The Intersection of Public Policy and Health Behavior Theory in the Physical Activity Arena

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### **Benefits of Policy-level Approaches**

- Impact a large number of people.
- Can better influence people who are difficult to reach.
- Require less time and effort from individuals.
- More cost-effective.

(Swinburn et al., 1999; Yen & Syme, 1999).



# Types of Physical Activity Policy Strategies

Policy Strategy

Examples

1. Provide information<br/>about the behavior.Point-of-decision stairway prompts, Mass<br/>media campaigns, Classroom-based<br/>curriculum.

2. Increase/decrease opportunities for behavior. Improved access, availability, and proximity to facilities, resources, services, and programs; Enhanced aesthetics; Improved safety.

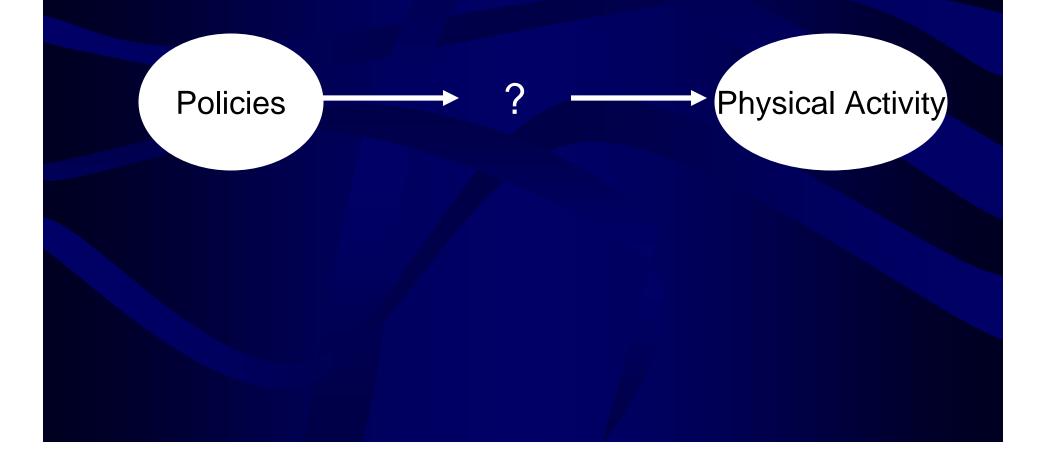
- 3. Offer incentives/ disincentives for behavior.
- 4. *Require/prohibit* behavior.

Public transportation vouchers, Lottery incentives, Tax deductions, Reduced health insurance premiums.

Pedestrian-only streets, Driving restrictions, Parking regulations.

