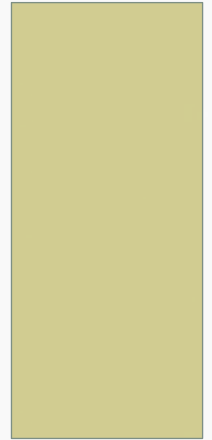


# The Cost of Environmental Messaging On Demand For Energy Efficiency

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“Harmony Between Man, Nature And Machine”



“Save Energy And  
Fight Climate Change”

# VALUES AND CHOICE

- Identity-related concerns affect consumer choice  
(Akerlof & Kranton, 2010; Berger & Heath, 2007, 2008; LeBoeuf et al., 2010; White & Dahl, 2006, 2007)
  - Choice as a reflection of what one values
- Effectiveness of promoting the environment
  - Likely moderated by political ideology



# HYPOTHESES AND OVERVIEW

- Environmental aspect polarizes energy efficiency
- Promoting the environment:
  - Repels conservatives
  - Reject energy-efficient choices would have selected otherwise
- Study 1: Ideology and Energy Efficiency
- Studies 2 and 3: Labels and Choice
  - Real choice of incandescent vs. fluorescent light bulb (Study 2)
  - Hypothetical choice of standard vs. hybrid car (Study 3)

# STUDY 1

- Political ideology → Energy Efficiency
- Key determinant: Value placed on emission reduction (**Environmental Concern**)
- Additional aspects of energy efficiency:
  - Foreign oil dependence reduction (Energy Independence)
  - Energy cost reduction (Cost)
- N = 657 U.S. participants recruited from Clearvoice

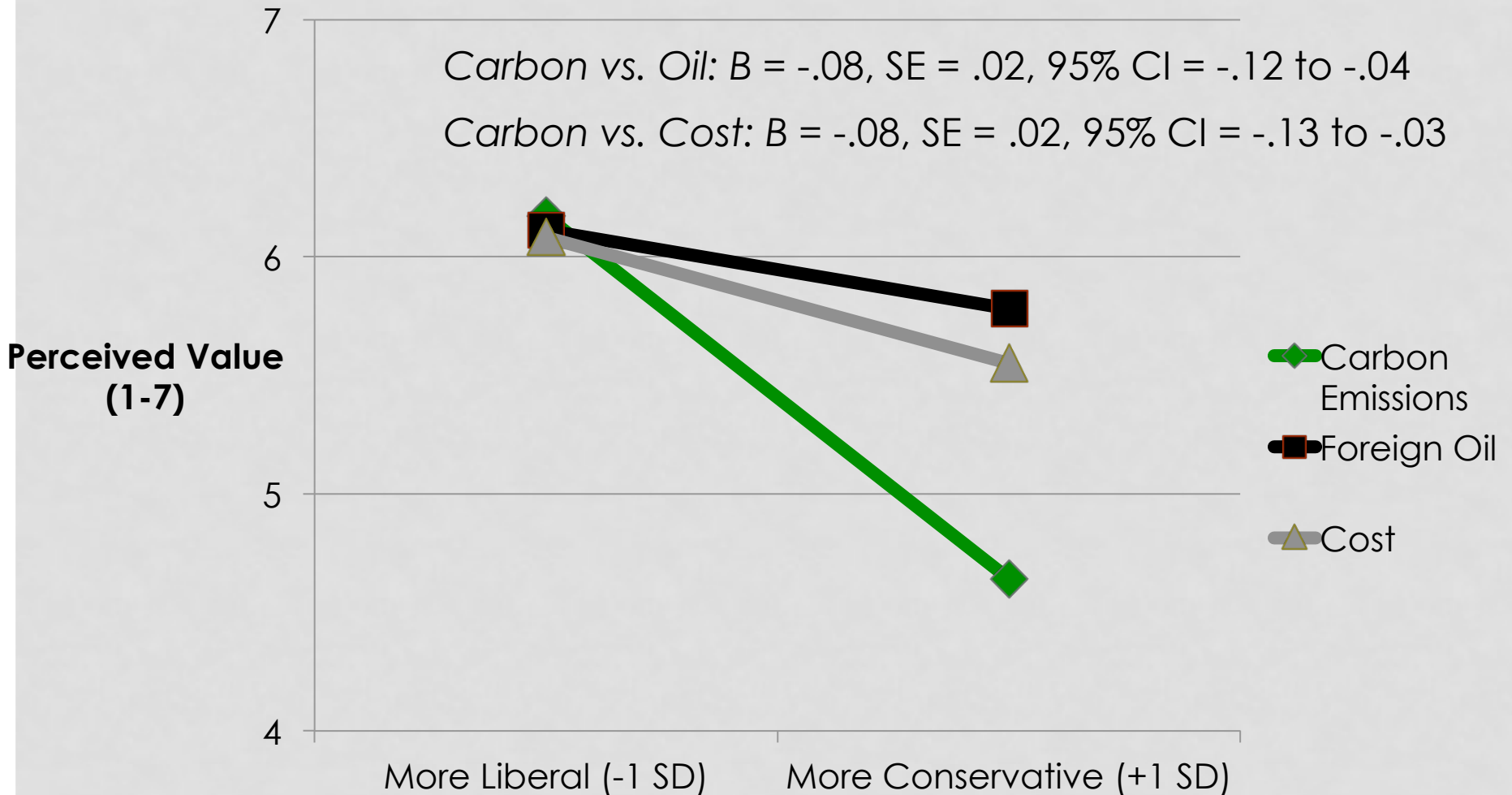
# DESIGN (CORRELATIONAL)

