Centre for Trials Research

Canolfan Ymchwil Treialon

Understanding barriers and facilitators to healthy pregnancies among women living in poverty using visual methods and the Behaviour Change Wheel

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Acknowledgements

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Additional support with BCW analysis: Dr Stephanie Smits, Dr Kate Brain

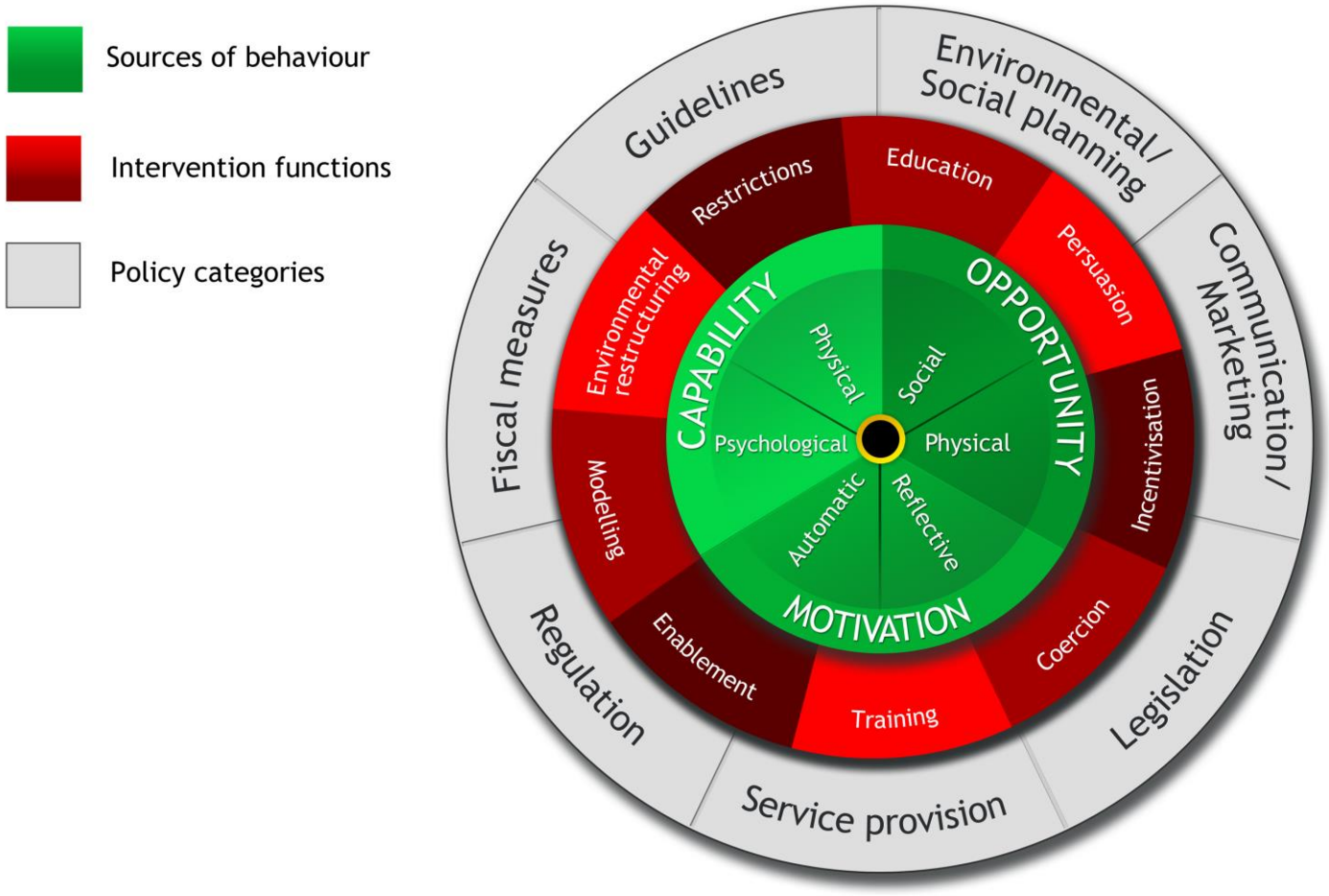
Overview

- Background and methods
- Why do we need an analysis of barrier and facilitators?
- The Behaviour Change Wheel
  - The COM-B model
- Data analysis
- Emerging findings
- Conclusions

