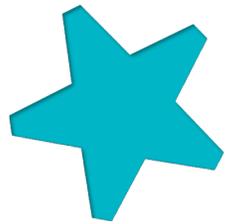




Behavior Change Design for Products People Actually Use

Amy Bucher, Ph.D.
VP Behavior Change Design, Mad*Pow
abucher@madpow.net
[@amybphd](https://twitter.com/amybphd)

mad***pow**



WHAT DOES A BEHAVIOR CHANGE DESIGNER DO?



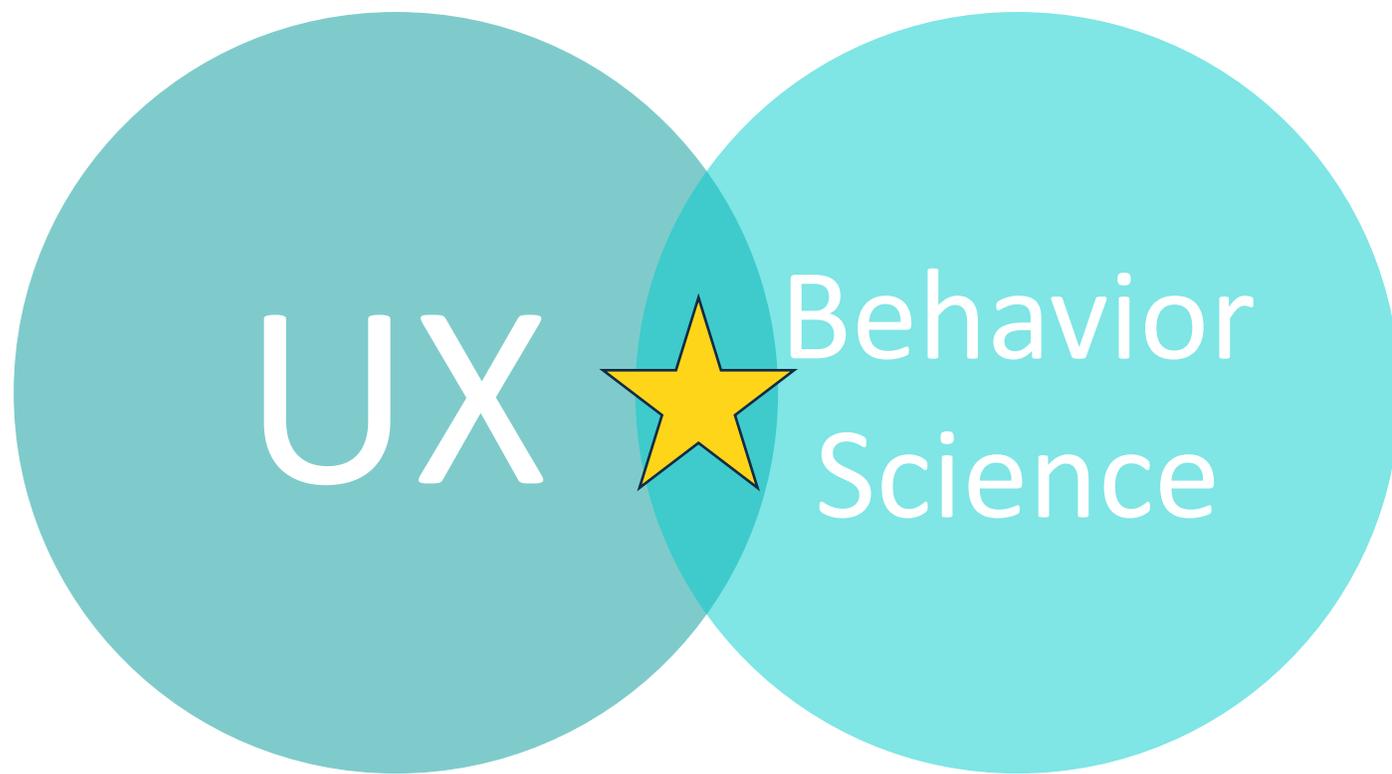
BEHAVIOR CHANGE DESIGNERS ...



Facilitate the ability of people to work toward **goals** by designing **interventions** that address barriers to target behaviors and promote conditions that are favorable to target behaviors

★ BEHAVIOR CHANGE DESIGNERS ...

Live in between





BEHAVIOR CHANGE DESIGNERS CAN TARGET:



Effective Engagement

to ensure just the right dose, exposure, and cadence of interventions to achieve results



Uptake

to overcome barriers to awareness and attention, interest, intentions, and follow-through



Behavior Change

to identify target behaviors for change, and techniques to shift behaviors to desired patterns