- Political Ideology ( $\alpha = .87$ )
  - Identify as politically liberal/conservative
  - Identify with Democrats; Republicans
- Read description of energy efficiency
- Potential mediators: Valuation
  - Reducing carbon emissions (Environment;  $\alpha = .93$ )
  - Reducing foreign oil dependence (Energy Independence;  $\alpha = .83$ )
  - Reducing cost of energy use (Cost;  $\alpha = .79$ )
- Main DV: Favor investment in energy efficiency
  - Self, Americans, U.S. government, U.S. businesses ( $\alpha = .83$ )

# SUPPORT FOR ENERGY EFFICIENCY

	Favor Investment in Energy Efficiency
Political Conservatism	-.24*** (.03)
Age	.004 (.003)
Gender (0 = Male; 1 = Female)	.13 (.09)
Education Level	-.02 (.03)
Income Level	.06 (.05)
Constant	5.49*** (0.22)

# PERCEIVED VALUE





# DO ENVIRONMENTAL LABELS AFFECT CHOICE?



- Environmental Label: Repels conservatives from energy efficient choice
  - Makes choice about concern for the environment

# STUDY 2: LIGHT BULBS

- Participants (N = 210) given \$2 to purchase incandescent (**standard**) or fluorescent (**efficient**)
  - Learned that fluorescent would:
    - Last for 9000 more hours
    - Result in a 75% reduction in electricity costs

