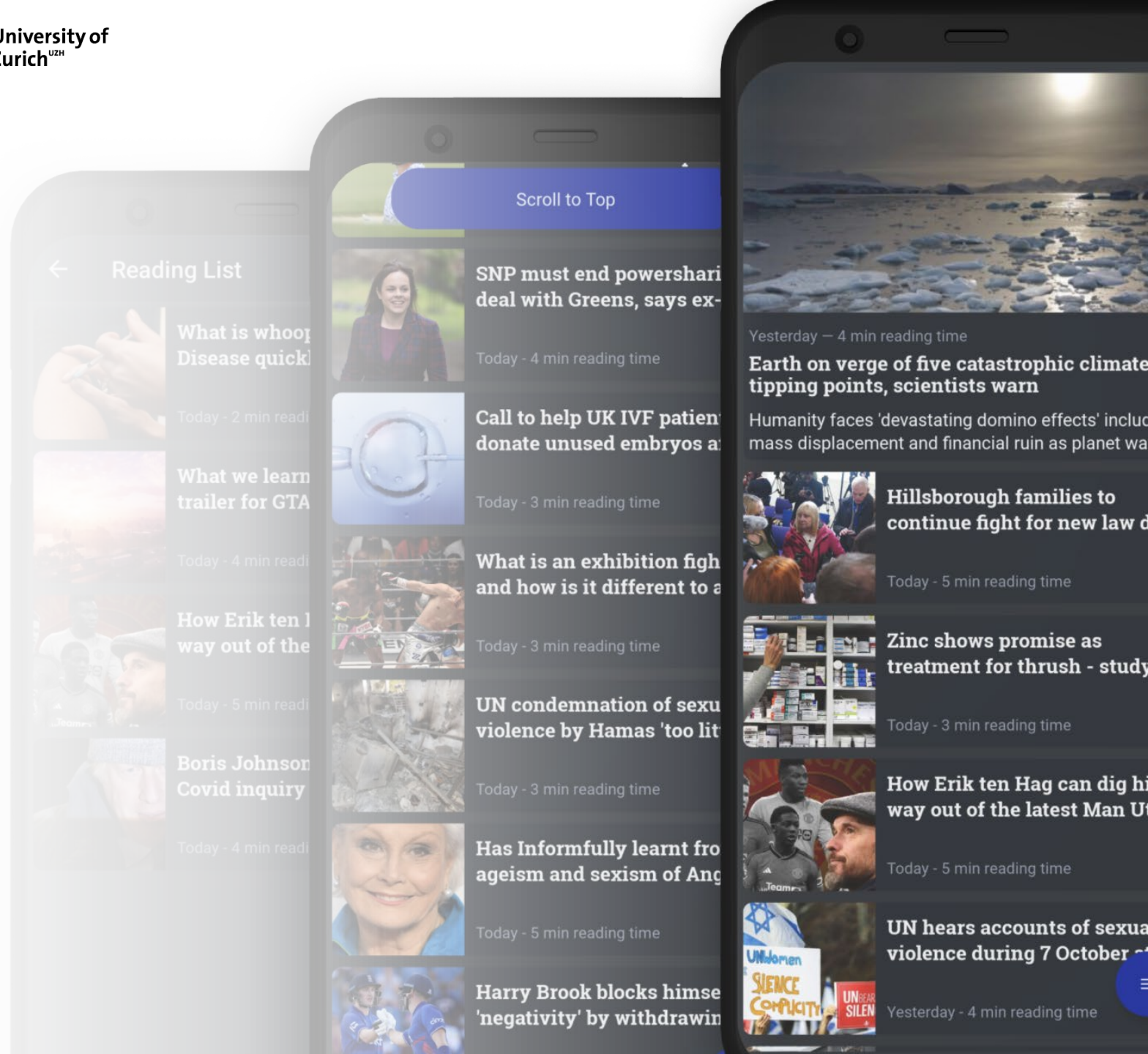


# Nudging news engagement

Testing the longitudinal effects of nudging on engagement with and learning from environmental news

Nicolas Mattis<sup>1</sup>, Lucien Heitz<sup>3</sup>, Philipp K. Masur<sup>1</sup>, Judith Moeller<sup>2</sup>, Wouter van Atteveldt<sup>1</sup>