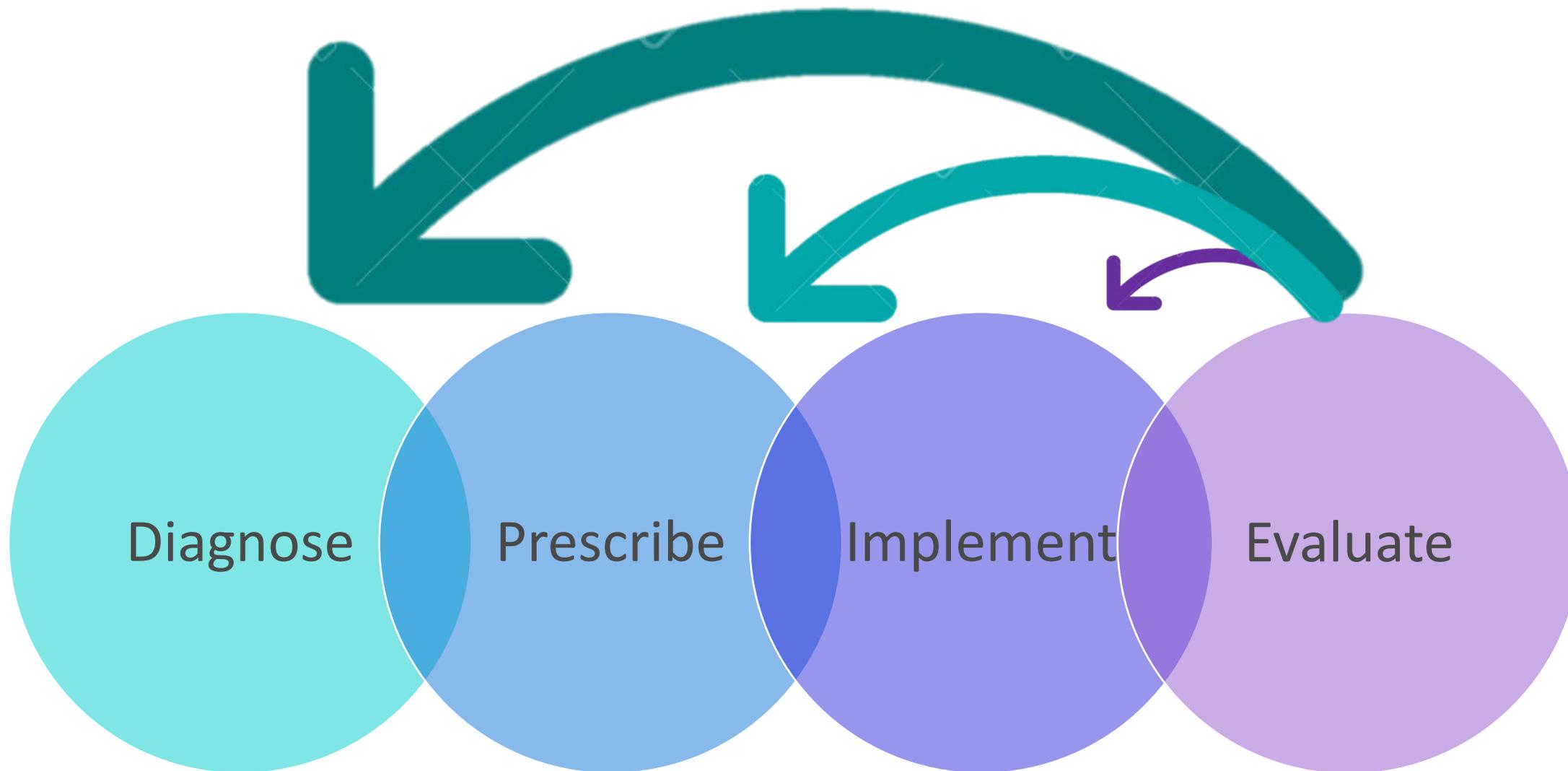


Action

testing ensures efficacy of implementation, reach, adoption, retention, and overall outcomes



THE BEHAVIOR CHANGE DESIGN PROCESS





BEHAVIORS COME FIRST



WHICH ONES ARE BEHAVIORS?

- ★ Walking in the park
- ★ Feeling confident
- ★ Taking a pill
- ★ Losing weight
- ★ Wanting to make a change
- ★ Being happy
- ★ Reading a chapter a night
- ★ Saving \$100 a month
- ★ Preparing for retirement
- ★ Practicing Spanish vocabulary



WHICH ONES ARE BEHAVIORS?

BEHAVIOR ZONE

- ★ Walking in the park
- ★ Taking a pill
- ★ Reading a chapter a night
- ★ Saving \$100 a month
- ★ Practicing Spanish vocabulary

NOPE

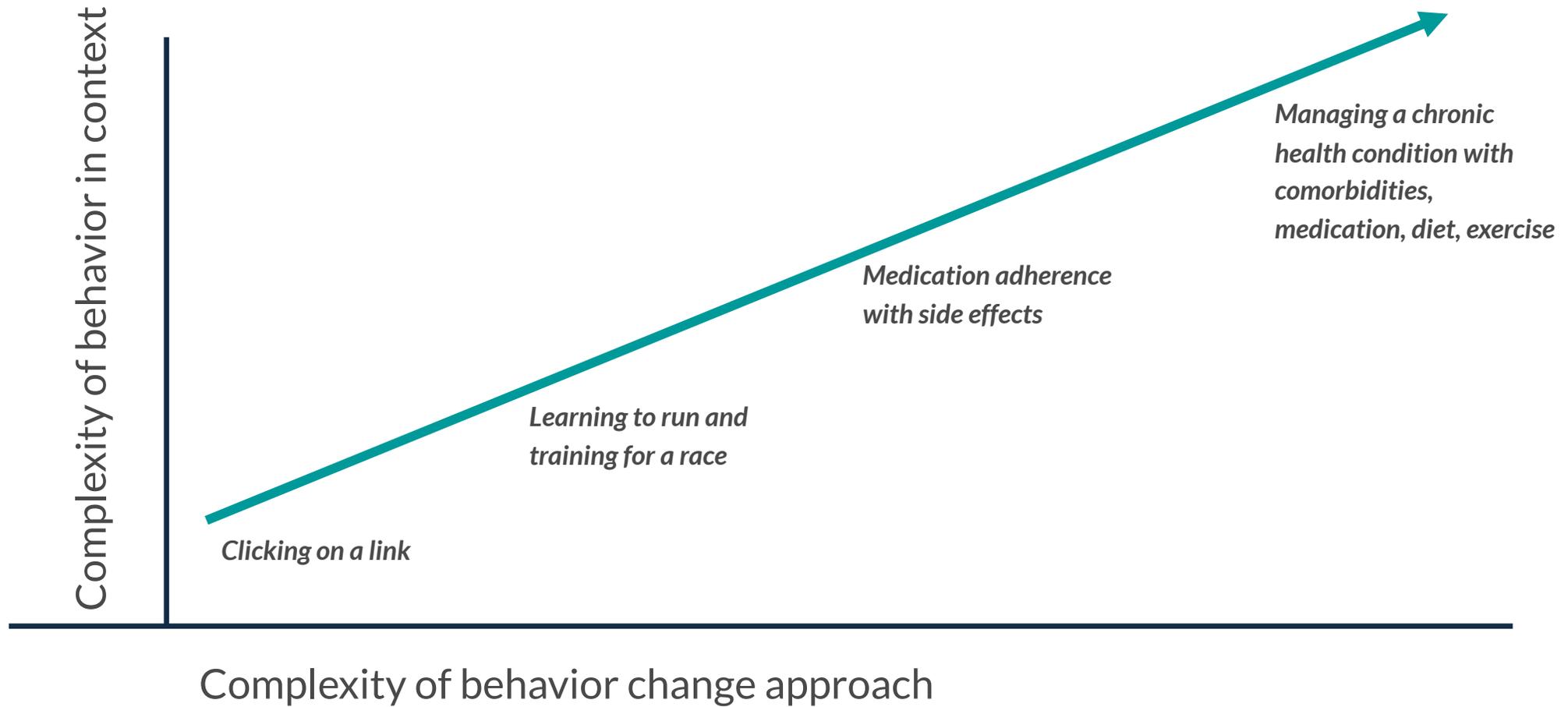
- ★ Feeling confident
- ★ Losing weight
- ★ Wanting to make a change
- ★ Being happy
- ★ **Preparing for retirement**



SELECTING TARGET BEHAVIORS

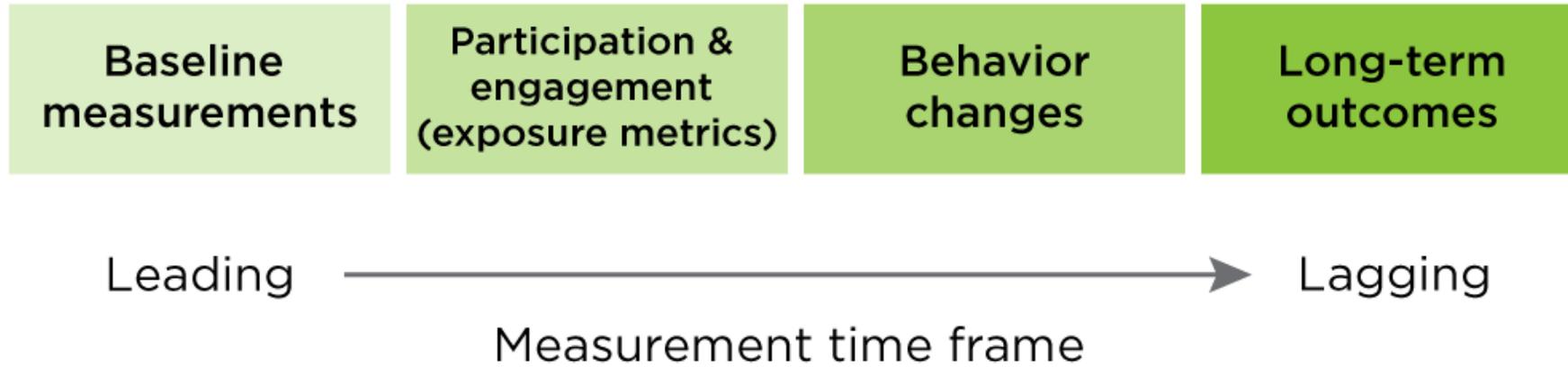
- ★ Which behaviors are most related to the project's big KPIs or outcome goals?
- ★ Do you have access to the people who do that behavior?
- ★ Can you influence them within the constraints of your toolkit?

