WIDER Recommendations to Improve Reporting of the Content of Behaviour Change Interventions

The following four recommendations to journal editors are made on behalf of the **W**orkgroup for **I**ntervention **D**evelopment and **E**valuation **R**esearch (WIDER) group and colleagues supporting WIDER's aims. WIDER's overarching aim is to improve the scientific reporting of behavior change interventions (BCIs) and evaluations of BCIs in accordance with CONSORT statements. We believe that CONSORT guidance and APA reporting standards (APA, 2008) need to be extended to allow better communication of the content of BCIs and active controls. The information specified by recommendations 1-3 is essential if BCIs are to be understood, replicated, accurately portrayed in literature reviews (including meta analyses) and contribute to improved professional practice. The information specified in recommendation 4 is critical to understanding what we mean by an "effective" intervention. The changes to editorial policy we recommend could greatly accelerate progress in the science of behaviour change and maximise the impact of such scientific endeavour on applications, including health promotion and patient care. Our recommendations focus on BCIs and BCI evaluations but these recommendations may be relevant to a broader range of psychological interventions designed to change cognitions, emotions and physiological responses.

1. Detailed Description of Interventions in Published Papers

Current standards of reporting of behaviour change intervention (BCI) evaluations mean that researchers and practitioners often cannot fully understand and replicate interventions evaluated in the literature. We suggest that journal editors adopt the guidance provided by the extended CONSORT statements for reporting of trials of Nonpharmacologic Treatments (Boutron, Moher, Altman, Schulz, & Ravaud, 2008) and pragmatic trials (Zwarenstein et al., in press). These are usefully augmented for behavioural scientists by Davidson et al (2003).

In particular, *we recommend* that instructions to authors specify that BCI evaluations describe (1) characteristics of those delivering the intervention, (2) characteristics of the recipients (and see Noguchi et al., 2007, for unusual but importantly informative detail on participants before and after attrition) (3) the setting (e.g., worksite, time and place of intervention), (4) the mode of delivery (e.g., face-to-face) (5) the intensity (e.g., contact time), (6) the duration (e.g., number of sessions and their spacing over a given period), (7) adherence/ fidelity to delivery protocols and (8) a detailed description of the intervention content provided for each study group.

2. Clarification of Assumed Change Process and Design Principles

Readers and reviewers need to be aware of, and have access to, the principles that underpin researchers' development of BCIs because this facilitates replication and adoption of the findings. For example, what change processes were thought to be necessary to prompt a change in the specified behaviour? How was the intervention design informed by theoretical considerations, if at all? What change techniques were incorporated in the intervention and why? Examples, of papers clarifying these design issues include Araújo-Soares et al. (in press) and Van Kesteren, Kok, Hospers, Schippers & De Wildt (2006).

Consequently, *we recommend* that instructions to authors specify that BCI evaluations describe (1) the intervention development, (2) the change techniques used in the intervention, and (3) the causal processes targeted by these change techniques; all in as

much detail as is possible, unless these details are already readily available (e.g., in a prior publication).

3. Access to Intervention Manuals/ Protocols
As CONSORT specifies, reviewers, researchers and practitioners also need to know what exactly was done in each intervention, that is, what materials were used in what sequence etc. For most BCIs, this material is usually too detailed to be included in a published intervention report. Unfortunately, however, protocols or manuals describing interventions are often not available from authors after BCI evaluations are published. Indeed, a few years after publication, it may be impossible to discover exactly what was tested in a BCI evaluation.
Consequently, *we recommend* that, at the time of publishing a BCI evaluation report, editors ask authors submit protocols or manuals describing BCI evaluations or, alternatively, specify where manuals can be easily and reliably accessed by readers. Such supplementary materials can be made accessible online.

Note that recommendation 3 has already been adopted as policy by some journals (e.g., West, 2008). Note too that in special cases limited access to online manuals can be provided (e.g., to comply with copyright demands) and that authors should be allowed to submit manuals and supplementary intervention materials in their own language (so that translations costs do not prohibit publication). In future we hope that that manuals and protocols would be available prior to evaluation studies being undertaken and also made available to reviewers of BCI evaluation reports so that they can better evaluate the aims, method, operationalisation and fidelity of intervention delivery. Finally, supplementary materials could also include video recordings of intervention techniques (e.g., classes and demonstrations). A precedent has already been set for such reporting by e.g., the *Journal of Visualized Experiments*.

4. Detailed Description of Active Control Conditions
Observed BCI efficacy/effectiveness is relative either to a baseline measure of behaviour, an active control group, or both. In trials that include control groups efficacy/effectiveness depends in part on the impact of the techniques employed in the control condition. For example, an intervention that is effective when compared to poor routine care may not improve on state-of-the-art routine care. If reviewers and researchers do not know the content of active control conditions and what effect these conditions are likely to have, they may misinterpret intervention quality and efficacy/ effectiveness data. Boutron et al. (2008) note, for example, that, “if the control treatment is usual care, authors should report all the components received by the control group” but that this is rarely achieved in practice p.288).
Consequently, *we recommend* that instructions to authors specify that BCI evaluations describe the content of active control groups in as much detail as is possible (e.g., the techniques used) in a similar manner to the description of the content of the intervention Itself. Consistent with point 2 (above), as standardised terminology is developed for this purpose, better descriptions of active control groups will evolve over time but much could be done to improve current practice.

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