

# The ABCPALs Project: Applying Behaviour Change theory to Parent-Led Language Interventions

## Summary

### Introduction

Speech and language therapy for children struggling to learn language in the early years generally aims to empower parents through what are known as ‘parent-led language interventions’. While we know that parent-led language interventions work, it is not clear precisely what SLTs (speech and language therapists) do to help make this happen. Understanding more about the individual techniques SLTs make use of would help when reporting and testing new and existing interventions for these children. The Behaviour Change Technique Taxonomy (BCTTv1) is a list of techniques used in public health interventions like helping people to increase exercise and reduce smoking. This list has proved a good place to start to define the techniques SLTs use in other types of SLT interventions, so may also help when thinking about parent-led language interventions. Combining knowledge of these techniques with a video learning tool, Video Enhanced Observation (VEO) during these interventions, may provide parents with valuable additional opportunities to reflect on their interactions with their child and so pick up techniques faster.

### Aims

This study has two phases; in Phase 1 I aimed to form a list of SLT techniques used in parent-led language interventions. These results then informed Phase 2, which was an intervention study. In this phase I aimed to understand the impacts of a technique-based parent-led language intervention supported with VEO technology.

### Methods

Phase I: I searched for academic papers about parent-led language interventions. I read the ones which were relevant, and identified techniques from the BCTTv1 in them. Once I had a list of all the techniques used in these interventions, I put these into a survey for SLTs to check they were used in practice as well as in research. I also observed three SLTs giving parent-led language intervention, again to check which techniques were being used in practice. Phase II: There were three groups involved in the intervention study. The first was ‘treatment as usual’ control group involving a telephone consultation (TAU-TC). I compared this with an in-person technique-based intervention (BCT), and a technique-based intervention involving VEO reflection and feedback (BCT-VEO). Due to UK government restrictions during the COVID-19 pandemic, the BCT-VEO was conducted online. Seventeen parents and their preschool children were split into these intervention groups. I measured child language and parent use of techniques before and after intervention, and at six weeks after the intervention finished. I collected parents’ views of their experiences in structured interviews.

### Results

Phase 1: I identified 84 papers containing descriptions of 45 interventions. Sixty-two SLTs responded to the survey, and I observed three SLTs delivering parent-led language intervention. I identified two ‘levels’ of techniques from all of these three methods. The first were used between a therapist and a parent (Level One) and the second were the ones that the SLT taught the parent to use with their child (Level Two). I found 29 Level One techniques altogether. Twenty-three of these were already in the BCTTv1, and six were formed as potential new

techniques specific to SLT. I found ten Level Two techniques, five were already in the BCTTv1, five were new, SLT-specific techniques.

Phase 2: Parents in all groups learned to use techniques in their interactions to some degree, and this was maintained at follow-up. The largest effects were seen in the BCT and BCT-VEO interventions, but this wasn't mathematically significant. Children's language measures increased, and vocabulary measures increased mathematically significantly in all three groups. All changes in children's language were maintained 6 weeks after. Largest increases in children's language were seen in the BCT group followed closely by the BCT-VEO group. More parents in these groups reported satisfaction with their intervention than the TAU-TC group.

#### Conclusion

The BCTTv1 is good starting place for identifying techniques used in parent-led language interventions, though some additions and adjustments are necessary. The BCT-based interventions are more effective than treatment as usual and preferred by parents. Adding VEO to parent-led language interventions, although not essential for supporting parents and children, could be a valuable addition to SLT's work with parents. Multiple factors affected this project including a relatively small group of participants, and disruption due to COVID-19 restrictions.

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