

Physical Activity Habits

The background features a dark, stylized mountain range under a blue sky. In the center, a white wireframe figure of a person is shown in a dynamic, active pose, composed of numerous small white dots connected by thin white lines. The overall aesthetic is modern and digital.

Physical
Activity
habits

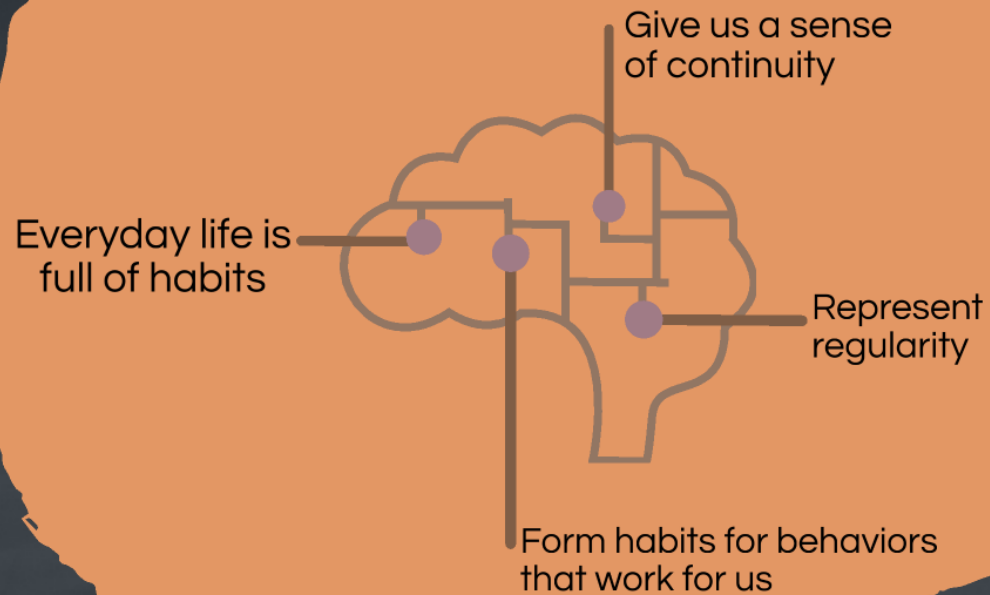
Forming
Physical
Activity
Habits

Intentions

Habits

John Hatem, UCY

What are habits?



Definition

Habits
&
Goals

Automaticity

"cue-response associations in memory that are acquired slowly through repetition of an action in a stable circumstance."

(Mazar & Wood, 2018)

