Reviewer's report

Title: A randomised controlled trial testing the effects of cognitive behavioural therapy for insomnia on the mental health of university students

Version: 2 Date: 25 April 2015

Reviewer: Nicole Cockayne

Reviewer's report:

This is a very clearly written manuscript describing the protocol for a RCT, which has the potential to contribute significantly to the field of psychiatric research. The theoretical rationale for undertaking the trial is sound, and the methodology is in keeping with the SPIRIT checklist. Specific comments and recommended revisions are provided below.

Major Compulsory Revisions

- One use of a trial protocol is to enable replication of the study. While the content addressed within the intervention is well described, a more detailed description pertaining to the delivery of the intervention is required under the heading ‘Planned Intervention’ (page 7). Presently it is unclear how many sessions will be delivered over the 12-week treatment period. The frequency with which sessions must be ‘attended’ is also unclear (daily, weekly, or other) as is the average time participants will spend on each session. Rather than providing this level of detail as a text description, the authors may consider providing this through an additional figure depicting processes within the intervention. Inclusion of this detail will enable replication of the study.

Minor Essential Revisions

- On page 5, under the description of ‘Participants’, expand the inclusion criteria to indicate the cut-point at which a participant would screen positive for insomnia on the Sleep Condition Indicator.

- The fourth secondary hypotheses reports the intervention will lead to occurrence of fewer mental health disorders, as measured by screening tools for pre-specified disorders and treatment by mental health services. However, where the outcome measures are described on page 8, it is not clear which tools will be used as screening tools for psychosis, bipolar affective disorder, depression and anxiety (will the same symptomatic scales be used), or how any treatments used during the study will be systematically measured (e.g. through a validated questionnaire or some other means). I recommend this be clarified.

- Add ‘CBT’ to the list acronyms.

Discretionary Revisions

- The authors note a smaller trial their team is completing within a (clinical) population with delusions and hallucinations. However it is unclear from the
manuscript whether the trial has been designed in light of an assessment of previous research. As such, consider justifying the conduct of this trial in the context of the existing literature, preferably informed by systematic review.

- It is reported the intervention is digital, and delivered “entirely online using computer or smartphone” (see page 4). To further enhance replication of the study, report whether the intervention is web-based (delivered via a website which is also optimised for viewing through browsers on smart phones) or whether it is both web-based and provided as an Application within a smart phone.

- Under the assessment of safety (page 8) consider adding the method by which the research team would collect this information (presumably spontaneous contact by a participant given the online nature of trial).

- Are there any adverse events, or other factors, that might warrant discontinuation or the forced withdrawal or participants?

- While recognising the trial will be conducted in a mentally healthy population, given the prevalence of common mental health conditions and the size of the intended sample, if self-report measures at any point of follow-up indicate serious psychological distress, or worsening symptoms, describe the processes in place (if any) to recommend referral to face-to-face clinical services or other appropriate treatment options.

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I have no competing interests to declare.