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The Presentation of Don't Know Answer Options in Web Surveys:  
An Experiment with the NatCen Panel

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# NatCen

Social Research that works for society

## The Presentation of Don't Know Answer Options in Web Surveys: An Experiment with the NatCen Panel

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08 March 2019

# Introduction

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- Experiment testing effects of four ways of presenting DK options
- Five attitude statements with agree/disagree scales
- Look at effects on no. of DK and Neither responses
- Closed and open probes to understand reasons for answers
- Uses the NatCen Panel – probability-based sequential web-CATI panel recruited from national face-to-face survey

# Overview

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- Motivation
- Experimental design
  - Ways of presenting DK options
  - Selection of attitude statements
  - Open and closed probes
- Overview of NatCen Panel
- Results
  - Number of DKs
  - The effect of prompts
  - The effect on use of Neither
- Conclusions

# Motivation



# Motivation

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- The DK dilemma for self-completion questionnaires:
  - Include DK option:
    - Allows those who don't know to give truthful answer
    - May increase amount of 'missing data'
    - May lead to satisficing
  - Do not include DK option:
    - Reduces 'missing data' and satisficing
    - Those who don't know must give false answer or exit survey entirely

# Solutions to the dilemma for web surveys

## **Option 1:**

Hide DK initially, and only show once question 'skipped'

## **Option 2:**

Show DK initially, but 'prompt' if selected

# Experimental design





# Experimental design

DK only shown when skipped	DK shown upfront
1. No explanation of functionality	3. No prompt
2. Explanation	4. Polite prompt when DK selected

# Hidden

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To what extent do you agree or disagree with the following statement:

Immigrants are generally good for Britain's economy.

- Strongly agree
- Agree
- Neither agree or disagree
- Disagree
- Strongly disagree

# Hidden

Please provide an answer or select “Don’t know” or “Prefer not to answer”

To what extent do you agree or disagree with the following statement:

Immigrants are generally good for Britain’s economy.

- Strongly agree
- Agree
- Neither agree or disagree
- Disagree
- Strongly disagree
- Don’t know
- Prefer not to answer

# Explanation

Before we start, we'd like to remind you that even if you are unsure of your answers, we still value your opinion. However, you do not have to answer any question you do not want to.

If we ask a question you don't know the answer to, or you would prefer not to answer, simply leave the question blank and click the 'Next' button to make the options 'Don't know' and 'Prefer not to say' appear.

# Explanation

How interested would you say you are in health research?

- Very interested
- Fairly interested
- Not very interested
- Not at all interested

◀ Previous

Next ▶



Please provide an answer or select "Don't know" or "Prefer not to answer"

How interested would you say you are in health research?

- Very interested
- Fairly interested
- Not very interested
- Not at all interested
- Don't know
- Prefer not to answer

◀ Previous

Next ▶

# Upfront

To what extent do you agree or disagree with the following statement:

Immigrants are generally good for Britain's economy.

- Strongly agree
- Agree
- Neither agree or disagree
- Disagree
- Strongly disagree
  
- Don't know

# Upfront + prompt

Thank you for your response.

**We would really like to know your opinion on this, even if you are unsure or don't feel you know enough about the topic.**

If you had to choose, to what extent do you agree or disagree with the following statement:

Immigrants are generally good for Britain's economy.

- Strongly agree
- Agree
- Neither agree or disagree
- Disagree
- Strongly disagree
  
- I really don't know

# Selection of attitude statements

- A. Immigrants are generally good for Britain's economy
- B. Large international companies are doing more and more damage to local businesses in Britain
- C. The law should always be obeyed, even if a particular law is wrong
- D. The welfare state encourages people to stop helping each other
- E. People should be able to travel by plane as much as they like, even if this harms the environment



# Closed probes

Which of the following **best** describes the reason you said that you don't know how strongly you agree or disagree with the statement 'Immigrants are generally good for Britain's economy'?

- I don't know enough about the topic
- I don't care about the topic
- I couldn't decide / I'm unsure of my opinion
- My answer would vary depending on the situation
- I didn't want to answer the question
- The question or statement was unclear
- Other (Please describe)

# The NatCen Panel



# Overview

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- First probability-based research panel in GB that is open to social research community
- Approx. 13,000 panellists
- Recruited from:
  - British Social Attitudes: 2015, 2016, 2017, 2018
  - Scottish Social Attitudes: 2015, 2016, 2017
  - European Values Survey: 2018
- Sequential mixed-mode: web first, then CATI
- Targeted design

# January wave

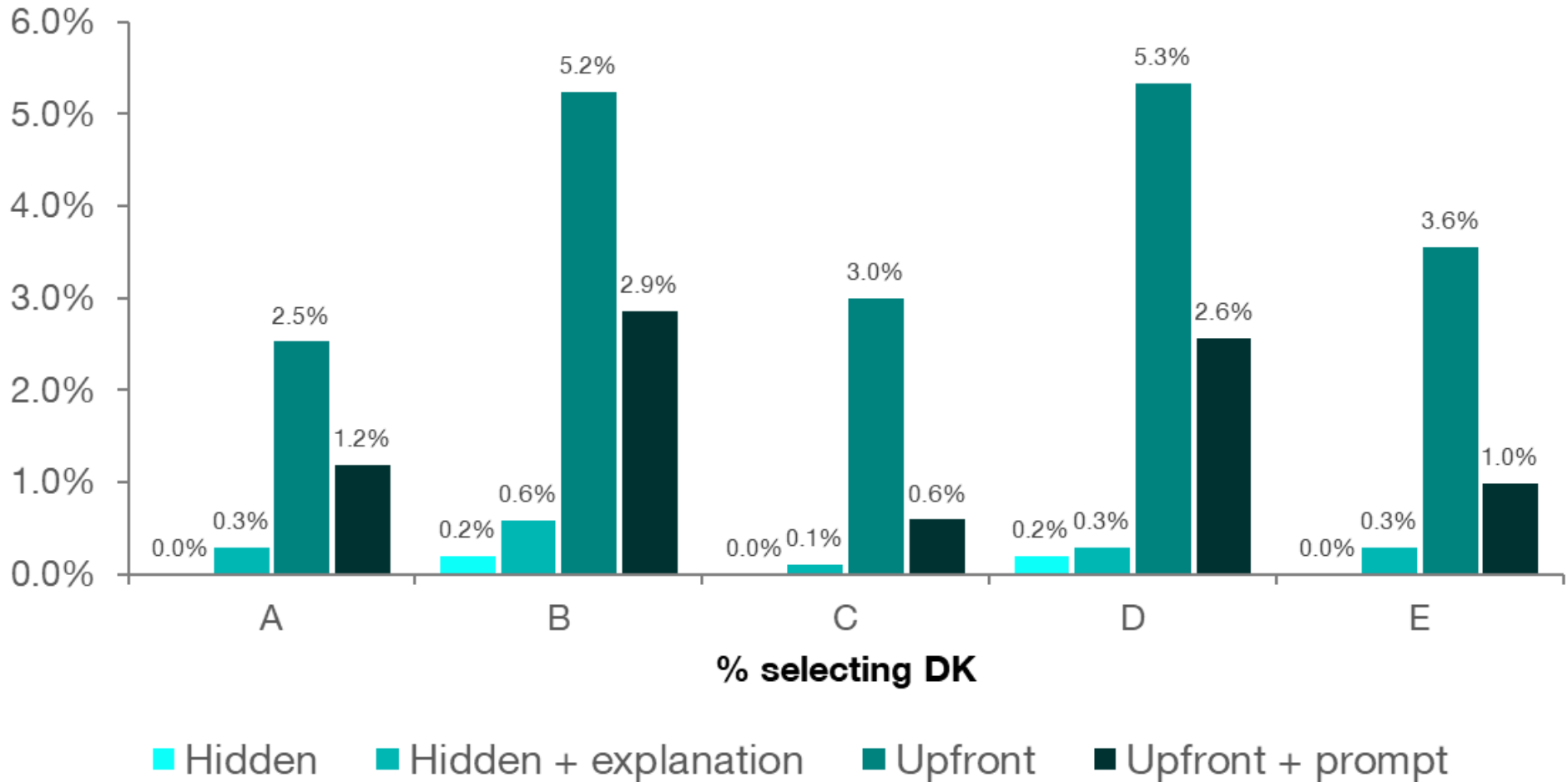
- DK experiment took place on the January 2019 wave
- Towards the end of a larger questionnaire
- 8125 cases issued, 4702 productive cases (58% response rate)
- 4147 web, 555 phone