# Overview

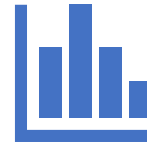
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Theoretical  
background &  
Research  
question



Experimental  
manipulations &  
procedure



Results



Discussion

# Theoretical background

## Choice architecture design

- **Choice architecture design** matters for how people make decisions (Thaler & Sunstein, 2009)
- Nudging to facilitate particular normative goals
- Democratic news recommender design
- Multiple stakeholders

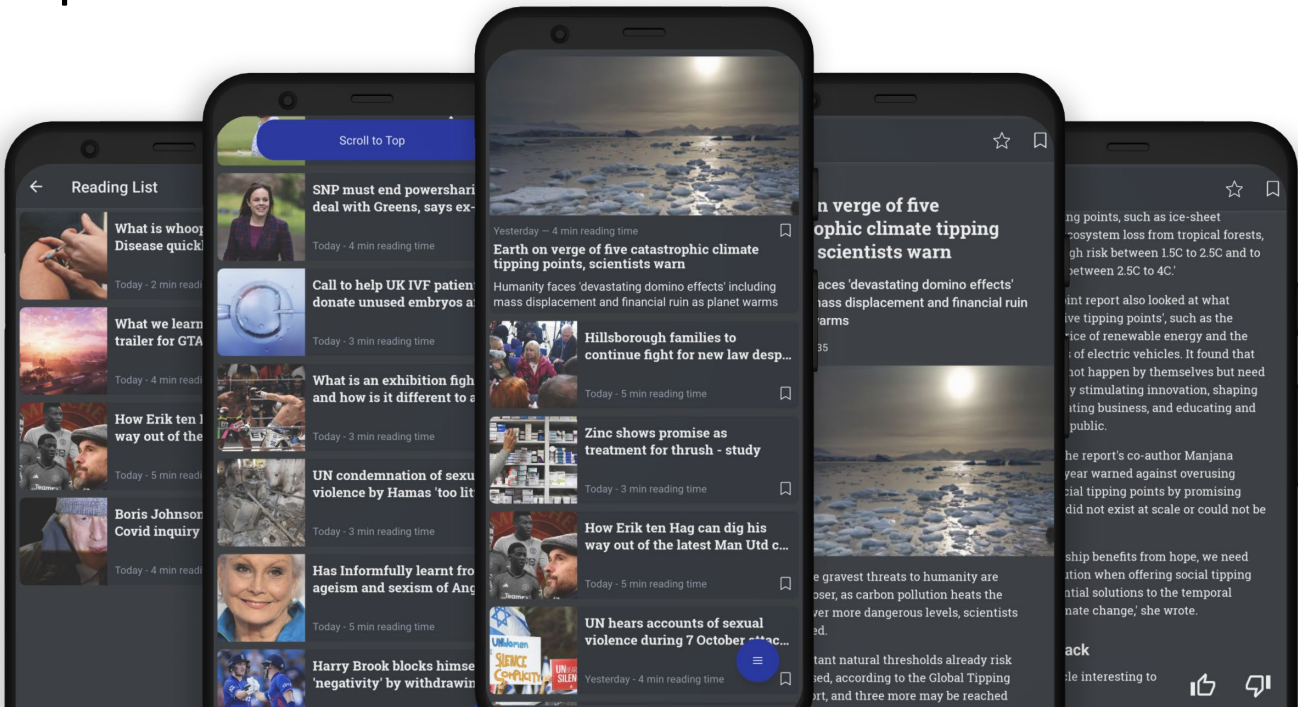
## (Political) learning

- **O**pportunity - **M**otivation - **A**bility framework (Luskin, 1990)
- In news app, opportunity comes down to ranking
  - > *Position nudge*
- Motivation/Ability can be triggered/catered to
- Text complexity as potentially inhibiting factor
  - > *Accessibility nudge*

**Overall RQ:** Can a position and accessibility nudge facilitate a) the selection of, b) the engagement with, and c) the learning from environmental news?

