

Combating Climate Change Helplessness: Efficacy Beliefs Promote Energy Conservation



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**STOP CLIMATE CHANGE
BEFORE IT CHANGES YOU.**



for a living planet™

SENATE - P.33
Why Is Ted Cruz Such
A Noisy Freshman?



SPECIAL ISSUE

State of the Union

ENERGY - P.31
The White House Resets
Climate Expectations

National Journal

February 9, 2013

Landfall

Climate change isn't some far-off phenomenon.
It's here, and it's already soaking the economy.

BY CORAL DAVENPORT



PLUS

There's No Such Thing
As Political Capital

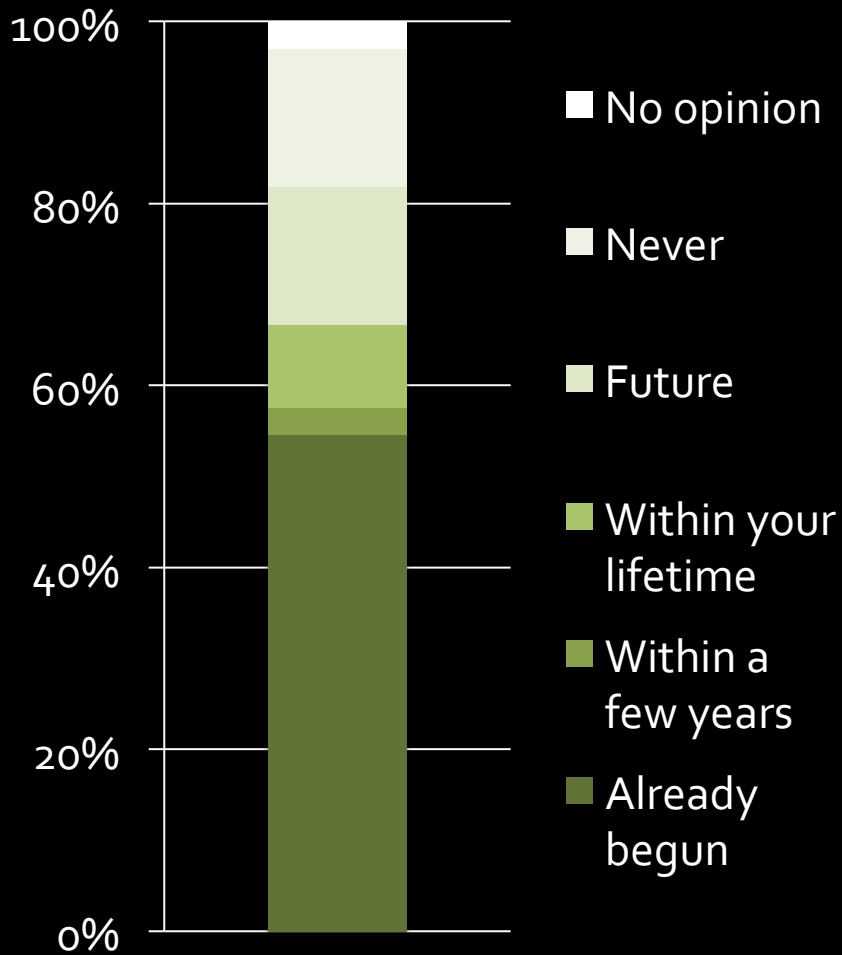
BY MICHAEL HIRSH

**DON'T LET THIS BE OUR FUTURE
WASHINGTON DC**

STOP CLIMATE CHANGE NOW

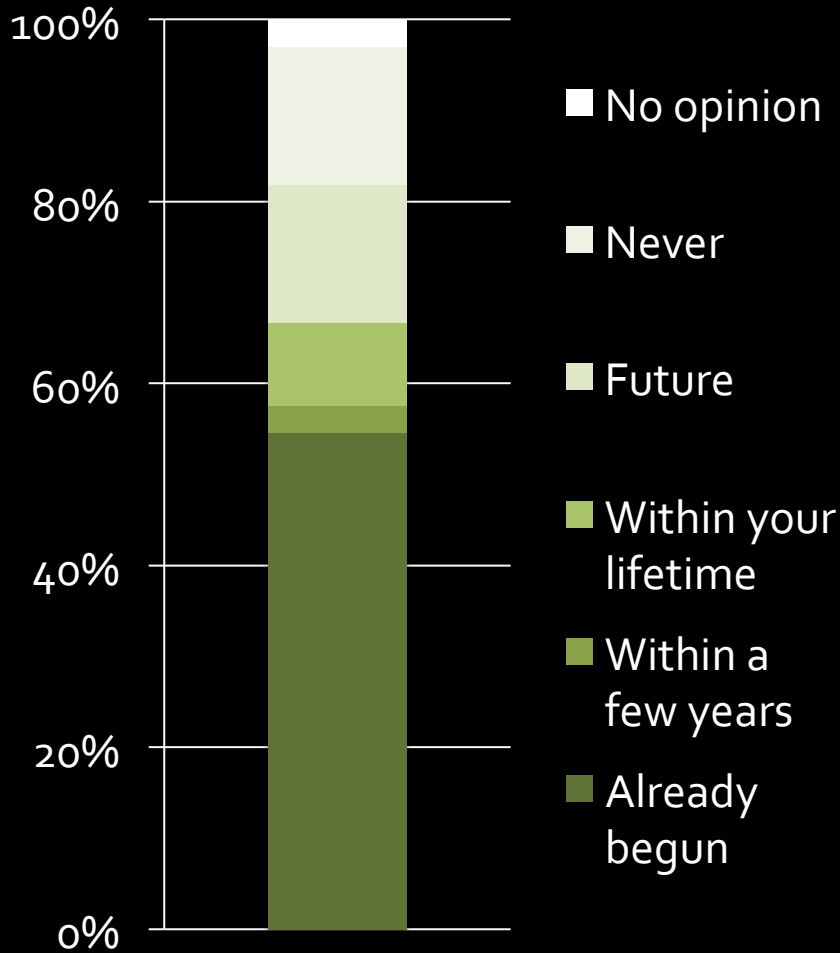


When will the effects of climate change happen?



(Gallup, 2013)

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(Gallup, 2013)

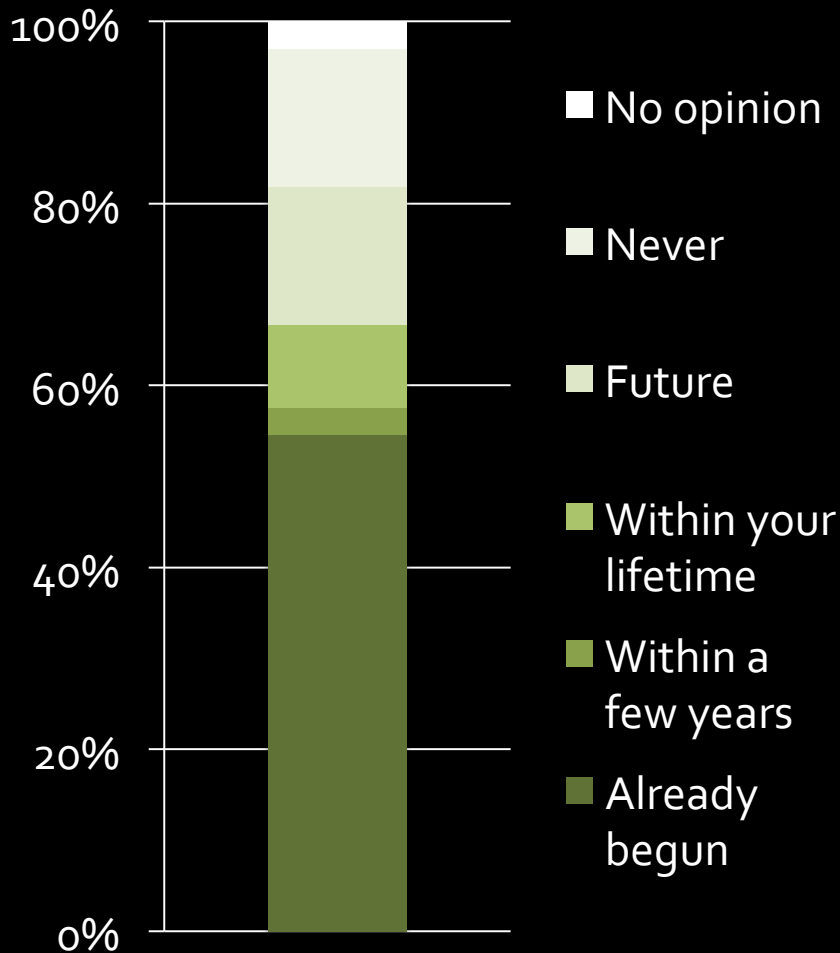
Percent concerned "a great deal" about global warming:

2014:

34%

(Gallup, 2014)

When will the effects of climate change happen?



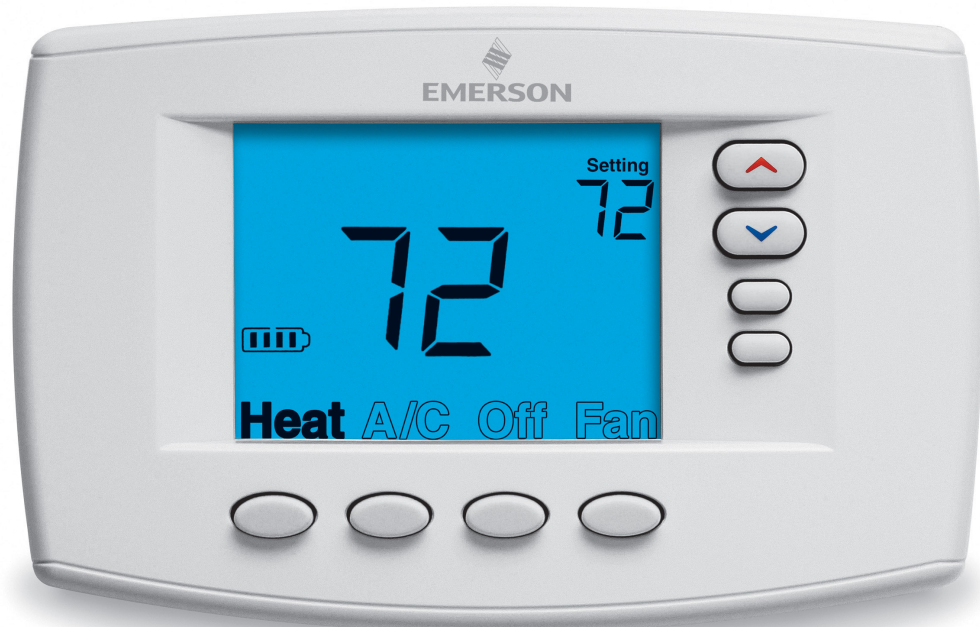
(Gallup, 2013)