# Results



# Proportion of DKs

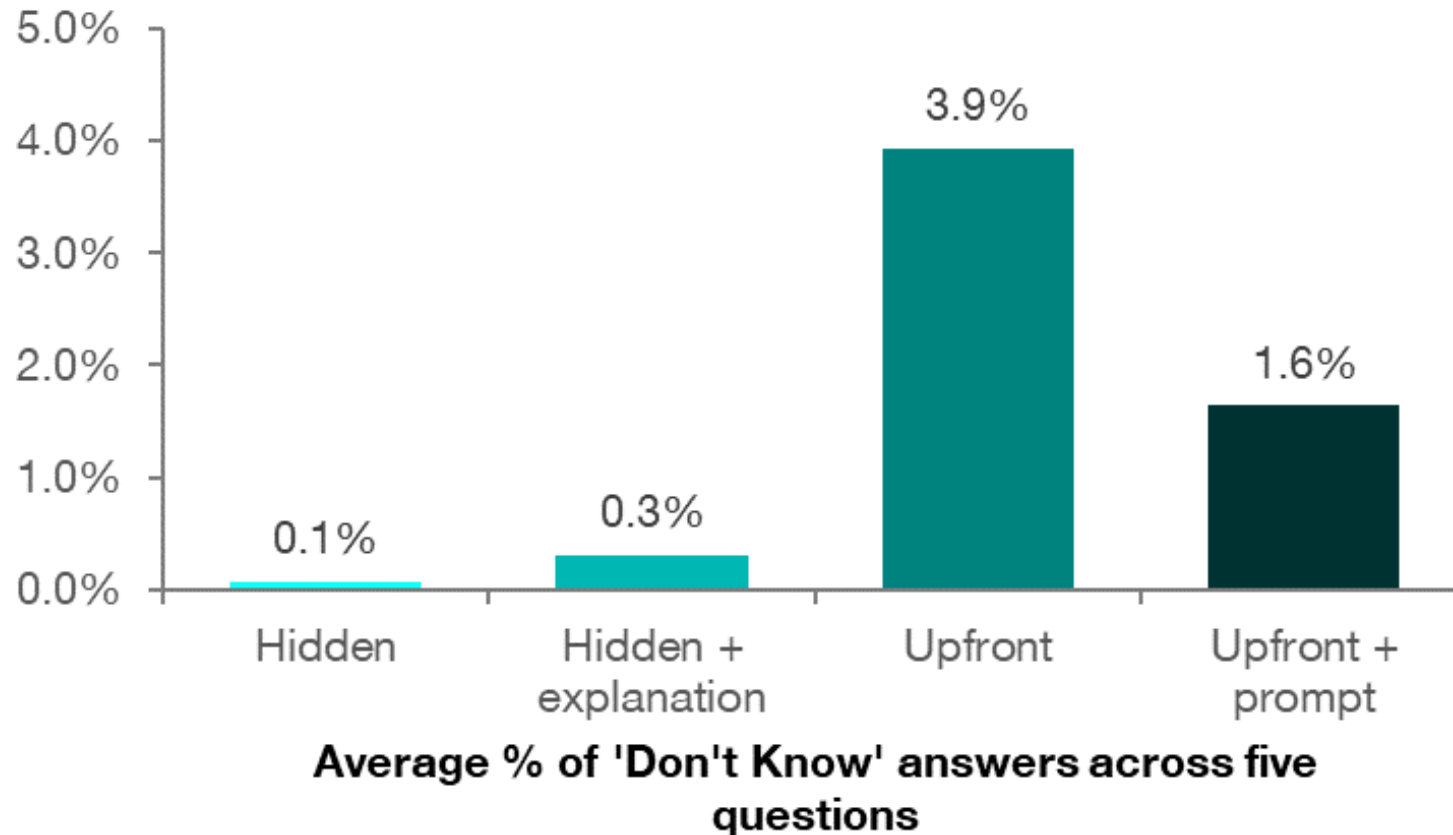
## Individual questions



Base: web only, hidden (1038), hidden + explanation (1025), upfront (1070),  
upfront + prompt (1014)

# Proportion of DKs

## Overall

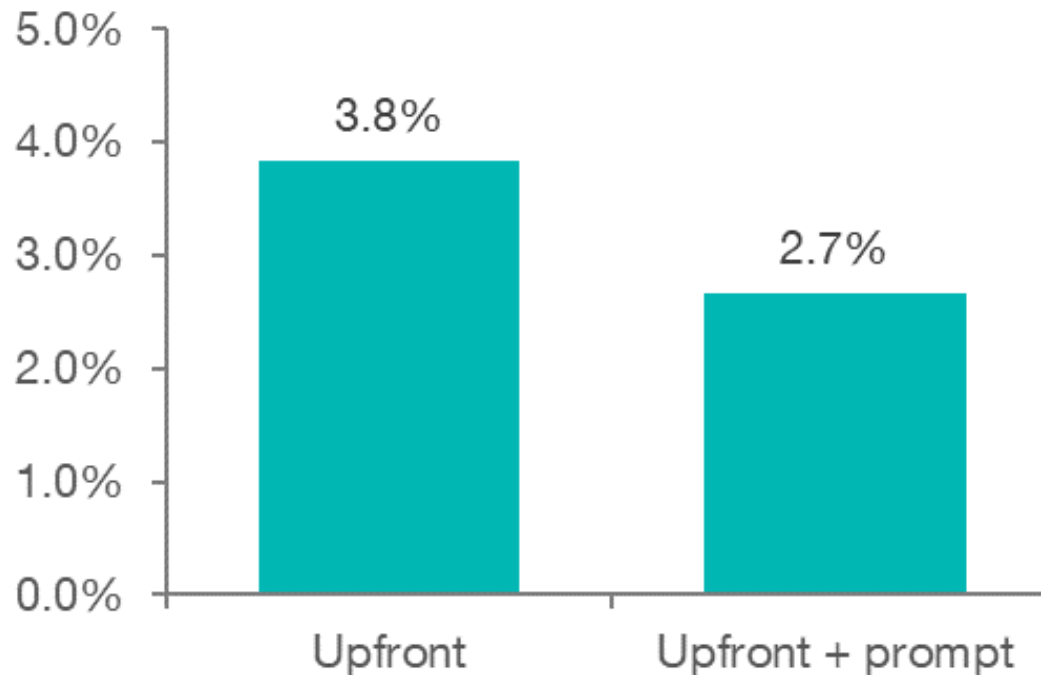


Base: web only, hidden (1038), hidden + explanation (1025), upfront (1070),  
upfront + prompt (1014)