1

Action to attain a desired outcome

e.g., snacking at work -> reduce hunger

2

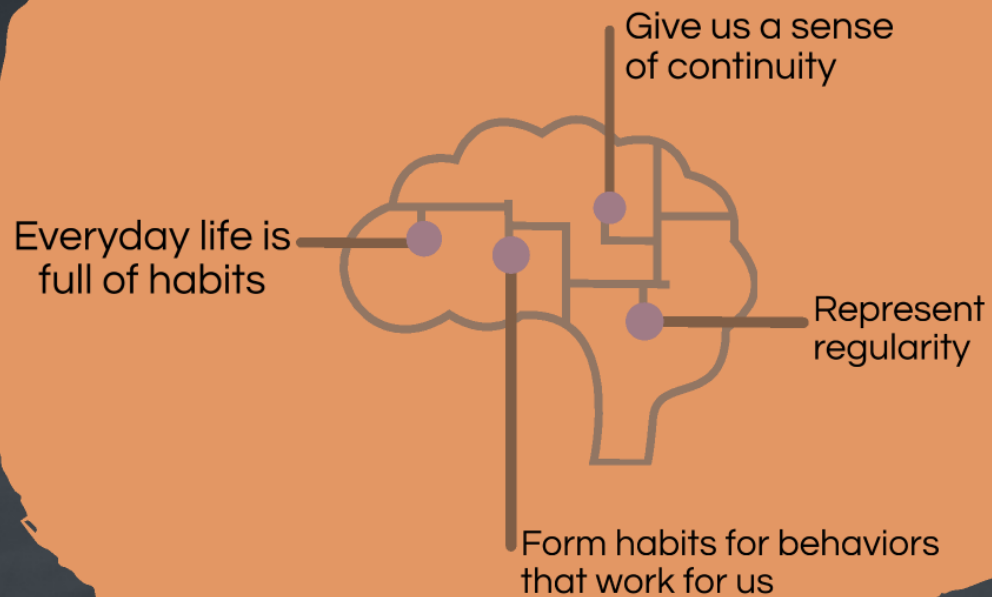
Repeat the action in a stable context

3

After sufficiently repeating the action

e.g., sight of one's office -> activate snacking behavior automatically

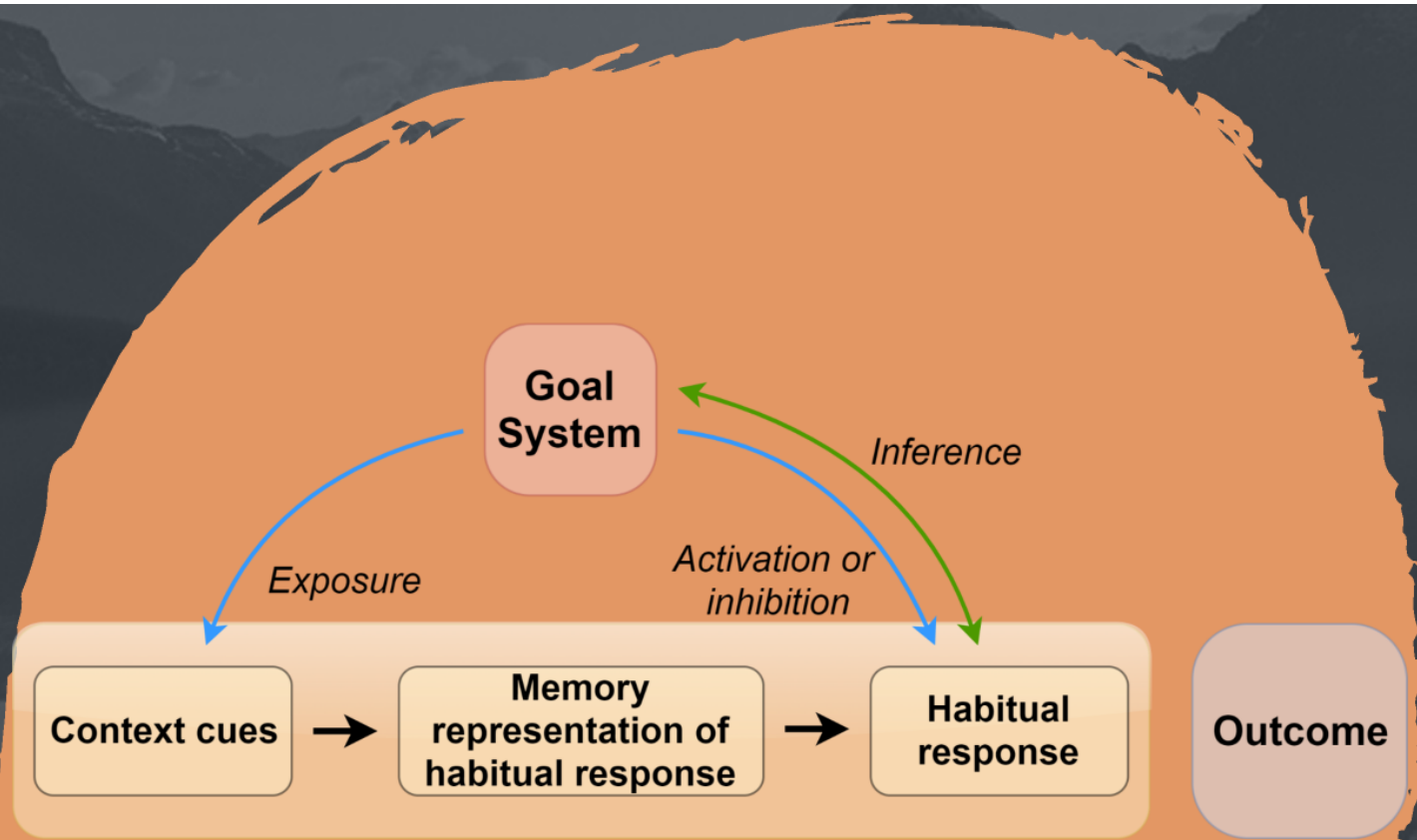
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Goal-habit interface model
(Wood and Runger, 2016)

What are habits?

