Methodology

- **Inclusion criteria:** was randomised controlled trial (RCT); intervention was self-guided (no contact with health professionals) and designed to change psychological well-being or mental health symptomology through relevant outcome measures.

- **Intervention:** was delivered and accessed via internet or computer; interventions had minimal human contact; trialled on higher education students only.

- **Exclusion criteria:** did not measure targeted mental health symptomology; not trialled on higher education students; not RCT; used historical controls; both experimental and comparison groups received same intervention.

- **Search:** of several databases and hand-searches conducted March-April 2012 and repeated June 2013.

- **Data extracted using template based on Cochrane Review guidelines1 and CONSORT eHEALTH checklist2.** Trial quality assessed using Cochrane Collaboration’s risk of bias tool3.

- **Analysis:** were used to extract and analyse outcome data where possible for meta-analysis.

Discussion and Implications

- **Website-based and computer-delivered interventions were found to help improve depression, anxiety and stress outcomes in university students when compared to no intervention.**

- **No intervention or comparison intervention or active control were significantly favoured in meta-analysis, which may suggest some equivalency in their effect upon improving outcomes.**

- **Ten studies reported skewed post-intervention data on one outcome and not all data could be extracted from them, which may affect the calculation of effect sizes.**

- **Small number of outcome measures made comparisons less complicated - but combined with skewed data and differences in baseline symptomology, it may have resulted in heterogeneity in analyses.**

- **Provision of human support (e.g. giving reminders) is important – but participants may benefit from human contact, otherwise they may not have any support to complete it.**

- **Some interventions trialled in this review may not be designed specifically for university students4.**

- **Overall we judged a ‘moderate’ risk of bias - mostly due to insufficient reporting of trial methodology and how outcome data were analysed.**

- **Several British HEIs have incorporated website-based interventions into their welfare services5 - best improvements in mental health outcomes may be achieved through combining self-help with face-to-face support6.**

- **Online interventions could be used as a support tool by students whilst waiting to see a relevant professional.**

- **Student evaluation beneficial to exploring their perceptions of interventions:**
  - Usability testing and evaluation of interventions could explore whether they are appropriate for students, the relevance of content etc.
  - Changes could be made to help improve effectiveness of interventions, or to target specific student subgroups (e.g. international students, students in different disciplines of study). A mobile/tablet apps are also an intervention strategy potentially preferable for this population – further research in this area is encouraged.

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