Bradford Council Cycling Development Programme

### **City of Bradford MDC**

#### www.bradford.gov.uk



## Key Partners

- Bradford Council
- British Cycling
- Faith Groups
- Schools
- Voluntary Sector
- Business Community
- University of Bradford
- Bradford Disability Sports and Leisure



## The Journey so far

- Started 2007 with a purchase of 6 bicycles
- 2016 we have secured over 150 bicycles for all abilities
- In 2009 there was no qualified Sky Ride Leaders within the council.
- By 2016 we have over 40 qualified leaders that represent the diverse communities of Bradford.



## The Journey Continued..

- There is currently over 1000 participants engaging in BDMC partnership cycling programmes.
- Over the last year we have had over 400 women engaging in cycling activities. programme
- 300 Young People with disabilities participating in various inclusive cycling programmes.





## Get involved....







<u>Sky ride</u>

## **Themed Rides**

- In 2016 their was over 20 themed rides that included engagement from across all sections of the community including;
- BME groups
- Eid and faith rides
- Inclusive cycling activities
- Women and Girls groups
- Family rides
- Community Cycling events



## Women and girls ride



<u>www.youtube.com/watch?v=0fwi36PrXNk</u>

## **Fundraising through Cycling**

- Marie Curie Hospice (Bradford to Scarborough 2016)
- 2015 Marie Curie Hospice (Tour De Mosques across Bradford District)
- 2014 (Local Charities) Bradford to Liverpool
- Lord Mayors Appeal (Bradford to Wembley 2013)
- Local charities in Bradford (Hamm Germany 2012)
- Save the Children / Cancer Research (Bradford to Edinburgh 2008)





## **Highlights**

- Sir Chris Hoy Opening the Cycling Hub
- Recognition by British Cycling as a leading cycling authority
- Tour de Yorkshire coming to Bradford 2017
- The Grand depart 2014
- Having resources to enable all participants to enjoy a bike ride regardless of ability









## Active Women Programme Southend-on-Sea

Sharon Wheeler - Cultural Strategy & Leisure Development Manager & Kirsty Horseman - Project Manager – Sport & Leisure Southend-on-Sea Borough Council



## Southend-on-Sea

- Southend is a vibrant and busy borough
- Population of 178,702
- Densely populated with 42.1 people per hectare
- Good transport links
- Unitary authority
- Strong partnerships embedded in service delivery
- Proven track record delivering women and girls projects
- Many accolades, including BBC East Power of Sport Award 2009 for our Running Sisters project





## How it Started?

Southend shortlisted by Sport England in 2013, for the delivery of the pilot project for women and girls.

The expression of interest had the following aims:

- To increase female sports participation.
- Reduce the barriers to female participation in sport.
- To enable females in Southend to play a more prominent role in the delivery of sport and physical activity.
- To improve the overall health of females locally.
- To further enhance and strengthen links between children's services, adult services, public health and our community activity network.
- To be inclusive to all females aged 14+ living, working or learning in the borough of Southend-on-Sea.
- Do something a bit different!





## An Active Female Population?

- 70,300 females aged 14+
- 19.9% of female adults regularly participated in sport / active recreation
- 55.1% of female adults are inactive
- 31,539 female adults wanted to do more sport / physical activity
- Female inactivity has remained fairly static from 2005 until 2012





## Active Women Programme

- Community Sports Activation Fund (CSAF)
- Three year project 2014 until 2017
- Delivered within the six most deprived wards within the borough
- For women to get more active
- Aged 22+
- Female instructors
- Free of charge
- Use of champions
- Training and volunteering



## Marketing

- Website active-women.co.uk
- Social media
- Attendance at community
- Bus stop campaigns
- Rotation of artwork on posters and flyers





## Year 1 – 2014 to 2015

- Choice of venues, each day of the week
- Zumba, aerobics, boxercise, pilates, yoga, swimming and much more
- 3,000 different participants
- 10,580 throughput
- A few women trained and volunteering





## Year 2 – 2015 to 2016

- Active Women recognised as a strong brand
- Wider range of exercise sessions, including dance
- 4,500 different participants
- 10,283 throughput
- A lot more women trained and volunteering





## Year 3 – 2016 to 2017

- Consultation with users and non-users for their feedback
- A bank of volunteers established
- 4,700 different participants
- 11,000 throughput





