Influences on uptake and engagement with health and wellbeing smartphone apps: a mixed-methods systematic review.

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1. BACKGROUND

- Digital behaviour change interventions, such as smartphone apps, could provide an effective and cost-effective way to improve and maintain good physical and mental health.
- However, uptake and engagement with these are currently low, and individuals tend to select apps according to their popularity, rather than quality or clinical effectiveness.
- Understanding influences on uptake and engagement can inform interventions to increase use.

2. AIM

- To synthesise what is known about influences on uptake and engagement with health and wellbeing smartphone apps amongst adults.

3. METHODS

- Search conducted in November 2018 in: Medline, Embase, CINAHL, PsychINFO, Scopus, Cochrane Library, DBLP and ACM digital Library, with additional manual search
- Terms searched: (mhealth) AND (behavior change) AND (uptake OR engagement)
- Inclusion criteria:
  - ✓ *adult population aged 18 and over*
  - ✓ *the digital intervention was a smartphone health or wellbeing behavior change app*
  - ✓ *outcomes were uptake and/or engagement, or factors associated to these*
- Title and abstract: 10% , full text 20% double screened to reduce selection bias
- Data extraction is performed by the first author and will be checked for accuracy by another author.
- Integrated methodology will be used and the convergent design (Figure 1.). Data will be converted: quantitative → qualitative

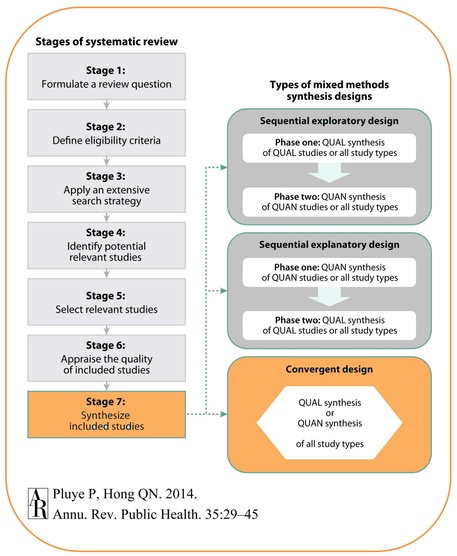

Figure 1. Stages of a systematic review and type of method selected to use in the current study.

4. PRELIMINARY RESULTS

- 38 studies are included in the review. (Figure 2.)
- Thematic synthesis of all studies is currently ongoing
- Data is currently being analyzed using NVivo 12
- Some preliminary findings are presented in Figure 3.
- Findings will be mapped onto the COM-B model (Figure 4.)

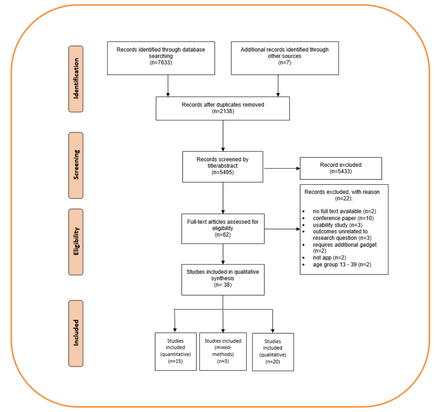

Figure 2. PRISMA flow diagram of the citations reviewed. Moher et al., 2009

Figure 3. The most frequently identified factors in NVivo

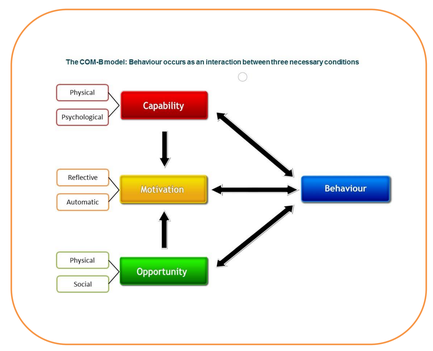

Figure 4. COM-B model. Michie et al. (2011).

5. FUTURE IMPLICATIONS

- This review is part of a funded PhD project and the findings will inform the development of web-based interventions that aims to promote uptake and engagement with health and wellbeing smartphone apps.
- The results will also inform stakeholders in public health and policymakers, digital behaviour change intervention developers and providers on the optimisation of health and wellbeing app uptake and engagement.
- Furthermore, this study aligns with the NHS long term plan, 'Digital First', which has a primary focus on digitally-enabled care.

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