# Prompts

## Why do prompts lower the no. of DKs?

- Is lower rate of DKs in prompt condition due to:
  - Respondent's changing their answers; or,
  - No longer selecting DK after seeing a first prompt?

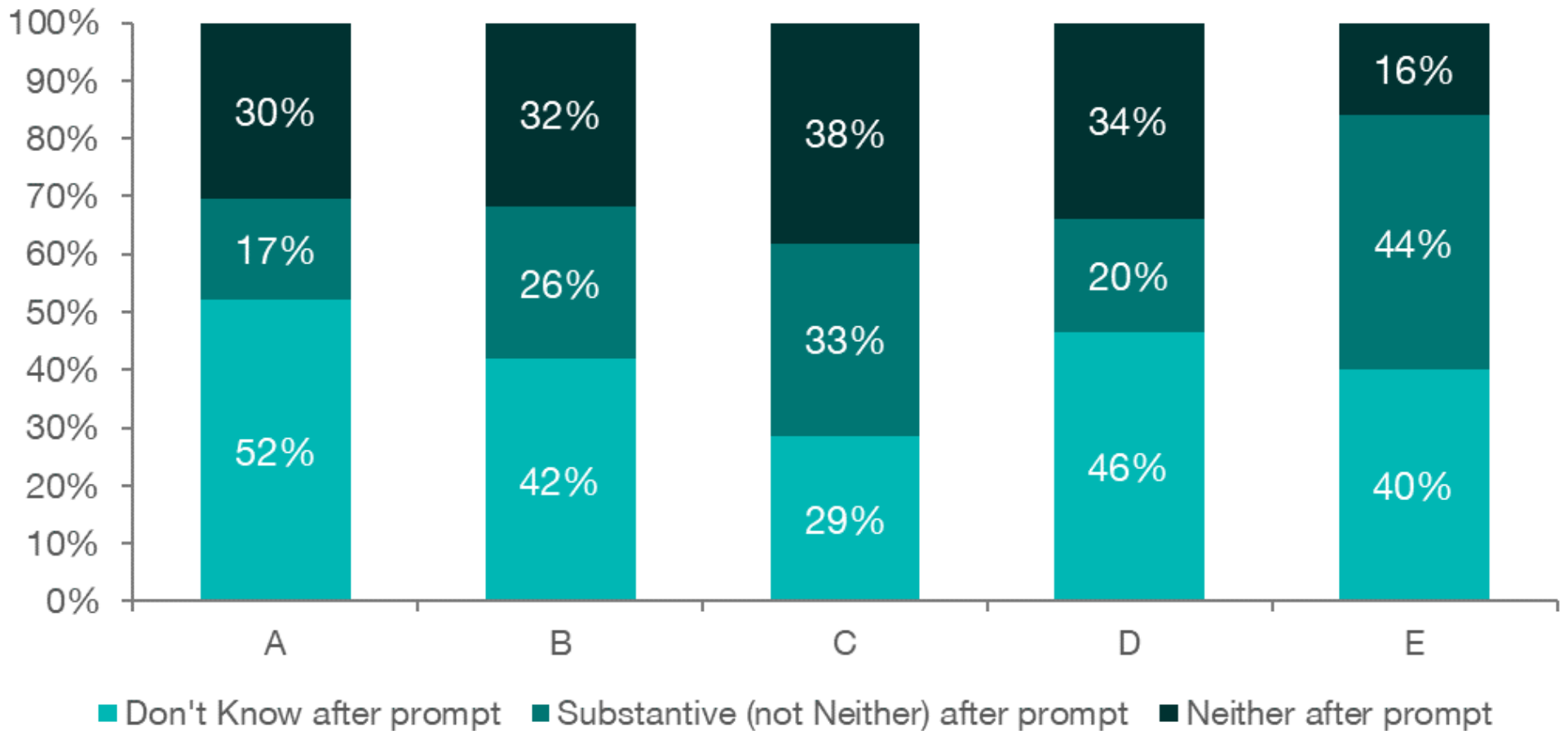


**Not significant**  
at 5% level



# Prompts

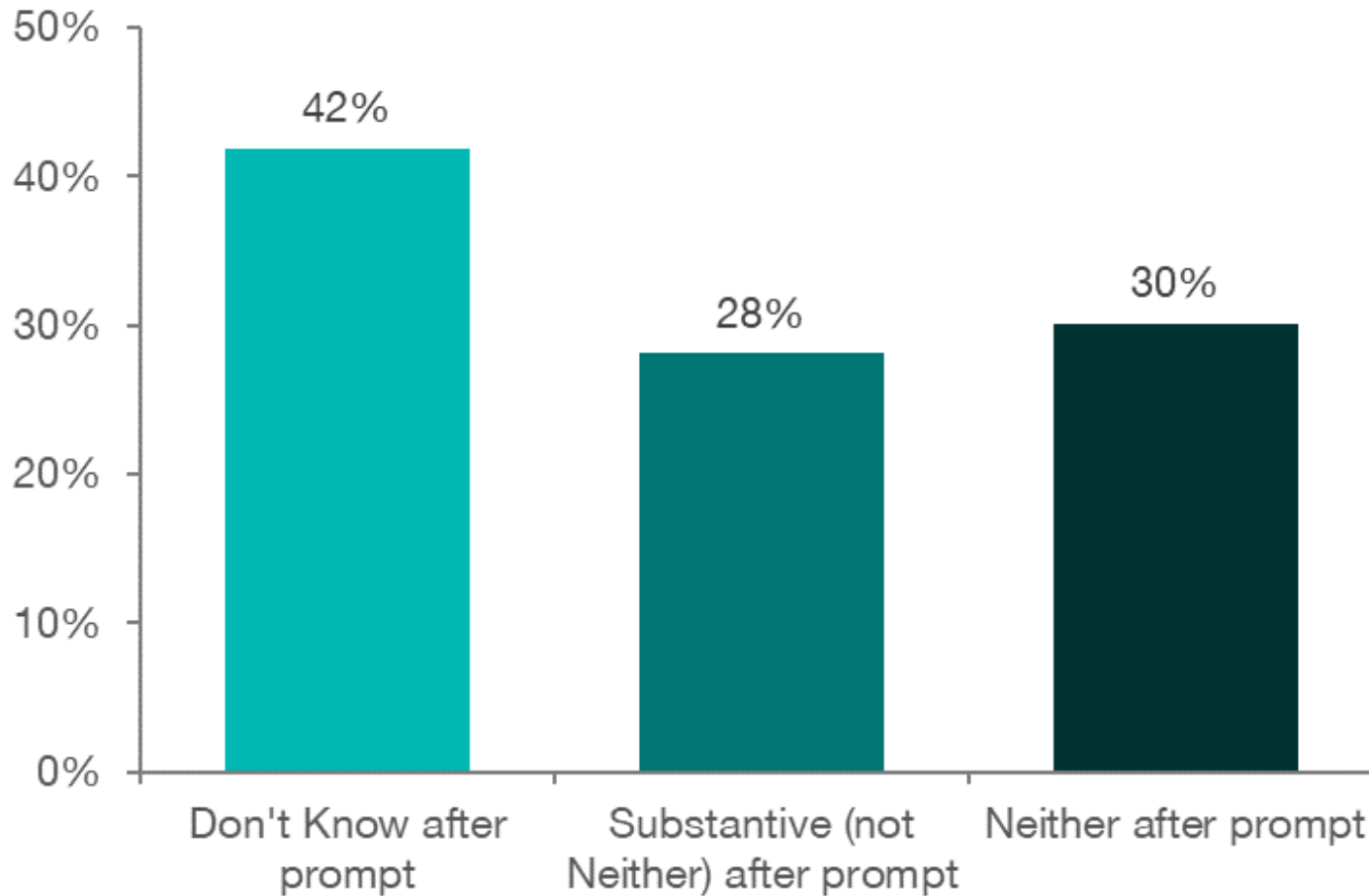
Do those who are prompted change their answers?



