

# Behavior

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Classical Conditioning

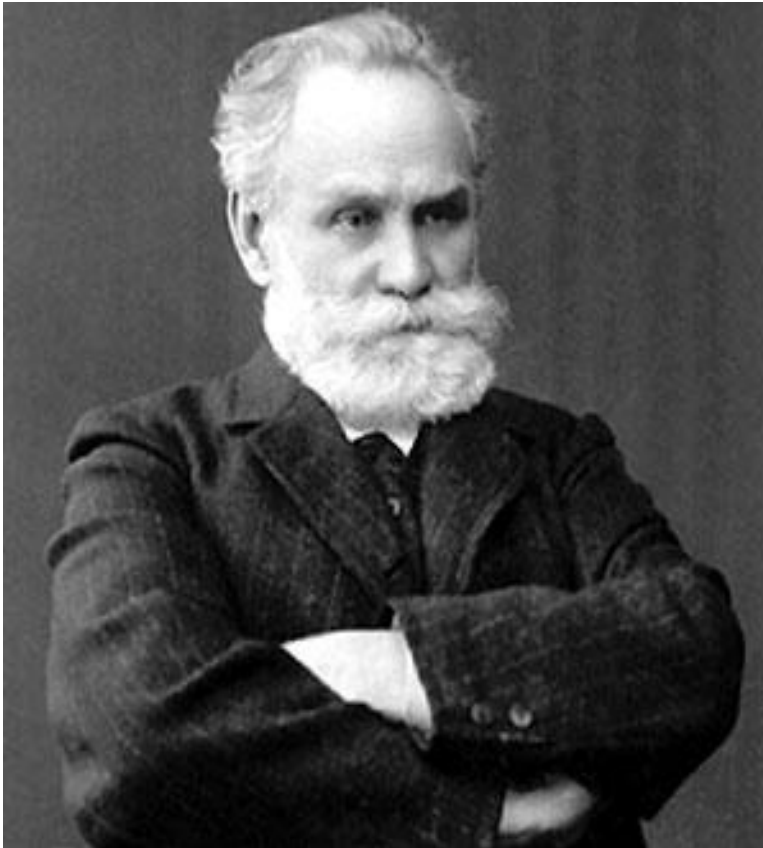
Operant Conditioning

Social Norms

Cognitive Dissonance

Stages of Change

# Classical Conditioning



- **Ivan P. Pavlov**  
(1849-1936)
- Russian physiologist
- Credited for the first systematic investigation into classical conditioning.
- Won the Nobel Prize for his discoveries on digestion.