## **Case Studies**

- Catherine
- Shirley
- Jodie





## The Future

- Community Sports Activation Fund (CSAF) June 2017 to May 2018
- 14+ women and girls little teenage provision and mums / daughters can exercise together
- £2 per session income generation
- Using volunteers already in place
- Further training and mentoring for the existing volunteers
- Sustainable



https://www.youtube.com/watch?v= NbsHYbal6IQ&feature=youtu.be





## **Contact Details and Questions**

- http://www.active-women.co.uk/
- Sharon Wheeler Cultural Strategy & Leisure Development Manager <u>sharonwheeler@southend.gov.uk</u>
- **Kirsty Horseman** Project Manager Sport & Leisure- <u>kirstyhorseman@southend.gov.uk</u>







academic excellence for business and the professions

### **Association for Public Service Excellence**

# Behaviour change: principles of intervention development

Tuesday 9<sup>th</sup> May 2017 (10.00-13.30)

### **Dr Martin Cartwright**

School of Health Sciences <u>martin.cartwright.1@city.ac.uk</u>



### Three key questions

- Why take a theory-driven approach to programme design?
  - Problems when programmes are not theory-driven
  - Benefits when programmes are theory-driven
- Why use systematic approaches to programme development?
- Where can I find out more?



### Whose behaviour?

### • General population / healthy populations

- **Aim:** promote primary prevention
- Example: Community-based exercise classes vs. home-based exercise to increase physical activity in > 65s

### • Patients

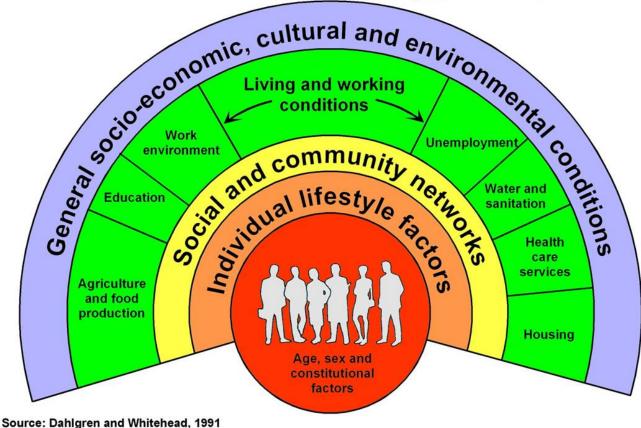
- Aim: promote secondary prevention
- Example: Supported self-management improves quality of life and selfbelief after stroke
- Healthcare professionals
  - Aim: promote evidence-based practice
  - Example: Audit and feedback: effects on professional practice and health care outcomes



