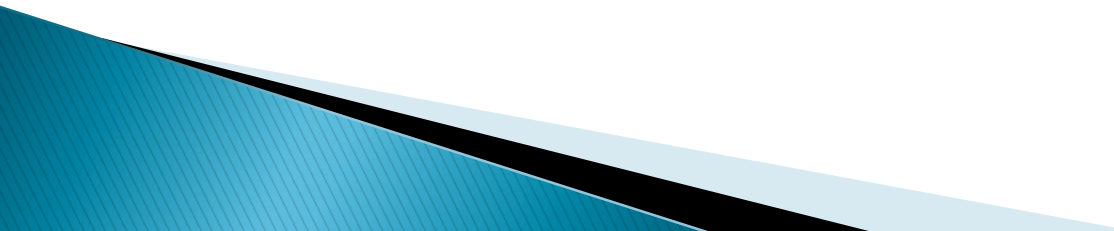# Encouraging Behavior Change using the MaintainIT Theoretical Perspective

Angela D. Bryan, PhD
University of Colorado Boulder

# Goals of research in social/health psychology

- Understand the determinants of health behavior

- Understand how individuals go about changing their behavior

- Develop intervention programs to help individuals successfully change their behavior

Why use a theory?

- Information-only approaches

92%

- Sometimes useful for simple behaviors
  ◦ Seatbelt use

- Almost never effective for complex behavior change
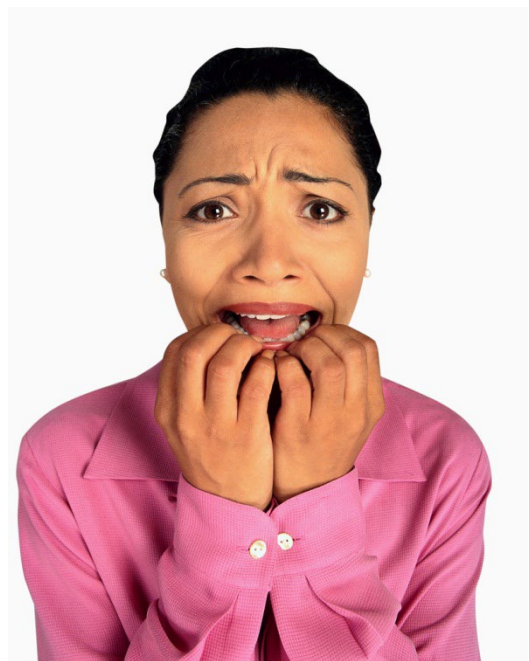 ◦ Diet
  ◦ Exercise
  ◦ Sleep
  ◦ Medication Adherence

25%
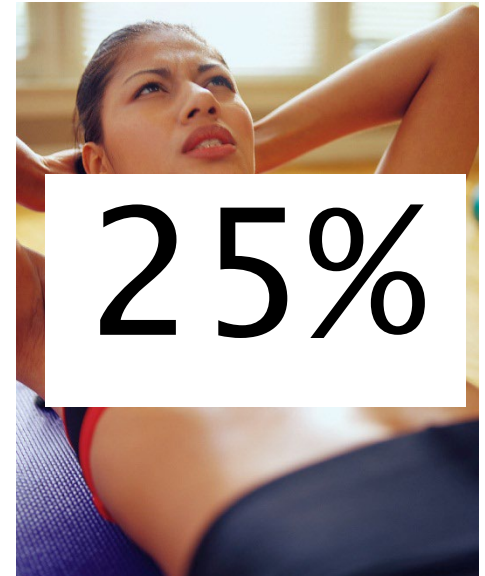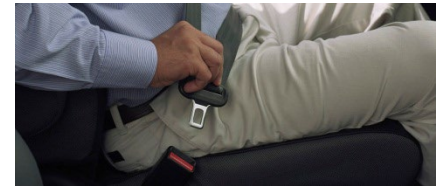
Why use a theory?

- Conventional wisdom/intuition approaches

- What individuals who need to change their behavior think will work

- Fear appeals do not change behavior

Why use a theory?

- For complex behaviors, theory-based interventions are more successful than those that are not theory-based
  - Glanz & Bishop, 2010; Noar, 2008; Prestwich, Webb, & Conner, 2015)

- But which theory to use? And which behavior change techniques to utilize?