Context to my analysis

- Existing interventions often have low uptake and high drop out (eg: NHS stop smoking services for pregnant women)
- Existing interventions may not affect behavior (Building Blocks - Robling et al., 2016. *Lancet*)
- MRC Framework for developing and evaluating complex public health interventions (Craig, 2008, *BMJ*)
  - By understanding the theoretical basis of behaviours, we can design interventions which may change them
- The Behaviour Change Wheel (Michie et al., 2011; 2014) provides one way of understanding the socio-ecological context of health behaviour

The Behaviour Change Wheel



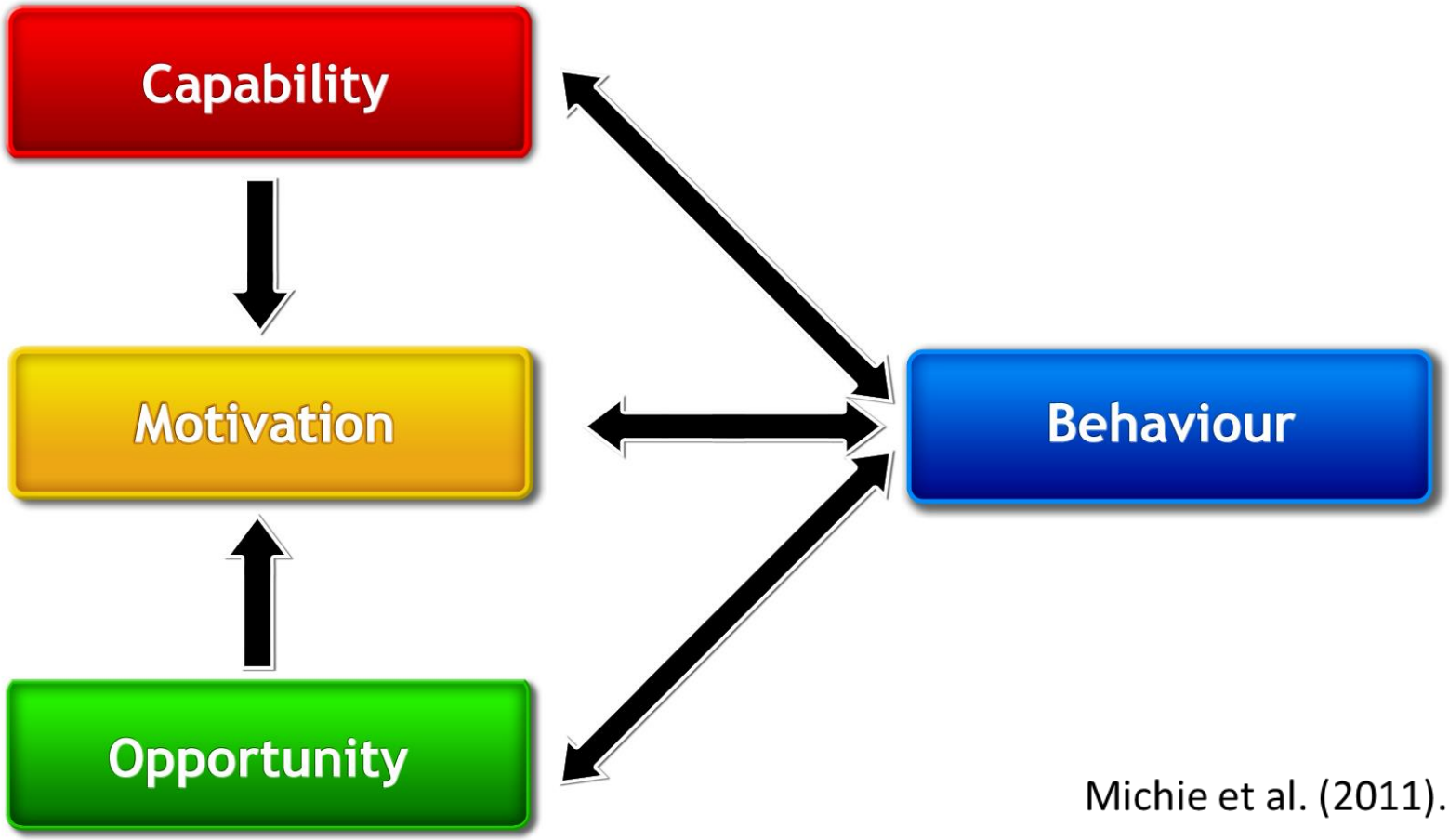
Michie et al. (2011). *Imp Sci*

The COM-B model

COM-B domain	COM-B sub-domain	Example
Capability – an individual's ability to engage in a specified activity	Physical	Skills, strength or stamina
	Psychological	Knowledge or psychological skills
Opportunity - environmental factors which allow or facilitate a behaviour	Social	Interpersonal influences, social cues and cultural norms
	Physical	Environment: time, resources, location
Motivation - beyond conscious decision making to include any way in which behaviour is directed psychologically	Reflective	Consider, evaluate (good/bad) and plan intentions
	Automatic	Driven by emotional reactions, desires, impulse or addiction

Michie et al., (2014) The Behaviour Change Wheel. London: Silverback

The COM-B model



Michie et al. (2011). *Imp Sci*

Data analysis

- Coded in Nvivo 11 (by Melanie)
- Identifying target behaviours (Michie et al., 2014)
  - Smoke free pregnancies
  - Abstinence from alcohol during pregnancy
  - Healthy diet in pregnancy
  - Infant feeding intention
- I mapped these to the BCW
- Today focus on smoking and alcohol
  - Barriers and facilitators

Smoking: Behaviour

- 4 abstinent (Donna, Fiona, Gaby, Imogen)
- 2 participants smoked (Cat and Jess)
- 1 used an e-cigarette (Becky)
- 1 had previously smoked in two previous pregnancies (Anna)
- 1 lived in a smokey home, but did not disclose smoking status (Ellie)
- 1 had quit prior to pregnancy (Hayley)

Smoking COM-B

The smell of smoking "makes me gag" (Donna)

Partners judgemental: "Well that's my baby in there." (Anna, Cat, Jess)

Judgement from friends, family and strangers "it was in my own house, I never walked around out and about with one, it's not the best look." (Anna)

