid aversive items/situations or get something preferred within established routines (e.g., turn-taking in shooting a basketball). Baseline data were collected, and the client did not yet control his temper appropriately in naturally occurring or contrived opportunities (0% accuracy) and would instead kick or punch the instructor.

Intervention. Initially, treatment involved teaching the client one way to appropriately control his frustration or aggression by a two-step temper control strategy (taking a deep breath and asking politely) within leisure play routines. The instructor contrived a situation that taking away the item the client was engaging (normally, the client got frustrated in this situation). Because the client likes playing basketball, taking turns to shoot was an example of a routine used to target this skill. A teaching segment within playing basketball began when the client kept shooting for five times without turn-taking. During the routines, the instructor held the basketball until the client showed the target behavior (taking a deep breath before any aggressive language

and asking politely for a turn). An environmental arrangement was used in the situation that his sibling joined the basketball shooting. An opportunity to get the basketball (or get other preferred items from other family members) and praise from the instructor would be given if he showed the target behavior appropriately.

RESULTS AND DISCUSSION

It took a total of 9 days for the client to get 90% of appropriately control his aggression and frustration when his preferred item was taken, or he was in an aversive situation. A significant increase in the accuracy of using target behavior illustrates in the figure below. Upcoming treatment will continue the NDBIs described in this competency to maintain the appropriate temper control target behavior. The first step intervention ends when the client has three times 80% or higher accuracy of target behavior. The second step after this competency will be generalized the temper control strategy to his interaction with siblings and friends.

Another important point to pay attention to is that the client should display persistence and use alternative ways when his original attempt is not successful.

This competency focused on utilizing an intervention of NDBIs to teach foundational concepts (temper control and verbal communication) to a client with ASD. This skill will lead to continued decreases in maladaptive aggressive behavior (e.g., kicking or punching) and highly encourage the client's social interaction with family members or friends; also, it increases his chance of successful access to preferred items or activities in the kindergarten.

Temper Control