Base: web only and routed to a prompt at –  
A (23), B (69), C (21), D (56), E (25)

# Prompts

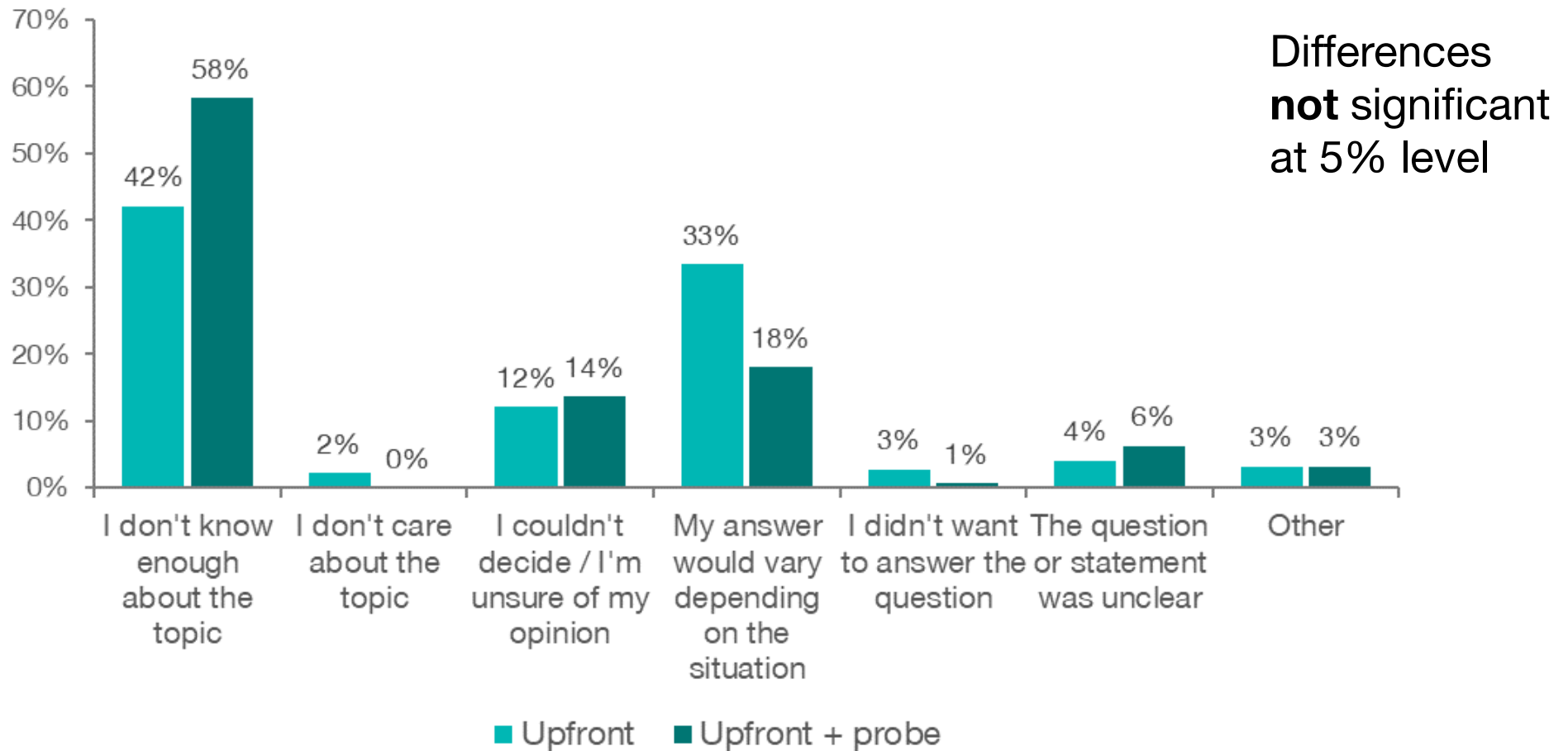
Do those who are prompted change their answers?



*Base: web only and routed to a prompt at –  
A (23), B (69), C (21), D (56), E (25)*