### **Understanding health**

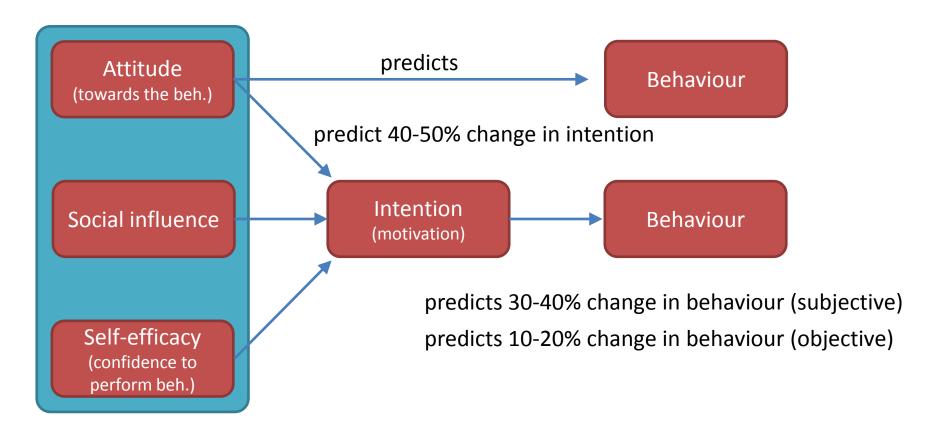
### **Models of health**

#### The Policy Rainbow





### **Models of behaviour**



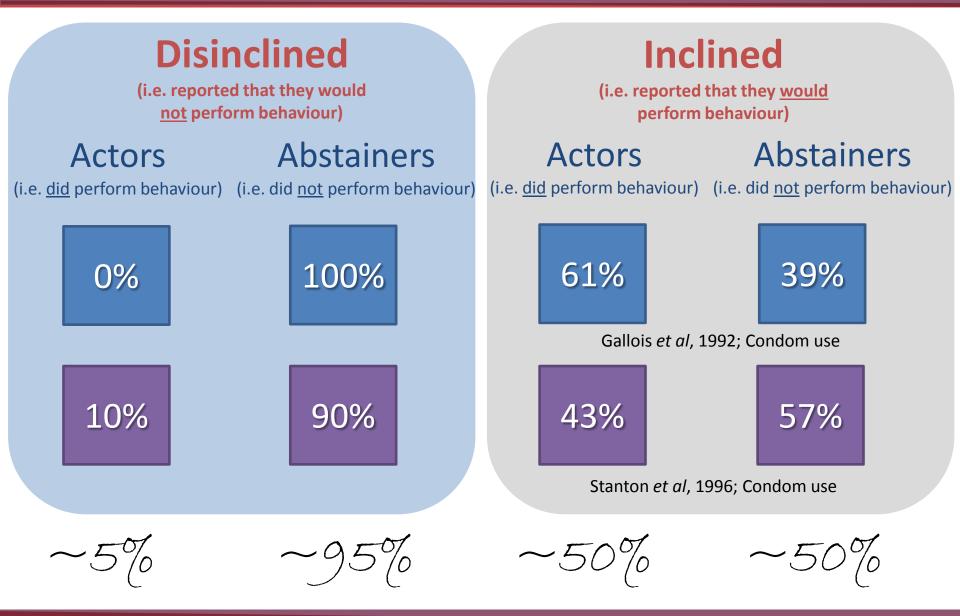


### **Understanding behaviour**

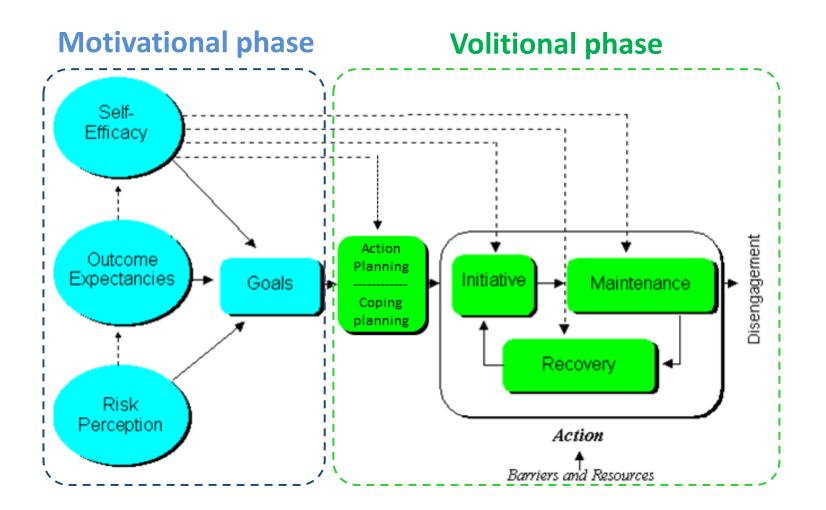




### **Actors & abstainers**







Health Action Process Approach (Schwarzer et al, 1992, 2008)

CITY UNIVERSITY

LONDON



## **Bridging the Gap(s)**

Explicit theory-based approaches Sritique: "Well, I can see that it works in practice, but does it work in theory?" ret Fitzgerald

Expert / Implicit theory approaches Critique: Reliance on the ISLAGIATT principle

## ONDON Warning: implicit models of behaviour!

### What can go wrong in intervention development?

- ISLAGIATT principle
- Lack of theoretical understanding
- Don't know why successful interventions 'worked' or why unsuccessful interventions didn't 'work'

"Seemed Like A Good Idea At The Time

#### CITY UNIVERSITY Warning: implicit models of behaviour!

### Intervention label

LONDON

Distribution of educational materials Educational meetings Local consensus processes Educational outreach visits Local opinion leaders

- Patient mediated interventions
- Audit and feedback
- Reminders
- Marketing
- Mass media

### Implicit process

- Correction of knowledge deficits  $\geq$
- $\geq$ Correction of knowledge deficits & social persuasion
- Correction of knowledge deficits & social persuasion  $\geq$
- Correction of knowledge deficits & social persuasion  $\geq$
- Correction of knowledge deficits & social persuasion  $\geq$
- $\geq$ Social persuasion
- Correction of knowledge deficits & feedback  $\geq$
- Correction of forgetting  $\geq$
- Barrier identifications & action planning  $\geq$
- $\triangleright$ Correction of knowledge deficits & social persuasion

## LONDON Warning: implicit models of behaviour!



#### 235 RCTs reporting 309 comparisons

- Reminders
- Dissemination of educational materials
- Audit & feedback documents
- Multifaceted interventions

"no basis on which to design a new intervention as very few trials used any theoretical foundation and it was therefore impossible to construct an integrating framework for the design and development of effective interventions."

