

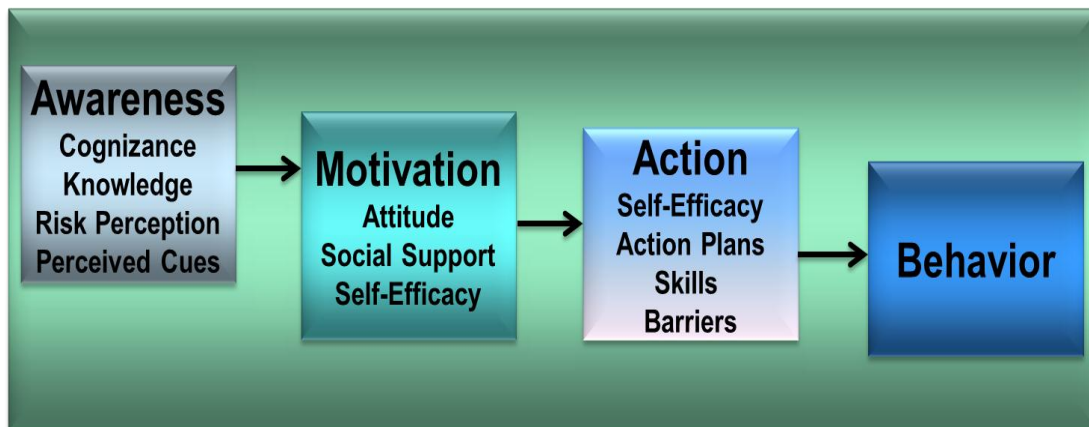
Support material for TWIST Session 18:

Tailored Digital Health Interventions and Addictions

Hein de Vries & Kei Long Cheung

Background information on key concepts

I-Change Model (simplified model)



Several constructs explained:

Awareness

- Behavioral cognizance: the degree to which people know (the level of) their own health behaviour.
- Knowledge: the knowledge that people have about the factual effects of a behavior or ingredient of the behavior (e.g. nicotine in cigarettes)
- Risk perceptions: the beliefs about potential harm.
- Cues: the cues from others (including mass media messages) and internal cues (e.g. pain) that prompt a person to become aware of a potential health problem

Motivation

- Attitude: a person's beliefs about the positive (pros) or negative (cons) outcomes of a particular health behaviour.
- Social influence beliefs: the perceptions of the behaviours as performed (social modelling), supported by others (social support) or expected to do (social norms)
- Self-efficacy: the perceived difficulty to perform the health behaviour in a variety of situations.

Action

- Action planning: setting a behavioural goal combined with actions that are needed to reach and maintain the goal
- Preparatory planning: making plans to prepare your new behaviour
- Coping planning: making plans to cope with difficult situations

Usability Evaluation

User-based methods:

Based on capturing and analysing usage data from real end-users

Expert-based methods:

Performed by expert evaluators or designers based on a set of guidelines

Nielsen's 10 usability heuristics

1. Visibility of system status
Are there any incidents where the program is unresponsive or slow?
2. Match between system and the real world
Are there any strange words/sentences used in the program?
3. User control and freedom
Are there any instances where important changes cannot be easily undone?
4. Consistency
Are there any inconsistencies concerning language use or functionality?
5. Error prevention
Are there any instances where you made or could make mistakes?
6. Recognition not recall
Are there any pages where the content or structure is unclear or insufficiently explained?
7. Flexibility and efficiency
Are there any frequently used functionalities that are not accessible fast enough?
8. Aesthetic and minimalist design
Are there any instances in which the program offers too much information?
9. Help users diagnose and recover from errors
Are there any error alerts which were not clear or which did not identify the problem correctly or did not provide a solution?
10. Help and documentation
Is there enough help or documentation available?