# Prompts

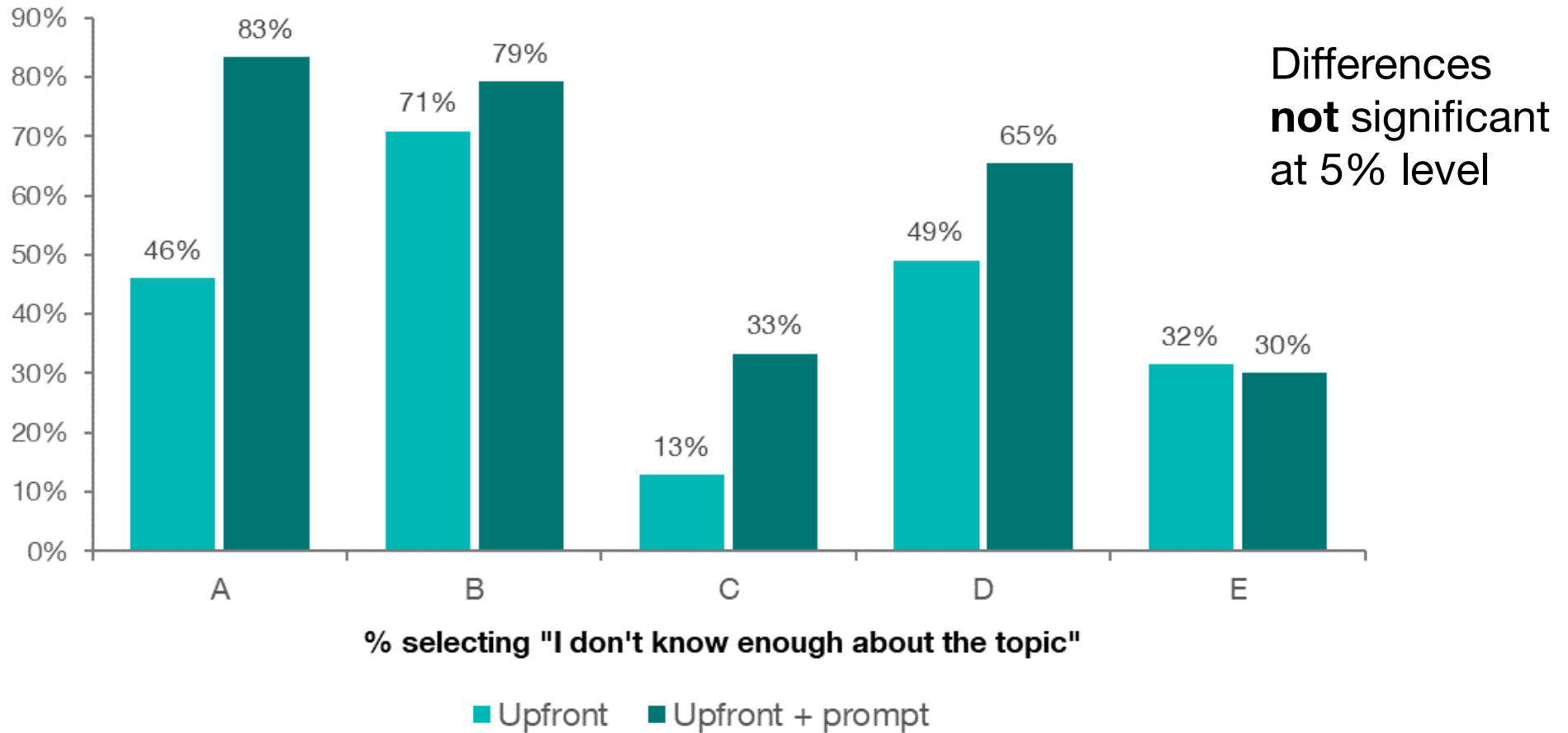
## Does prompting lead to better use of DK?



Base: web only, upfront condition – A (26), B (55), C (31), D (57), E (38);  
Upfront + prompt condition – A (12), B (29), C (6), D (26), E (10)

# Prompts

## Does prompting lead to better use of DK?

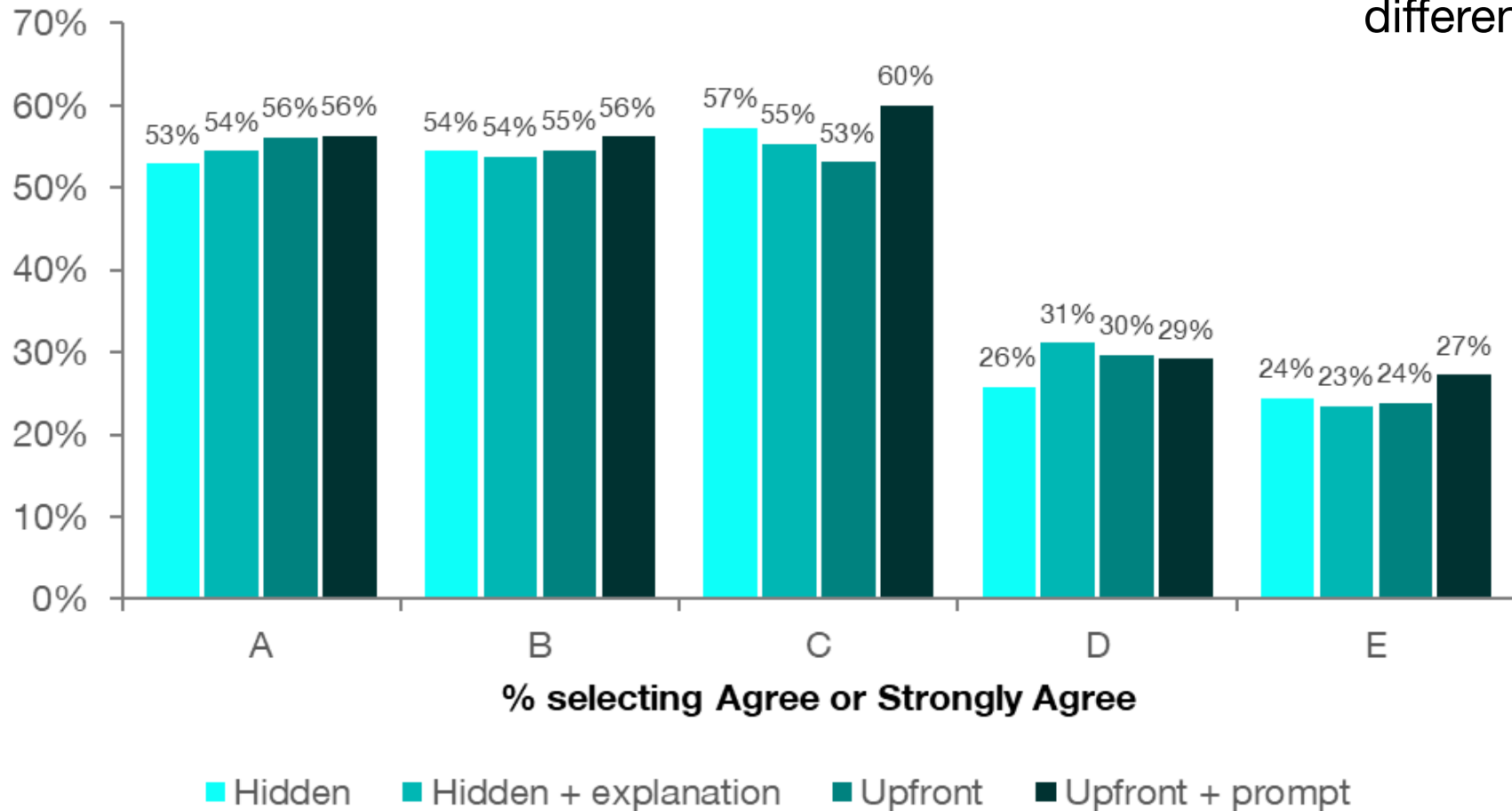


Base: web only, upfront condition – A (26), B (55), C (31), D (57), E (38);  
Upfront + prompt condition – A (12), B (29), C (6), D (26), E (10)