# Classical Conditioning

Before conditioning

**FOOD**  
**(UCS)**

**SALIVATION**  
**(UCR)**



**BELL**

**NO RESPONSE**



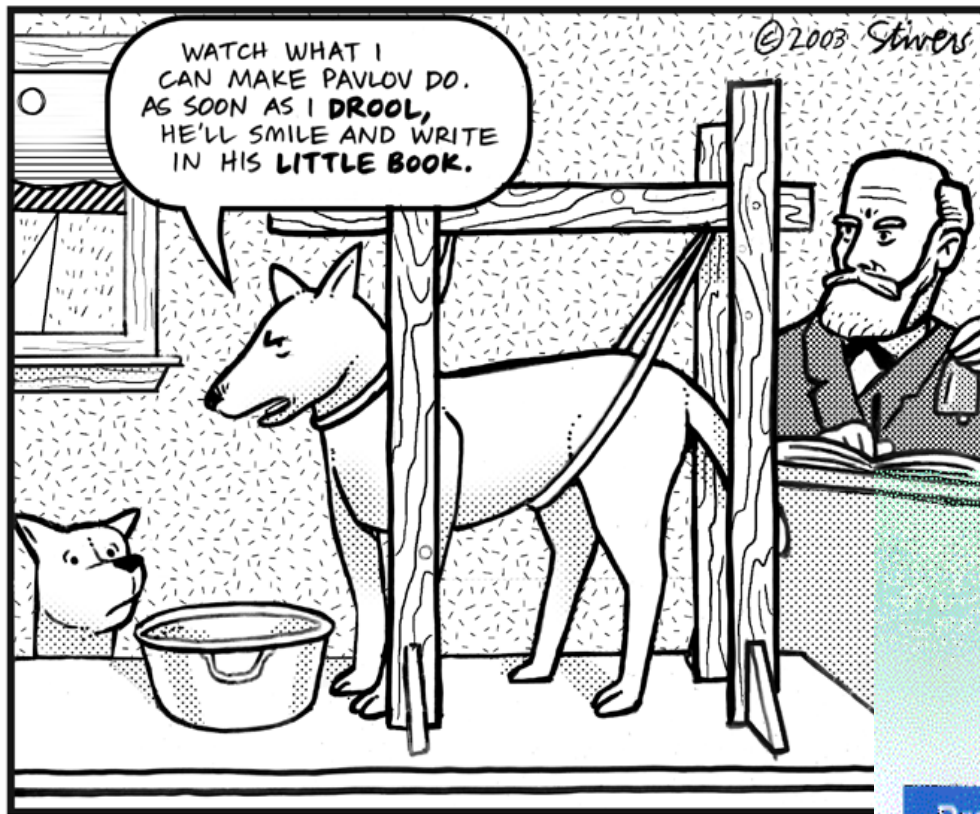
# Classical Conditioning

- That was easy!
- Environmental behavioral change
- Knowing about your behavior can make you more conscious of your decisions.
- The Office – Altoids



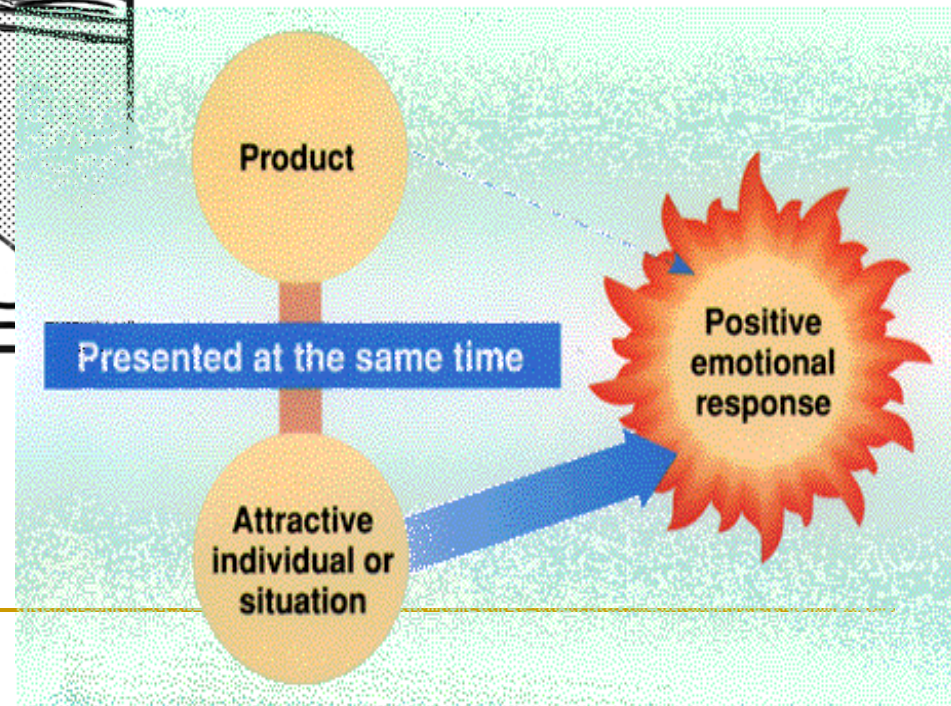
Unbeknownst to most students of psychology, Pavlov's first experiment was to ring a bell and cause his dog to attack Freud's cat.

# Are you being classically conditioned?



**When I go into this place I feel cool, why is that?**

**Why do I feel I need these clothes?**





# Operant Conditioning

- **Edwin L. Thorndike**

(1874 – 1949)

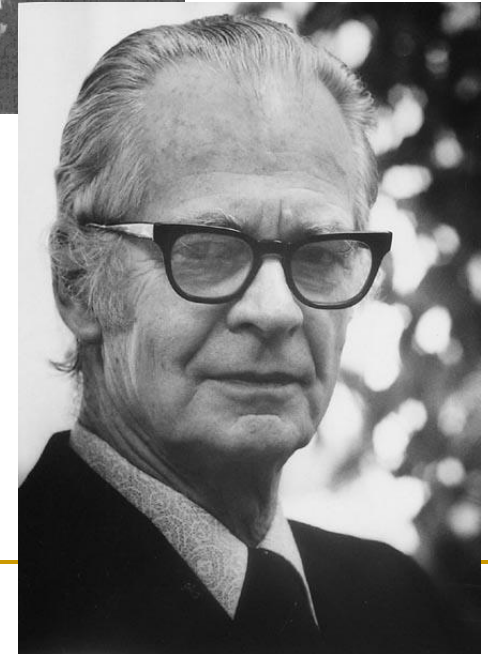
- Law of Effect
- Cat in box maze



- **B. F. Skinner**

(1904-1990)