**Price: \$0.50**

**Price: \$1.50**

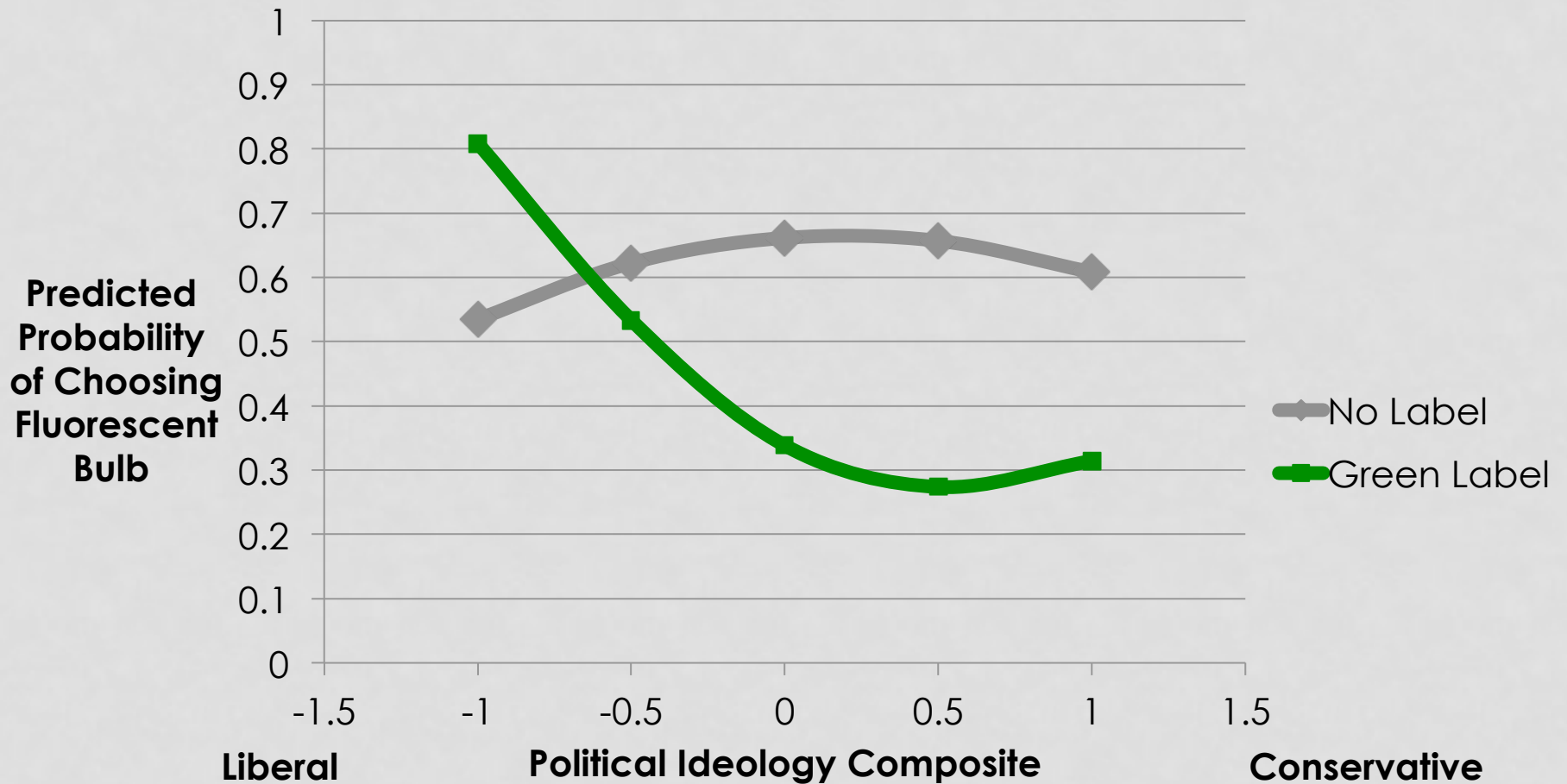
**PROTECT THE  
ENVIRONMENT**



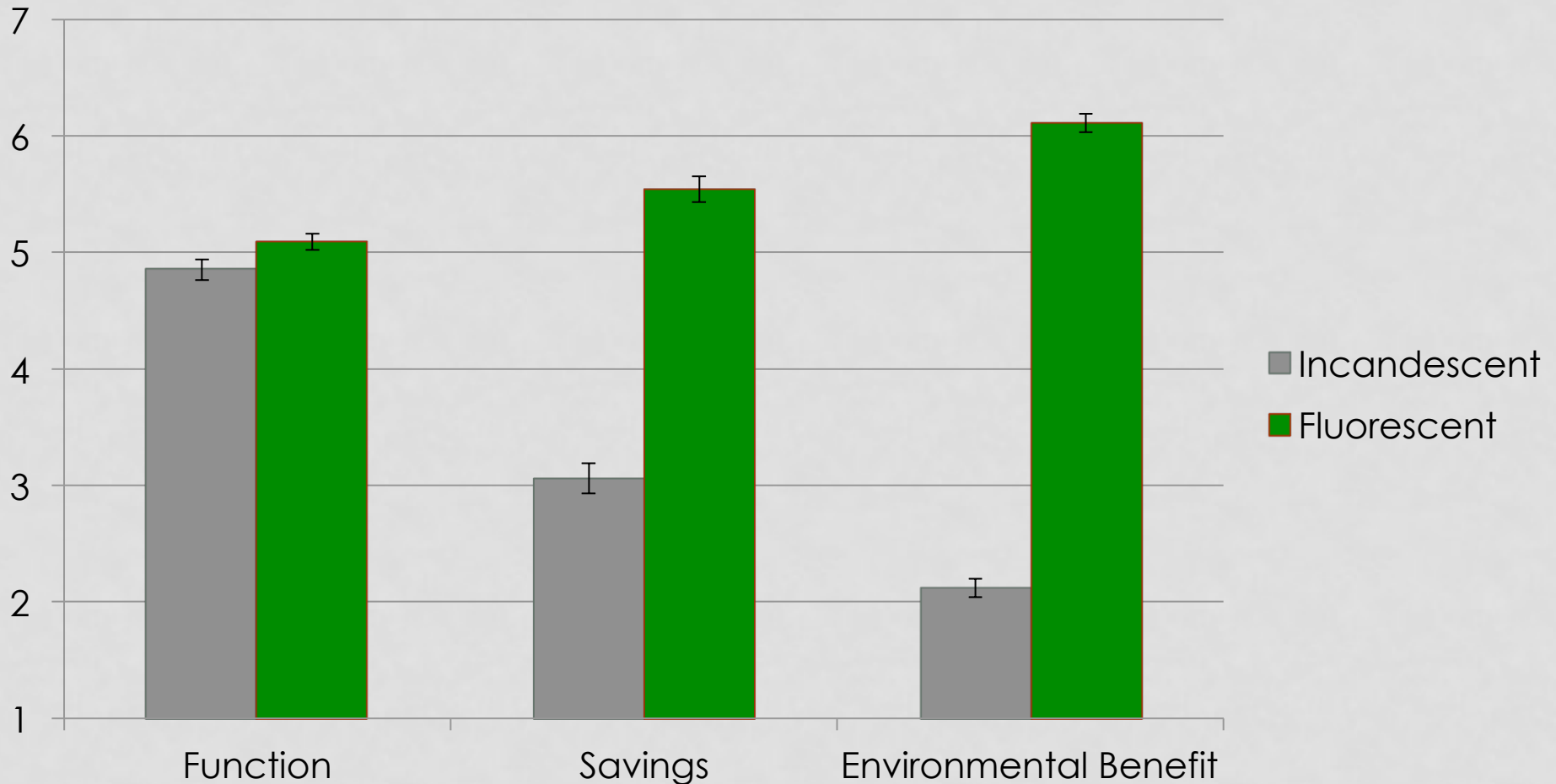