# Effect on other answer options

## Agree/strongly agree

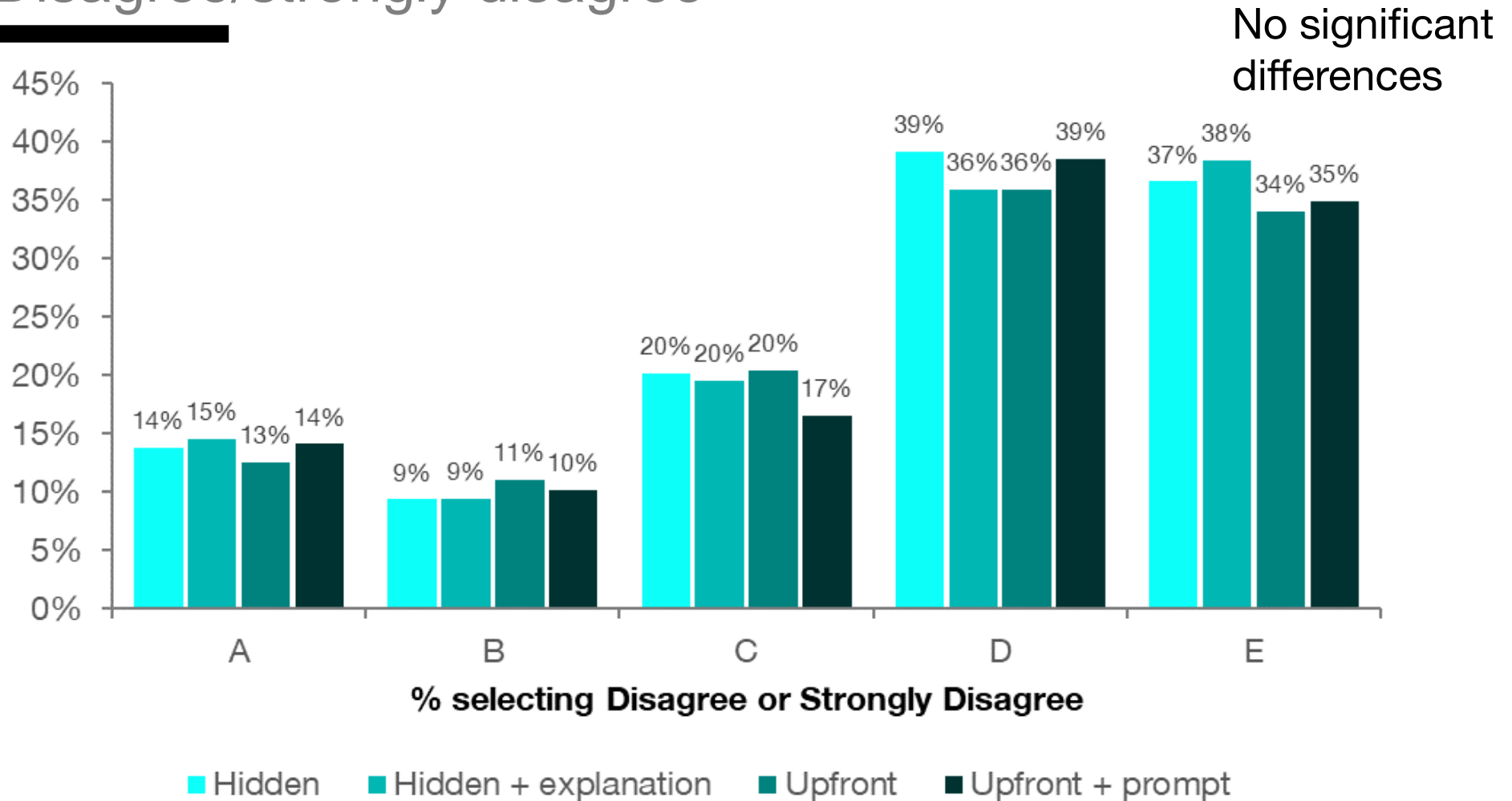
No significant differences



Base: web only, hidden (1038), hidden + explanation (1025), upfront (1070),  
upfront + prompt (1014)

# Effect on other answer options

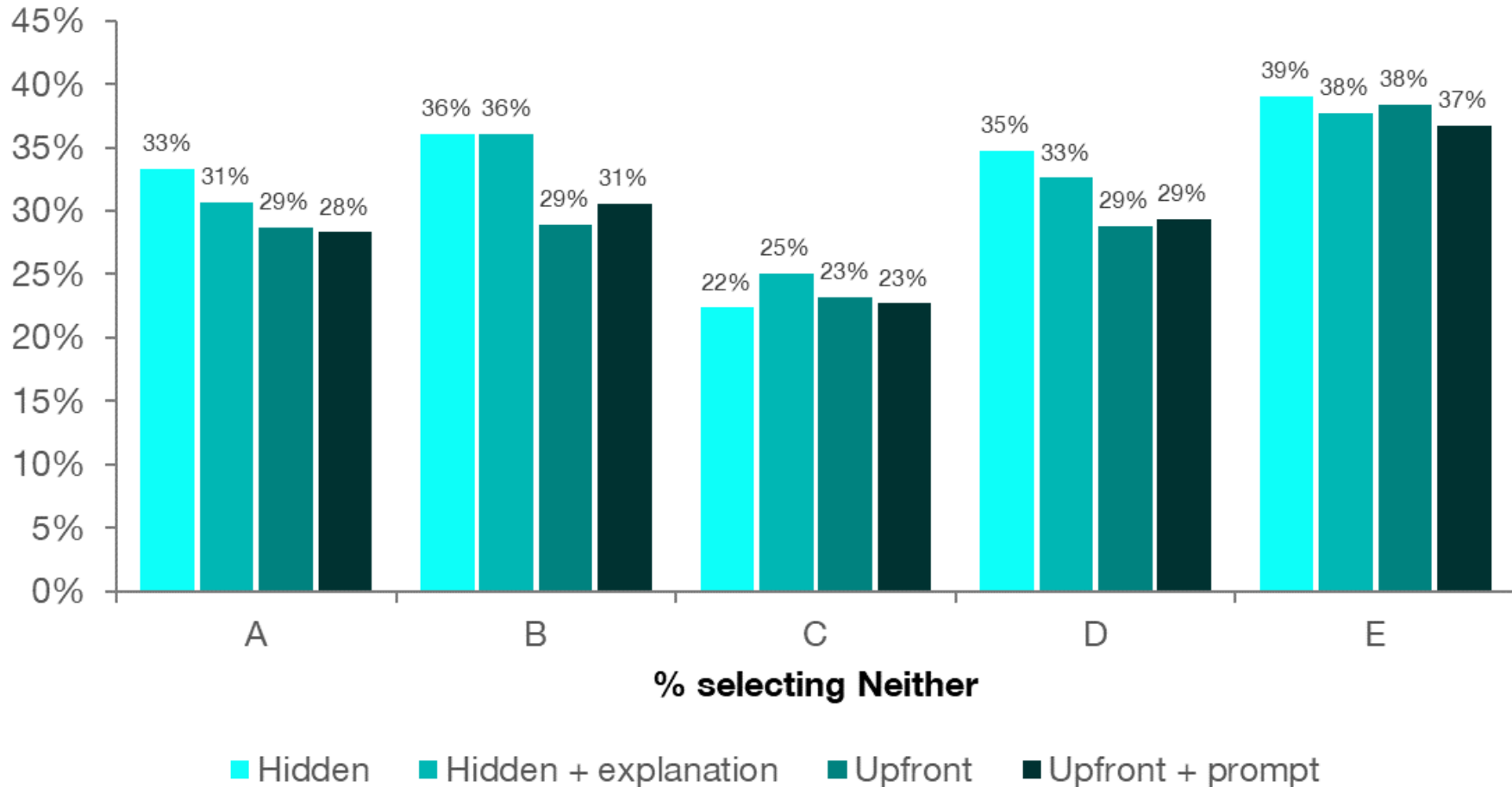
## Disagree/strongly disagree



Base: web only, hidden (1038), hidden + explanation (1025), upfront (1070),  
upfront + prompt (1014)