Percent concerned "a great deal" about global warming:

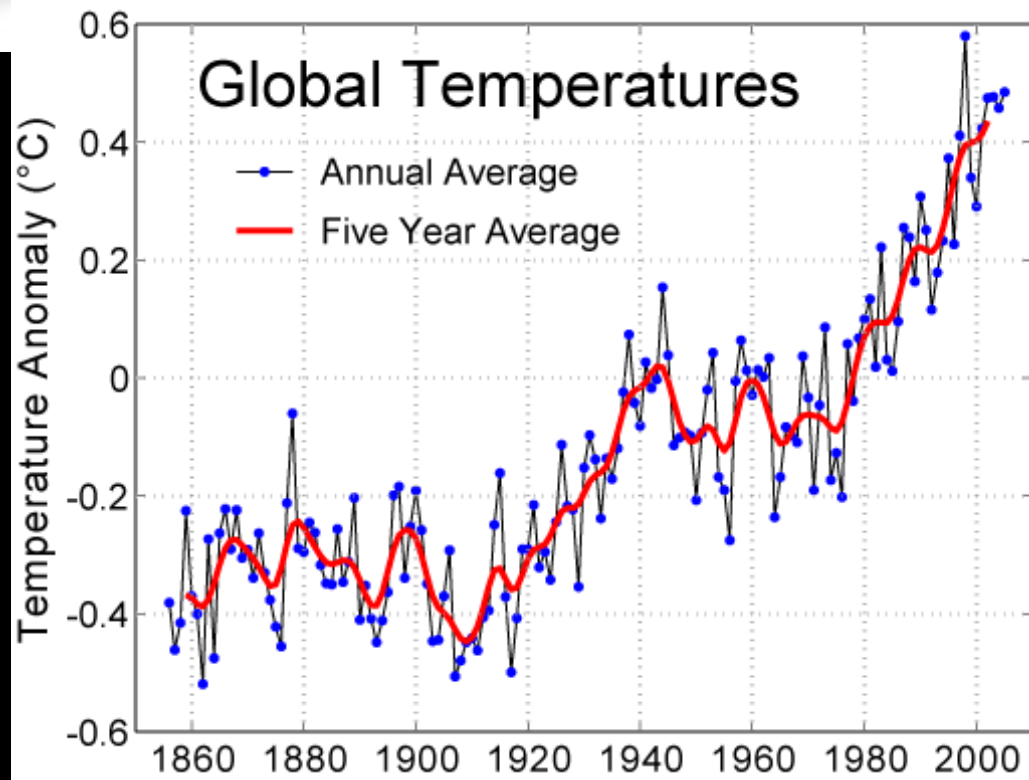
2014: 34%

1989: 35%

(Gallup, 2014)



But what can individuals do?



Climate Change Helplessness

In the face of a powerful and seemingly uncontrollable threat, people will lack the motivation to act to prevent negative consequences.

Hypothesis

- If people believe that their behavior can affect climate change, they will:
 - Act to conserve energy
 - Moralize energy use
 - Support policies to curb energy use

Study 1

- N = 282 Mturk workers
- 3 (Message Frame) x 2 (Efficacy Message)

Neutral Message Frame

Climate change is a phenomenon widely discussed in the media ...

... take measurements of sea ice, temperature, ...

World leaders meet every few years to discuss climate policy ...

Fear Message Frame

Climate change is a truly severe phenomenon ...

... which could kill thousands of people ...

... you will likely experience a higher rate of severe floods, superstorms, and tornadoes ...

Disgust Message Frame

Climate change is a truly nasty phenomenon ...

... which could bring ashore much of the waste and pollution from the oceans ...

... you are likely to be ... eating food grown with contaminated soil ...

Low Efficacy

Unfortunately, there is not much that you can do to make a real difference ...

... they notice it taking more time and effort than simply throwing their bottles in the garbage ...

... you might save about 3 tons of carbon emissions, which is practically nothing ...

High Efficacy

Fortunately, there are things that you can do to make a real difference ...

... they don't notice it taking any more time or effort than throwing their bottles in the garbage ...

... you can save over 6000 pounds of carbon emissions ... a substantial saving ...

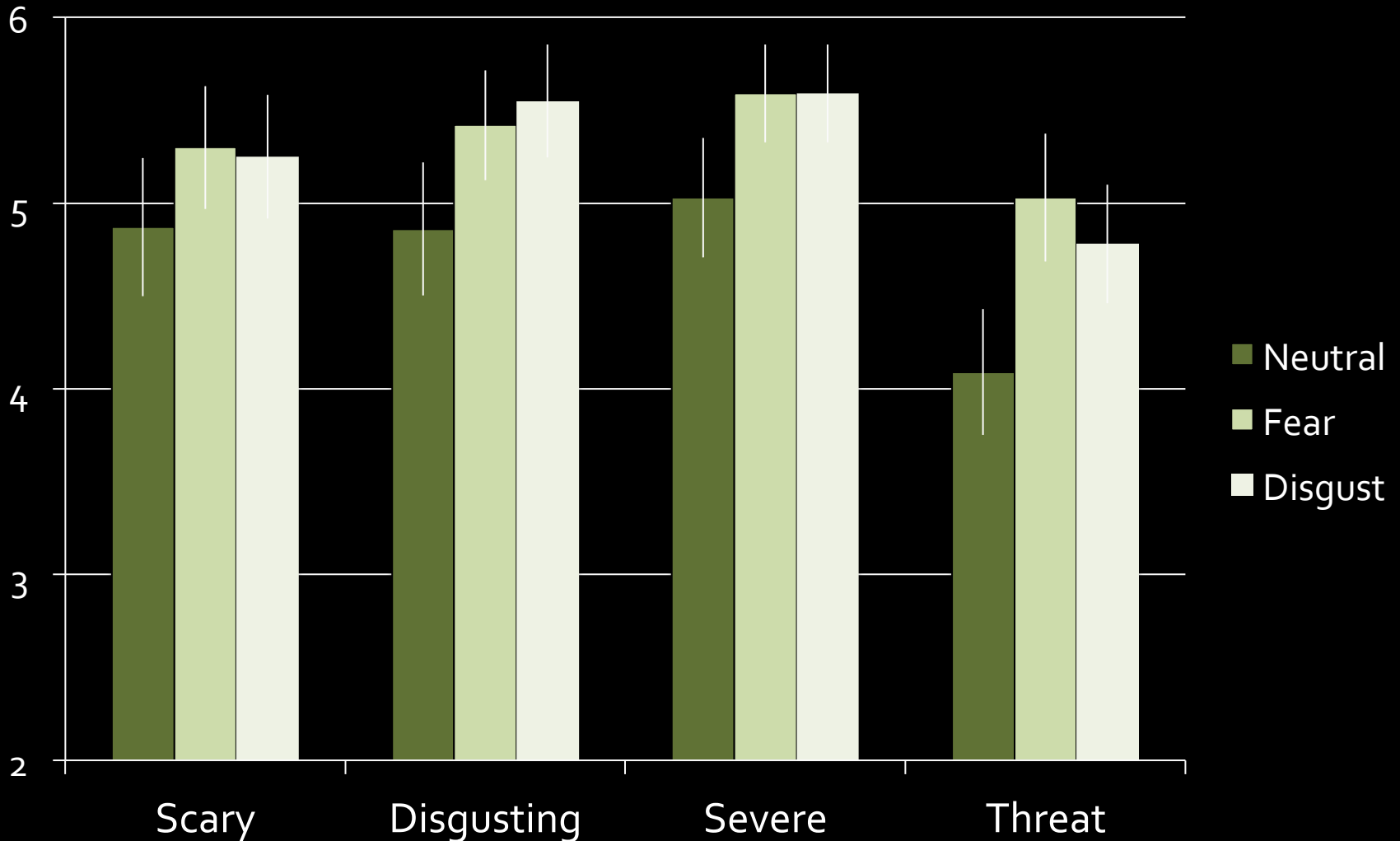
Measures

- Emotional responses to climate change:
 - How (*scary, disgusting, severe, personally threatening*) is climate change?
- Efficacy check
 - *How effective are individual actions in combatting climate change?*