Definition

Habits
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Automaticity

Everyday life is
full of habits

Give us a sense
of continuity

Represent
regularity

Form habits for behaviors
that work for us



Automatic processes tend to be

(Moors & De Houwer, 2006)

- Efficient
- Independent of intention
- Independent of awareness
- Stimulus driven

Physical Activity Habits

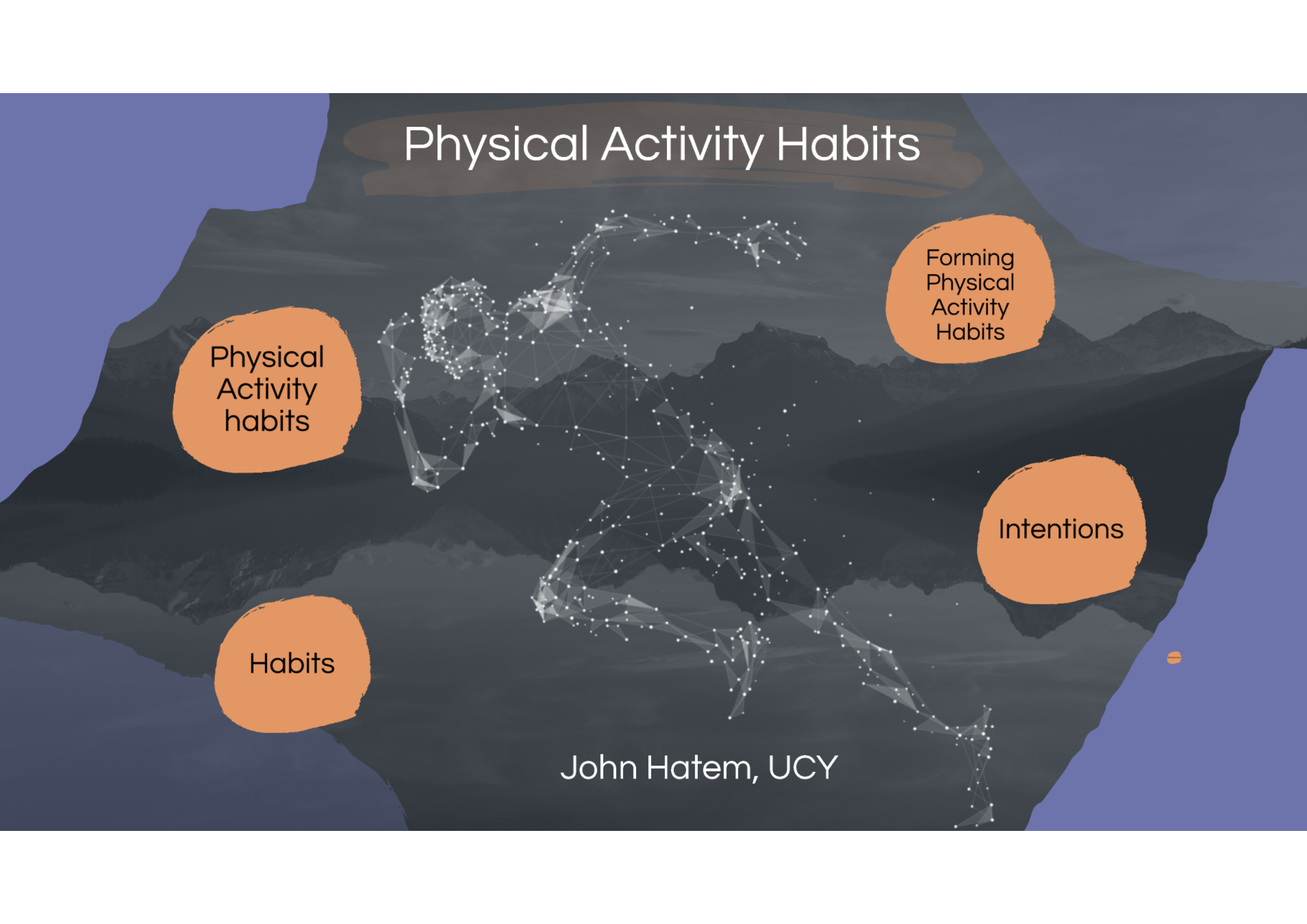
Physical Activity habits

Forming Physical Activity Habits

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Physical Activity Characteristics

- Time needed to perform exercise
 - It takes a lot of time to enact
 - Includes time consuming preparation and transition actions
 - 30+ minutes per session
- Physical activity takes the body out of the resting state
 - physical activity activates affective and physiological responses (Ekkekakis, Hall, & Petruzzello, 2008) (Lee, Emerson, & Williams, 2016)
 - As the intensity increases, the potency of discomfort increases
- Physical activity is not a simple behavior
- Regular physical activity is a repeated behavior
- High likelihood of being performed in the same context (Gardner, 2015)
- habit is a consistent predictor of physical activity (Rebar et al., 2016)

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Can Physical Activity be Habitual?