Grimshaw et al (2000)



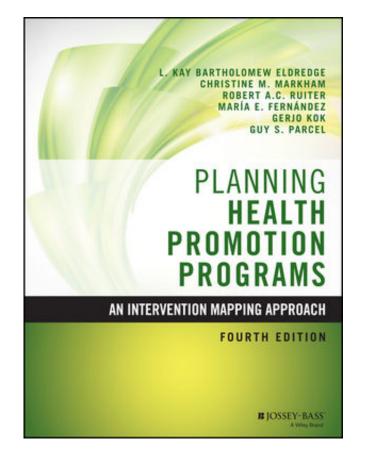
- Injury control framework Geller et al. (1990)
- Intervention framework for retail pharmacies Goel et al. (1996)
- Intervention mapping Bartholomew et al. (1998-2016)
- **STD/ HIV framework** Cohen and Scribner (2000)
- Environmental policy framework Vlek (2000)
- Intervention implementation taxonomy (Walter et al, 2003)
- Population Services International (PSI) framework (2004)
- Legal framework Perdue et al. (2005)
- Epicure taxonomy West (2006)
- **People and places framework** Maibach et al. (2007)

- **Public health: ethical issues** Nuffield Council of Bioethics (2007)
- Implementation taxonomy Leeman et al. (2007)
- Culture capital framework Knott et al. (2008)
- **DEFRA's 4E model** DEFRA (2008)
- Framework on public policy in physical activity Dunton et al. (2010)
- **MINDSPACE** Institute for Government and Cabinet Office (2010)
- Taxonomy of behaviour change techniques Abraham et al. (2010)
- **EPOC taxonomy of interventions** EPOC (2010)
- **Behaviour Change Wheel** Michie et al. (2011/2014)
- **EAST** Behavioural Insights Team (2011)



### Background

- Bartholomew LK, Parcel GS, Kok G. Intervention Mapping: A Process for Developing Theory- and Evidence-Based Health Education Programs. Health Education & Behavior, 1998, 25 (5): 545-563
- Bartholomew LK, Markham CM, Ruiter RAC et al, 2016. Planning health promotion programs: An Intervention Mapping approach, 4th edition. Hoboken, NJ: Wiley.ISBN-13: 978-1119035497
- http://interventionmapping.com
- https://tinyurl.com/z4px9g7



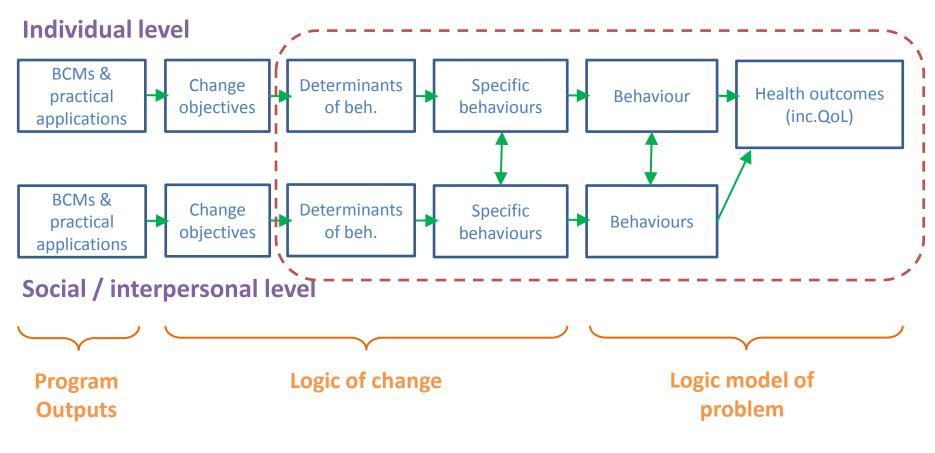


Step 1	Logic model of problem Is there a problem?	<ol> <li>Establish a planning group</li> <li>Conduct needs assessment &amp; create initial LMoP</li> <li>Conduct capacity assessment</li> <li>State program goals</li> </ol>		
Step 2	Logic model of change What causes the problem? What needs to change?	<ol> <li>State outcomes for behaviour and environmental change</li> <li>State performance objectives</li> <li>Select determinants</li> <li>Construct matrices of change objectives</li> <li>Create LMoC</li> </ol>		
Step 3	Program design How is change accomplished? How could the intervention be delivered?	<ol> <li>Generate intervention ideas (i.e. themes, components, scope, sequence)</li> <li>Select theoretically and empirically supported change methods</li> <li>Select or design practical applications</li> </ol>		
Step 4	<b>Program production</b> How should the intervention be delivered?	<ol> <li>Refine structure and organisation</li> <li>Prepare plans for program materials</li> <li>Draft messages materials, and protocols</li> <li>Pre-test, refine and produce material</li> </ol>		