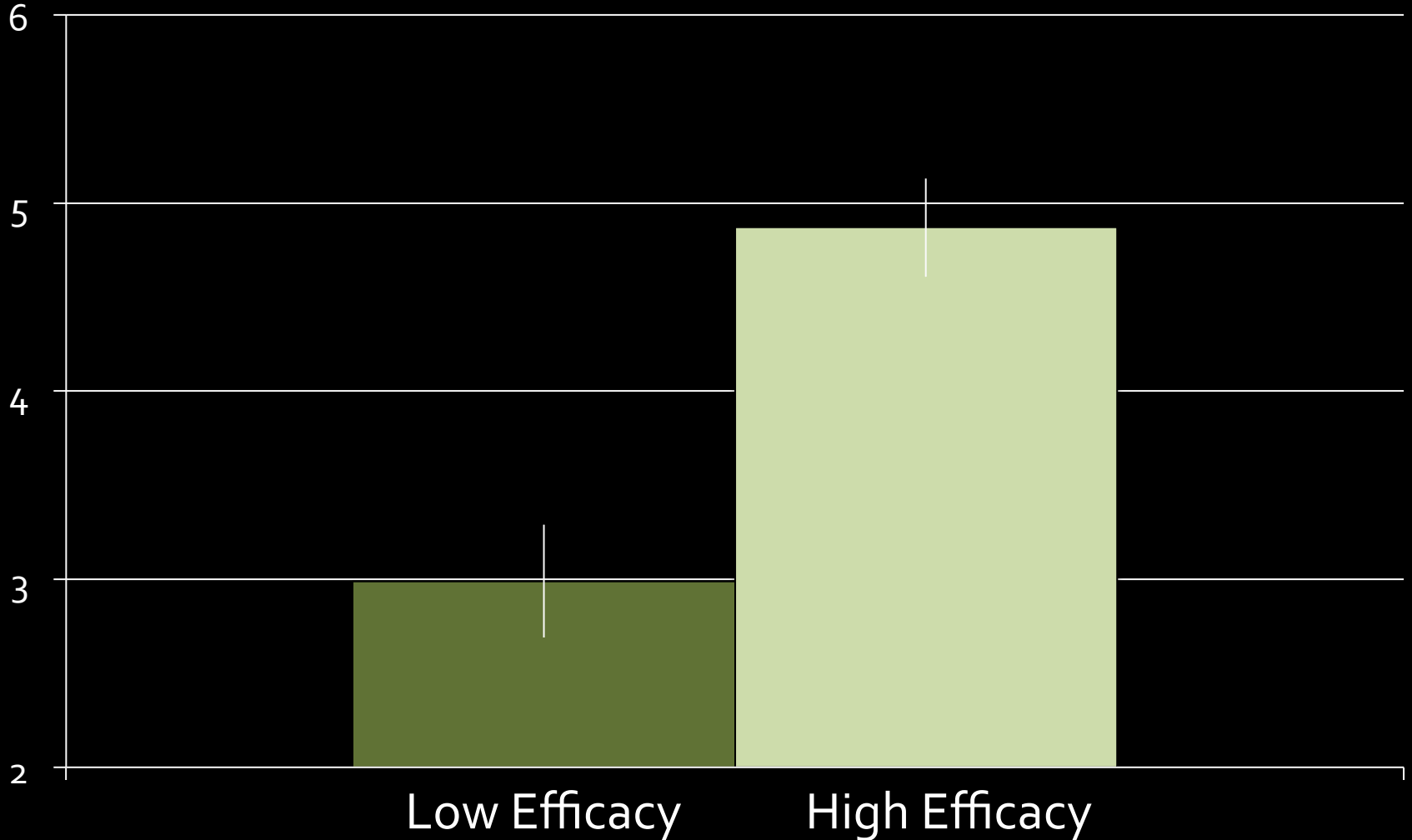
Measures

- Climate Change Beliefs (adapted from Sinatra & Lombardi, 2012); 7 items
 - *Scientific evidence points to a warming trend in global climate.*
- Intentions to conserve energy; 12 items
 - *I intend to recycle at home.*
- Energy use moralization; 11 items
 - *Using too much energy is morally wrong.*
- Support for energy conservation policies; 7 items
 - *A fee for each disposable plastic shopping bag used.*

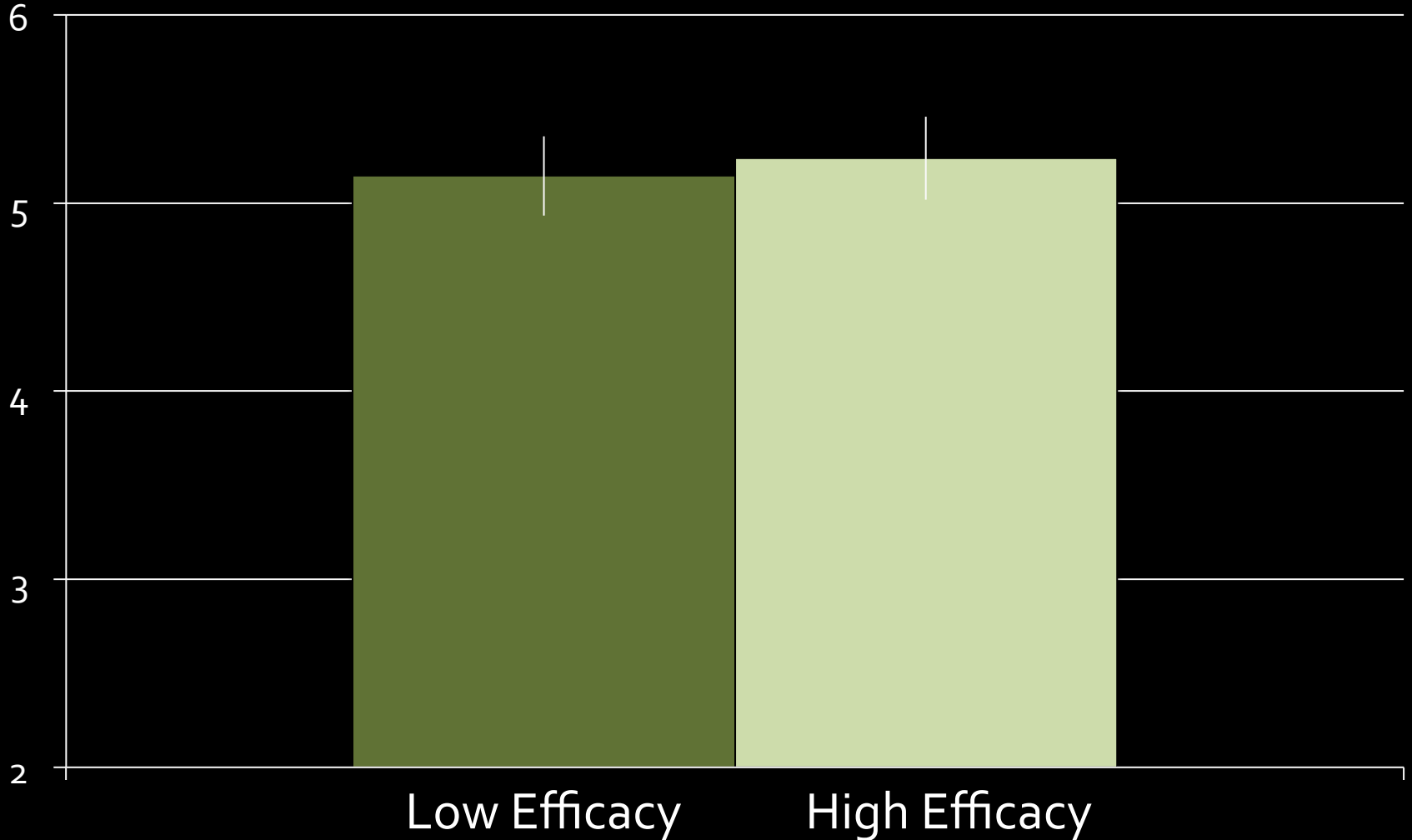
Emotional Responses (1-7) by Message Frame



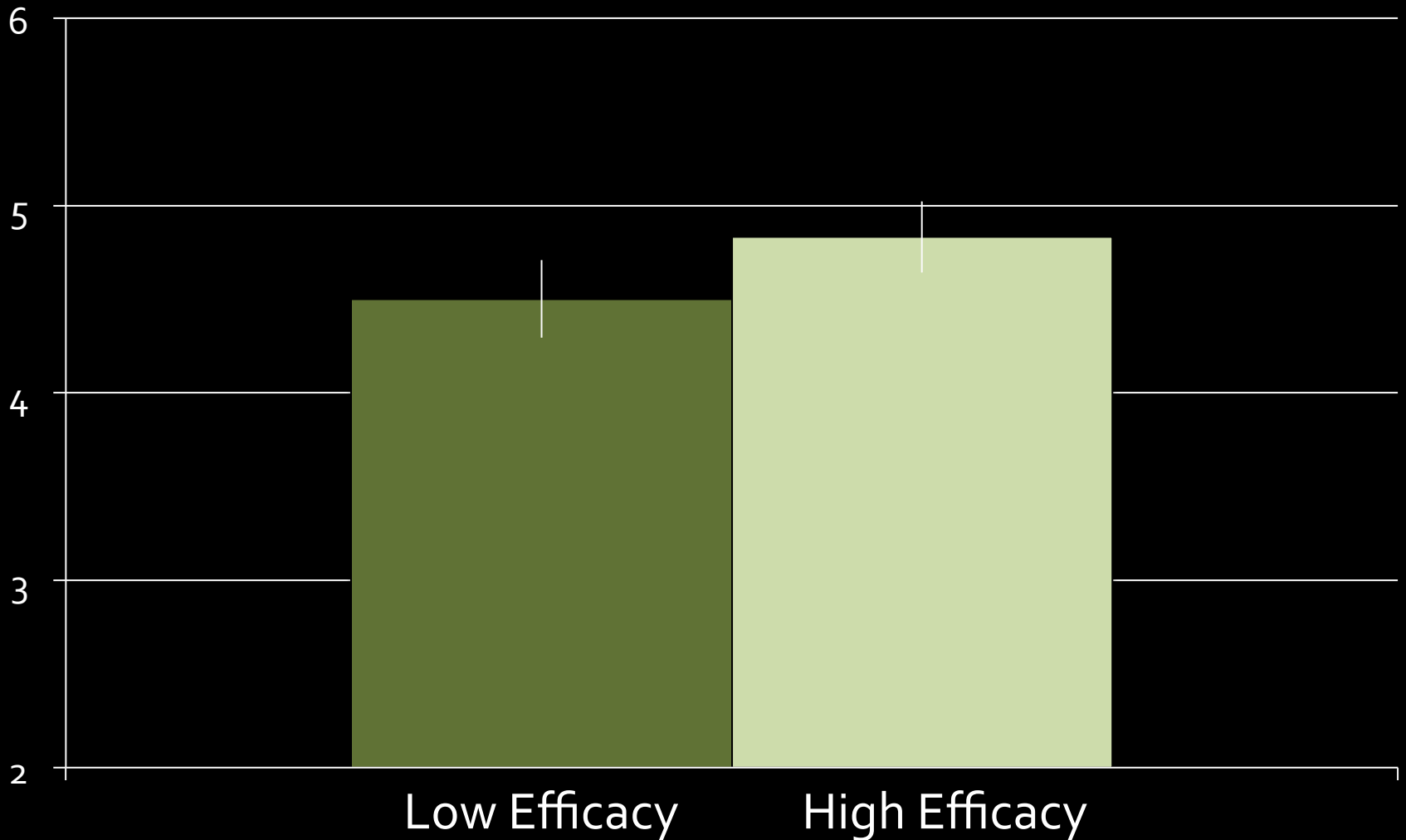
Efficacy Check (1-7) by Efficacy Condition