# Which approach should policy-makers take?

# How do policies influence physical activity behavior?

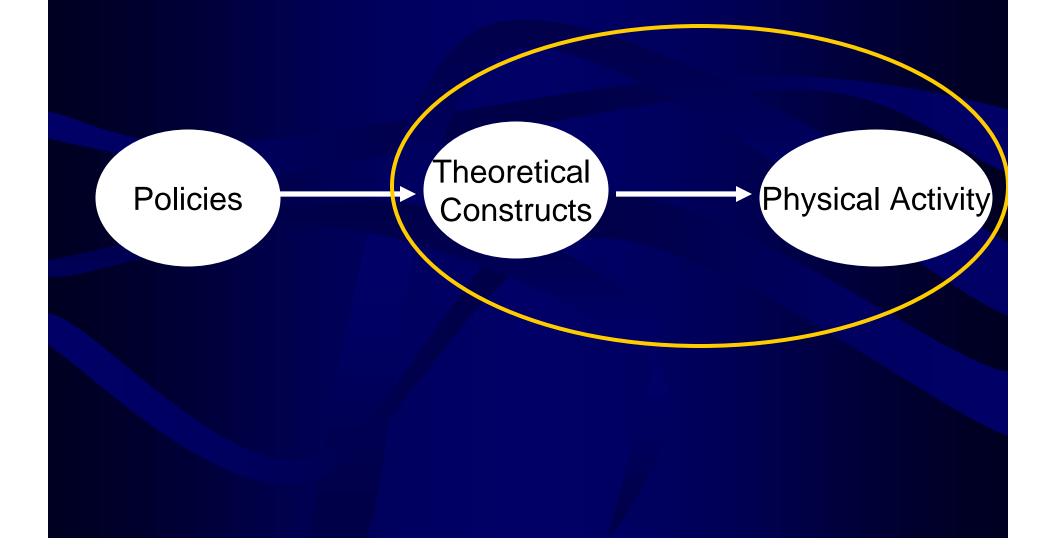


# Theories of Health Behavior Change

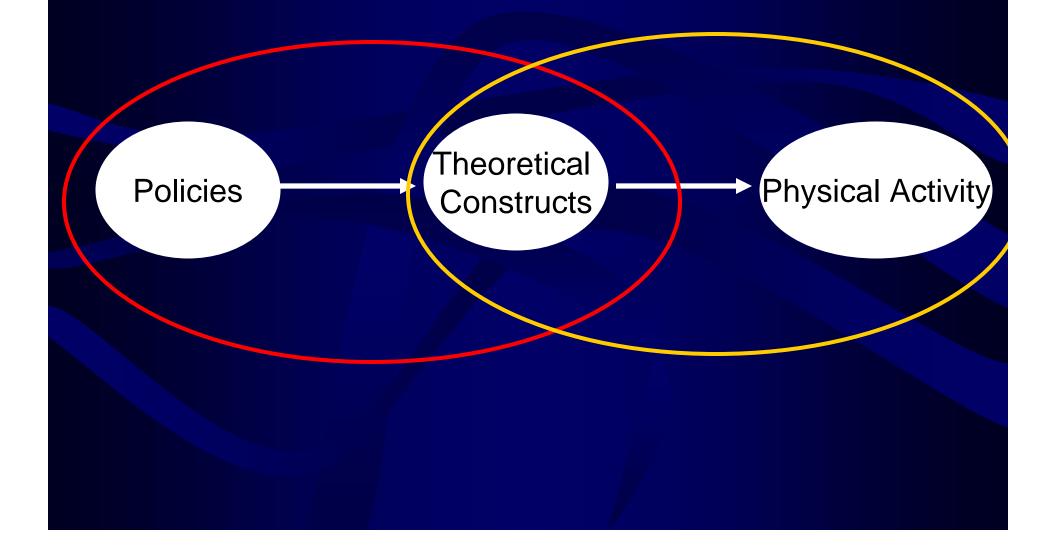


- Offer a variety of psychosocial factors that are thought to predict health behavior change.
- Few past attempts to describe the influence of physical activity policies on mediating mechanisms.

## **Theoretical Intervening Variables**



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|  | Policy Strategy                                 |   |  |   |
|--|---|---|--|---|
| Health<br>Behavior<br>Theory           | Provide<br>information<br>about the<br>behavior | Increase/<br>decrease<br>opportunities<br>for the<br>behavior | Offer<br>incentives or<br>disincentives<br>for the<br>behavior | Require/<br>prohibit<br>the<br>behavior |
| Health Belief<br>Model (HBM)           |   |   |  |   |
| Self-<br>Determination<br>Theory (SDT) |   |   |  |   |
| Transtheoretical<br>Model (TTM)        |   |   |  |   |

|  | Policy Strategy   |   |  |   |
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| Health Belief<br>Model (HBM)           | Perceived<br>susceptibility,<br>Perceived<br>severity,              |   |  |   |
| Self-<br>Determination<br>Theory (SDT) | Integrated<br>regulation<br>(i.e., self-worth<br>and growth)        |   |  |   |
| Transtheoretical<br>Model (TTM)        | "Consciousness<br>raising"—<br>Precontemplation<br>to Contemplation |   |  |   |

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|--|--|---|--|---|
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| Health Belief<br>Model (HBM)           | Perceived<br>susceptibility,<br>Perceived<br>severity,       | Perceived<br>barriers,<br>Cues to action                      |  |   |
| Self-<br>Determination<br>Theory (SDT) | Integrated<br>regulation<br>(i.e., self-worth<br>and growth) | Intrinsic<br>regulation<br>(i.e., enjoyment)                  |  |   |
| Transtheoretical<br>Model (TTM)        | "Consciousness<br>raising"—                                  | "Stimulus<br>control"—  |  |   |
|  | Precontemplation<br>to Contemplation                         | Preparation to<br>Action and<br>Maintenance                   |  |   |

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| Health Belief<br>Model (HBM)           | Perceived<br>susceptibility,<br>Perceived<br>severity,       | Perceived<br>barriers,<br>Cues to action                      | Perceived<br>benefits  |   |
| Self-<br>Determination<br>Theory (SDT) | Integrated<br>regulation<br>(i.e., self-worth<br>and growth) | Intrinsic<br>regulation<br>(i.e., enjoyment)                  | Identified<br>regulation<br>(i.e., rewards)                    |   |
| Transtheoretical<br>Model (TTM)        | "Consciousness<br>raising"—                                  | "Stimulus<br>control"—  | "Reinforcement<br>management"—                                 |   |
|  | Precontemplation<br>to Contemplation                         | Preparation to<br>Action and<br>Maintenance                   | Action to<br>Maintenance                                       |   |

|  | Policy Strategy  |   |  |  |
|--|--|---|--|--|
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| Health Belief<br>Model (HBM)           | Perceived<br>susceptibility,<br>Perceived<br>severity,       | Perceived<br>barriers,<br>Cues to action                      | Perceived<br>benefits  | None   |
| Self-<br>Determination<br>Theory (SDT) | Integrated<br>regulation<br>(i.e., self-worth<br>and growth) | Intrinsic<br>regulation<br>(i.e., enjoyment)                  | Identified<br>regulation<br>(i.e., rewards)                    | External/<br>Introjected<br>regulation<br>(i.e., rules,<br>laws) |
| Transtheoretical<br>Model (TTM)        | "Consciousness<br>raising"—                                  | "Stimulus<br>control"—  | "Reinforcement<br>management"—                                 | "Social<br>liberation"—  |
|  | Precontemplation<br>to Contemplation                         | Preparation to<br>Action and<br>Maintenance                   | Action to<br>Maintenance                                       | Maintenance  |

Policies that Require or Prohibit Behaviors Could have Negative Consequences

 Unplanned activity could cause injuries (e.g., improper footwear or carrying heavy loads).



Individuals may be be less compelled to be active in other settings due to fatigue or negative attitudes.

#### Summary

- Policies that provide information map onto a number of psychosocial constructs and may be useful for individuals early in the change process.
- Policies that provide opportunities rely heavily upon or may trigger intrinsic motivation and may be useful for individuals who are preparing to change behavior.
  - Policies that offer incentives or require the behavior do not involve many psychosocial processes and may be more useful for reinforcing behavior maintenance versus adoption.

#### **Future Recommendations**

- Need more policy evaluation research.
- Examine the impact of policies on psychosocial and behavioral outcomes.
- Use longitudinal and quasi-experimental research designs.
- Conduct subgroup analyses.





# Thank You