# Experimental manipulations

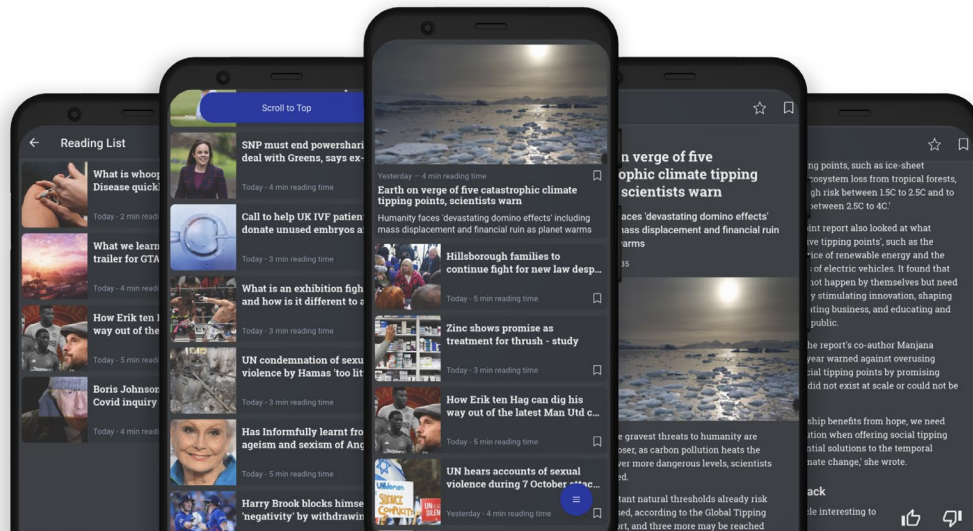
- The ***position nudge*** aimed to facilitate engagement & recall through prominent article position.



Rank	Nudge	No nudge
1	Env. article	Popular article
2	Random article	Random article
3	Random article	Random article
4	Random article	Random article
5	Popular article	Env article.
6	Random article	Random article
...	Random article	Random article
26	Random article	Random article

# Experimental manipulations

- The ***position nudge*** aimed to facilitate engagement & recall through prominent article position.
- The ***accessibility nudge*** aimed to facilitate recall through lowered text complexity



	Original	Rewritten
Title	The new 'scramble for Africa': how a UAE sheikh quietly made carbon deals for forests bigger than UK	A UAE sheikh quietly made deals for big forests that are even bigger than the UK
Teaser & text	...	...
Flesh RE score	47.3	65.0
Gunning Fog Index	16.5	12.5
Kincaid	13.2	9.4