What is Habitual
Behavior?

■ 'habit cannot be both the behavior and the cause of the behavior' (Maddux, 1997)

■ "a process by which a stimulus automatically generates an impulse towards action, based on learned stimulus-response associations" (Gardner, 2015)

■ complex behaviors portray action hierarchically

■ Two stages of action

- Selection of action
- Performance

Habitual Instigation

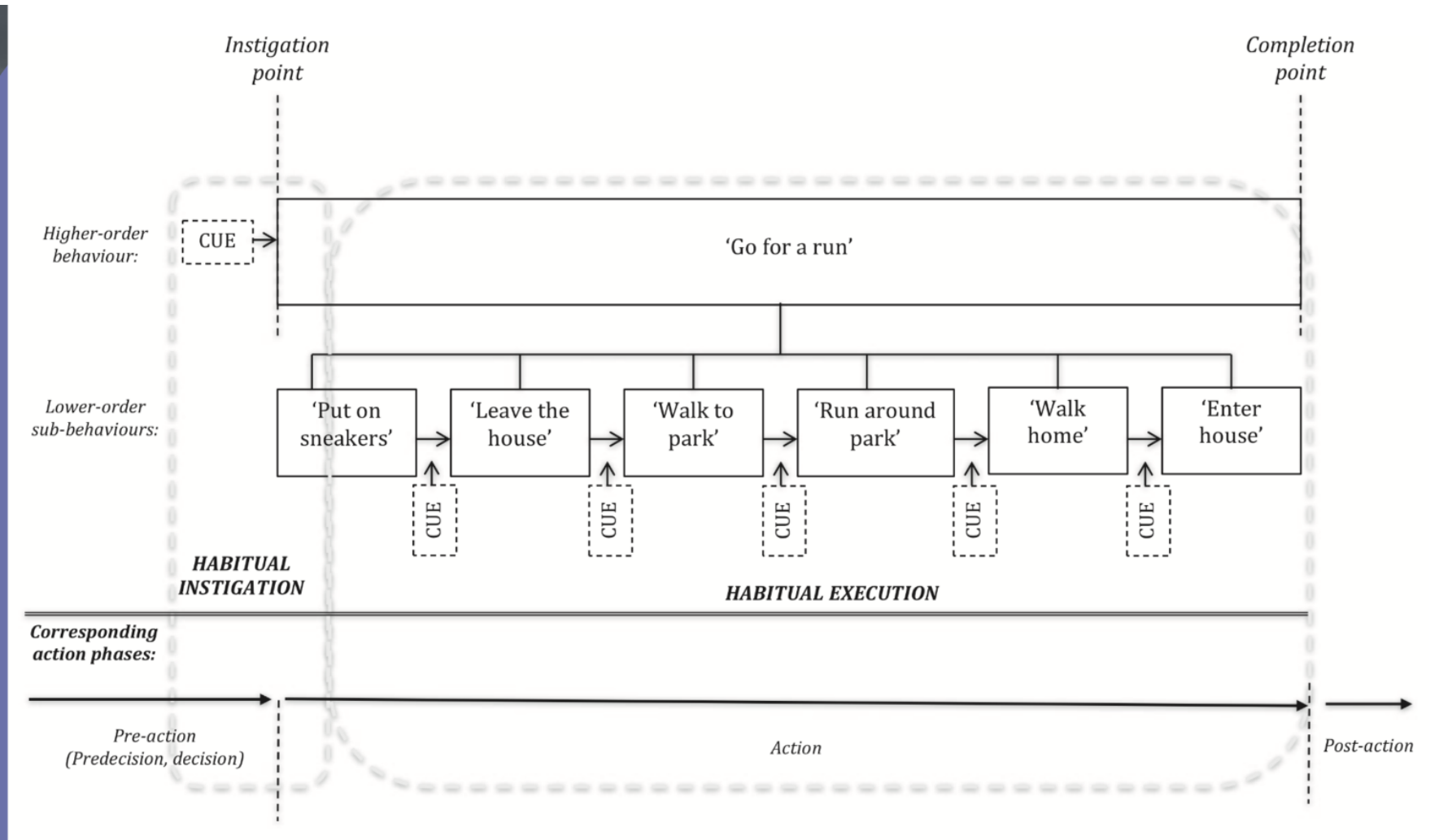
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Habitual Instigation