The Role of Behavioral Science Theory in Development and Implementation of Public Health Interventions

Karen Glanz[1] and Donald B. Bishop[2]

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Key Words

theoretical frameworks, concepts, health behavior, strategies, ecological perspective

The Maintain IT Model
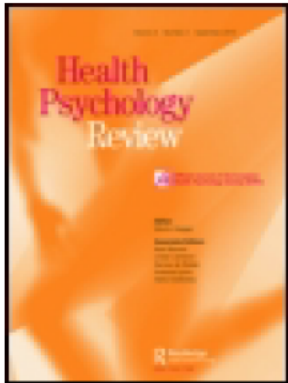
Harnessing centred identity transformation to reduce executive function burden for maintenance of health behaviour change: the Maintain IT model

Ann E. Caldwell, Kevin S. Masters, John C. Peters, Angela D. Bryan, Jim Grigsby, Stephanie A. Hooker, Holly R. Wyatt & James O. Hill

Maintain IT Core Constructs

Executive Function: critical for complex reasoning, planning, focus on long term goals including behavior change

- Downside…. relatively slow, effortful, and prone to errors.
- Behavior that is "automatic" versus cognitively taxing is easier to maintain
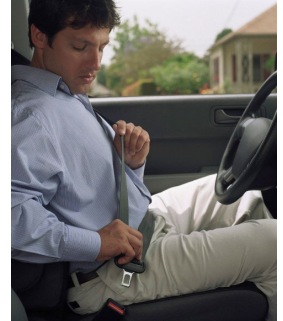
Centered Identity: one that allows for integration of the behavior with already formed components of identity

- Unlikely that complex behaviors will ever be fully automatic
- Allows for resilience in the face of barriers (emotions, stress, and lapses in behavior)

Behavior Change is a Process of Identity Transformation

Integrate behavior with identity
- Explore fundamental aspects of role and group based identity
- Integrate behavior with fundamental identities, values, purpose in life wherever possible
- ACT and disconnected values approaches to connect and align behavior with values
- Strengthen behavior based identity (experience)
- Develop integrated motivation

Improve PWB & perceptual lens
- Incremental implicit theory
- Optimistic attributional style
- Group formation – social support
- Well-being therapies – e.g.,gratitude
- Mindfulness
- Meditation
- Self-compassion exercises

Executive Function

Centred Identity

Executive Function

Centred Identity

Executive Function

Centred Identity

Executive Function

Centred Identity

Behavior specific
- Knowledge
- Tools
- Learning what is needed for health benefits
- Improve self-efficacy, attitudes, intentions
- Set implementation intentions

Improve executive function
- Improving inhibitory control
- Train implicit impulses/automatic associations
- Train approach/avoidance
- Episodic future thinking
- Improve working memory in emotional contexts
- Mindfulness
- Meditation

Initiation

Maintenance

Moving from Initiation to Maintenance

http://www.runnersworld.com/runners-world-cover-search/runners-world-cover-search-finalist-josh-lajaunie
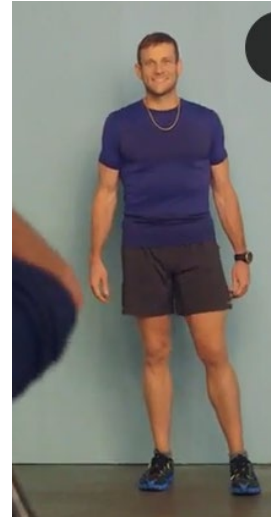
Components of Centered Identity

- **<u>Behavior-based identity</u>**: the extent to which an individual identifies as a person who performs a given behavior
  - Predicts engagement (e.g., Rhodes et al., 2016; van den Putte, Yzer, Willemsen, & de Bruijn, 2009) and protects against lapses (Kendzierski & Sheffield, 2000).
- **<u>Role- and group-based identities</u>**: Identity includes roles that correspond to one's place in the social structure
  - Behaviors that align with or help to maintain alignment with roles/groups are more likely to be maintained

Components of Centered Identity

- **<u>Personal Values</u>**: core beliefs that guide behavior and provide standards against which behavior is assessed.
  - ◦ Those who have awareness of what they value are more likely to make choices that support their health (Segar, Eccles, & Richardson, 2011).
- **<u>Perceptual Lens</u>**: a filter through which new circumstances and information are perceived and interpreted.
  - ◦ Optimistic attributional style and growth mindset predict success at behavior change