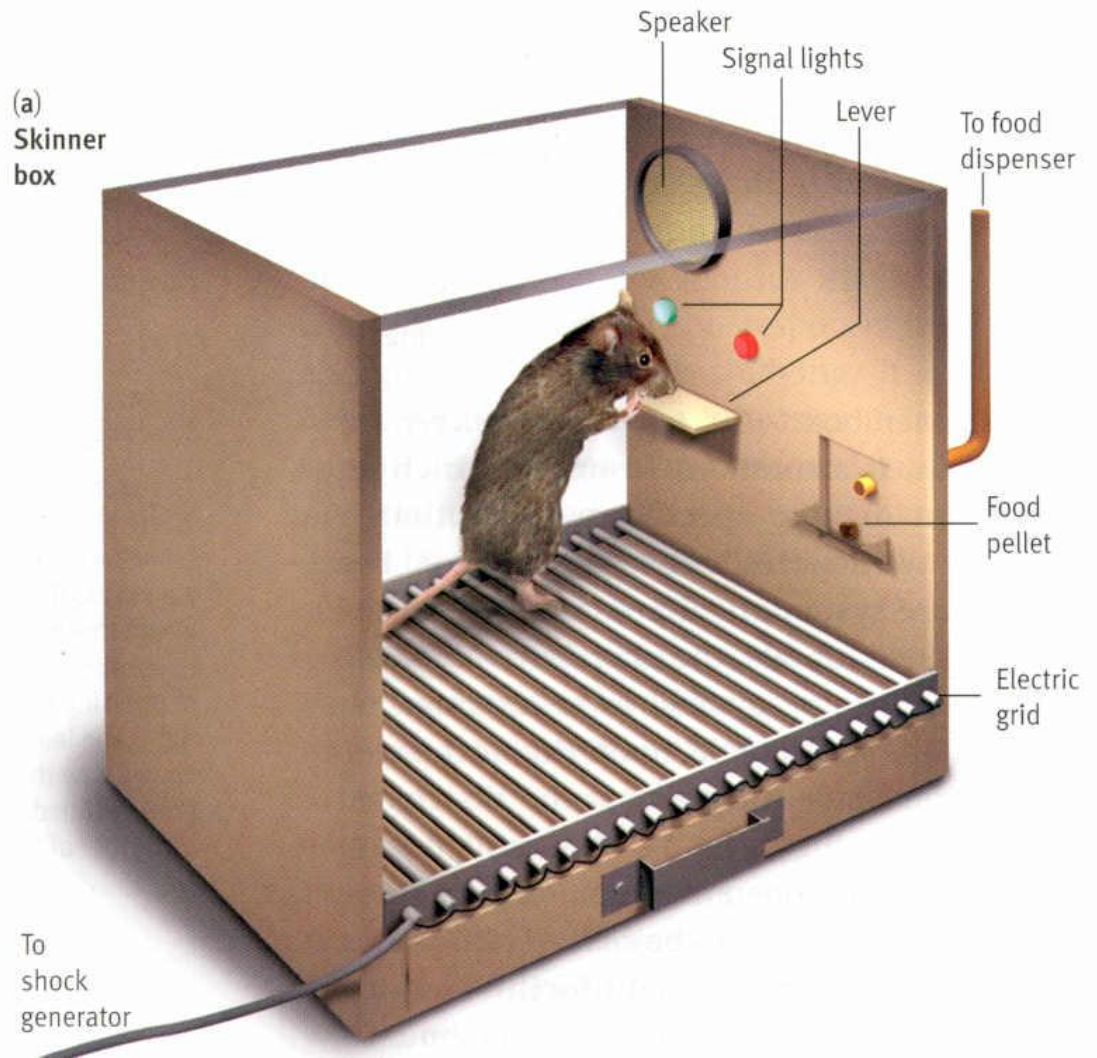
- Learning by consequences
- Skinner box



# Operant Conditioning Chamber



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# Operant Conditioning: Self-control

## ■ Physical Restraint

- Physically manipulate the environment to prevent the occurrence of some problem behavior.