**Price: \$0.50**

**Price: \$0.50**

# BULB CHOICE



# ONE ALTERNATIVE EXPLANATION



# OTHER MESSAGES THAT AFFECT CHOICE?



**INDEPENDENCE**

# STUDY 3: HYBRID CAR

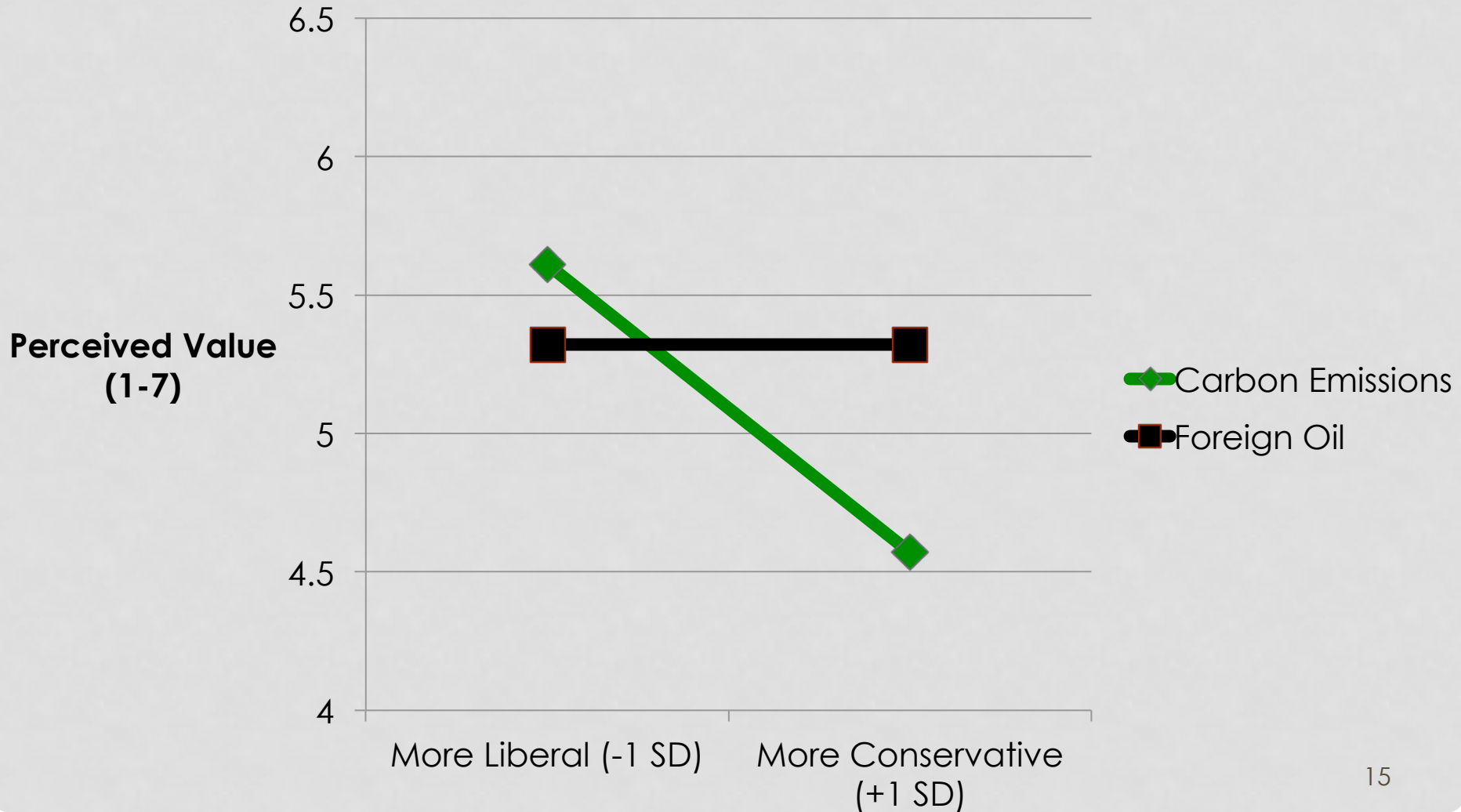
- Participants (N = 609 adults recruited online)
- Choice: Standard vs. Hybrid Car
  - Hybrid: Better MPG; Higher price