# Effect on other answer options

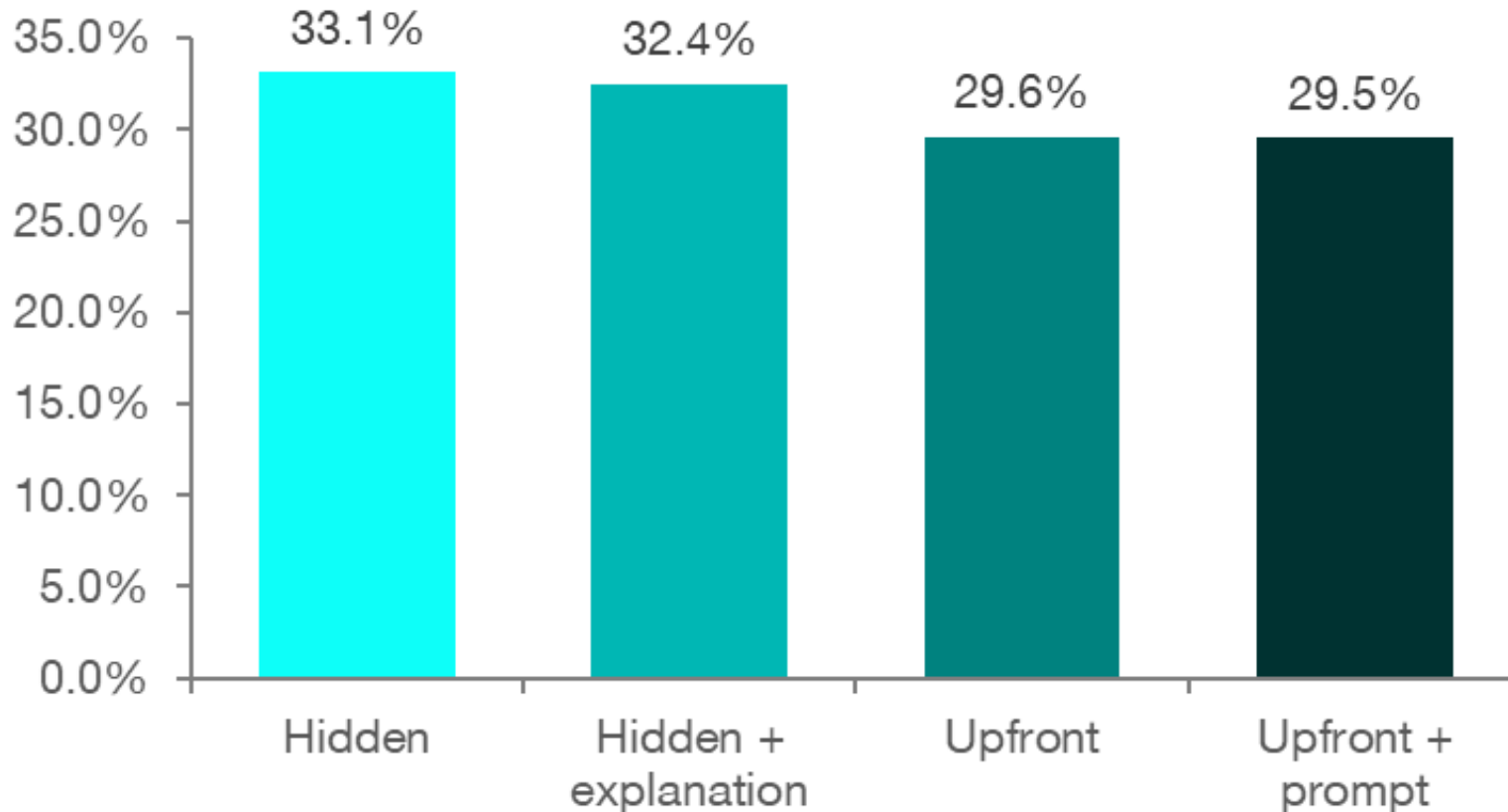
## Neither



Base: web only, hidden (1038), hidden + explanation (1025), upfront (1070),  
upfront + prompt (1014)

# Effect on other answer options

Neither



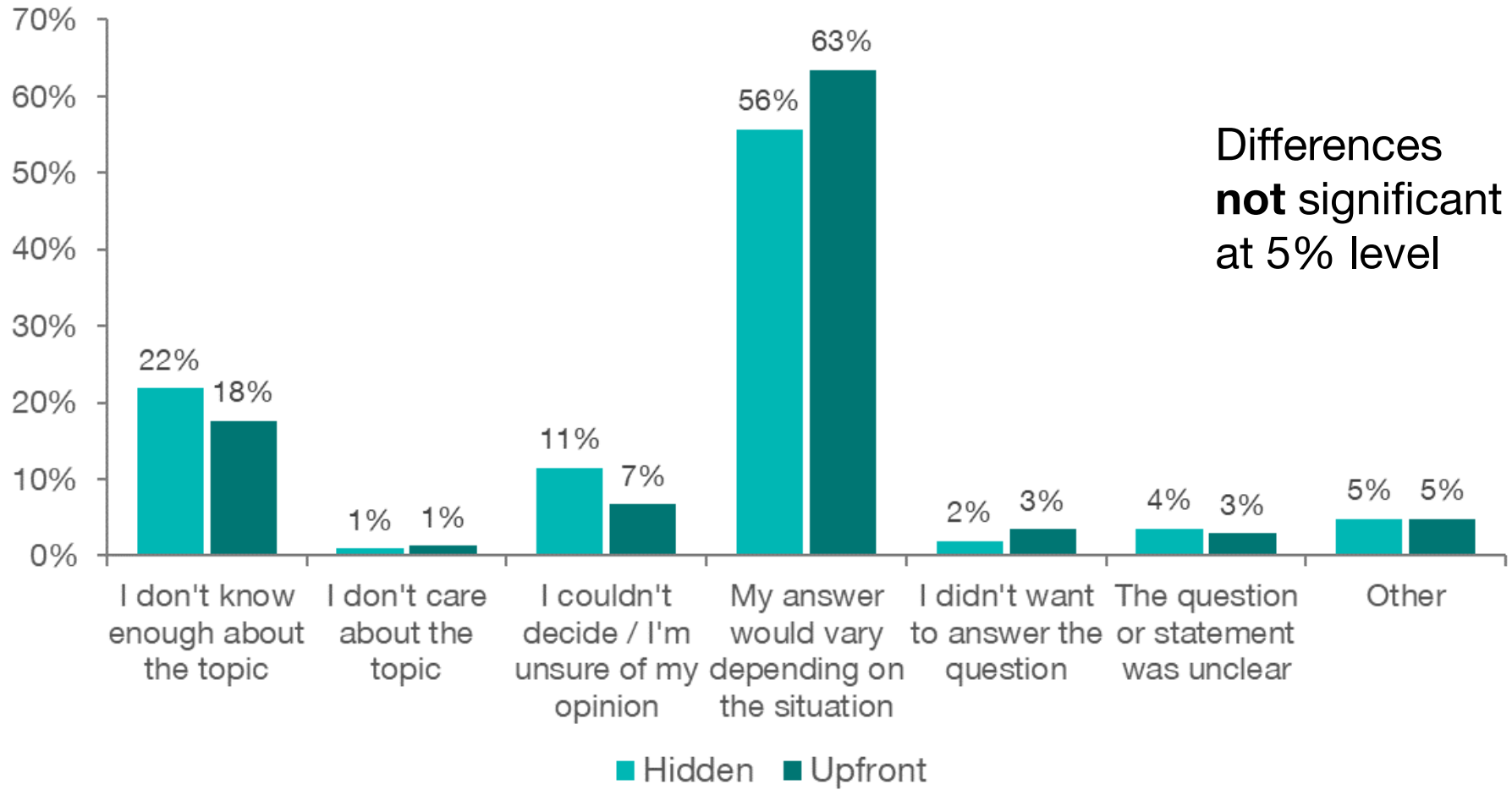
**Average % 'Neither' options across five questions**