### **Intervention Mapping**

### **Logic Model**



Bartholomew Eldredge et al. (2016)

<ul> <li>Personal determinants</li> <li>Low levels of knowledge (declarative &amp; procedural)</li> <li>Lack of skills for self-management</li> <li>Low self-efficacy</li> <li>Low outcome expectancies for treatments</li> <li>Low outcome expectancies for SM</li> <li>Low outcome expectancies for lifestyle change</li> <li>Unstable attributions</li> </ul>	<b>→</b>	Poor self-management behaviour Monitoring Limited subjective prodromal symptom monitoring Limited monitoring of personal seizure triggers Limited monitoring of behaviours for safety Limited monitoring of SM behaviours Implement Solutions Treatment management • Lack of attendance at HC appointments • Not maintaining chronic anti-epilepsy medication as prescribed • Low planned compliance	Epilepsy Logic Model	
<ul> <li>Lack of acceptance / denial of diagnosis</li> <li>Fear of stigma</li> <li>Perceived barriers</li> </ul>		<ul> <li>Seizure Management</li> <li>Not calling HC profession in acute situation</li> <li>Not communication with family or HCP</li> </ul>	Health outcomes & HRQoL	
<ul> <li>Perceived barriers</li> <li>Perceived norms / peer influence</li> <li>Negative affect (depression, anxiety)</li> <li>Low patient acceptability of treatment</li> <li>Low patient acceptability of care</li> </ul>		<ul> <li>Not communication with family of HCP</li> <li>Not using first aid activities – recognising status epilepticus</li> <li>Lifestyle Management</li> <li>Failure to manage lifestyle (sleep, stress, triggers, hydration, avoid overheating, controlling allergies, avoid hypoglycaemia, avoid flashing lights, disclosure to others, social support network, link to resources)</li> <li>Evaluation</li> </ul>	<ul> <li>Increased seizures (number &amp; duration)</li> <li>Finding &amp; maintaining employment</li> <li>Hospitalisation</li> <li>ER visits</li> <li>Injury</li> <li>Limits on driving</li> <li>Restrictions on sporting and</li> </ul>	
<ul><li>Personal determinants</li><li>HCP's lack of knowledge, skills and time</li></ul>		Limited evaluation of success of actions	recreational activities • Compromised adaptive and	
<ul> <li>re: communication with patient and family, SM training, lifestyle change.</li> <li>acceptance / denial of diagnosis</li> <li>Family's lack of knowledge and skills to provide social support for SM and reinforcement of SM</li> <li>Community's misguided beliefs about epilepsy, lack of knowledge and skills to assist with seizures, and lack of awareness of policies and guidelines (e.g.</li> </ul>	<b>→</b>	Environmental Factors Interpersonal Limited communication with family by HCP Low transfer of knowledge & skills to patient by HCP Organisational Limited time for SM training during clinic visits Limited access to information and training at Community Limited access to medical care	psychosocial functioning • Memory & concentration problems • Death	
employment, driving, sports, housing)		Limited linkage to social networks & withdrawal from society	]	



### Taxonomy of behaviour change methods (BCMs)

#### **Individual** Table 1: **Basic Methods** at the Individual Level

level

Table 2: Methods to Increase Knowledge
Table 3: Methods to Change Awareness and Risk Perception
Table 4: Methods to Change Habitual, Automatic and Impulsive Behaviours
Table 5: Methods to Change Attitudes, Beliefs, and Outcome Expectations
Table 6: Methods to Change Social Influence
Table 7: Methods to Change Skills, Capability, and Self-Efficacy and to Overcome Barriers
Table 8: Methods to Reduce Public Stigma

#### **Environmental** Table 9: **Basic Methods** for Change of Environmental Conditions.

levelTable 10: Methods to Change Social NormsTable 11: Methods to Change Social Support and Social NetworksTable 12: Methods to Change OrganizationsTable 13: Methods to Change CommunitiesTable 14: Methods to Change Policy