Components of Centered Identity

▸ **Psychological well-being**: *eudaimonic* well-being, a multidimensional construct representing positive psychological function or flourishing
  ◦ Related to but NOT hedonic well-being (i.e., happiness).
  ◦ Many health behaviors are not inherently enjoyable (Ryan, Patrick, Deci, & Williams, 2008) and may even be unpleasant, particularly at initiation!!
  ◦ Requires ability to tolerate distress and persevere
  ◦ Involves a sense of purpose in life, positive relationships, personal growth, autonomy, and self-acceptance
  ◦ Eudaimonic well-being is robustly related to biomarkers of health (e.g., lower cortisol and inflammatory markers), self-reports of health, and prevention of and recovery from health problems (Ryff, 2014; Ryff, Radler, & Friedman, 2015; Vázquez, Hervás, Rahona, & Gómez, 2009).

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Techniques for Behavior Change

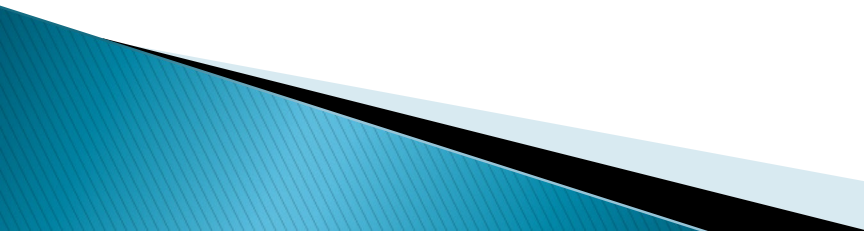Can we skip the "knick-knack paddy whack" crap this time and just get to the good part?

- How do I get people to engage in this process?

- Is it even possible to change all these constructs?
  ◦ Spoiler alert: NO

Executive Function

- Very difficult to change
  - Working memory seems largely trait-based
  - Response inhibition (ability to delay an immediate reward in favor of future larger gain) seems more malleable
    - Most "training" tasks only result in short term changes
    - Mindfulness meditation (Gallant, 2016)

- EF is a necessary but not sufficient condition
  - Important mostly at early initiation

Facilitating Centered Identity Transformation

- Behavior–based identity: transformation of this facet of identity is expected to occur with repeated performance of the behavior

- Role- and group–based identities: find ways to incorporate the behavior to be consistent with role/group–based identities (mom, husband, coach, etc.)

- Personal values: identify important values and link the health behavior to those values

Facilitating Centered Identity Transformation

- Perceptual lens: some trait-like aspects similar to EF
  - Interventions to increase growth mindset have small effect sizes (Calo, Judd, & Peiris, 2024).

- Psychological well-being: can be improved with writing gratitude letters or journals, count-your-blessings exercises, and expanding positive relationships (Chan, 2010; Emmons & McCullough, 2003; Ryff, 2014)

Case Study – Setting the Stage

- A woman in her 40's who needs to increase physical activity

- ALWAYS support autonomy
  - "Is it OK with you if we talk about increasing your physical activity?"
  - "Can I give you some information about the importance of physical activity?"
  - "What kind of physical activity would you prefer to do?"

Case Study – Learning and Connecting Values to Behavior

- What are the patient's role-based identities/values
  - "What is important to you? What things in your life do you value?"

- Make connections to behavior
  - Patient values being a mother and spending her free time with her children; views exercise as being selfish and taking time AWAY from them

- CHANGE THE FRAME
  - Frame exercise as a part of investing in her children, engaging with them and setting a good example
  - Brainstorm incorporating physical activity in ways that reinforce her role as a mother
    - Walking with her family to the park
    - Hiking or walking with her child

Case Study – Identifying and Confronting Barriers

▸ Ask the patient what barriers she sees to being more active
  ◦ Could be family social context, judgment
  ◦ Use implementation intentions (specific plans for when/how to be active); increases the likelihood of following through even in difficult circumstances
  ◦ Recognize social contexts as being situational, transient, and specific, as opposed to internal, stable, and global
    • Life happens, getting active is a process, everyone misses their workout sometimes, this is a journey not a destination

Case Study – Encourage Reflection

- Encourage patient to keep a gratitude journal
    - Brief statement of what they were grateful for today?
    - If they were active today, how did it make them feel?

- Come back to their experience at the next visit
    - Ask what they learned from journaling
    - Cheer successes
    - Process challenges/barriers

Thank you!

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CUChange Website:

Questions? Discussion?