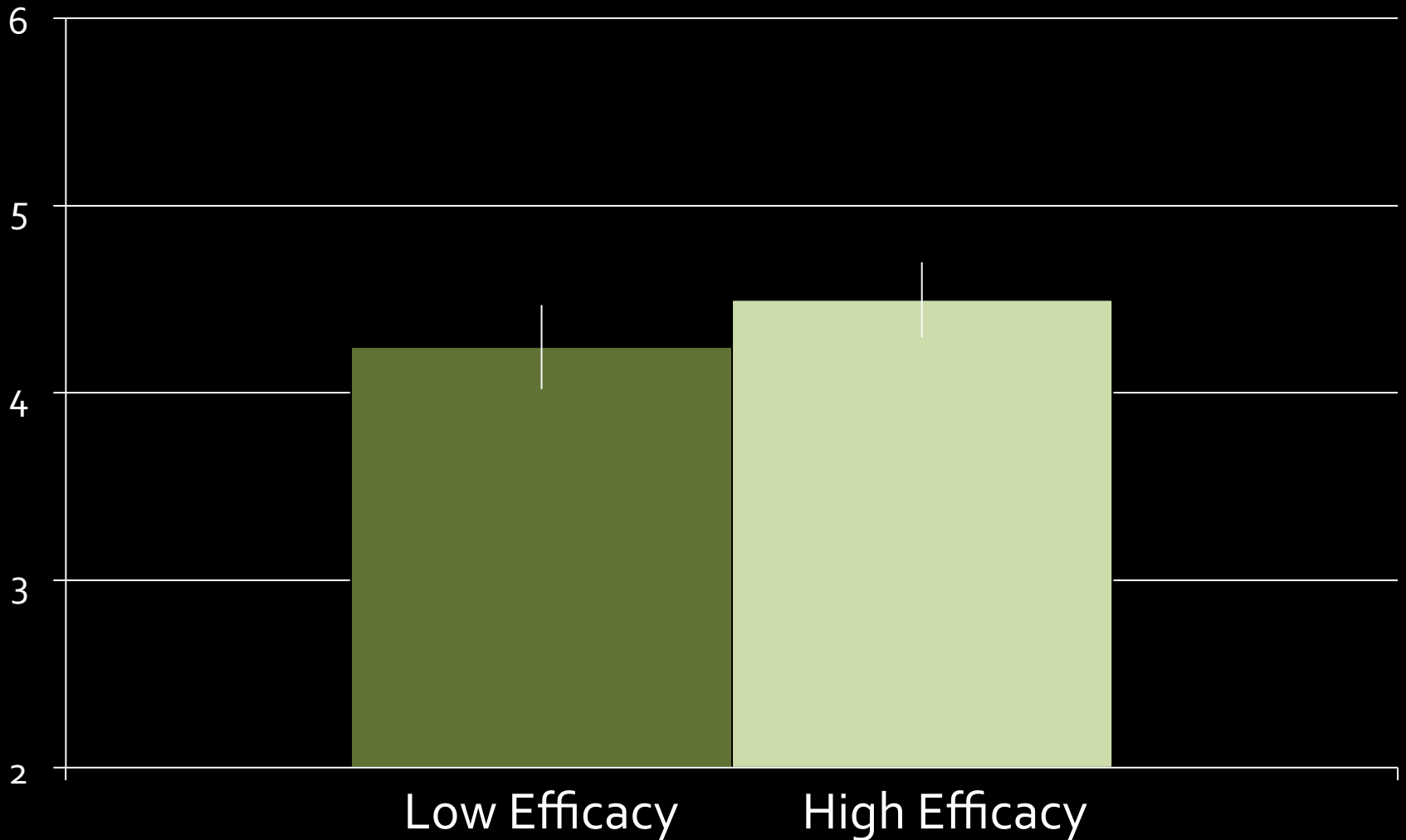
Belief in Climate Change (1-7) by Efficacy Condition



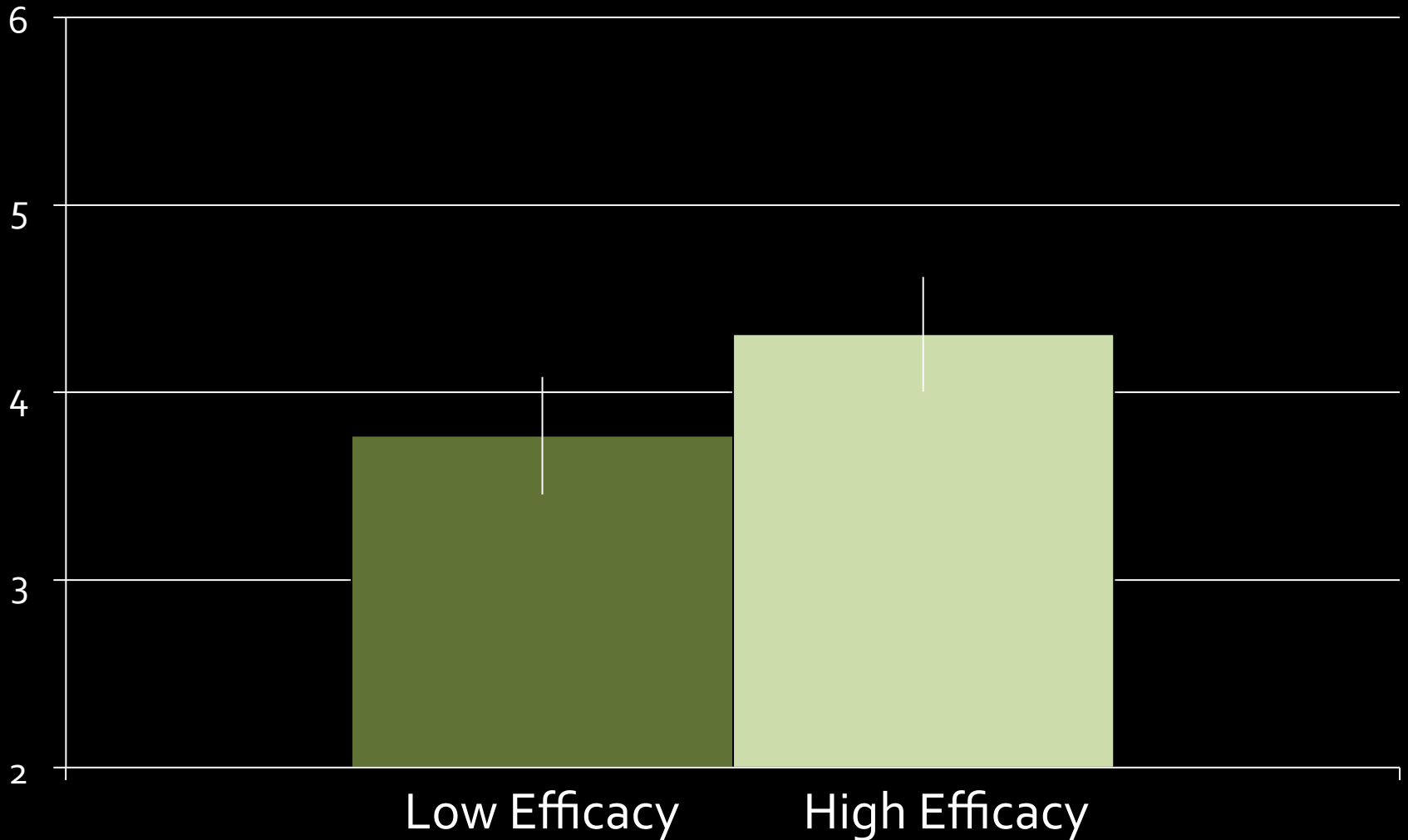
Intentions to Conserve Energy (1-7) by Efficacy Condition



Moralization of Energy Use (1-7) by Efficacy Condition



Number of Policies Supported (0-7) by Efficacy Condition



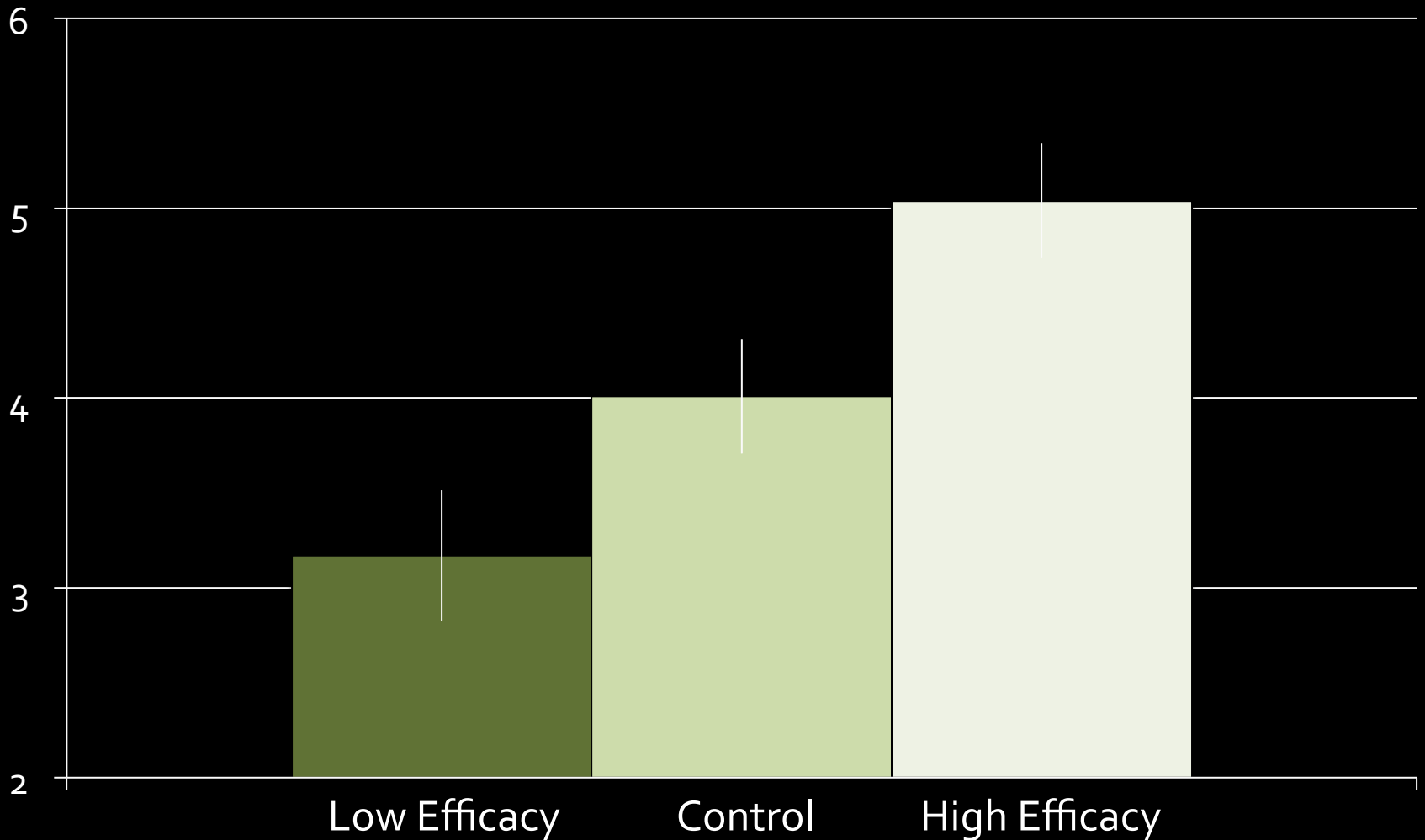
Study 1: Summary

- Message Frames did not successfully distinguish fear and disgust.
- Efficacy promoted intentions, moralization, policy support.

