Registry of Efficacy and Effectiveness Studies

Study Title:
Function Based Video Self-Modeling to Reduce Challenging Behaviors in Students with Autism Spectrum Disorder

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Version History

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Section I: General Study Information

PI name: Kate Sadler
PI affiliation: University of Virginia

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Study start date: 2018-08-16
Study end date: 2019-08-16

Intervention start date: 2018-10-10

Timing of entry: Prior to implementation of the intervention

Brief abstract:
Research has demonstrated that video self-modeling meets the criteria as an evidence-based intervention for individuals with ASD, often producing substantial changes in student behavior without the need for intensive services (Bellini & Akullian, 2007; Bellini, Gardner, Hudock, & Kashima-Ellingson, 2016). VSM has clearly been successful, however there is very little research that uses VSM to address aggressive behaviors in students with ASD which reportedly occurs in over 50% of those diagnosed (Farmer, et al., 2015; Mazurek, Kanne, & Wodka, 2013).

For students who have made little to no progress on school-based behavior support plans, a function-based VSM is ideal. Using a VSM to depict a functionally equivalent behavior offers an alternative to traditional procedures. For instance, a function-based VSM would provide the learner with a satisfying reinforcing consequence, visual portrayal of a communicative response amidst a condition that typically triggers
aggressive behavior, and a point of view that has the ability to increase self-efficacy. Additional benefits would include the immediate and maintained effects that often accompany a VSM intervention. The following study combines the use of a functional analysis of behavior to inform target behaviors in a VSM to modify aggressive behaviors in students with ASD.

**Keywords:** Autism, video self-modeling, functional analysis, aggression

**Comments:**

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**Section II: Description of Study**

**Type of intervention:**
Practice

**Topic area of intervention:**
Special Education

**Number of intervention arms:**
1

**Target school level of intervention:**
Kindergarten, 1, 2, 3, 4, 5

**Target school type:**
Suburban

**Location of implementation:**

*United States:* South

*International:* North America

**Further description of location:**
Virginina

**Brief description of intervention arm:**
1) First, the IISCA (Hanley, et al., 2014) will be conducted on each participant in order to gather information about problem behavior and test a hypothesis about the function. The steps of the IISCA will occur in the following order.
   a. Open-ended interview with caregiver and up to three staff members
   b. Direct observation of student
   c. Synthesized contingency across two contexts (e.g., show that the behavior is absent and present across two contexts)
2) Second, once the function of the behavior is determined, researchers will tell staff to teach a new simple functional communication response (e.g., “break please”) or reinforce an existing response under conditions that do not evoke problem behavior (e.g., an easy task) (Carr & Durand, 1985; Kurtz, et al., 2011). This procedure teaches the learner an alternative to problem behavior.
3) Third, as part of the VSM development, the student will be video recorded as he/she is prompted to use the functional communication response under a condition that typically evokes a problem behavior (e.g., a more complicated task). Prompts by staff will be provided so that the student is successful.
4) Once video editing has occurred, the function-based VSM will portray the individual using the alternative response independently, under conditions that typically evoke problem behavior. The student will be required to watch the video (approximately 3 minutes in length) at least one time per day.
5) Post-intervention observations will be conducted (at least 6 months after intervention) on each participant in the form of observation probes using at least 2 different providers across 2 different locations.
Anecdotal notes will be taken by the research staff.
6) Evaluations will be conducted with the behavior service providers (see “Service Provider Feasibility Questionnaire”) to determine the utility of using the Function-Based VSM compared to other behavioral interventions.
7) Evaluations will be conducted with the Caregiver/Teacher/Behavior Service provider (see “Caregiver/Service Provider Social Validity”) to determine if the stakeholders find the intervention to be socially valid.

**Brief description of comparison condition:**
Treatment as usual (IEP and behavior support plans)

**Comparison condition:** Business-as-usual

**Comments:**

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**Section III: Research Questions**

**Confirmatory research questions:**

*Question 1*
To what degree can a function-based VSM affect classroom behavior in students with ASD?

*Question 2*
To what degree does a function-based VSM impact aggression?

*Question 3*
To what degree does a function-based VSM impact replacement behavior?