NOT ALL BEHAVIORS ARE EQUAL



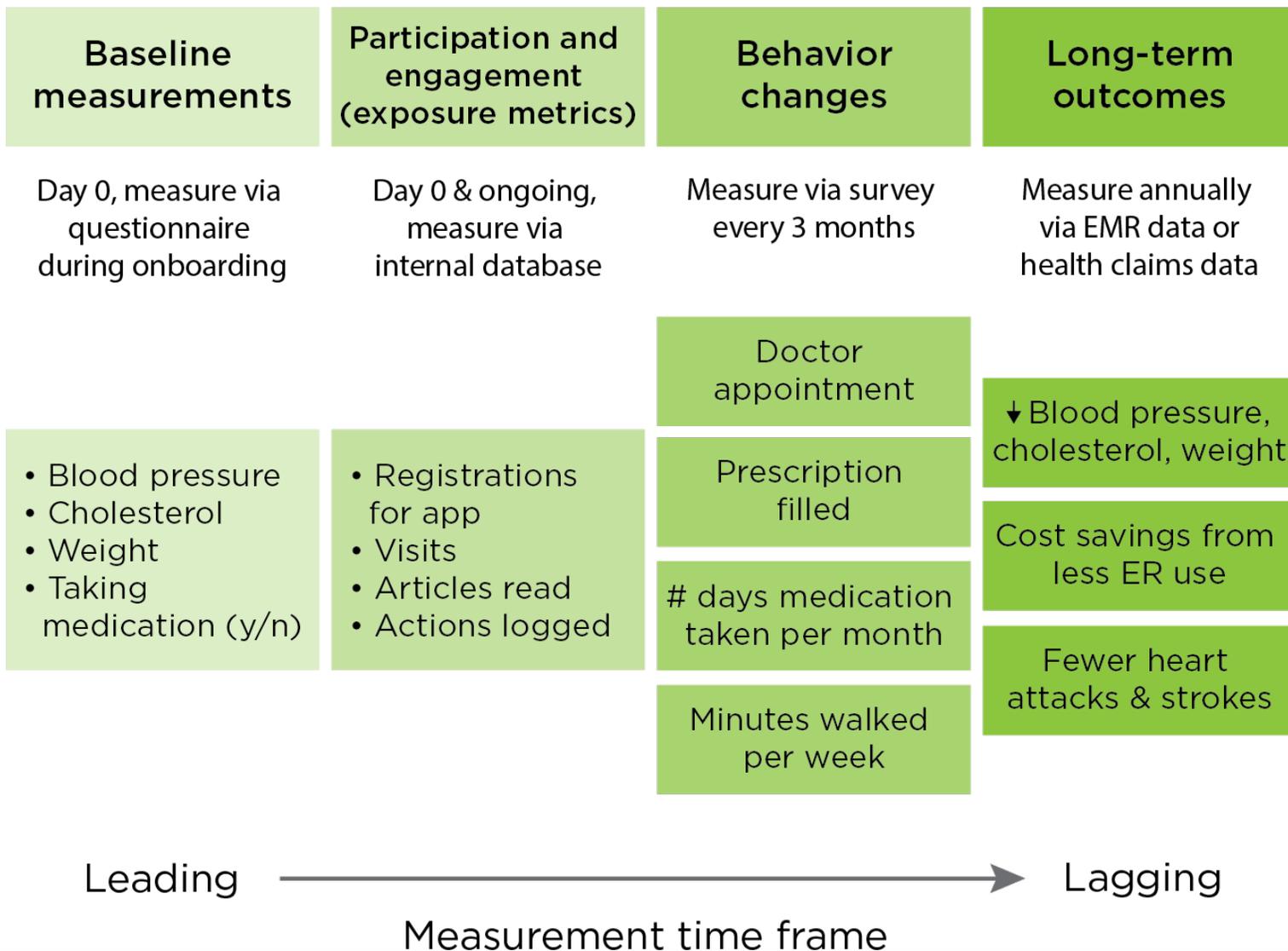


BUILDING AN OUTCOMES PLAN





BUILDING AN OUTCOMES PLAN





DESIGNING INTERVENTIONS

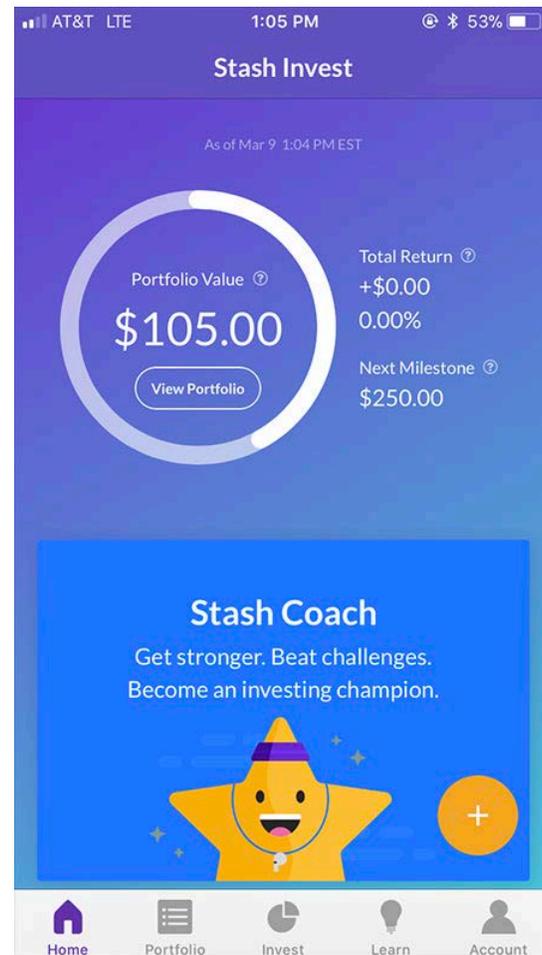
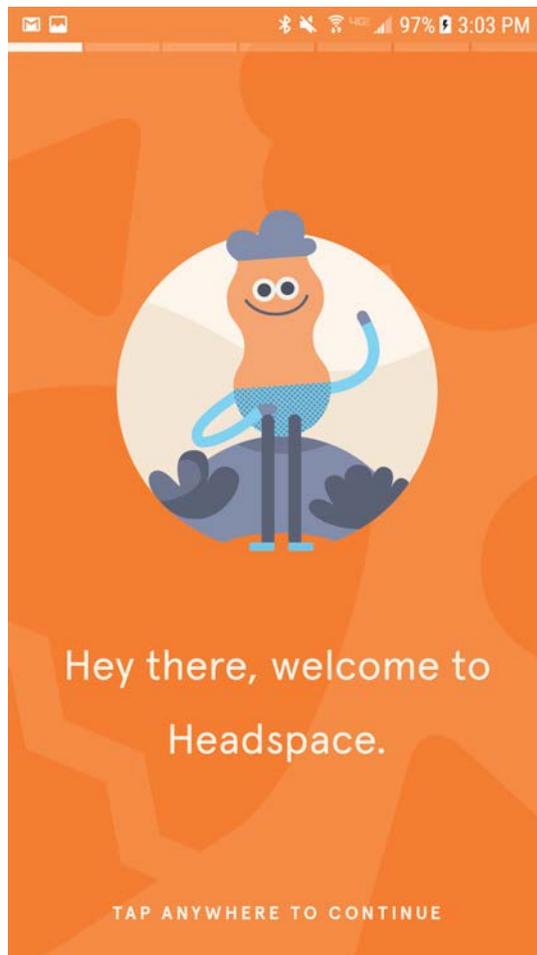
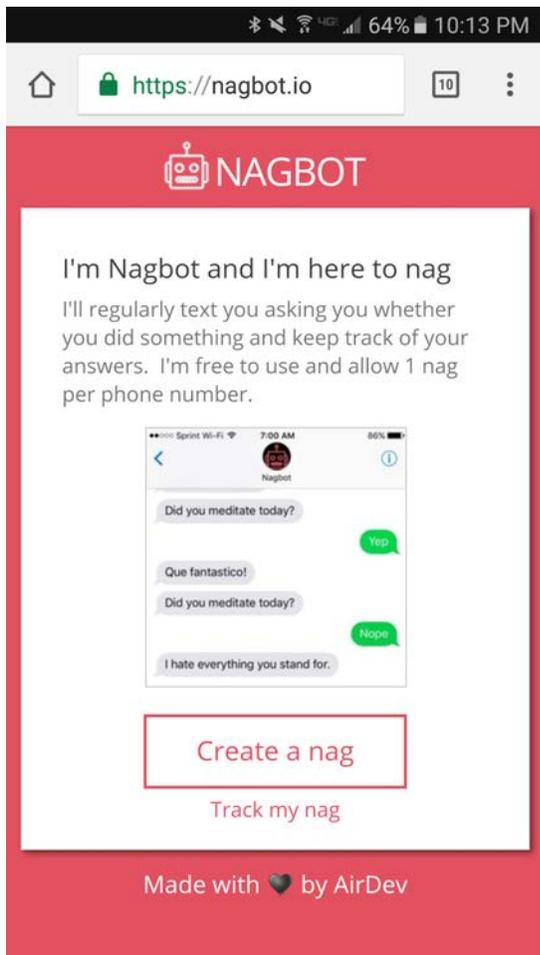
Interventions are products, experiences, or communications designed to get people to act differently than they would otherwise

They can affect:

- **What** people do
- **How often** they do it
- **How long** they do it for
- **When** they do it



INTERVENTIONS





NOT REALLY INTERVENTIONS

YOU UNLOCKED A BADGE



So Udderly Sweet

Wouldn't it be nice if milk stouts came directly from beer producing cows? While this unfortunately isn't the case (yet) they do have a full body and sweetness due to a larger amount of lactose and sugars. That's 5 different beers with the style of Milk / Sweet Stout. Try 5 more for Level 2!