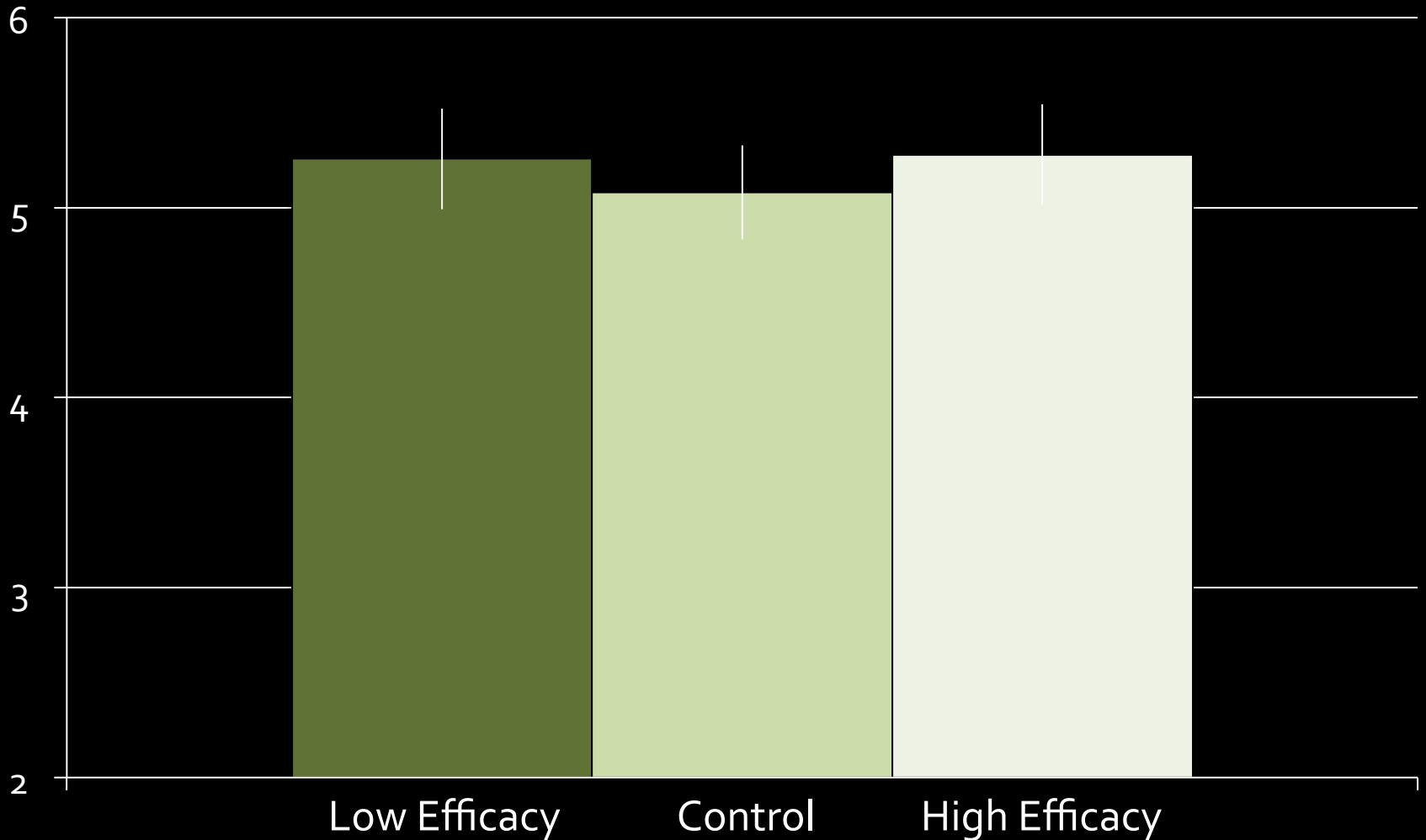
Study 2

- Manipulation:
 - High Efficacy
 - Control
 - Low Efficacy
- Added *behavior* measure; 10 items
 - Compared to a typical week, did you drive more or fewer miles this week?
- Administered measures at two time points:
 - **Time 1:** Immediately following message ($N = 296$)
 - **Time2:** One week later ($N = 221$)

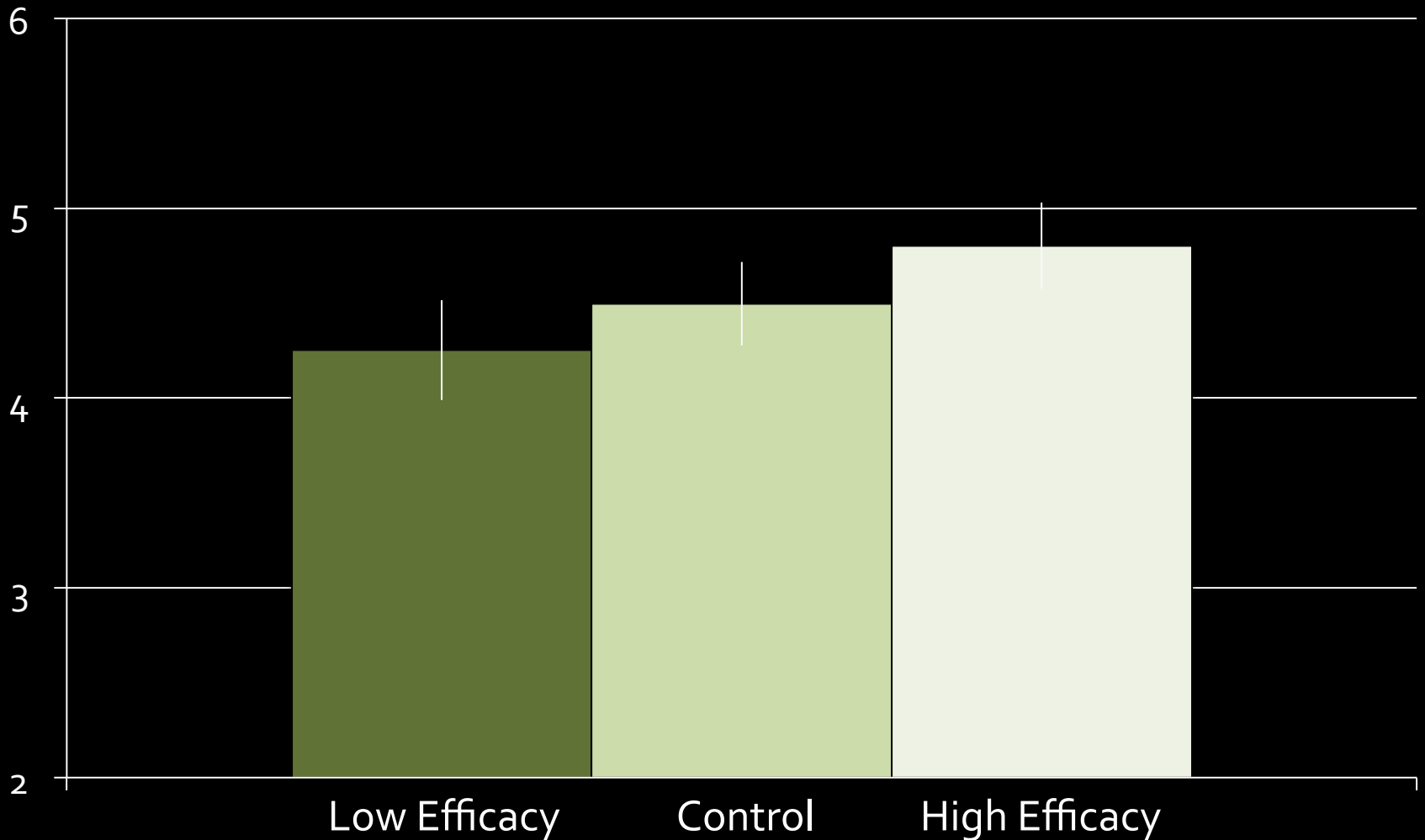
Time 1: Efficacy Check (1-7)



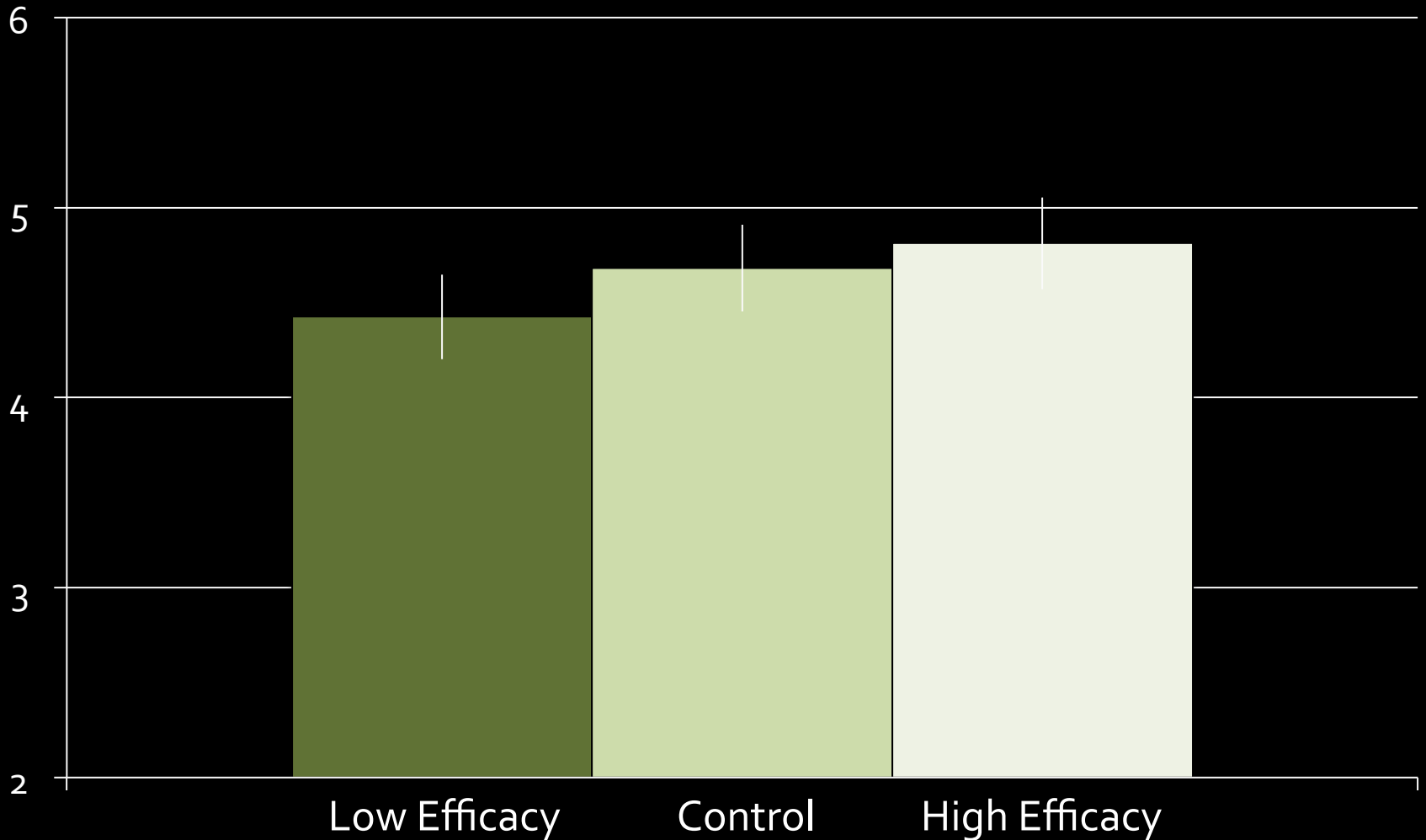
Time 1: Belief in Climate Change (1-7)