**Exploratory research question:**

**Comments:**

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**Section IV-A: Study Design (Selection)**

**Study Design:**
Single Case Design (SCD)

**Comments:** Multiple Baseline Across Participants

*Section IV-B starts on the next page.*
Section IV-B: Study Design (Input)

Design: Multiple-baseline

Participant group: Student

Total participants: 6

Total phases: 4

Phase description:

Phase order: Data-driven

Phase duration/number of data points: Until a clear trend in the data emerges (5 data points)

Data collectors blind to condition: No

Interventionists blind to condition: No

Participants to condition: Yes

Comments

Section V: Sample Characteristics

Inclusion criteria for participants:
Individuals will be selected to participate based on the following criteria: (1) individuals will have been referred to a private school, clinic, or adult services due to severe problem behaviors; (2) reports from a teacher, clinician, and/or parent indicating that disruptive behavior impedes the individual’s ability to participate in the curriculum and/or interfere with daily activities; (3) the individual must be capable of attending to a video for up to 2 minutes; (4) the individual will have a diagnosis of Autism Spectrum Disorder (ASD) made by an independent clinician.

Exclusion criteria for participants:
Exclusion criteria includes the following: (1) participants who do not demonstrate disruptive behavior; (2) Students who are making adequate progress on current intervention plans.

Recruitment method:
Participants will be approached/recruited among students who are currently enrolled at the Virginia Institute of Autism (VIA) who have interfering maladaptive behaviors and would benefit from a functional analysis of behavior and a video self-modeling procedure. Participants will be recruited by sending letters to the parents and teachers of students enrolled at VIA. In some circumstances, VIA staff will identify students that may benefit from the study and caregivers will be directly contacted to ask if they would like more information. The caregivers will be instructed to contact the principal investigator(s) if interested.

Comments
Section VI-A: Outcomes (Selection)

Confirmatory question 1 - number of outcome measures: 3

Confirmatory question 2 - number of outcome measures: 3

Confirmatory question 3 - number of outcome measures: 3

Comments:

Confirmatory Question 1, Outcome Measure 1

Outcome domain:

Minimum detectable effect size:

Outcome measure:

Scale of outcome measure:

Normed or state test:

Same outcome measure in treatment and comparison groups: . . . .

Confirmatory Question 1, Outcome Measure 2

Outcome domain:

Minimum detectable effect size:

Outcome measure:

Scale of outcome measure:

Normed or state test:

Same outcome measure in treatment and comparison groups: . . . .

Confirmatory Question 1, Outcome Measure 3

Outcome domain:

Minimum detectable effect size:

Outcome measure:

Scale of outcome measure:

Normed or state test:
Same outcome measure in treatment and comparison groups:

Confirmatory Question 2, Outcome Measure 1
Outcome domain:
Minimum detectable effect size:
Outcome measure:
Scale of outcome measure:
Normed or state test:
Same outcome measure in treatment and comparison groups:

Confirmatory Question 2, Outcome Measure 2
Outcome domain:
Minimum detectable effect size:
Outcome measure:
Scale of outcome measure:
Normed or state test:
Same outcome measure in treatment and comparison groups:

Confirmatory Question 2, Outcome Measure 3
Outcome domain:
Minimum detectable effect size:
Outcome measure:
Scale of outcome measure:
Normed or state test:
Same outcome measure in treatment and comparison groups:

Confirmatory Question 3, Outcome Measure 1
Outcome domain:
Minimum detectable effect size:
Outcome measure:
Scale of outcome measure:
Normed or state test:
Same outcome measure in treatment and comparison groups:

Confirmatory Question 3, Outcome Measure 2
Outcome domain:
Minimum detectable effect size:
Outcome measure:
Scale of outcome measure:
Normed or state test:
Same outcome measure in treatment and comparison groups:

Confirmatory Question 3, Outcome Measure 3
Outcome domain:
Minimum detectable effect size:
Outcome measure:
Scale of outcome measure:
Normed or state test:
Same outcome measure in treatment and comparison groups:

Comments:

Section VII starts on the next page.
Section VII: Analysis Plan

More responses are needed in section VI-B to display section VII information.

Comments:

Section VIII: Additional Materials

Links

No links have been added yet.

Files

No files have been added yet.

Comments