Uniquely yours

On Repeat
The songs you can't get enough of right now.

Repeat Rewind
Past songs that you couldn't get enough of.

Jump back in

Songs to Sing in the Shower
Ed Sheeran, U2, R.E.M., Drake, Justin Bieber

Burning Down the House...
Talking Heads

New podcast episodes

ABC - The Jackson 5
Devices Available

Search Gaming

TheMissesMae is live now – playing **Fortnite**
32 minutes ago

Hello maeniacs!



Fortnite
4M Following

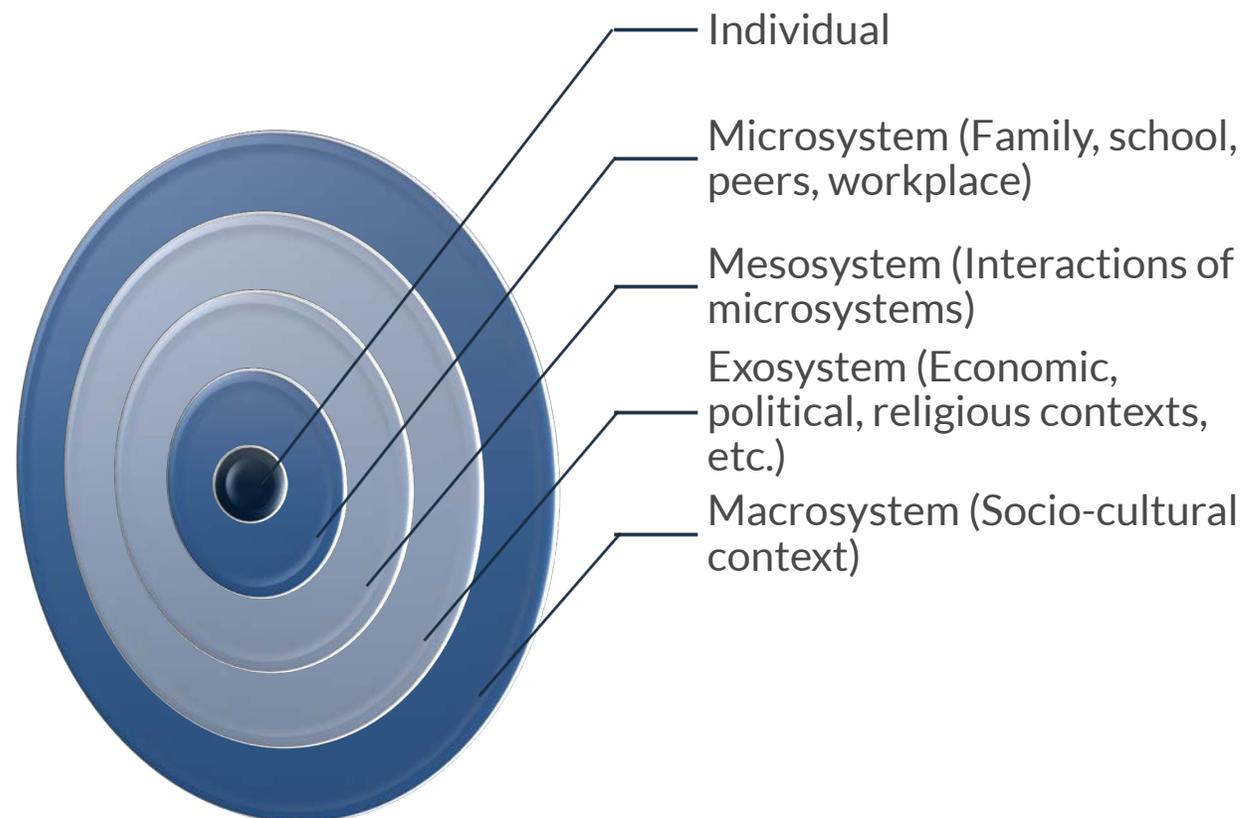
1.2K 786 Comments

Like Comment Share

Bre Robinson shared a link ▶ Call of Duty: Black Ops 4 Fan Group



UNDERSTANDING BEHAVIOR IN CONTEXT



Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. *American Psychologist*, 32, 513-531.



