



Designing a complex online healthcare intervention: a systematic review of online behavioural change interventions during pregnancy, to determine the implementation context

Presented by Dr J Stockdale

**(in collaboration with colleagues Professor Marlene Sinclair,
Dr Mary Brown & Ms Mary Rose Holman
(PHA Conference, NI 2015))**

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The OptiBIRTH Study

Aim:

To test a complex intervention that would > VBAC rates through > women-centred, professionally-engaged shared-decision making & conduct a cluster randomised trial in Ireland, Germany and Italy, to test the intervention



WP3:
Motivational
Design



Two motivationally-designed portals
(women & staff)

Three motivationally-designed apps
to >engagement of women & staff in
the SDM process



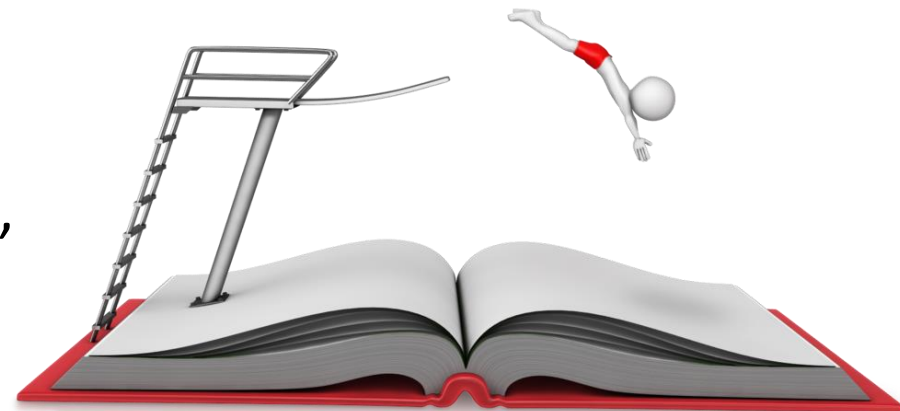
Shared Decision Making:



- “the provision of evidence-based information about **options, outcomes and uncertainties**, together with decision support counselling and a system for recording and implementing patients’ informed preferences (Coulter & Collins 2011)

ARCS Motivational Design:

Theoretical design model that focuses on optimising the learners’ educational experience (whatever the content of the learning goal[s]), so that the majority are motivated to learn.....



Motivational Design Process....



Motivational Microscope (UX Research)

- Options provided
- How are the options presented to users
- What known 'groups of users' exist in the population & what options are they most motivated to choose
- UX –what is their experience of their chosen option



Motivational Design in response to UX

- Based on the insights gained from the known groups
- Users like – you keep
- Users dislike – you re-design
- Users miss – you provide

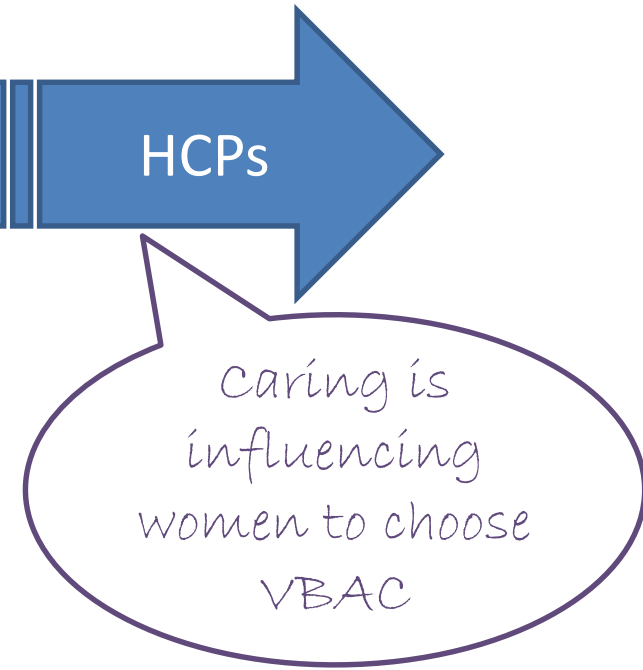


Users Test Drive (motivational microscope)

- Under the motivational microscope

**This slide reflects the answer to question posed at the conference*

The Concept - >Public Health via Person-Centred SDM



Woman-centeredness in both SDM and BC!