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Habitual Execution

the habit process activates lower-level sub-actions subservient to a higher-order behavioral target, and so, unless enactment of any lower-level actions is frustrated, facilitates completion of the higher-order behavior



Habit instigation vs execution

(Gardner et al., 2016)

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Forming Physical Activity Habits



Goal setting, self-control

(Judah, Gardner, & Aunger, 2013; Lally et al., 2011; Lally & Gardner, 2011)



Gym-based exercise habit formation took between 6 weeks and 2 months

(Kaushal & Rhodes, 2015)



Increased physical activity through principles of habit formation

(Kaushal et al., 2017)



Physical Activity Habits

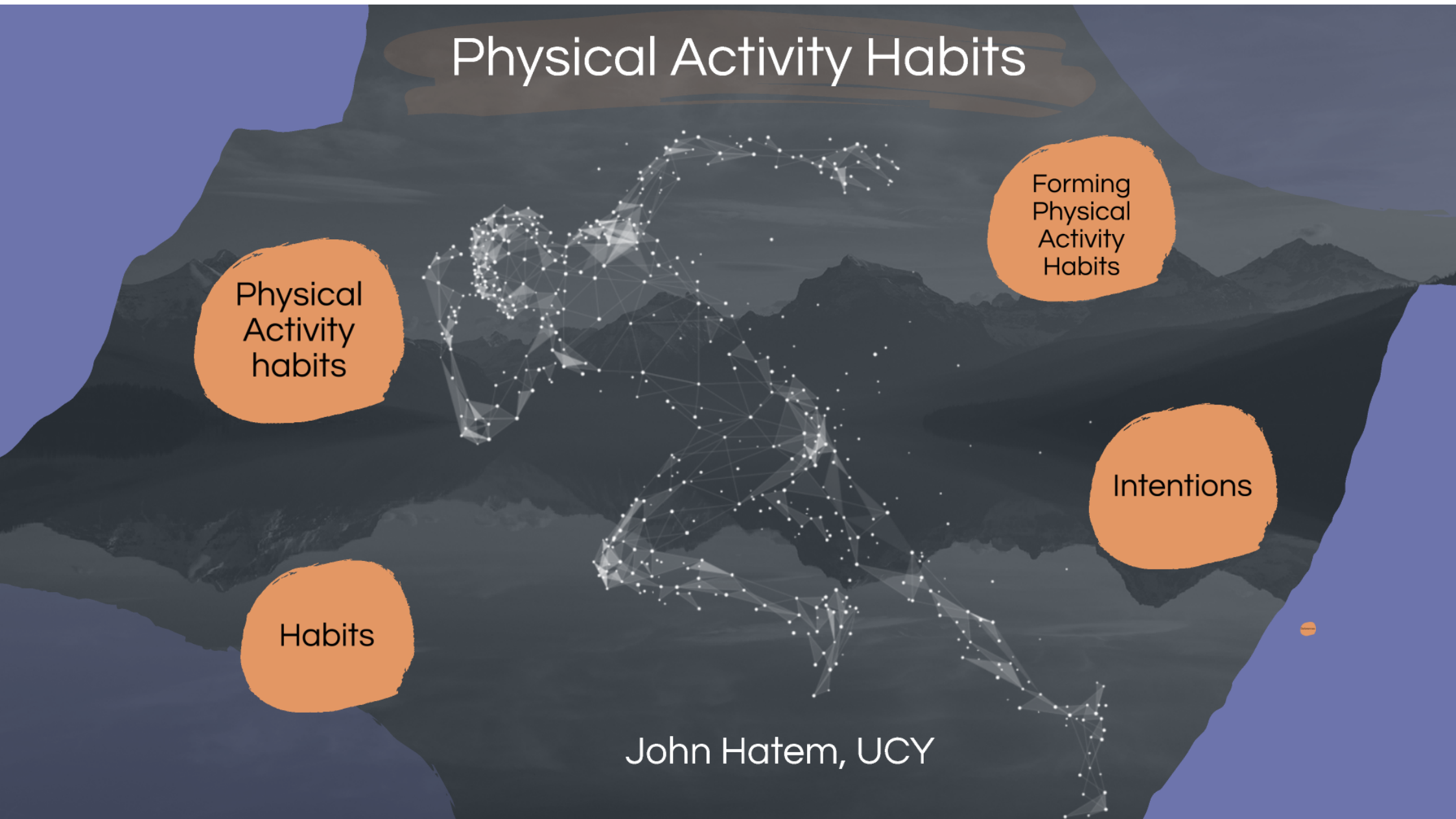
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The relationship between physical activity and intention