BEHAVIOR CHANGE THEORIES AND FRAMEWORKS

These are just some of the top models that social scientists use to think about behavior and behavior change.

- Acceptance and commitment therapy
- Behavioral economics*
- Cognitive behavioral therapy
- COM-B model & the behaviour change wheel
- Culture capital framework
- DEFRA 4Es model
- Diffusion of innovation theory
- EAST framework
- Environmental policy framework
- Epicure taxonomy
- EPOC taxonomy of interventions
- Fogg behavior model*
- Framework on public policy in physical activity
- Goal setting theory
- Habit formation (plus *Hooked*)*
- Health action process approach
- Health beliefs model
- Implementation taxonomy
- Information motivation behavioral skills model
- Injury control framework
- Intervention mapping
- Legal framework
- MINDSPACE
- Motivational interviewing
- People and places framework
- Population Services International (PSI) framework
- RURU: Intervention implementation taxonomy
- Self-determination theory of motivation
- Social cognitive theory
- Social ecological model
- Social norms theory
- Taxonomy of behaviour change techniques
- Theory of planned behavior
- Theory of reasoned action
- Transtheoretical model (stages of change)*

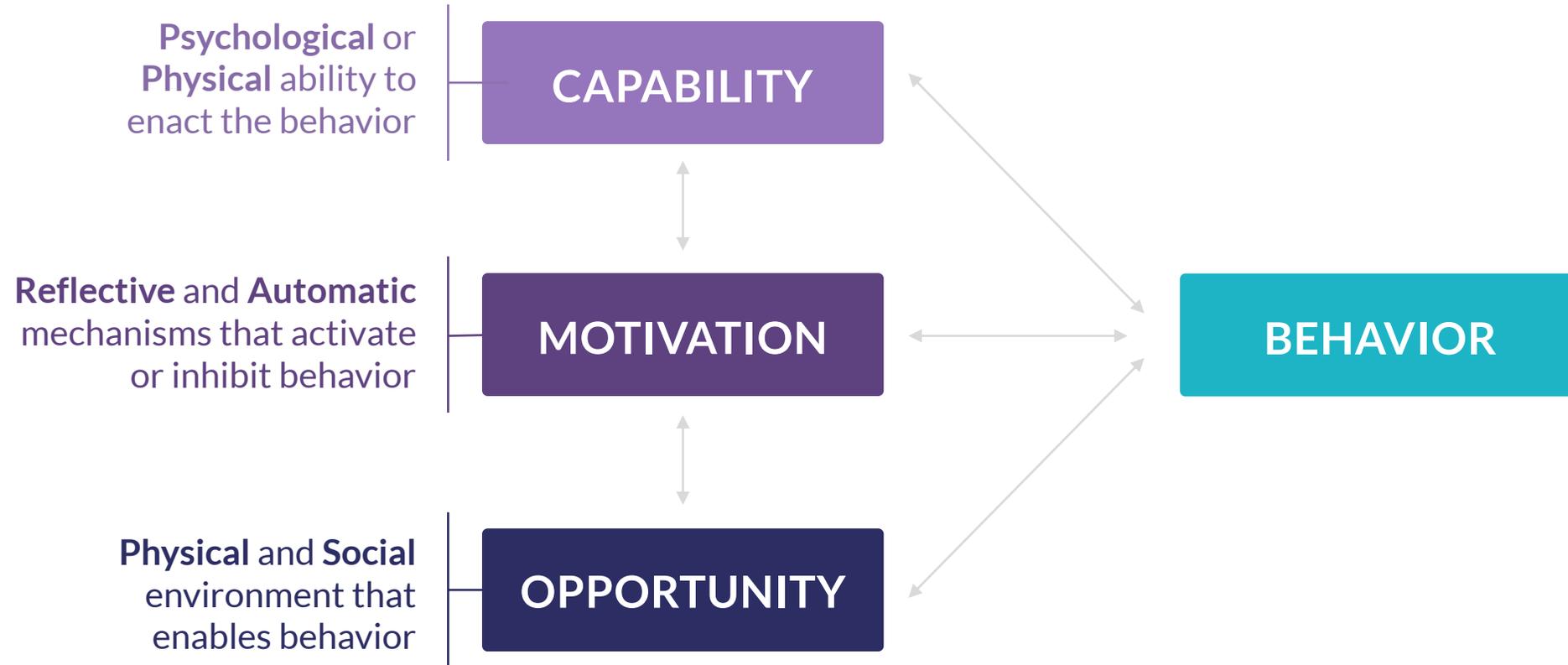


CHOOSING A FRAMEWORK:

- Is it applicable to your topic or problem area?
- Does it have a strong, recent evidence base?
- If you use it, will it yield useful action items given the project you're working on?



THE COM-B MODEL





TYPES OF MOTIVATION: SELF DETERMINATION THEORY

AMOTIVATED

I have no desire to do this.

EXTERNAL

Someone told me I have to do this.

INTROJECTED

I've internalized the nagging: Better do this.

IDENTIFIED

Doing this will help me achieve goals I really value.

INTEGRATED

Doing this is part of who I am.

INTRINSIC

I love doing this; it feels great!