‘negative health behaviours, could have positive psychological, social and physical benefits to a person, from both a social and cultural perspective’...

National Institute of Clinical Excellence Guidelines Behaviour change: the principles for effective interventions (PH6). 2007



Connecting with the goal to have their optimal birth (SDM)



SR to confirm the context of WCN in SDM

Connecting with the goal to increase VBAC rate (BC)

Demonstrate the distinction between women-centeredness in a SDM online context & women-centeredness in a BC online context.....

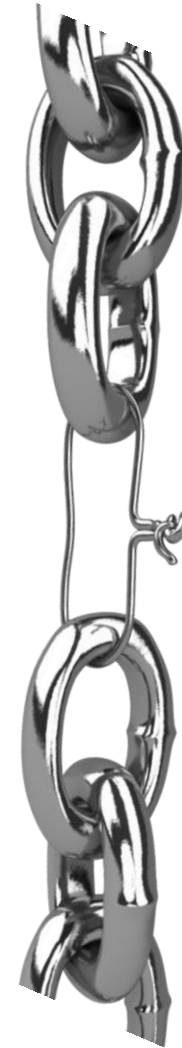
- F2F context (SDM Aids)
- No taxonomies - theoretically map the context of SDM from a person-centred perspective back to the online design

- BC Taxonomies (Michie et al,2012)



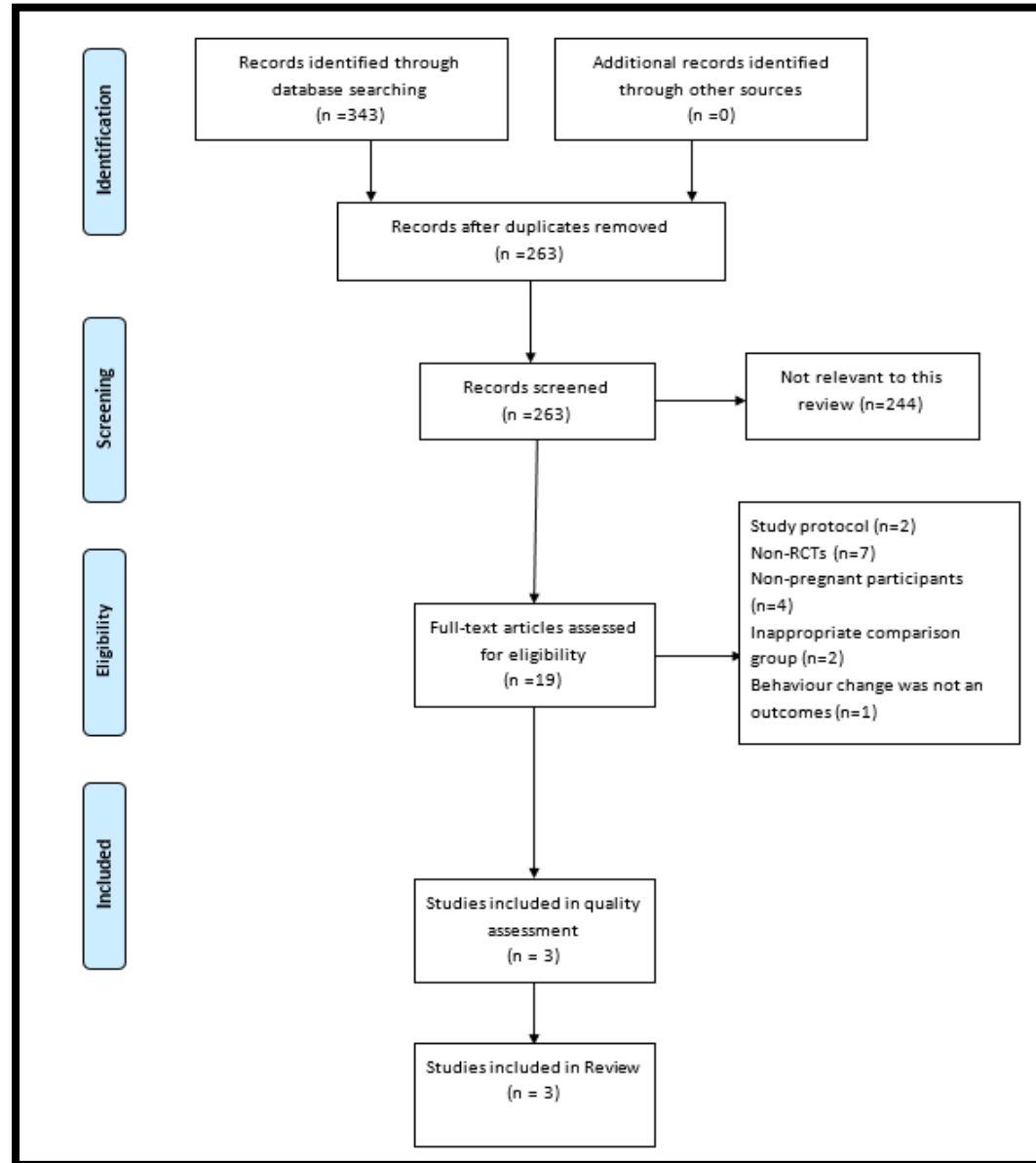
Aim:

