Coaching Parents via Telehealth to Conduct Functional Analysis and Functional Communication Training for Challenging Behavior

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Introduction

Functional behavior assessment (FA) and functional communication training (FCT) have been identified as evidence-based practices for addressing challenging behavior among individuals with autism spectrum disorder.\(^1\)

One obstacle to the widespread use of evidence-based practices such as FA/FCT is the availability of trained interventionists in rural or remote areas.

Telehealth technology has the potential to overcome such obstacles by providing remote coaching.

Previous studies have demonstrated success in using telehealth to provide FA and FCT to children in clinic or school settings with parents or teachers as implementers.\(^2,4\)

The purpose of the current study was to replicate the previous demonstrations of the effective use of telehealth for conducting FA and FCT in home with parents as implementers.

Methods

Three elementary aged boys with developmental disabilities and their parents participated in the study (See Table 1).

All participants were referred through local service agencies in Minnesota due to their engagement in challenging behavior.

A functional analysis interview with the primary caregiver and a multielement FA was conducted to identify the function of the challenging behavior for each participant.

A functionally equivalent communication response was identified for each participant.

FCT was evaluated using single case reversal (BAB or ABAB) designs, with baseline (reinforcement for challenging behavior) during the A phases, and FCT (reinforcement for appropriate behavior) during B phases.

All assessment and intervention sessions were conducted in the child’s home by the parent with live coaching from study staff via telehealth using Google Hangouts.

<table>
<thead>
<tr>
<th>Participant</th>
<th>Age</th>
<th>Diagnosis</th>
<th>FA result</th>
<th>FCT response</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>8</td>
<td>CP, GDD</td>
<td>Attention</td>
<td>Big Mack Switch</td>
</tr>
<tr>
<td>2</td>
<td>7</td>
<td>ASD</td>
<td>Tangible</td>
<td>Picture Card or Verbal Mand</td>
</tr>
<tr>
<td>3</td>
<td>6</td>
<td>ASD</td>
<td>Tangible</td>
<td>Picture Card</td>
</tr>
</tbody>
</table>

All participants showed differentiated results in the FA. All participants learned a functionally equivalent communicative response.

- Results for participant 1 (Figures 1 & 2) show that SIB was maintained by access to attention. FCT resulted in immediate decreases in SIB that were maintained when procedures were generalized to a new location.
- Results for participant 2 (Figures 3 & 4) show that yelling was maintained by access to tangible items. FCT resulted in immediate and sustained reductions in yelling, and increases in appropriate communication.
- Results for participant 3 (Figures 5 & 6) show that SIB was maintained by access to tangible items. FCT resulted in immediate increases in appropriate communication and decreases in SIB.

Discussion

This study replicates previous research documenting the utility of telehealth implemented FA and FCT procedures for children with challenging behavior.

These results suggest that all three parents were able to successfully implement the assessment and intervention sessions with remote coaching.

The intervention procedures produced decreases in challenging behavior and increases in communicative behaviors for all three participants.

Future research should seek to replicate these findings and include a cost analysis for delivering services in home or at a site versus using telehealth technology.

References