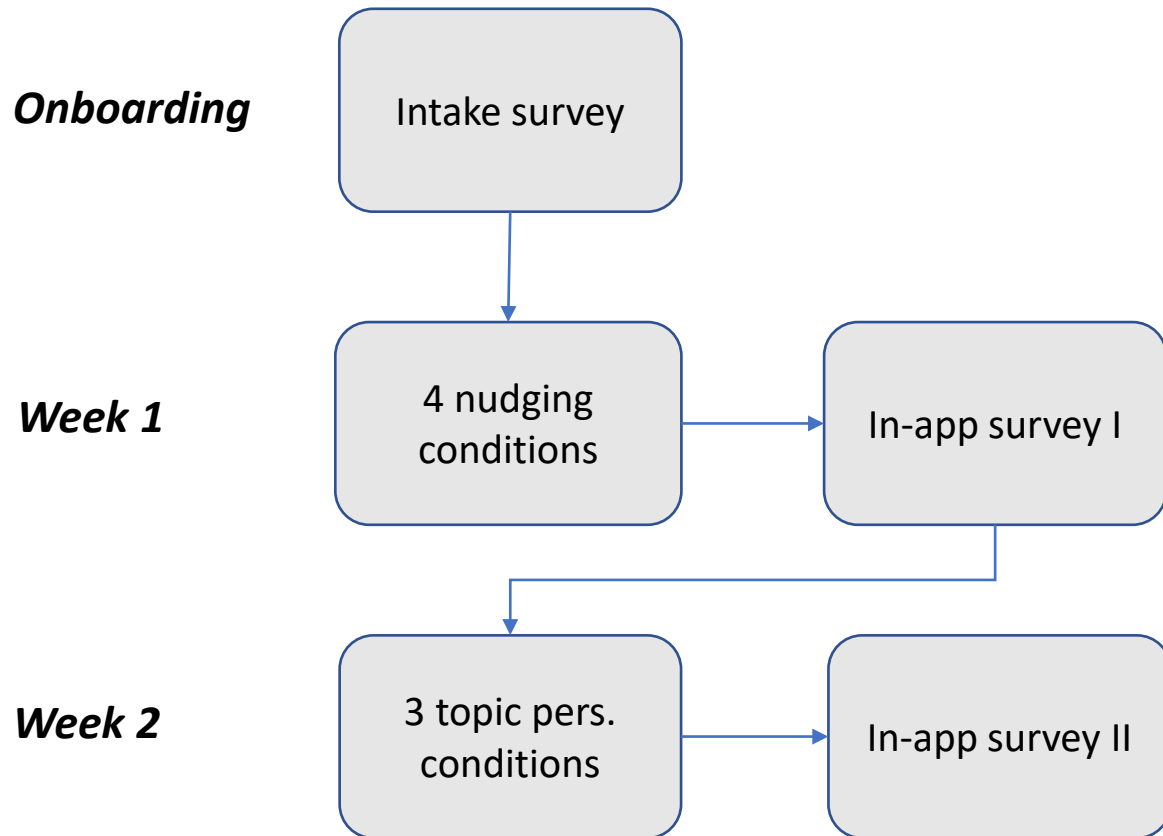


# Experimental manipulations

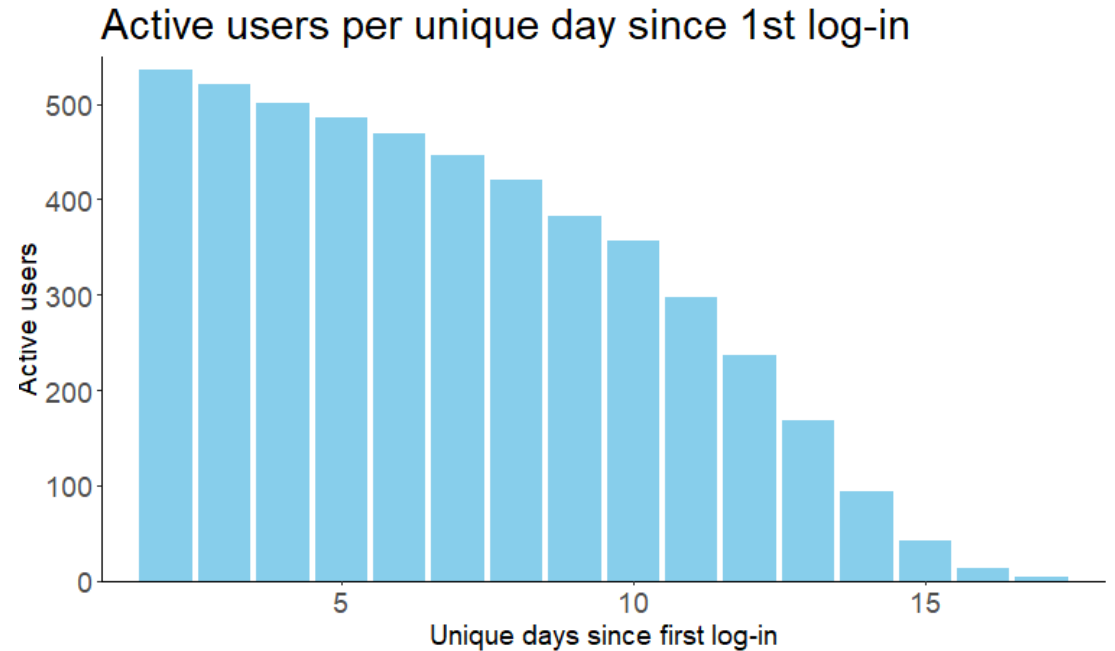
- The ***position nudge*** aimed to facilitate engagement & recall through prominent article position.
- The ***accessibility nudge*** aimed to facilitate recall through lowered text complexity
- For ***topic personalization***, we used either explicit or implicit user preferences or kept everything the same (control)