To systematically review computer-based, behaviour change interventions during pregnancy and their design components in order to determine the context in which behavioural change during pregnancy should be applied



Results:

- 3 studies met the criteria
- 2 studies reported significant BC
- Design Components:
 - Problem solving
 - Incompatible beliefs
 - Computer-based counselling
 - Motivational Interviewing



Results (Context):

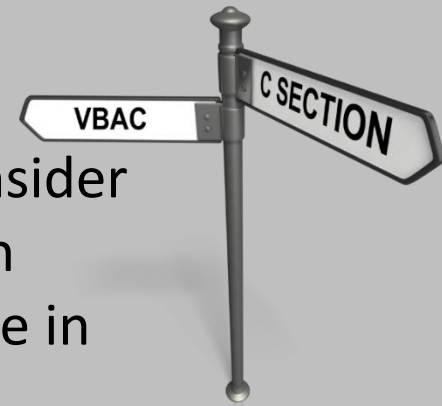


Behavioural Change Design:

1. Evidence related to + outcomes that supports influencing almost all users to take that option
2. Users know the goal is uni-directional & it's purpose
3. Goal of the online designer: support user motivation to adopt & sustain their uni-directional goal

SDM Design:

1. Evidence uncertainty of + outcomes for everybody
2. The person knows there are different options to consider
3. Goal of the online designer: support user motivation in *learning* about the options, so they can participate in the shared decision making process



Back to OptiBIRTH:

SDM may achieve both goals (>VBAC rate & woman-centeredness)



Goal of SDM Online Designer: educator - not a convincer



SDM is about women making choices WITH their HCPs



Theoretical design is key for walking the fine line between SDM and BC

ARCS Motivation to Learn Model is theoretically appropriate for designing SDM technologies



Optimise UX: motivational design process provides insights that leads to the design of a suite of choices, services and/or products, that are motivationally relevant, easy to use and satisfying for the different groups of users

Unlike Motivational Interviewing, motivational design is not a form of psychotherapy and therefore, the motivational designer does not aim to influence what choice a person makes



Our team for this systematic review:

Professor Marlene Sinclair – Professor of Midwifery Research at Ulster University (WP3 OptiBIRTH Project Lead)

Dr Janine Stockdale – lead motivational designer on the OptiBIRTH project (2013-2015)

Dr Mary Jane Brown – motivational designer (joined the systematic review team)

Ms Mary-Rose Holman – Librarian Assistant at Ulster University (joined the systematic review team)

If you would like to know more:

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IN REVIEW: Sinclair M, Stockdale J, Brown MJ, Holman MR. (2015) A systematic review of computer and online-based behavioural change interventions applied during pregnancy: to determine the design difference between behavioural change and decision making approaches (JAN)

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<http://www.optibirth.eu/optibirth/>