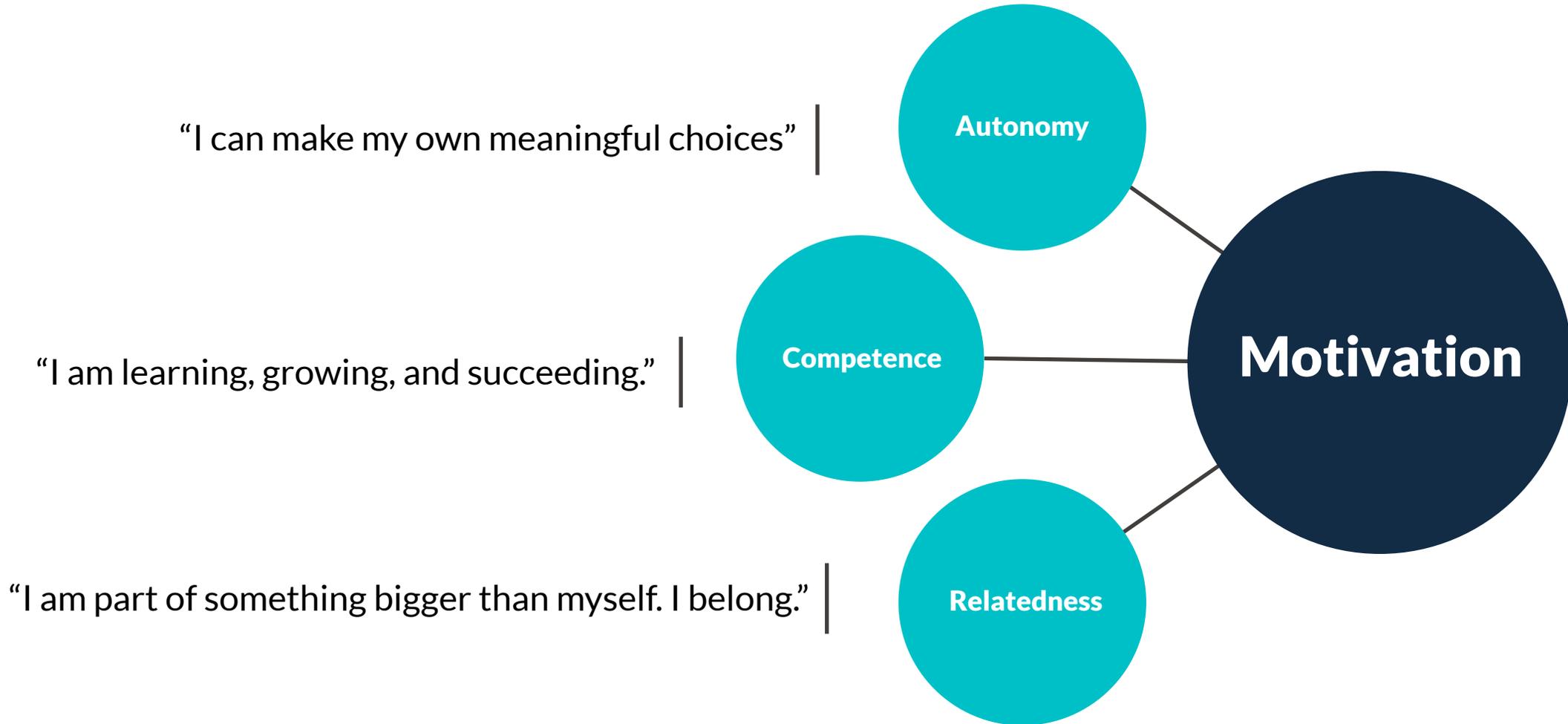
CONTROLLED

AUTONOMOUS

Long-term change happens here!



SUPPORT FUNDAMENTAL PSYCHOLOGICAL NEEDS TO GUIDE STUDENTS TOWARD BETTER MOTIVATIONAL QUALITY





THE LITERATURE REVIEW

Recommendations for pilot

In other areas, the proposed user experience may be adjusted to accommodate the behavior change strategy. The planned feedback and research will help to clarify the specific adjustments.

Some areas of adjustment may include:

- **Testing alternative navigations.** Recognizing that some limited-use (e.g. instructions for initial implementation) regularly consulted (e.g. patient instructions or log sheet) structured to emphasize accessibility to the more frequent use, **proposes testing 2-3 versions of the navigation and information architecture and patients in Phase 2.**
- **Adding mid-week patient outreach.** Because there are some patients who tend to fall off track in the first few days of the 7-day protocol, **incorporating some kind of outreach to patients from the start to ensure patients are on track and provide an opportunity to ask questions.** Particularly during the pilot, when patient participation is low, **provides an opportunity to improve adherence to the protocol and a chance to address protocol post-pilot.**
- **Adding live patient support.** Along the same lines, patients may benefit from implementing the protocol in their daily lives and have a support person without jeopardizing the quality of the results, particularly during the pilot period or the first weeks of SMBP as a treatment component. **including a mechanism for patients to ask questions (e.g. a support person) in the practice in the suggested protocol.**
- **Call out patient resources in protocol.** The UX guide currently lists patient resources in the materials. **Mad*Pow recommends creating an annotated list of patient resources in the protocol so practitioners can easily select and email.**

PATIENT PAYMENT BEHAVIOR: LITERATURE REVIEW

RESEARCH CITED AND REVIEWED

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- [National Patient Safety Foundation \(2013\).](https://c.ymcdn.com/sites/www.npsf.org/resource/resmgr/AskMe3/AskMe3_Implementation_dwnld.pdf) AskMe3 Program implementation guide for health care organizations: Good questions for your good health. Retrieved from https://c.ymcdn.com/sites/www.npsf.org/resource/resmgr/AskMe3/AskMe3_Implementation_dwnld.pdf
- [Peters, E., Hibbard, J., Slovic, P., & Dieckmann, N. \(2007\).](#) Numeracy skill and the communication, comprehension, and use of risk-benefit information. *Health Affairs*, 26(3), 741-748.
- [Rhodes, K. V., Bisgaier, J., Lawson, C. C., Soglin, D., Krug, S., & Van Haitsma, M. \(2013\).](#) “Patients who can't get an appointment go to the ER”: Access to specialty care for publicly insured children. *Annals of Emergency Medicine*, 61(4), 394-403.



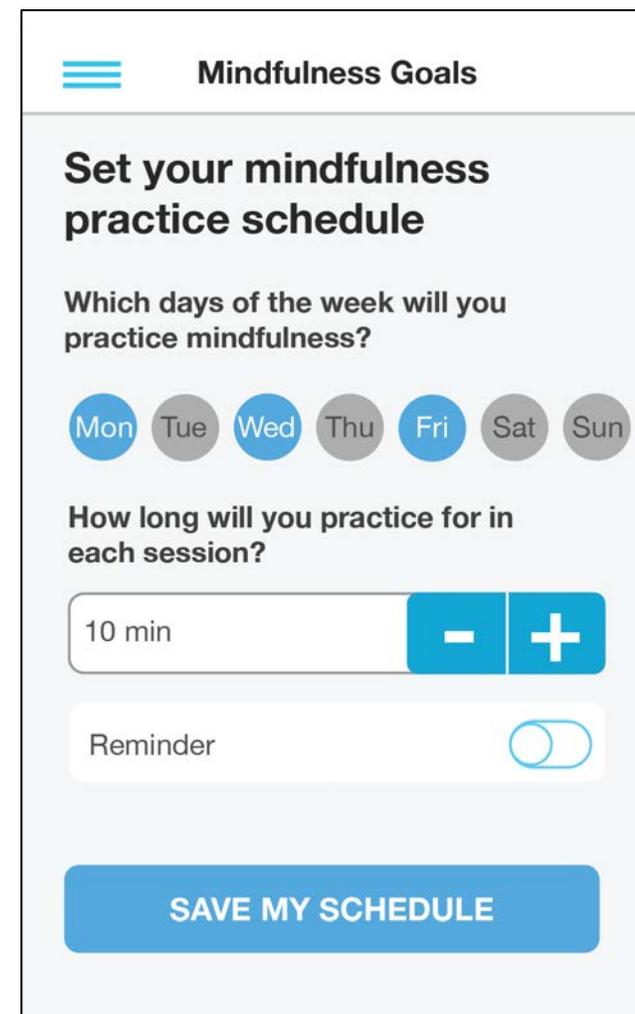
WHEN IS MORE KNOWLEDGE NEEDED?

Some interventions may call for additional subject matter expertise . . . for example

- Highly regulated product environment (e.g. pharmaceuticals, medical devices, investment products, etc.)
- Complex medical issues that need to be addressed with clinical protocols (e.g. behavioral health, diabetes prevention program [DPP])
- Deep knowledge about a specific population needed (e.g. cross-cultural work, work on vulnerable populations)



BUILDING THE THING!



