

# Theories & Techniques of Behaviour Change

## PROJECT UPDATE DECEMBER, 2016

We are more than two years into this MRC-funded project, which has been granted a no-cost extension until August, 2017.

### EXCITING NEWS

We are delighted to announce that our **protocol paper**, titled, 'From theory-inspired to theory-based interventions: A protocol for developing and testing a methodology for linking behaviour change techniques to theoretical mechanisms of action' has been **published** and is now available (open-access) in *Annals of Behavioral Medicine*:  
<http://link.springer.com/article/10.1007/s12160-016-9816-6>

### COMMUNICATION AND DISSEMINATION UPDATES

- ⇒ The project was presented at the **European Health Psychology Society & BPS Division of Health Psychology conference** (Aberdeen) in August, 2016 and at the **UK Society for Behavioural Medicine Conference** (Cardiff) in December, 2016. Presentation slides are available on our website: <http://www.ucl.ac.uk/behaviour-change-techniques/resources>
- ⇒ A **new resource** is now available for the behaviour change community—The **BCTTv1 Interventions Database**—which allows you to search for published intervention papers and reviews in which BCTs have been coded using BCTTv1. Visit our online training site: [www.bct-taxonomy.com](http://www.bct-taxonomy.com) and sign in to access the database.

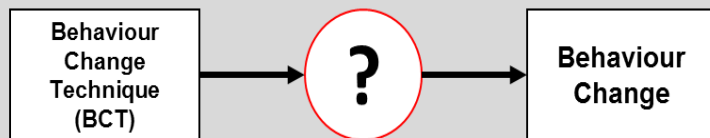




## Studies 1 & 2 Reminders

Studies 1 & 2 are currently being written up for publication.

### Study 1—Identifying Hypothesised Links between BCTs and Mechanisms of Action in Published Interventions



Study 1 aimed to examine links between BCTs and mechanisms of action, as explicitly hypothesised in a corpus of published

behaviour change interventions.

Of the 2639 BCT-MoA links extracted from the articles, there were 84 statistically significant links between 51 BCTs and 23 MoAs. Amongst the links, 33% required some inference, 88% were linked as groups of BCTs or mechanisms of action, and 9% had been empirically tested. High frequency links include *Instruction on how to perform a behaviour* (BCT) to 'self-efficacy' (mechanism of action).

### Study 2—Identifying Hypothesised Links between BCTs and Mechanisms of Action through Expert Consensus

Study 2 aimed to encapsulate current expert thinking about the links between BCTs and mechanisms of action.

We considered consensus to be reached if  $\geq 80\%$  of experts agreed that a BCT was either definitely linked, or definitely not linked, to a mechanism of action. Of the 1,586 links rated by experts, 90 were identified as 'definite' links and 464 were identified as 'definitely not' links. There were 51 BCTs with one or more definite links to a mechanism of action. There were 20 mechanisms of action with one or more definite links to a BCT.





## Studies 3 & 4

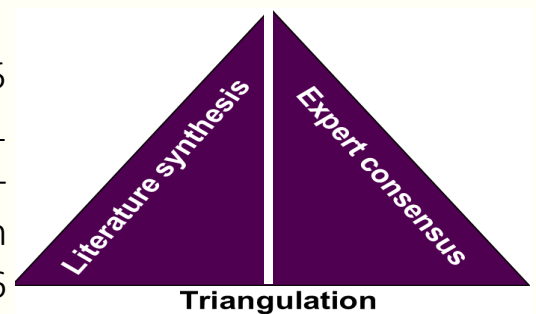
The final two studies of the project are now complete.

### Study 3: Integrated Matrix of Explicit Links

The third study aimed to evaluate the agreement and differences between published interventions and expert consensus and produce an integrated matrix of hypothesised BCT – MoA links.

Sixteen experts provided ratings on 185 links based on the findings from Studies 1 (literature synthesis) and 2 (expert consensus). A total of 92 BCT-mechanism of action links covering 51 of 93 BCTs, and 20 of 26 mechanisms of action, were identified.

Findings are presented in an integrated matrix of BCT-mechanism of action links in the form of a heat map.



### Study 4: Published Implicit Links

The final study in this project examined whether groups of co-occurring BCTs could be linked to specific theories.

Five groups of BCTs were identified from the Study 1 literature using factor analysis. Twenty-five international experts agreed on 5 links, covering 3 of 5 BCT groups and 5 of 83 theories. For example, 92% of experts were confident of a link between Self-Efficacy Theory and the BCTs: Behavioural Practice/Rehearsal, Demonstration of the Behaviour and Instruction on How to Perform the Behaviour.





## Team Updates

- ◇ Rachel has recently begun a new one-year post as Senior Behaviour Change Research Advisor at Bupa, as part of a partnership between UCL and Bupa.
- ◇ Lauren has taken a postdoctoral fellowship in Cardiovascular Behavioural Medicine in the Department of Psychiatry and Human Behaviour, at the Miriam Hospital and Alpert School of Medicine at Brown University.
- ◇ Both Rachel and Lauren will continue to be involved in the project and we are also delighted to welcome a new member of the team, Hilary Groarke, who will be working as a Research Assistant with us on the project. If you would like any more information on the project, please contact [h.groarke@ucl.ac.uk](mailto:h.groarke@ucl.ac.uk).

You can continue to keep up to date with all of our latest news through our [website](http://www.ucl.ac.uk/behaviour-change-techniques/resources) (<http://www.ucl.ac.uk/behaviour-change-techniques/resources>), and [twitter](#) account: [@UCLTaxonomy](https://twitter.com/UCLTaxonomy)

*Merry Christmas & Happy New Year from the Theories and Techniques of Behaviour Change Team:*



**Susan Michie**



**Marie Johnston**



**Alex Rothman**



**Mike Kelly**



**Marijn De Bruin**



**Rachel Carey**



**Lauren Connell**



**Hilary Groarke**