*Base: web only, hidden (1038), hidden + explanation (1025), upfront (1070),  
upfront + prompt (1014)*



# Closed probes

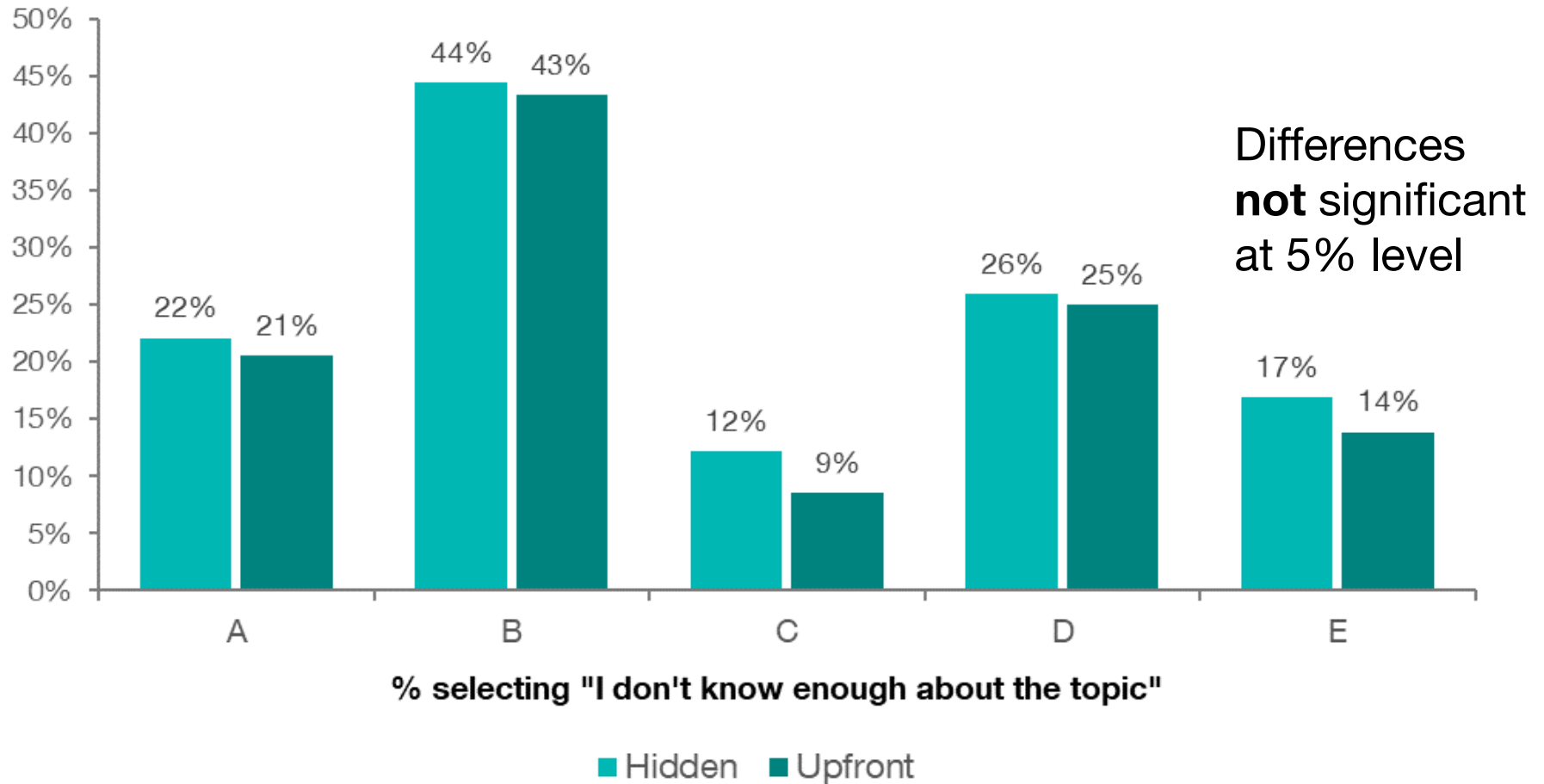
Does use of 'Neither' change if DK offered upfront?



Base: web only, hidden – A (387), B (408), C (254), D (384), E (436);  
upfront – A (337), B (331), C (268), D (327), E (435).

# Closed probes

Does use of 'Neither' change if DK offered upfront?



Base: web only, hidden – A (387), B (408), C (254), D (384), E (436);  
upfront – A (337), B (331), C (268), D (327), E (435).

# Conclusions



# Conclusions

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- Explaining the ‘hidden’ functionality does not significantly increase the proportion of DKs
- Offering DK upfront increases the proportion of DKs, and prompting reduces it
- Most of those who are prompted change their answer, but most who change answer change to Neither
- Prompting appears to make a small (non-significant) improvement to the ‘quality’ of DKs
- Offering DK upfront reduces the proportion of Neithers
- But, no evidence that offering DK upfront improves the ‘quality’ of Neithers

# Recommendations

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- If we can improve the ‘quality’ of the DK responses we receive, DK can be a substantively interesting part of an analysis
- Promising evidence that prompting increases quality of DK
- Further researcher needed into the effect of prompting on other kinds of questions, with other kinds of answer options

# Contact

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