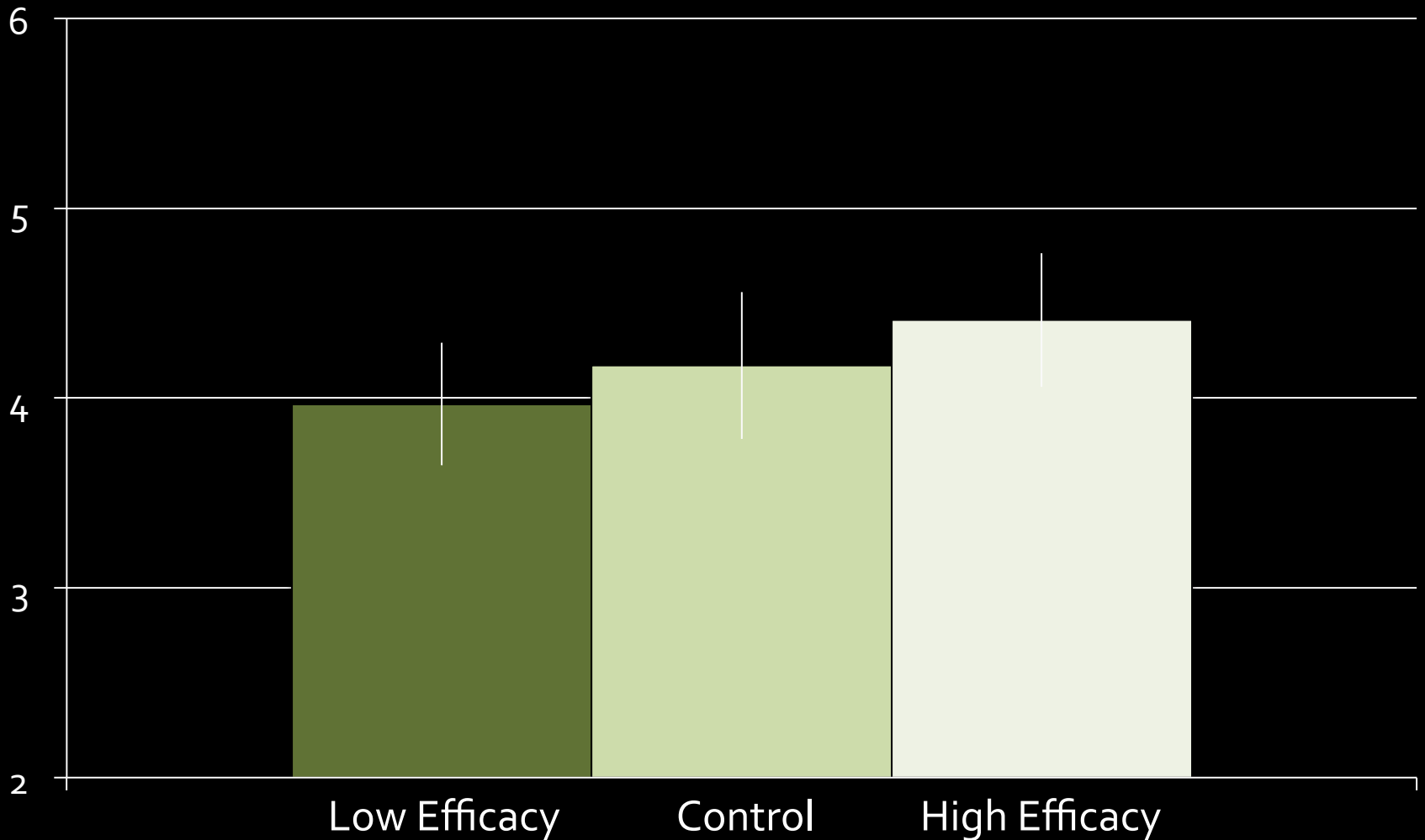
Time 1: Intentions to Conserve Energy (1-7)



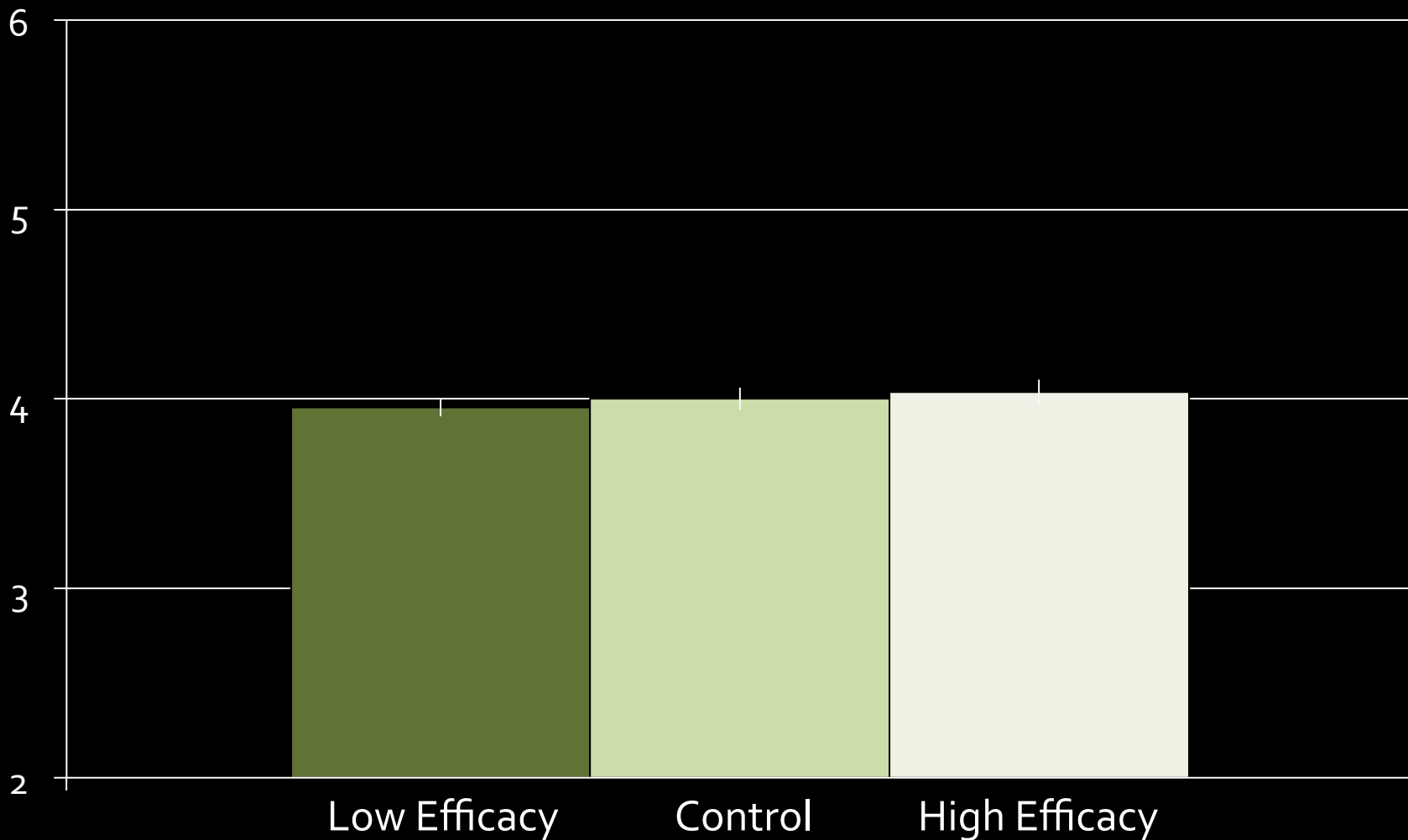
Time 1: Moralization of Energy Use (1-7)



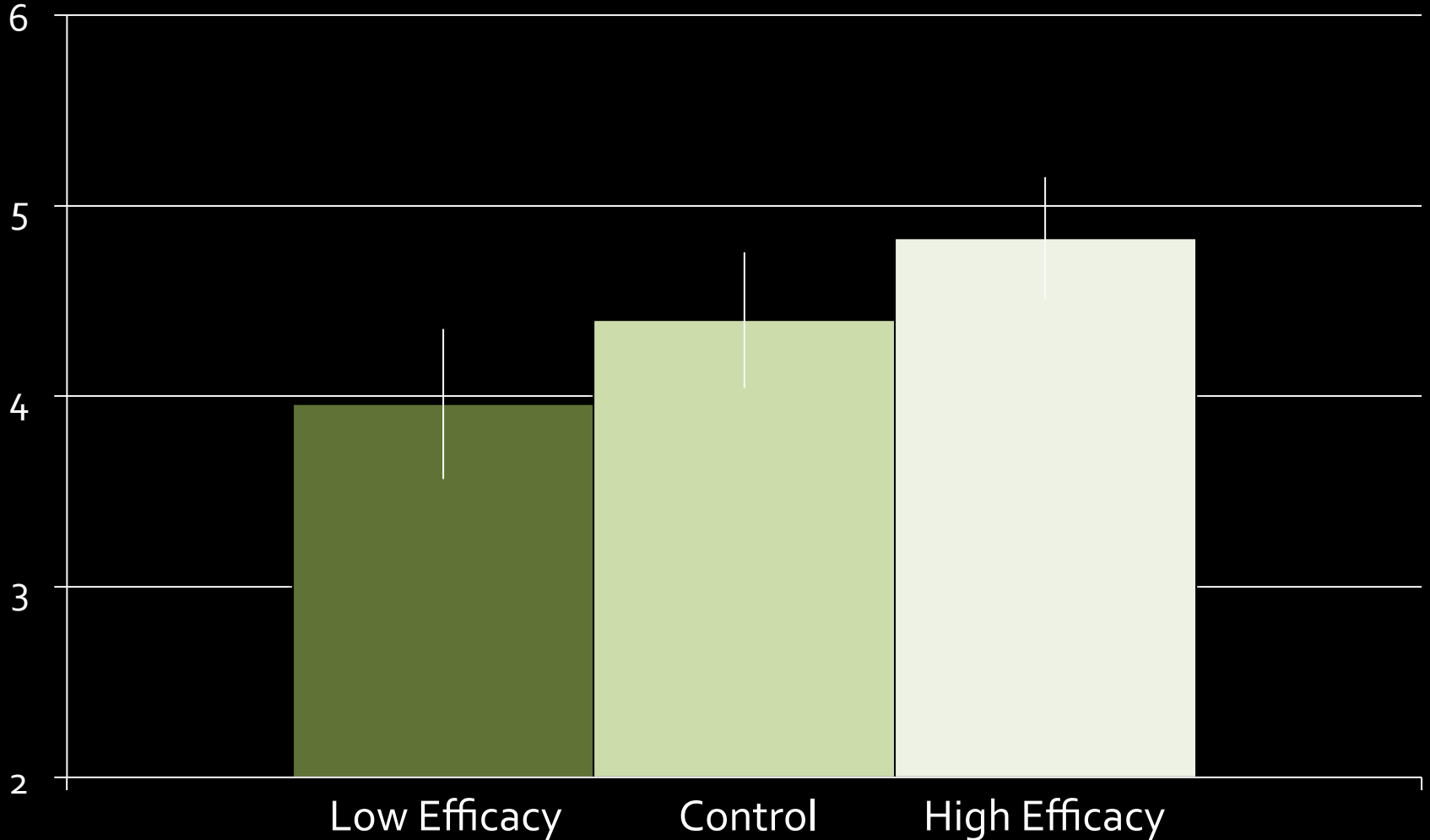
Time 1: Number of Policies Supported (0-7)