## ■ Depriving and Satiating

- Deprive or satiate yourself, thereby altering the likelihood of a behavior.





# Operant Conditioning

## ■ Doing something else

- To prevent yourself from engaging in certain behaviors, perform an alternate task.



## ■ Self Reinforcement and Self Punishment

- A self control tactic that might seem obvious from a behavioral standpoint is to simply reinforce/ punish your own behavior.



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# Self Reinforcement and Self Punishment

## **Four types of Contingencies**

Positive Reinforcement  
Negative Reinforcement  
Positive Punishment  
Negative Punishment

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# Operant Conditioning

- **Positive Reinforcement** – Consist of the ***presentation*** of a stimulus (usually considered pleasant or rewarding) following a response, which then leads to an ***increase*** in the future strength of that response.
- **Negative Reinforcement** – Is the ***removal*** of a stimulus (usually considered unpleasant or aversive) following a response that then leads to an ***increase*** in the future strength of that response.

# Operant Conditioning

- **Positive Punishment** – Consist of the ***presentation*** of a stimulus (usually considered unpleasant or aversive) following a response, which then leads to a ***decrease*** in the future strength of that response.
- **Negative Punishment** – Consist of the ***removal*** of a stimulus (usually considered pleasant or rewarding) following a response, which then leads to a ***decrease*** in the future strength of that response.



# Four Types of Contingencies

When you want to increase a behavior, **reinforce**.

When you want to decrease a behavior, **punish**.

When you introduce a stimulus, it's called **positive**.

When you take away a stimulus, it's called **negative**.

Positive Reinforcement <i>(Treating)</i>	Negative Reinforcement <i>(Nagging)</i>
Positive Punishment <i>(Spanking)</i>	Negative Punishment <i>(Grounding)</i>

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# Operant Conditioning

- How does operant conditioning fit into our daily lives?
  - How could operant conditioning be used to create or reduce behavior change to better the environment?
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# Social Norms

A general rule of conduct reflecting standards of social approval and disapproval

- What are some social norms relating to environmental behaviors?
    - ❑ How do they influence you?
    - ❑ Are you comfortable challenging them?
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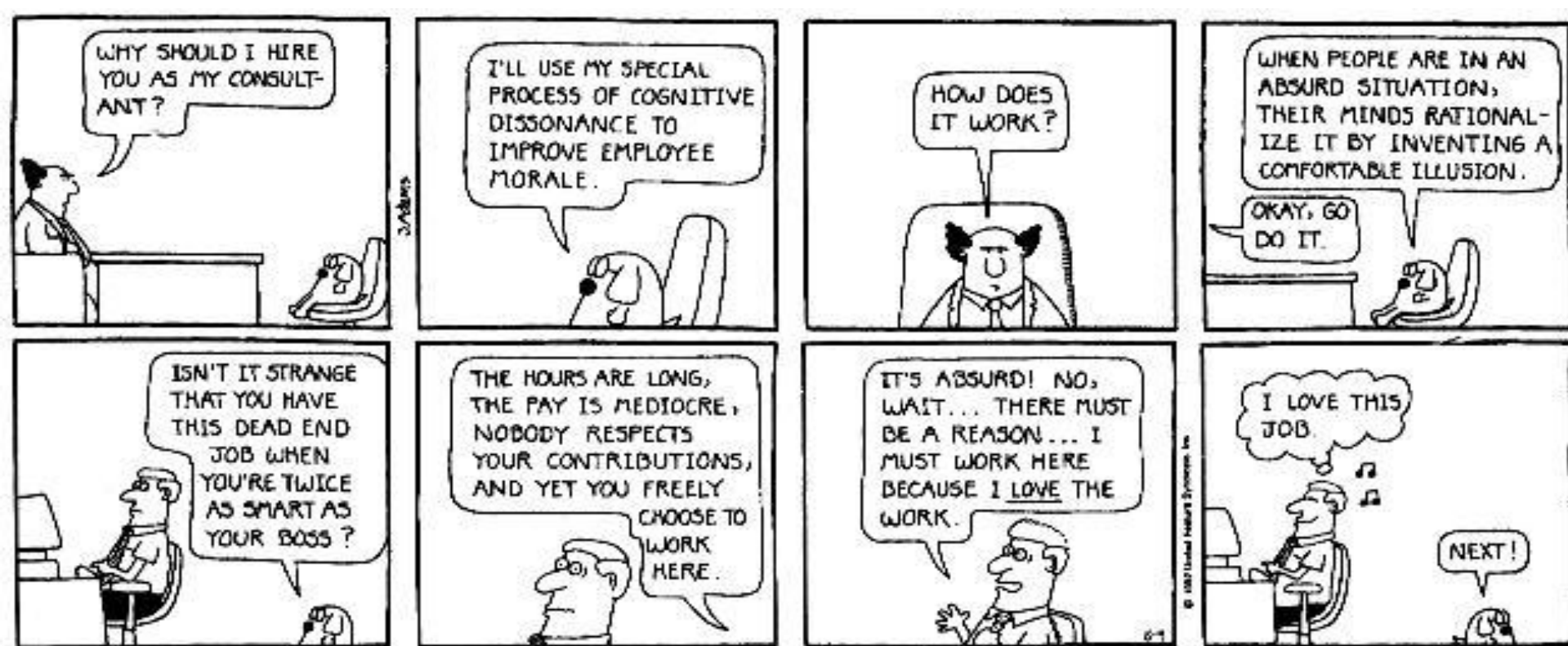