- Label  
Oil (E

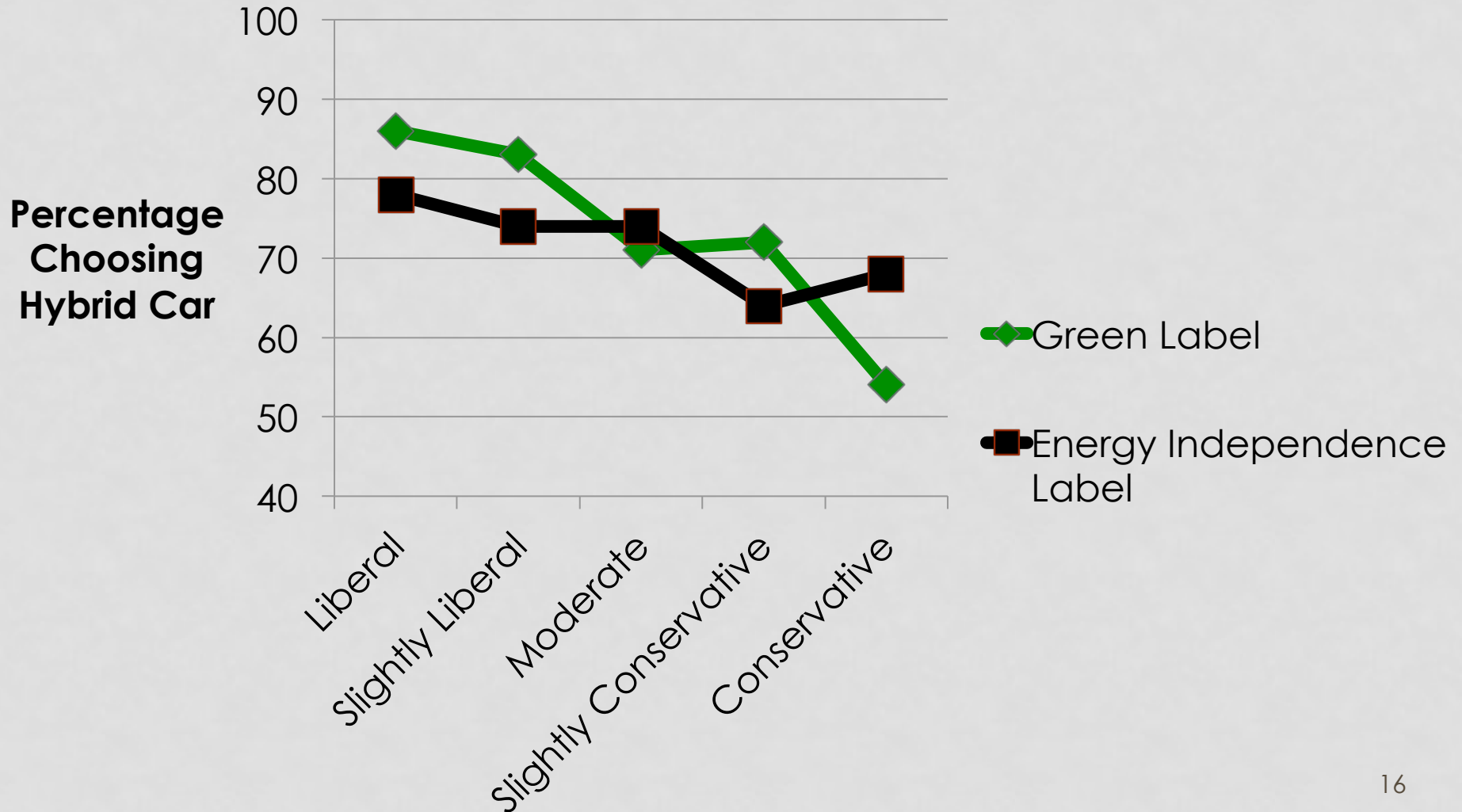


Foreign

# PERCEIVED VALUE



# CAR CHOICE





# SUMMARY

- Conservatives less in favor of energy efficiency investment than liberals
  - Driven by polarization over environmental concerns
- Ideology matters to environmental appeals
  - Leads to rejection of cost-saving energy efficient options
- Bridging the ideological gap
  - Greater trans-ideological agreement about cost and energy independence

