Defining the Techniques of Speech and Language Therapists

Applying the Behaviour Change Technique Taxonomy (BCTT) to Speech and Language Therapy Interventions with Children

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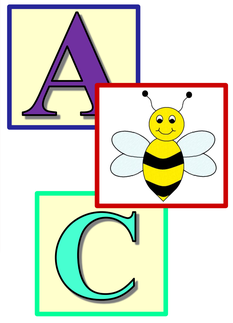
Introduction

The Behaviour Change Technique Taxonomy (BCTT) is a list of 93 labels and descriptions of techniques (Behaviour Change Techniques – BCTs) used in healthcare interventions to change behaviour, e.g. giving praise for decreasing alcohol consumption, or demonstrating the use of a nicotine patch to encourage smoking cessation. It is hoped that this list will form a basis for the collective classification of techniques that many healthcare professionals, including speech and language therapists (SLTs), use. The application of the BCTT to speech and language therapy (SaLT) is in its early stages, with no current research into interventions with children. This study begins to fill this gap by using the BCTT to describe and classify the techniques of an expert SLT working with a child who has language, literacy and behavioural difficulties.

Aims

- To give evidence as to whether the BCTT could feasibly be applied to paediatric SaLT and why
- To describe the potential benefits and uses of the BCTT in SaLT
- To report whether the phonological awareness intervention (Stringer, 2010) in this instance was delivered with fidelity as an example of the above



Methods

Online BCTT training

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Transcription and coding of four sessions (videoed): discussion with colleagues and creation of new BCTs

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Coding of sessions through transcripts: discussion with colleagues concerning creation of new BCTs

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Data collection: counting of BCTs, calculation of average BCT use across sessions

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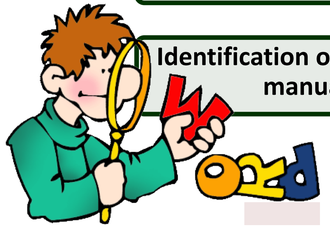
Identification of BCTs in phonological awareness therapy manual to calculate treatment fidelity



Results & Discussion

New BCTs and the Frequency of BCTs

In collaboration with a fellow student researcher and project supervisor, seven new BCTs were developed and coded in this study. The most prominent of these was Scaffolding. This is a term used much in speech and language therapy, and describes helping the client to perform the behaviour by providing additional support. This can take many forms, and so this term was exploded to encompass the two found in this study: Verbal emphasis and Visual aid.

Out of the 26 BCTs coded in these four sessions, 19 were existing BCTs (73%) and 7 were new (27%). Graph 1 shows the BCTs coded most frequently. These were 2.2 *Feedback on behaviour*, 10.4 *Social reward*, and 8.1 *Behavioural practice/rehearsal*. Any BCTs with a frequency lower than 5% were grouped into the 'Other' column. There were on average 118 BCTs coded in the 20-30 minute sessions, with more being coded the longer the session. This gives an average of five BCTs being used per minute.

Average BCT use per minute = 118/[(17+22+20+29)/4] = **5.36**

This proportion indicates that **the BCTT is a good starting place** for SaLT to begin building a taxonomy. It is expected that of the ninety-three BCTs overall, some would never be used in SaLT, e.g. 11.4 *Paradoxical instructions* and 14.2 *Punishment*. Others are expected to appear more/only in paediatric interventions, and others more/only in adult interventions.

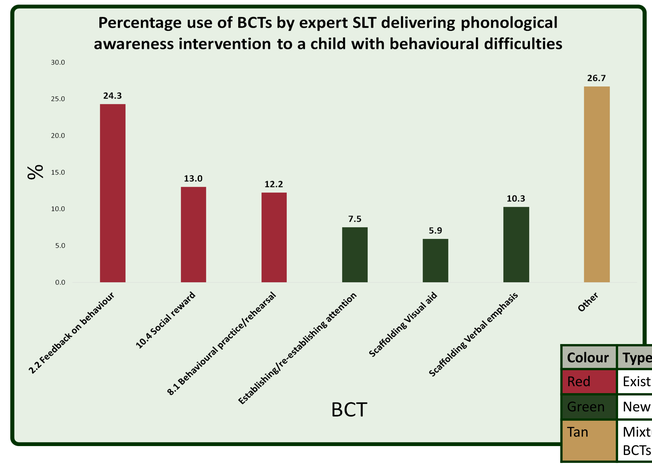
Behavioural Management

Some (2%) of BCTs that were coded did not focus on the target behaviour i.e. improving phonological awareness, and instead focused on the management of the child's misbehaviour. The BCTT guidelines state that if the technique is not directly focused on the behaviour, it should not be coded. However it was decided that these BCTs should be coded despite this, as without managing misbehaviour, improvement in phonological awareness would not be able to take place.

Treatment Fidelity

The phonological awareness treatment manual was examined for BCTs. Out of the 12 BCTs found, the SLT displayed 9 in the videos, 2 of which were described as optional. The other was another form of scaffolding. Given that other scaffolding techniques were used consistently throughout therapy and that the rest of treatment adhered to the manual, treatment fidelity was nonetheless rated as very high. This procedure showed how simple transparent treatment fidelity testing would be for any intervention.

Graph 1



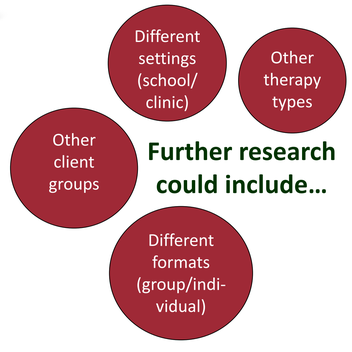
Colour	Type of BCT
Red	Existing BCTs
Green	New BCTs
Tan	Mixture of Existing and New BCTs

Conclusion

The BCTT can and should be applied to SaLT, because the techniques used by the therapist matched many existing BCTs, and they were used often within sessions. This is in spite of the difficulties encountered, for example:

- creating new BCTs, deciding what their definitions would be, and whether they were worthy of being a new BCT entry
- finding that the SLT used existing BCTs to manage misbehaviour and deciding the best course in terms of coding these

This is because overall it was felt that with **teamwork** and **collaboration**, **knowledge of the BCTT**, and **clinical experience**, such difficulties can be overcome.



It is anticipated that the use of the BCTT in SaLT will allow:

- Improved reporting of interventions (including use of BCTs in intervention manuals)
- and thus, improved replication interventions
- Improved clinical teaching
- Easier and more transparent testing of treatment fidelity

References & Acknowledgments

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2. Stringer, H. (2010). *A Manual for Phonological Awareness Intervention*. Newcastle upon Tyne, UK: Newcastle University, School of Education, Communication and Language Sciences.

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