# What leads to changes in behavior or attitudes?

## Cognitive Dissonance Theory

Holding inconsistent cognitions (thoughts) leads to psychological tension that people become motivated to reduce.



# Cognitive Dissonance



# Cognitive Dissonance

**Behavior**

Step One:  
**Unwanted  
consequence**

Step Two:  
**Personal  
Responsibility**

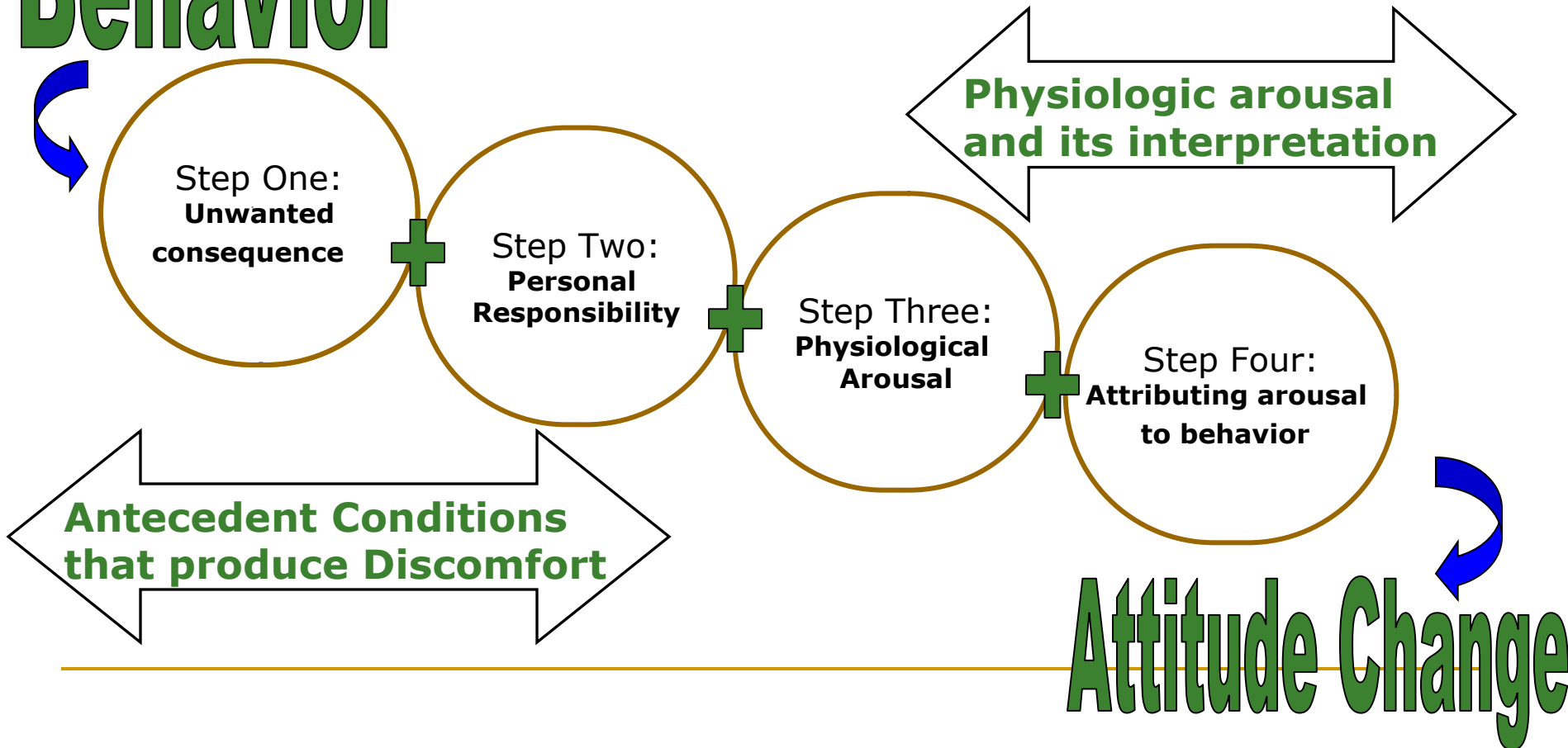
Step Three:  
**Physiological  
Arousal**