Sample BCT image from Marta Denkwicz, <https://www.panacea.digital/2019/02/18/behaviour-change-design/>



TESTING FOR EFFECTIVENESS AND EFFICACY

- ★ Randomized control trials (RCTs)
- ★ Quasi-experimental studies
- ★ Real-world comparisons
- ★ Pre- / post-evaluations
- ★ Case studies
- ★ Surveys



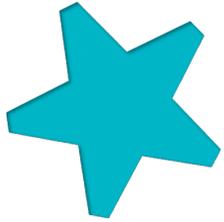


**REMEMBER: OUTCOMES TELL YOUR
STORY**



OTHER ROLES BEHAVIOR CHANGE DESIGNERS PLAY

- ★ **Subject matter expert:** Providing insight into particular theories or topics relevant for a project
- ★ **Business development support:** Identifying behavior change needs and ensuring adequate coverage is built into proposals
- ★ **Spot review and consulting:** Collaborate to identify areas where behavior change is relevant to include in projects focused on other areas
- ★ **Continuing education:** Spend time staying current on research in the field especially as it's relevant to professional responsibilities
- ★ **Marketing and thought leadership:** Share our experience and perspective to establish our reputation and attract the clients we want to work with

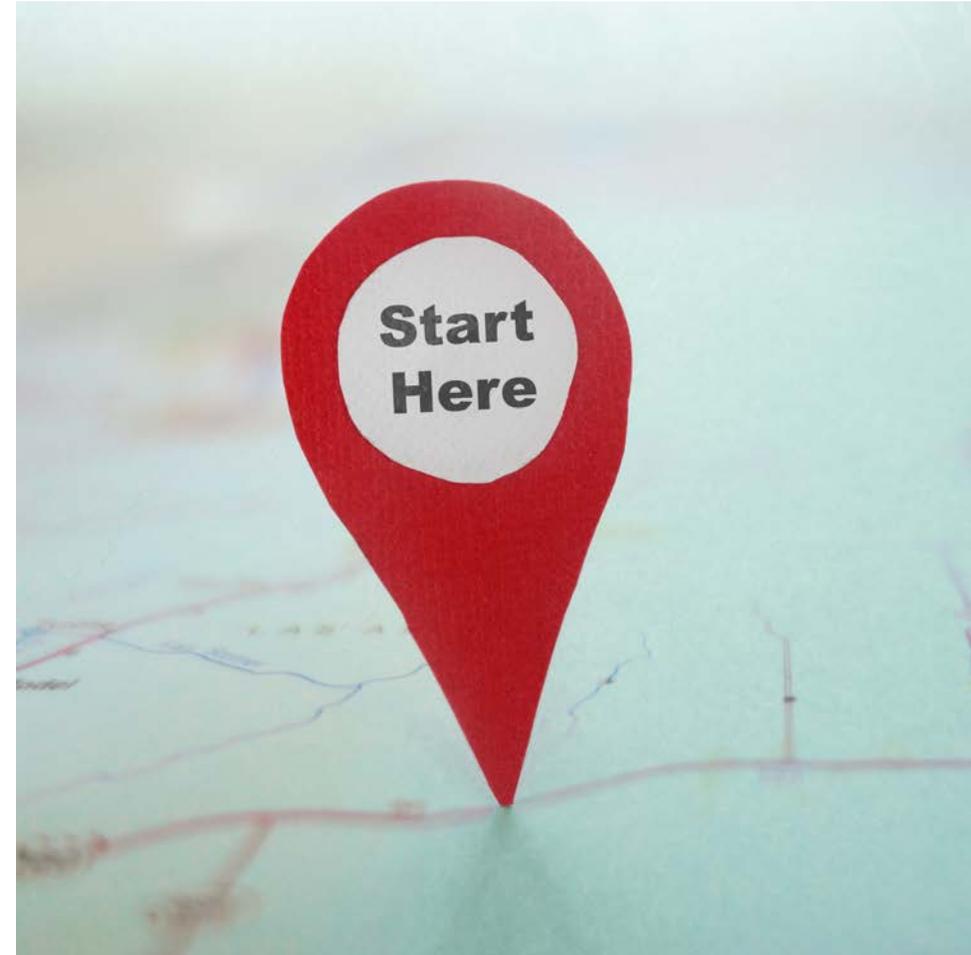


PRACTICING BEHAVIOR CHANGE DESIGN



BRINGING BEHAVIOR CHANGE DESIGN INTO YOUR WORK

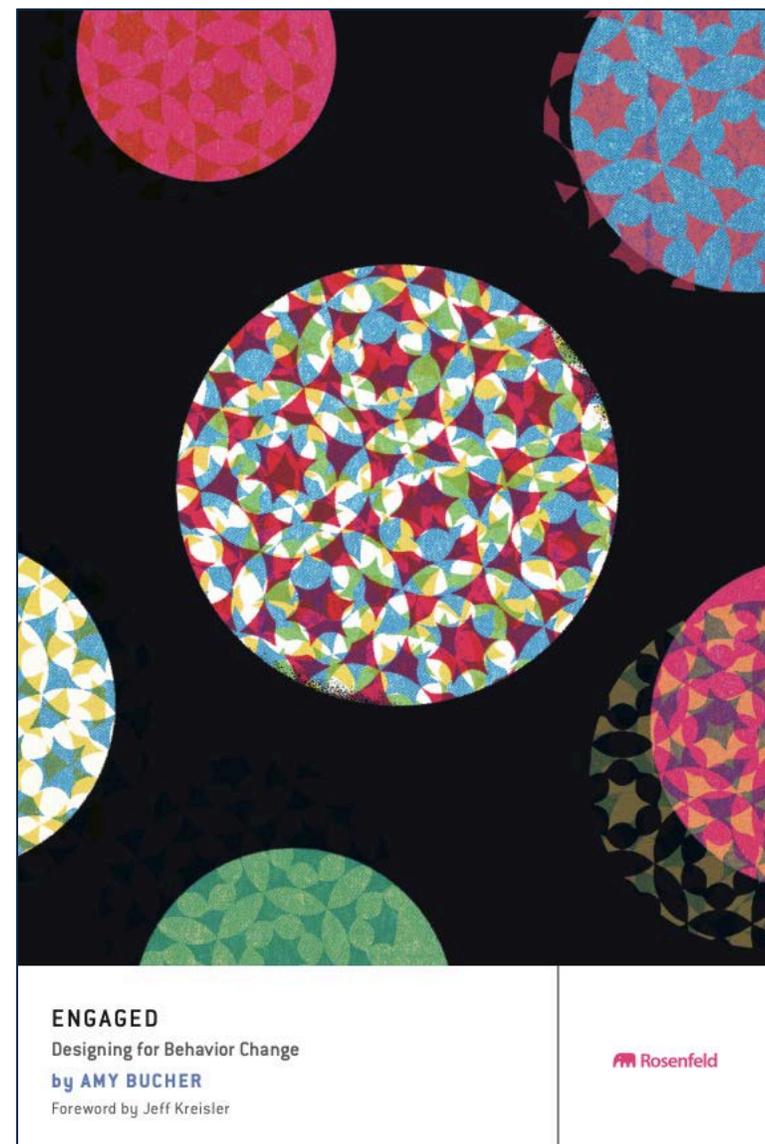
- ★ Start small and build!
- ★ Try 1-2 tactics now
- ★ Be mindful of growing your skillset
- ★ Remember you can call on experts to augment and support your efforts