Rank	Editorial	Explicit pers.	Implicit pers.
1	<b>Env. article</b>	<b>Env article.</b>	<b>Env article.</b>
2	Random article	Topic pref 1	Topic pref 1
3	Random article	Topic pref 2	Topic pref 2
4	Random article	Topic pref 3	Topic pref 3
5	<i>Popular article</i>	<i>Popular article</i>	<i>Popular article</i>
6	Random article	Topic pref 1	Topic pref 1
7	Random article	Topic pref 2	Topic pref 2
8	Random article	Topic pref 3	Topic pref 3
9 - 26	Random article	Random article or topic pref	Random article or topic pref

# Experimental procedure

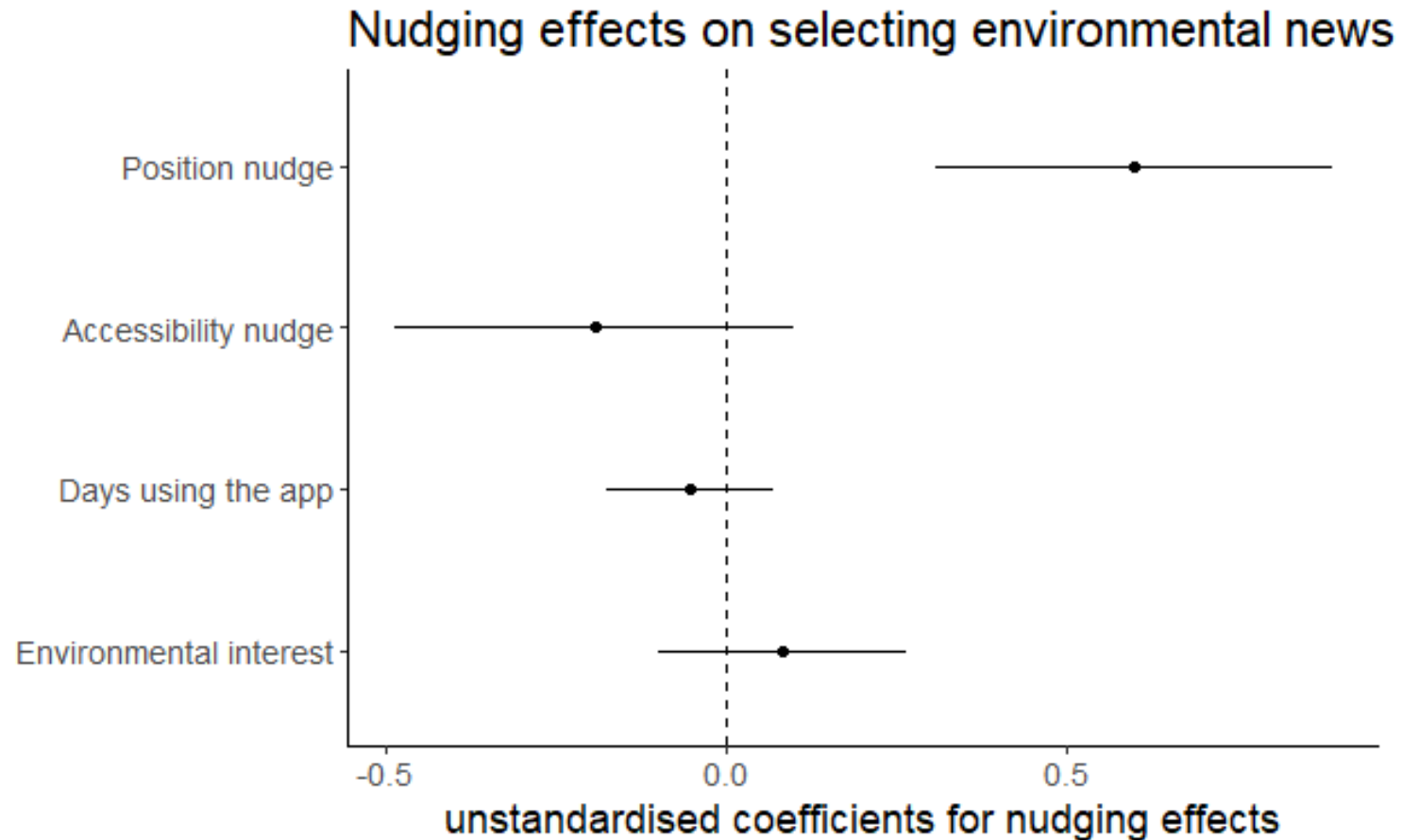


N = ~500 respondents  
Age = 37.12 (M); 11.74 (SD)  
Gender = 167 male, 325 female, 5 non-binary  
Education = 3.96 (M); 0.8 (SD)  
News interest = 6.05 (M); 2.18 (SD)