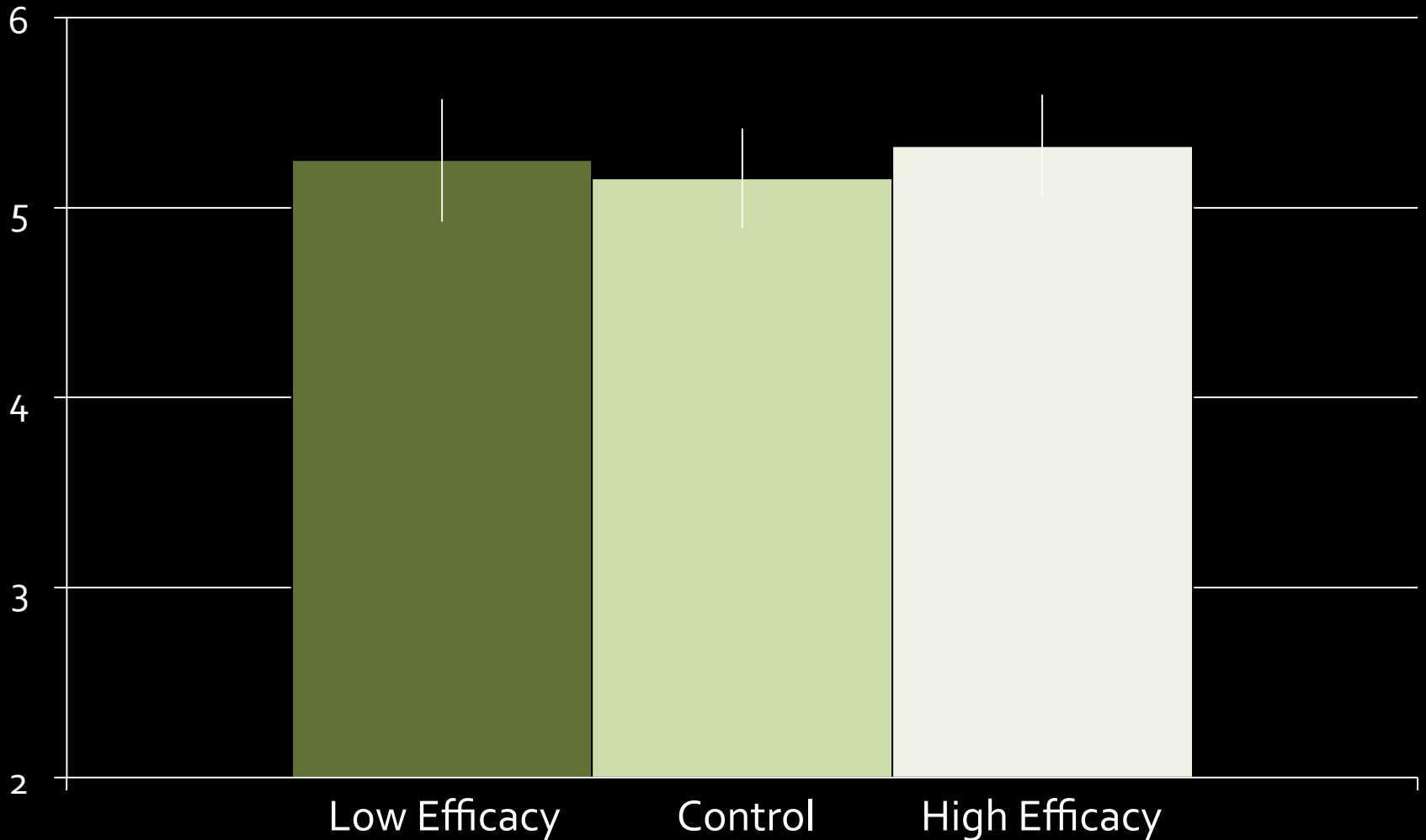
Time 1: Behavior (1-7)



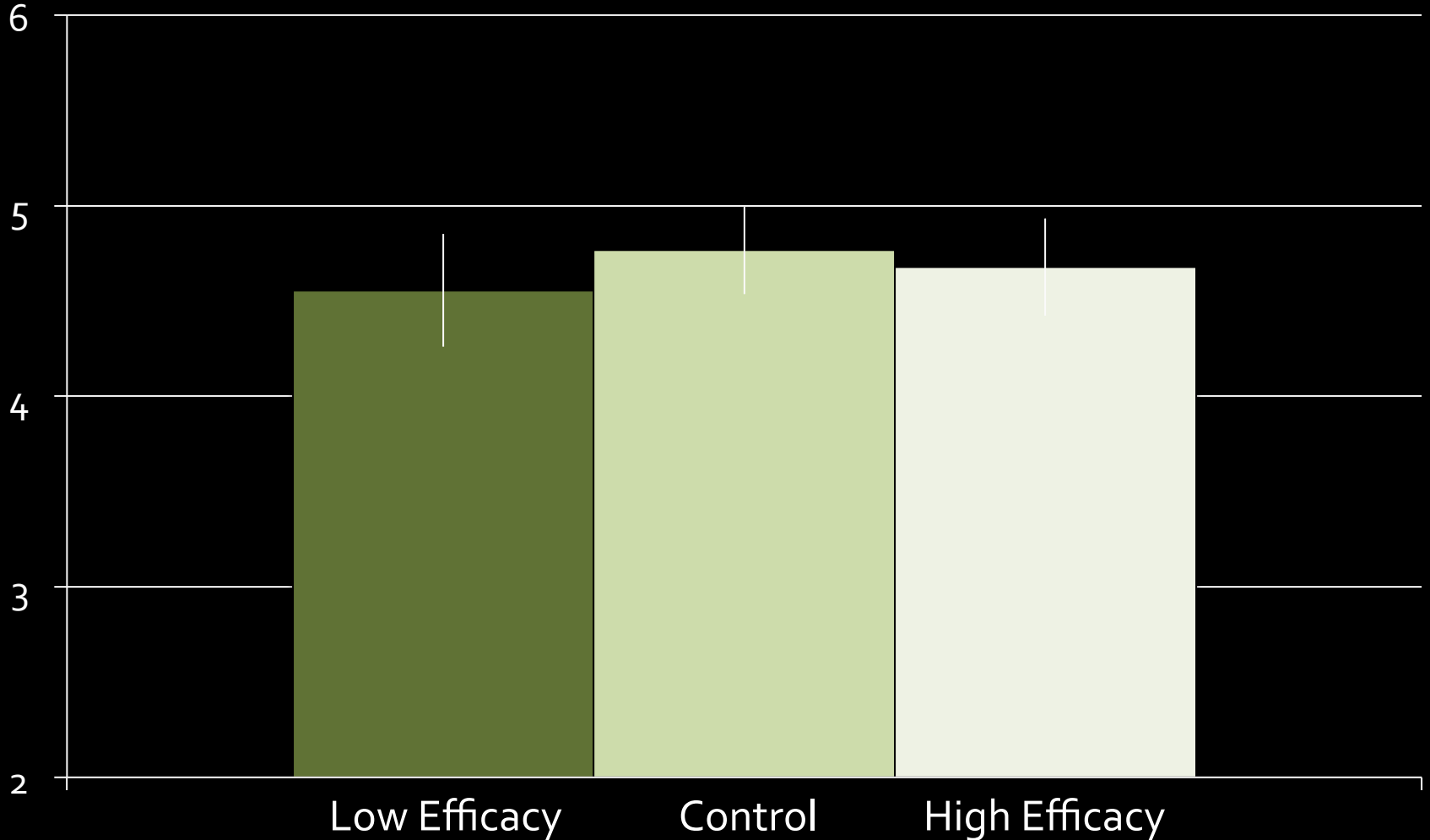
Time 2: Efficacy Check (1-7)