ENGAGED: DESIGNING FOR BEHAVIOR CHANGE

- ★ Available in paperback and e-reader versions
- ★ RosenfeldMedia.com or Amazon
- ★ Use code ENGAGEDCHXD at RosenfeldMedia.com for 20% off



CONVENING A COMMUNITY: THE HEALTH EXPERIENCE DESIGN CONFERENCE



**HEALTH
EXPERIENCE
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CONFERENCE BY **mad*power**

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Crisis in the State of
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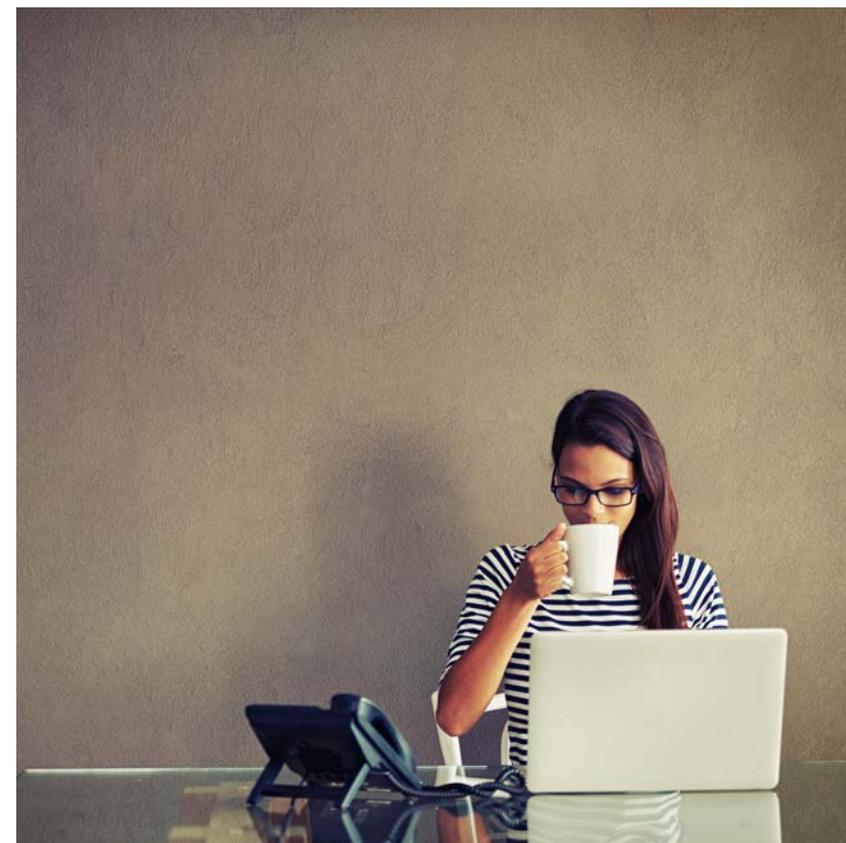
#StateWithoutStigma

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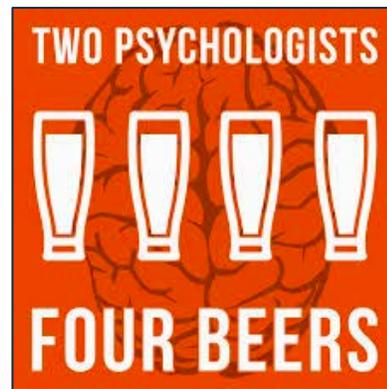
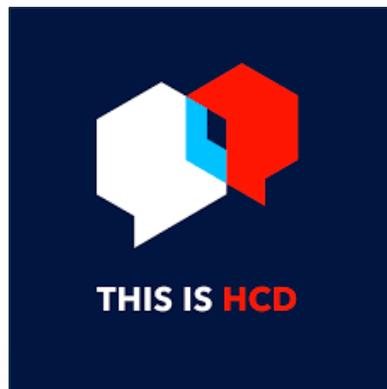
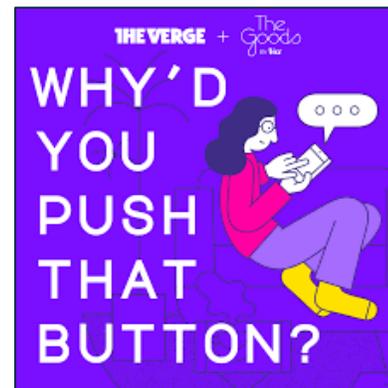
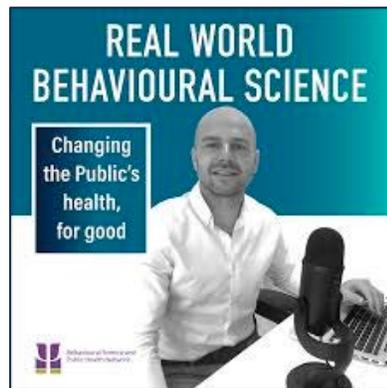
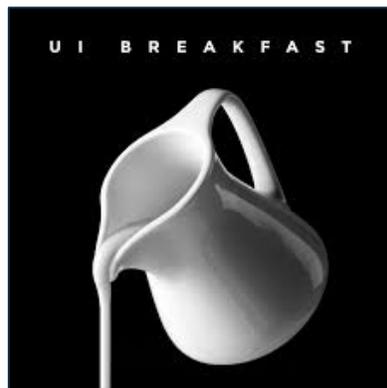
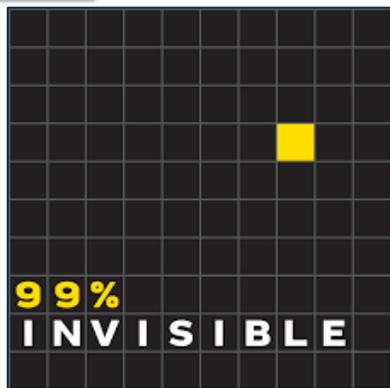
CONFERENCES & WEBINARS

- ★ APA's "How Did You Get That Job?" series
- ★ CHXD
- ★ HxD and FxD
- ★ Professional organization conferences (APA, APS, AOM, etc.)
- ★ Design and UX conferences
- ★ Industry (e.g. healthcare or financial services, Behavior, Energy, & Climate Change) events
- ★ Check Meetup, local chapters of UXPA, Action Design Network, etc. for evening and weekend events





PODCASTS





SOCIAL MEDIA & NEWSLETTERS

- ★ Twitter
 - #digitalhealth
 - #behaviorchange
- ★ Slack
 - UXPA International
 - Local UXPA chapters
 - Ethical Technology
 - Rosenfeld Media
 - BetterBehavior
 - Innovation Learning Network
- ★ CHXD Mobilize community



BEHAVIORAL
scientist

Habit Weekly

Best behavioral design content of the week

By [Samuel Salzer](#)



The latest on Business, Behavior, and the Brain.



DISCUSSION