# IMPLICATIONS

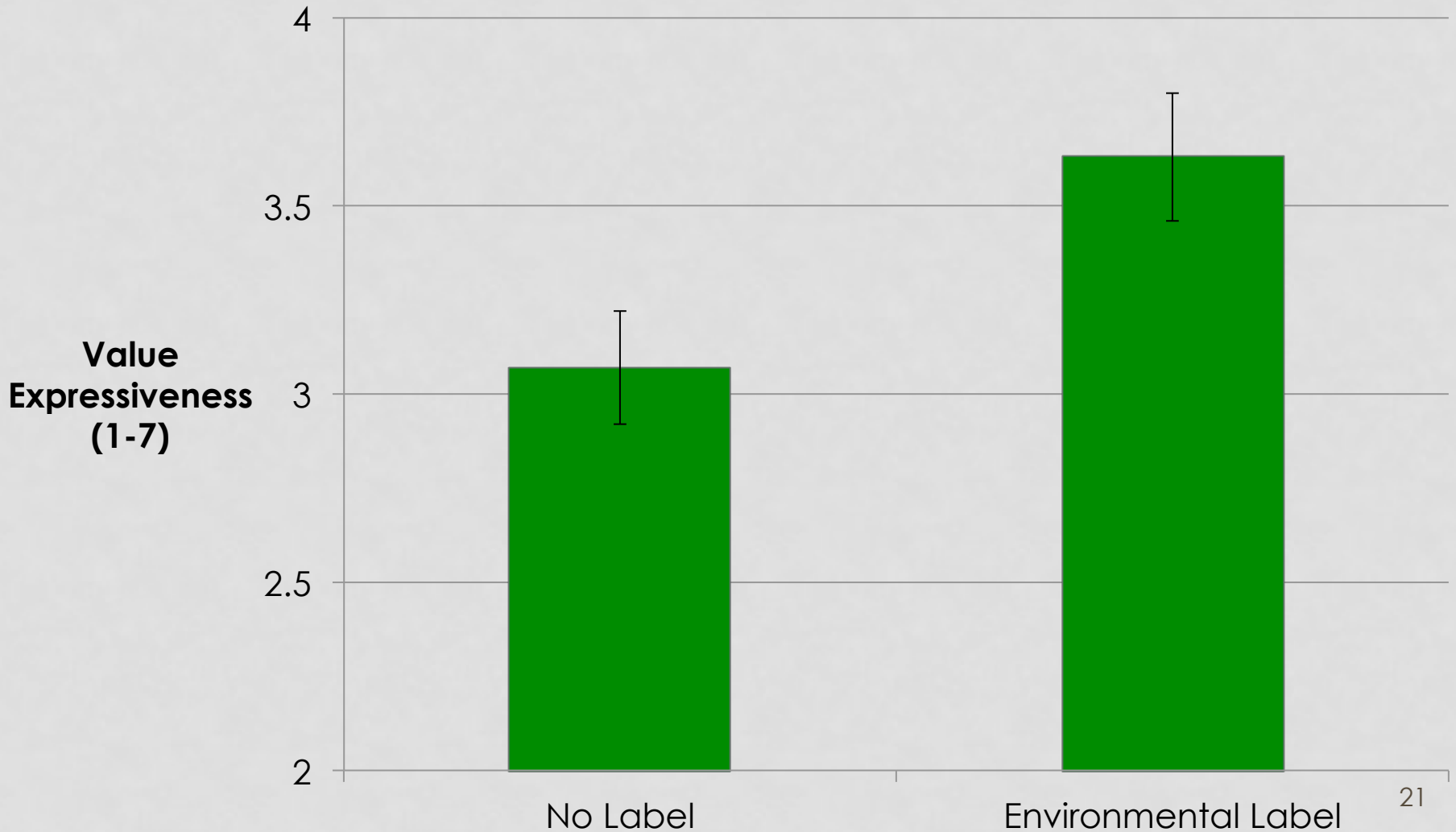
- Two different strategies
  - Motivating the environmentally-concerned
  - Motivating the masses
- Motivating the environmentally concerned
  - ENERGY STAR Program
    - “Join the movement to protect the climate.”
    - “You, too, can join the fight against climate change. Become an ENERGY STAR partner today.”
- Motivating the masses
  - One size fits all unlikely to be effective
  - Need to consider values of different groups