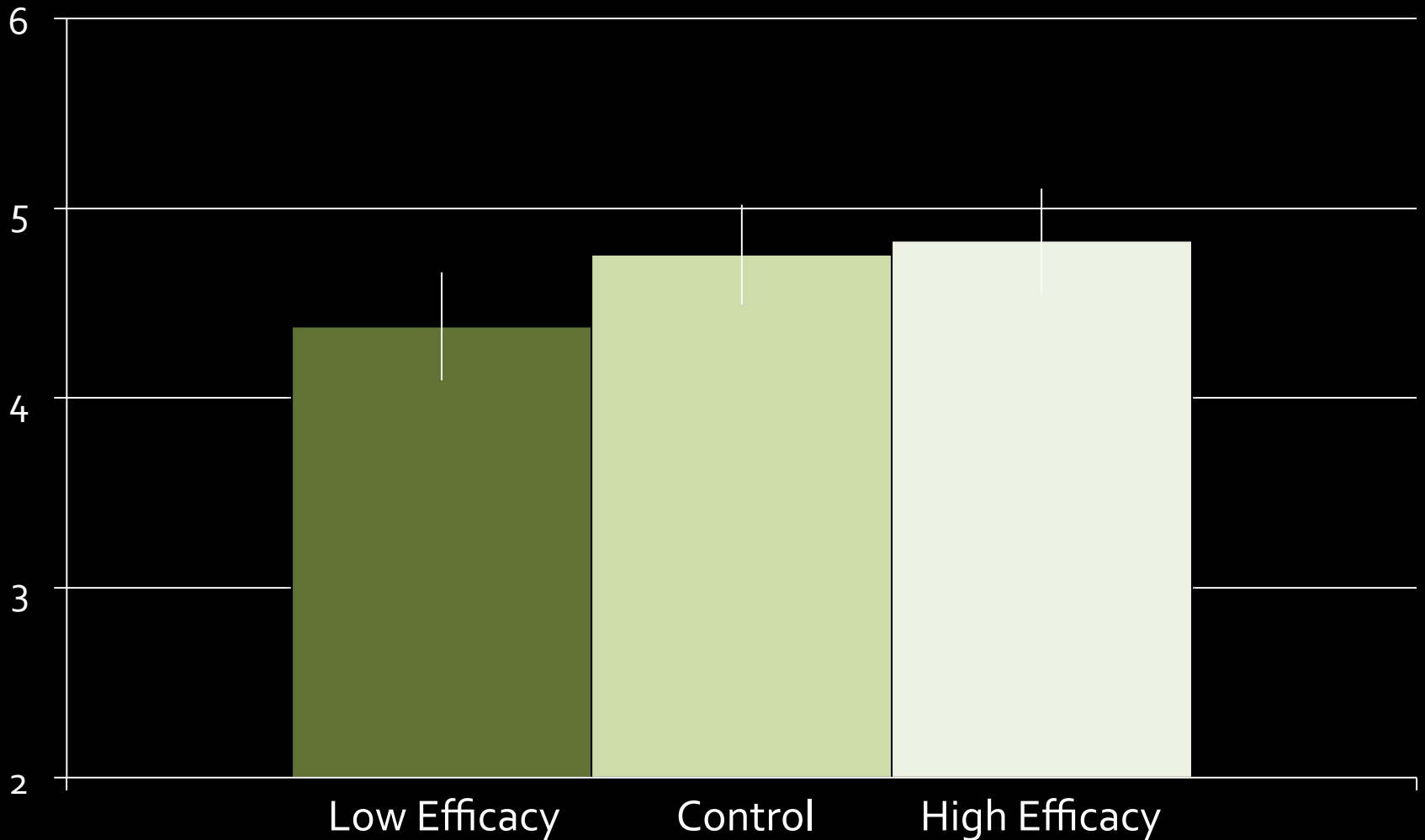
Time 2: Belief in Climate Change (1-7)



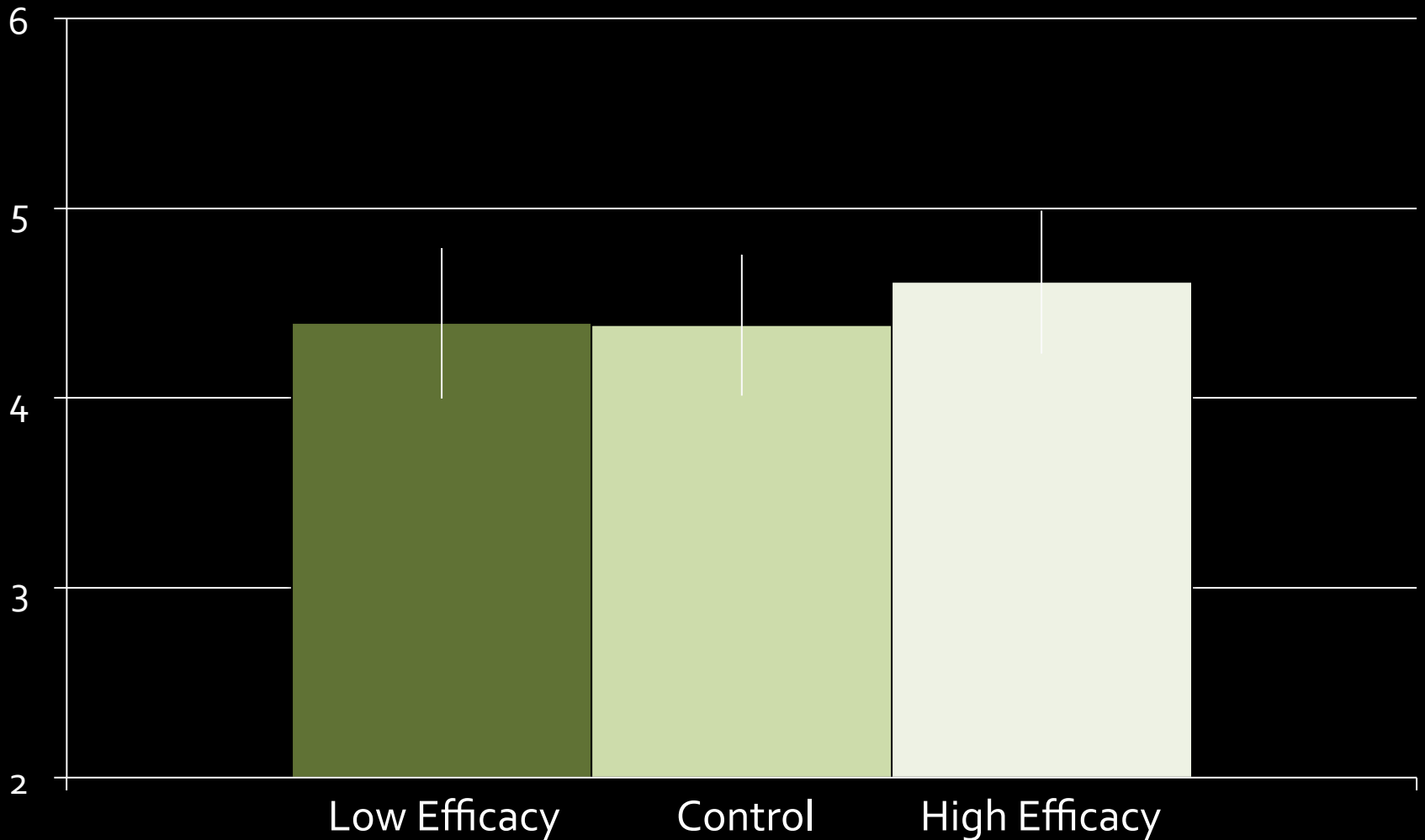
Time 2: Intentions to Conserve Energy (1-7)



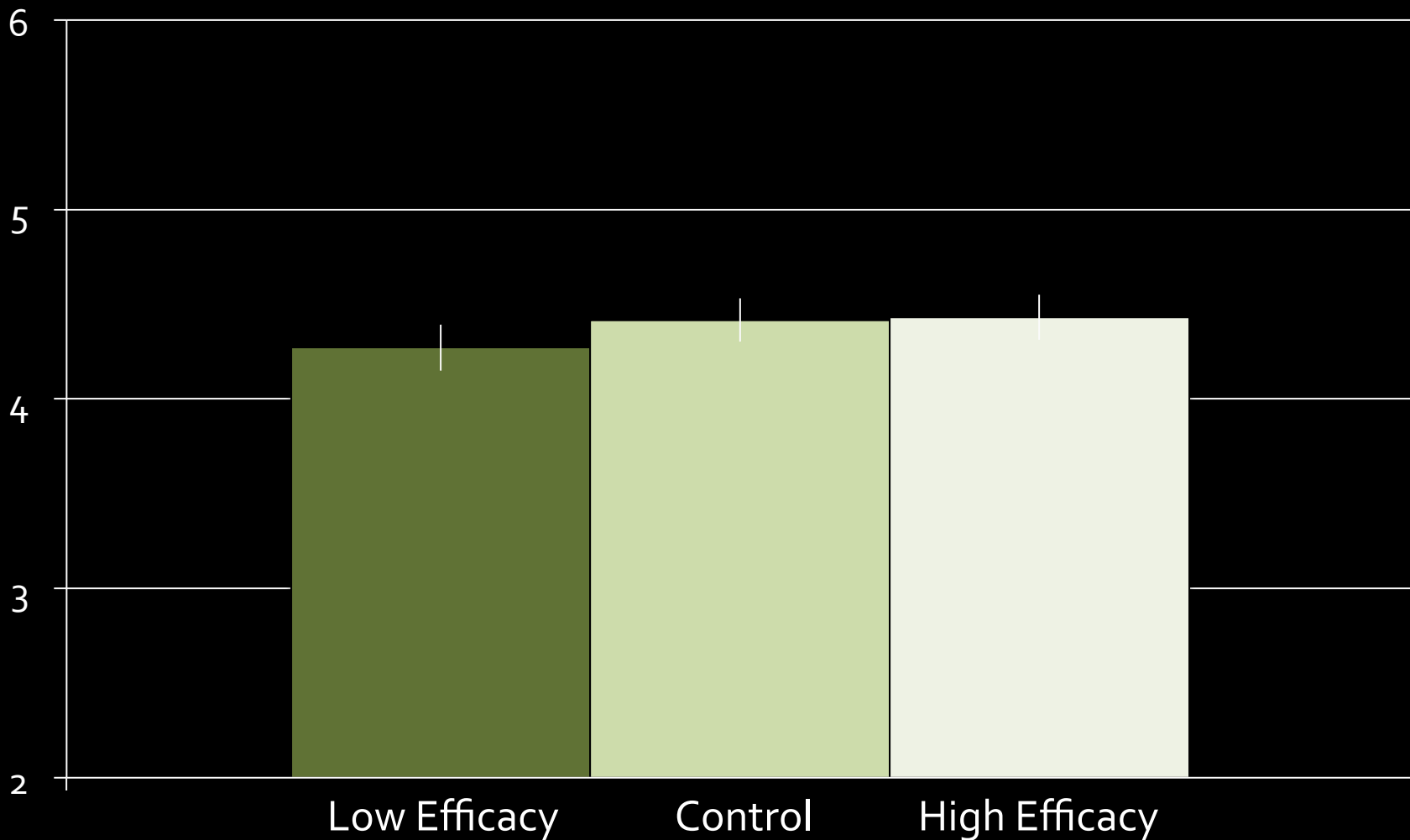
Time 2: Moralization of Energy Use (1-7)



Time 2: Number of Policies Supported (1-7)



Time 2: Behavior (1-7)



Study 2: Summary

- Replicated effect of efficacy on intentions, moralization, and policy support immediately following exposure
- Effect on moralization remained one week later
- Predicted behavior over the following week

Conclusions & Future Directions

- Efficacy messages promote energy conservation and moralization of energy use
- Efficacy is not just good for intentions and behavior: It increases moralization, also
- Efficacy beliefs have potential to substantially reduce energy waste

Thanks!

**YOU CONTROL
CLIMATE CHANGE.**



TURN DOWN. SWITCH OFF. RECYCLE. WALK. CHANGE