(Rhodes & de Bruijn, 2013)



Non-intenders & non-active

Intender & non-active

Non-intender & active

Intender & active

Conceptualizing Intention

The relationship between physical activity and intention

(Rhodes & de Bruijn, 2013)



Non-intenders & non-active

Intender & non-active 36%

Non-intender & active < 2%

Intender & active 42%

Conceptualizing Intention

The relationship between physical activity and intention

(Rhodes & de Bruijn, 2013)



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Non-intender & active < 2%

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Intention-behavior gap is
46%

Conceptualizing Intention



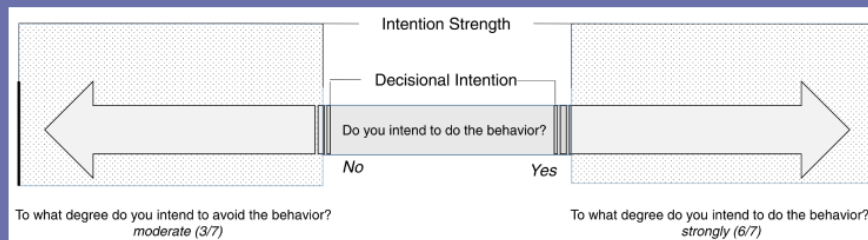
Intention comprises of two different constructs (Rhodes & Rebar, 2017)

- 1- Decisional intention
- 2- Intention strength

New
Hypothesis

Intention comprises of two different constructs (Rhodes & Rebar, 2017)

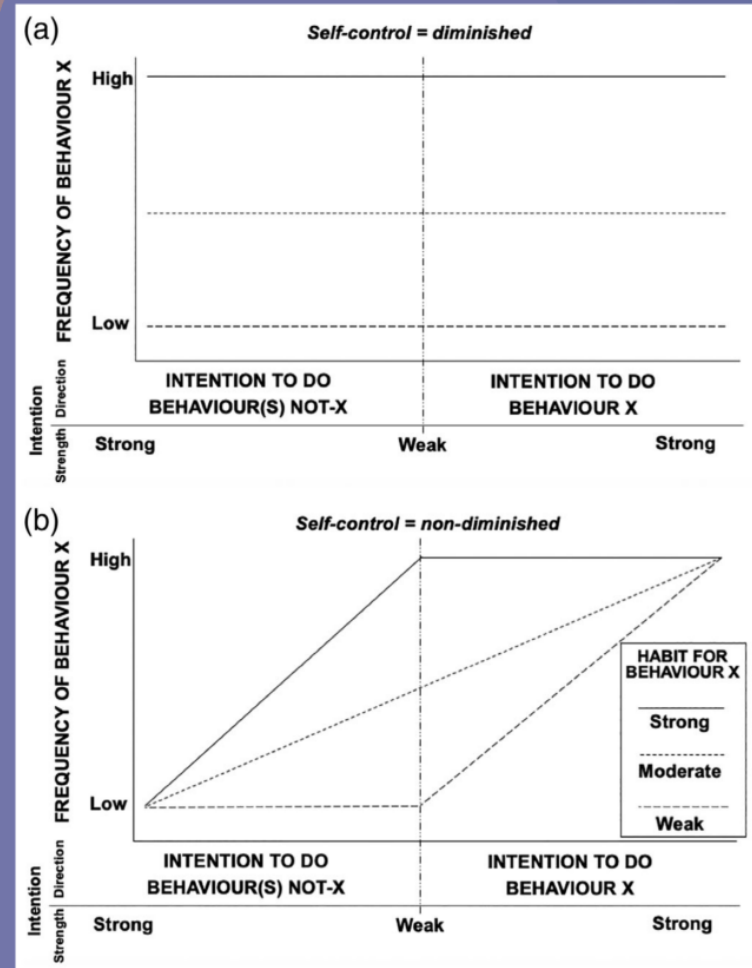
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New Hypothesis

Habit-intention interaction Hypothesis

(Gardner et al., 2020)



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