

Evidencing the behaviour change model underpinning a personalised and tailored app for low back pain

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BACKGROUND

Digital interventions are a potentially effective way of delivering information and support. It is vital to understand how components of an intervention work.

AIM

To illustrate how content and functionality of the getUBetter app for low back pain is aligned with behavioural theory and behaviour change techniques.

METHODS

Content was mapped against the Behaviour Change Wheel (BCW) and Capability Opportunity Motivation – Behaviour (COM-B) model (1). The Persuasive Systems Design Framework (2) was used to describe the functionality and delivery of content.

RESULTS

22 behaviour change techniques (BCTs) from the BCTTV1 taxonomy (3) were present in the app. Figure 1 provides an example of the link between the problem, theoretical constructs, and practical content.

Figure 1

Step 1 - PROBLEM

Lack of Knowledge and Understanding, of both condition and recovery journey

OBJECTIVES:
1a) Educate about symptoms and recovery journey
1b) Skill training in healthy lifestyle behaviours

Step 2 - THEORY

COM-B

CAPABILITY

KNOWLEDGE:
An awareness of the existence of something
SKILLS:
An ability or proficiency acquired through practice

BCW

INTERVENTION FUNCTIONS

EDUCATION:
Providing or increasing knowledge or understanding
TRAINING:
Imparting skills

Step 3 - PRACTICE

BEHAVIOUR CHANGE TECHNIQUE

4.1 Instruction how to perform a behaviour
8.1 Behavioural practice/rehearsal
8.3 Habit formation
8.7 Graded tasks

Persuasive System Design (Guiding principles)

- Reduction (simple tasks)
- Tunnelling
- Simulation
- Tailoring / personalisation



CONCLUSION

This process enabled the proposed mechanisms of action and theoretical foundations of a digital health behaviour change intervention to be described. The findings provide guidance for the ongoing evaluation of effectiveness of the intervention, and highlight areas which might be strengthened in future iterations.

REFERENCES

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