COMMENTS

Specifying the active content of behaviour change interventions: the Behaviour Change Techniques Taxonomy v1 (BCTTv1)

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Original Paper:
The Behavior Change Technique Taxonomy (v1) of 93 Hierarchically Clustered Techniques: Building an International Consensus for the Reporting of Behavior Change Interventions.


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INTRODUCTION.

When a successful behaviour change intervention is published, it is important that readers understand what the intervention involved. This information can be used by practitioners to implement the intervention to improve health outcomes and by researchers to integrate new data with previous evidence to advance the cumulative evidence and theory of behaviour change. However, until recently, the reporting of behaviour change interventions has been hindered by the lack of a shared language: the same words have been used to describe different interventions and the same interventions have been described in different words.

Intervention reporting guidelines such as CONSORT (Moher et al., 2001) recommend that the delivery and content of the intervention is described, but offer no advice on how intervention content should be reported. Michie et al. (2013)’s paper presents an important step in improving reporting: a taxonomy of 93 behaviour change techniques (BCTs), each with a label and definition. BCTs are the active content of behaviour change interventions that are observable, replicable and irreducible.

Methods

The BCT taxonomy was the result of a programme of work conducted in 6 steps: 1. aggregating previous classifications of BCTs; 2. a Delphi procedure in which 19 international experts in behaviour change identified overlap, redundancy and omissions; 3. a further Delphi round in which the same experts rated clarity, precision, distinctiveness and confidence of use; 4. International Advisory Board of 30 experts gave feedback; 5. The resulting BCT list was used to code published intervention descriptions to assess inter-rater agreement in coding; and 6. a hierarchical structure was developed based on the results of an open-sort task involving 19 behaviour change experts.

Results

The resulting 93 BCTs are presented in 16 clusters as BCT Taxonomy v1. Each BCT is reported with a label and definition and information about its reliability. The table illustrates a few BCTs which have good reliability.
<table>
<thead>
<tr>
<th>BCT label</th>
<th>BCT definition</th>
<th>Hierarchical grouping</th>
<th>Inter-rater reliability of coding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material reward (behaviour)</td>
<td>Arrange for the delivery of money, vouchers or other valued objects if and only if there has been effort and/or progress in performing the behavior (includes ‘Positive reinforcement’)</td>
<td></td>
<td>.85</td>
</tr>
<tr>
<td>Self-monitoring of behaviour</td>
<td>Establish a method for the person to monitor and record their behavior(s) as part of a behavior change strategy</td>
<td></td>
<td>.82</td>
</tr>
<tr>
<td>Behavioral practice/rehearsal</td>
<td>Prompt practice or rehearsal of the performance of the behavior one or more times in a context or at a time when the performance may not be necessary, in order to increase habit and skill</td>
<td></td>
<td>.78</td>
</tr>
<tr>
<td>Social comparison</td>
<td>Draw attention to others’ performance to allow comparison with the person’s own performance</td>
<td></td>
<td>.90</td>
</tr>
</tbody>
</table>
Discussion

The taxonomy can be used to code the active ingredients of published intervention descriptions, including those written in languages other than English, if the coders are fluent in both languages. Use of BCTTv1 should result in a better evidence base for changing behaviour to achieve health outcomes.

Training programmes have been developed to improve coding reliability in new coders and an internet-based training programme will be available in January 2014. The taxonomy may additionally improve the reporting of interventions by enabling the writing of clear, replicable intervention descriptions and this is currently being investigated.

BCTTv1 only addresses the active content of interventions but other aspects of the delivery of the intervention are also poorly reported (Hoffmann et al., 2013; MacCleary et al., 2013) and require specification. The competencies to deliver behaviour change interventions involve both foundation competencies such as communication skills and basic knowledge of health behaviour in addition to competence in delivering BCTs (Dixon & Johnston, 2010).

For further information about developments of the taxonomy, training opportunities etc. see http://www.ucl.ac.uk/health-psychology/BCTtaxonomy/index.php

References