Step Four:  
**Attributing arousal  
to behavior**

**Physiologic arousal  
and its interpretation**

**Antecedent Conditions  
that produce Discomfort**

**Attitude Change**



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# Necessary Conditions

- People do not change their attitude every time they behave inconsistently.
  - The following conditions intensify dissonance:
    - ❑ perceived freedom
    - ❑ insufficient justification
    - ❑ self-relevance of attitude
    - ❑ negative outcomes
-



# Cognitive Dissonance



“I say I care for the environment, yet I just realized that in my daily routine I rarely think about how my actions affect the environment.”

**How would you reduce dissonance?**

# Reducing Cognitive Dissonance

## Techniques

- Change your attitude.
- Change your perception of the behavior.
- Add consonant cognitions
- Minimize the importance of the conflict.
- Reduce perceived choice.

## Examples

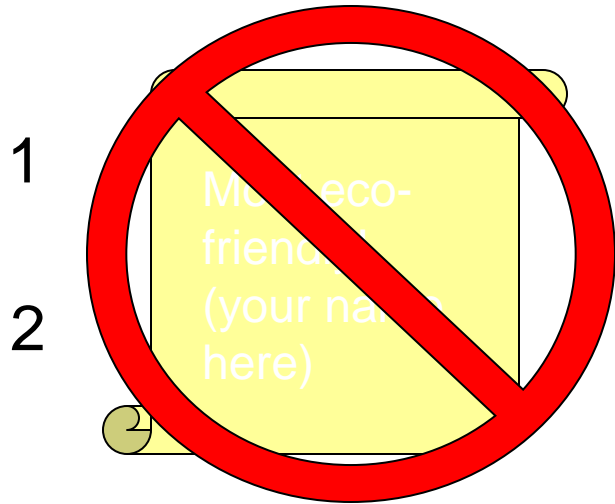
- The environment isn't as important as I said it was.
- Recycling/ buying local doesn't really make that much of a difference.
- I think about the environment more than my peers.
- I am such a busy person I don't have time to think about this.
- I had no choice: our society makes it necessary to think of money first and foremost.

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# Reducing Cognitive Dissonance

- We could also change our behaviors!
  - “Wow, I didn’t realize I did this! For now on I am going to be aware of my behaviors.”

# Cognitive Dissonance in Action



(1) I do things for a reason.

(2) I went without air conditioning for no reason.

**DISSONANCE!**





# Cognitive Dissonance in Action

(1) I do things for a reason.

(2) I went without air conditioning  
**because I believe in energy conservation!**



Initiation

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Dissonance  
starts with:

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Inconsistent  
attitudes,  
thoughts,  
and behavior

# How do we change our behavior?

## Stages of Behavior Change Continuum

1. Unaware (Precontemplation)
2. Aware (Contemplation)
3. Concerned (Commitment)
4. Preparation
5. Action
6. Maintenance

# Using the Stages of Change Model

Stage	Definition	Potential Change Strategies
<b>Precontemplation (unaware)</b>	Has no intention of taking action within the next six months	Increase awareness of need for change; personalize information about risks and benefits
<b>Contemplation/Commitment</b>	Intends to take action in the next six months	Motivate; encourage making specific plans
<b>Preparation</b>	Intends to take action within the next thirty days and has taken some steps in this direction	Assist with developing and implementing concrete action plans; help set gradual goals
<b>Action</b>	Has changed behavior for less than six months	Assist with feedback, problem solving, social support, and reinforcement
<b>Maintenance</b>	Has changed behavior for more than six months	Assist with coping, reminders, finding alternatives, avoiding relapses.

*\*from Theory at a Glance from the National Cancer Society*