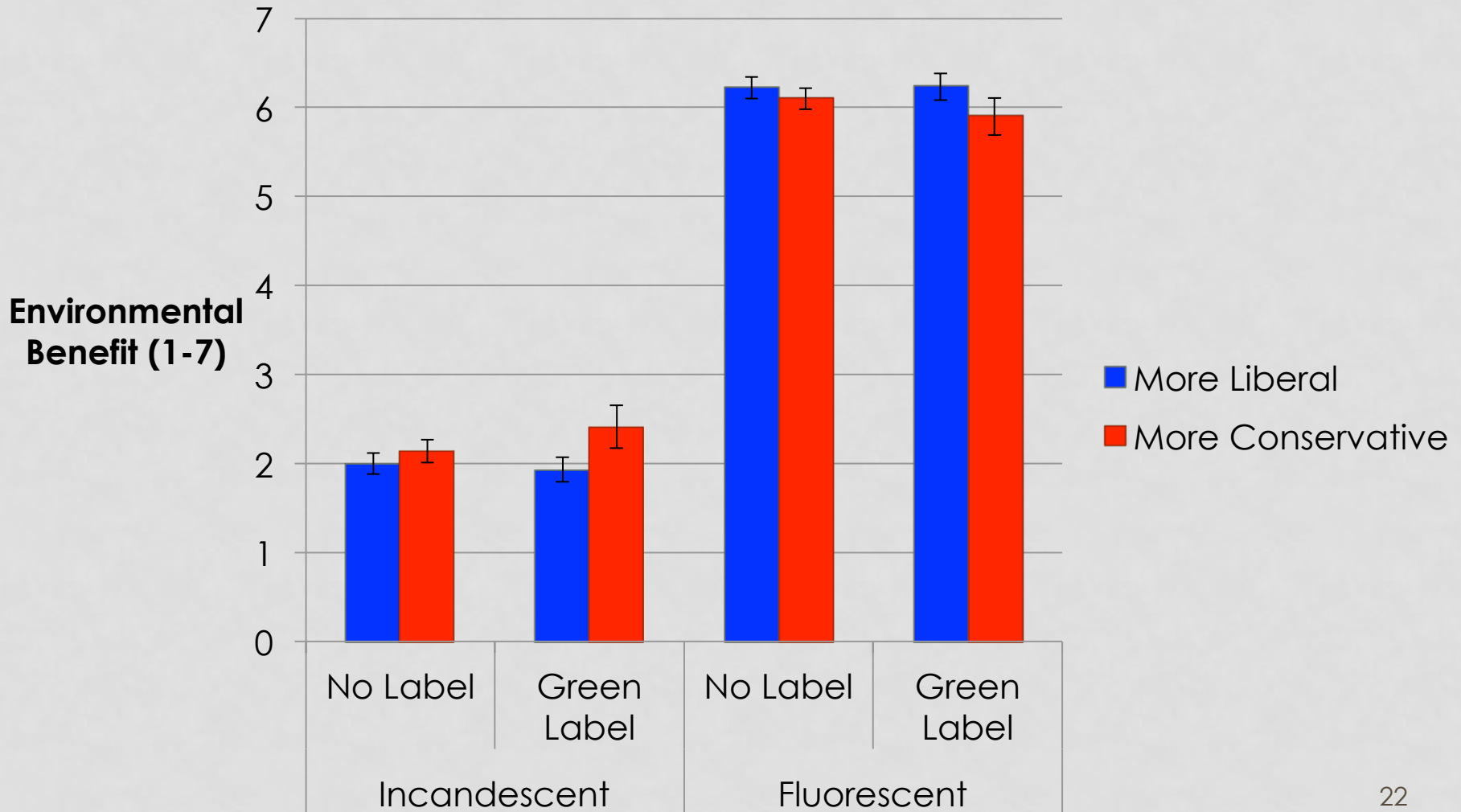
# STUDY 2: LIGHT BULBS

- Participants (N = 210) given \$2 to purchase incandescent (**standard**) or fluorescent (**efficient**)
  - Learned that fluorescent would:
    - Last for 9000 more hours
    - Result in a 75% reduction in electricity costs
- Environmental Salience
  - Purchase of fluorescent came with blank sticker (No Label) or Protect The Environment sticker (**Green Label**)
- Upfront cost
  - Bulbs either the same price (\$0.50) or fluorescent more \$ (\$1.50)

# VALUE EXPRESSIVENESS OF CHOICE



# ONE ALTERNATIVE EXPLANATION



# PERCEIVED VALUE SIMILARITY