### **Intervention Mapping**

#### **Basic methods**

- 1. Participation
- 2. Belief selection
- 3. Persuasive communication
- 4. Active learning
- 5. Tailoring
- 6. Individualisation
- 7. Modelling
- 8. Feedback
- 9. Reinforcement
- 10. Punishment
- 11. Motivational interviewing
- 12. Facilitation
- 13. Nudging

#### Knowledge

- 1. Chunking
- 2. Advance organizers
- 3. Using imagery
- 4. Discussion
- 5. Elaboration
- 6. Providing cues

Awareness & risk perception

- 1. Consciousness raising
- 2. Personalise risk
- 3. Scenario-based risk information
- 4. Framing
- 5. Self-re-evaluation
- 6. Dramatic relief
- 7. Environmental reevaluation
- 8. Fear arousal
- 9. Self-affirmation

#### Habitual, Automatic &

impulsive behaviour

- 1. Deconditioning
- 2. Counterconditioning
- 3. Implementation intentions
- 4. Cue altering
- 5. Stimulus control
- 6. Planning coping responses
- 7. Early commitment
- 8. Public commitment
- 9. Training executive function

Attitude, beliefs & outcome expectancies

- 1. Classical conditioning
- 2. Self-re-evaluation
- 3. Environmental reevaluation
- 4. Shifting perspective
- 5. Arguments
- 6. Direct experience
- 7. Elaboration
- 8. Anticipated regret
- 9. Repeated exposure
- 10. Cultural similarity

#### **Public stigma**

- 1. Stereotype inconsistent information
- 2. Interpersonal contact
- 3. Empathy training
- 4. Co-operative learning
- Conscious regulation of impulsive stereotyping and prejudice
- 6. Reducing inequalities , race, gender & sexuality

#### Skills, capabilities, self-efficacy

- & overcoming barriers
- 1. Guided practice
- 2. Enactive mastery
- 3. Verbal persuasion
- 4. Improving physical & emotional states
- 5. Reattribution training
- 6. Self-monitoring of behaviour
- 7. Provide contingent rewards
- 8. Cue altering
- 9. Public commitment
- 10. Goal setting
- 11. Set graded tasks
- 12. Planning coping responses

#### Social influence

- Information about others' approval
- 2. Resistance to social pressure
- 3. Shifting focus
- 4. Mobilizing social support
- 5. Providing opportunities for social comparison



### Example

Behavioural outcome = Increase physical activity in over-50s

Performance objectives		Determinants	
	Awareness	Attitude	Self-efficacy
1. Older adults monitor their recreational physical activity level	Older adults describe the purpose of monitoring and reporting their own recreational physical activity		Older adults express confidence about being able to monitor and report their own recreational physical activity
2. Older adults indicate reasons to be physically active as recreation	Older adults list the personally relevant benefits of being sufficiently physically active	Older adults express a positive attitude about being sufficiently physically active	
3. Older adults identify solutions to take away the barriers to being physically active for recreation	Older adults describe the situations and barriers that prevent them from being sufficiently physically active		Older adults express confidence about being able to take away and to cope with their barriers



### Example

Personal determinant	Theoretical change method (related theory)	Parameters for use	Practical applications	
Awareness	Consciousness raising (TTM, ICM)	Table: Methods to change aware quickly followed by increase in problem-		
Attitude	Tailored feedback and argumentation (TTM, ICM)	Table: Basic methods for ind the behavior in time, and he specific Table: Methods to change attit	and co	
Self-efficacy	Social modelling (SCT)	outcome expectat skins. reinforcement of model. Table: Basic methods for ind	amcuit situations and now to	es about now to cope.
Action planning	Action planning ( (HAPA; ICM;SRT)	Table: Methods to change skil overcome barrie	· · · · · ·	plan.
Coping planning	Planning coping responses (HAPA, SRT)	Table: Methods to change skil overcome barrie		ılan.



- Implicit theories are not helpful for programme design
  - Range of intervention targets (determinants) and behaviours change mechanisms are limited
  - Reasons for success or failure remain unclear
- Systematic frameworks for programmes development promote lead to better understanding of problem(s) and potential solution(s)
  - better understand of the drivers and barriers of behaviour (Logic model of the problem)
  - Justification of choice of BCMs
- Intervention Mapping (and other approaches) offer a detailed framework for programme development (inc. examples & resources)
  - Collaborations between frontline organisations and behavioural scientists (and other stakeholders) is required