- Stress (Cat and Anna)
- Belief alcohol worse than smoking (Jess)

Belief PH advice was accurate (Becky)

Smoking as a home-based activity (Cat, Anna)

Addiction: "I've got to have one" (Cat)

Strong views from childhood – smoking is bad (Donna, Gaby)

Alcohol: Behaviour

- Research context:
  - 9 of the women already had children
  - guidance to completely abstain from alcohol introduced Jan 2016
- 5 women were abstinent (Donna, Fiona, Gaby, Imogen, Jess)
- 2 regularly drank a few drinks (Anna, Cat)
- 1 drank on her previous pregnancy but was abstinent now (Hayley)
- 1 would consider having a drink on special occasions (Becky)
- 1 not discussed (Ellie)

Alcohol COM-B

Partner encourages alcohol consumption (Anna, Cat, Donna, Hayley)

Tiredness and sickness reduced appeal (Cat, Hayley)

Feel excluded from social life because can't drink (Anna, Becky, Donna, Hayley, Jess)

Belief that 1 or 2 drinks would be safe (Cat)
"Alcoholics manage to have babies" (Anna)
"rules change all of the time" (Hayley)

Rarely drank or engaged in NTE anyway (Donna, Gaby, Imogen)

"I'm dying to have a glass of wine" (Fiona)

"It's not the same" (Cat)

Concern about baby: "you feel like whoa and I don't want to put a poor innocent baby through that really." (Fiona)

Conclusions

- More women abstained from alcohol than remained smokefree in their pregnancies
- The drivers of smoking and alcohol were different, notably highlighting addiction (automatic motivation)
- The social environment influenced both smoking and alcohol consumption
  - Women's behavior in relation to alcohol and smoking was judged – both at home and in public
- It was not always easy to understand what was a barrier and what was a facilitator: this appeared related to how it was perceived by the individual – shame and guilt may affect behavior

- We have applied for funding to follow up the ladies following birth – outcome March 2017

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Thank you

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- Any Questions?

wellcome

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Coleg y Gwyddorau Biofeddygol a Bywyd

Ymchwil Iechyd a Gofal Cymru
Health and Care Research Wales

Ariennir gan Lywodraeth Cymru
Funded by Welsh Government

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Athena SWAN Bronze Award