## Results for news selection (w1)

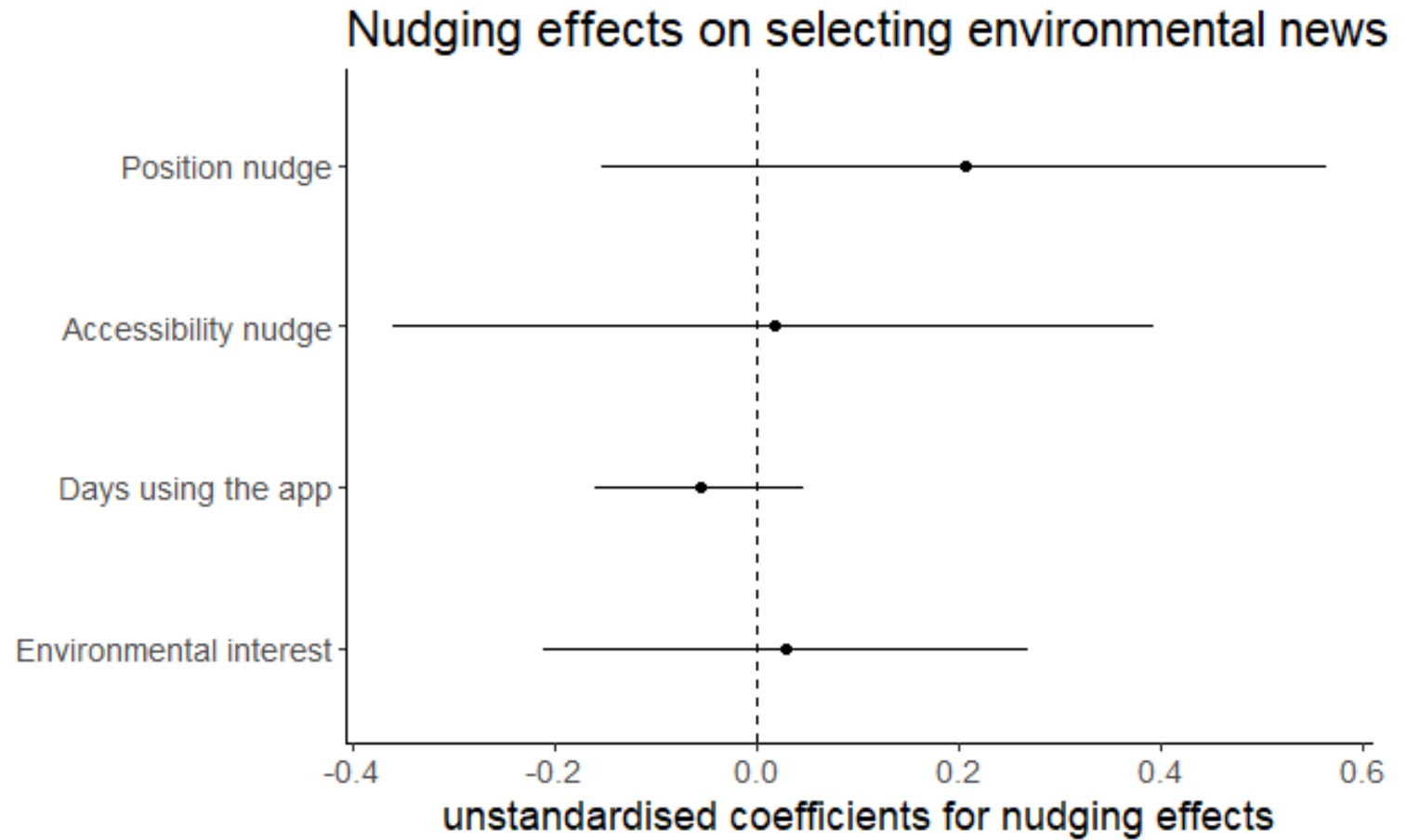
- **Multilevel GLM** with random intercepts for username, day
- **Controls:** age, gender, education, environmental discussions, news interest, issue importance, news selection preferences





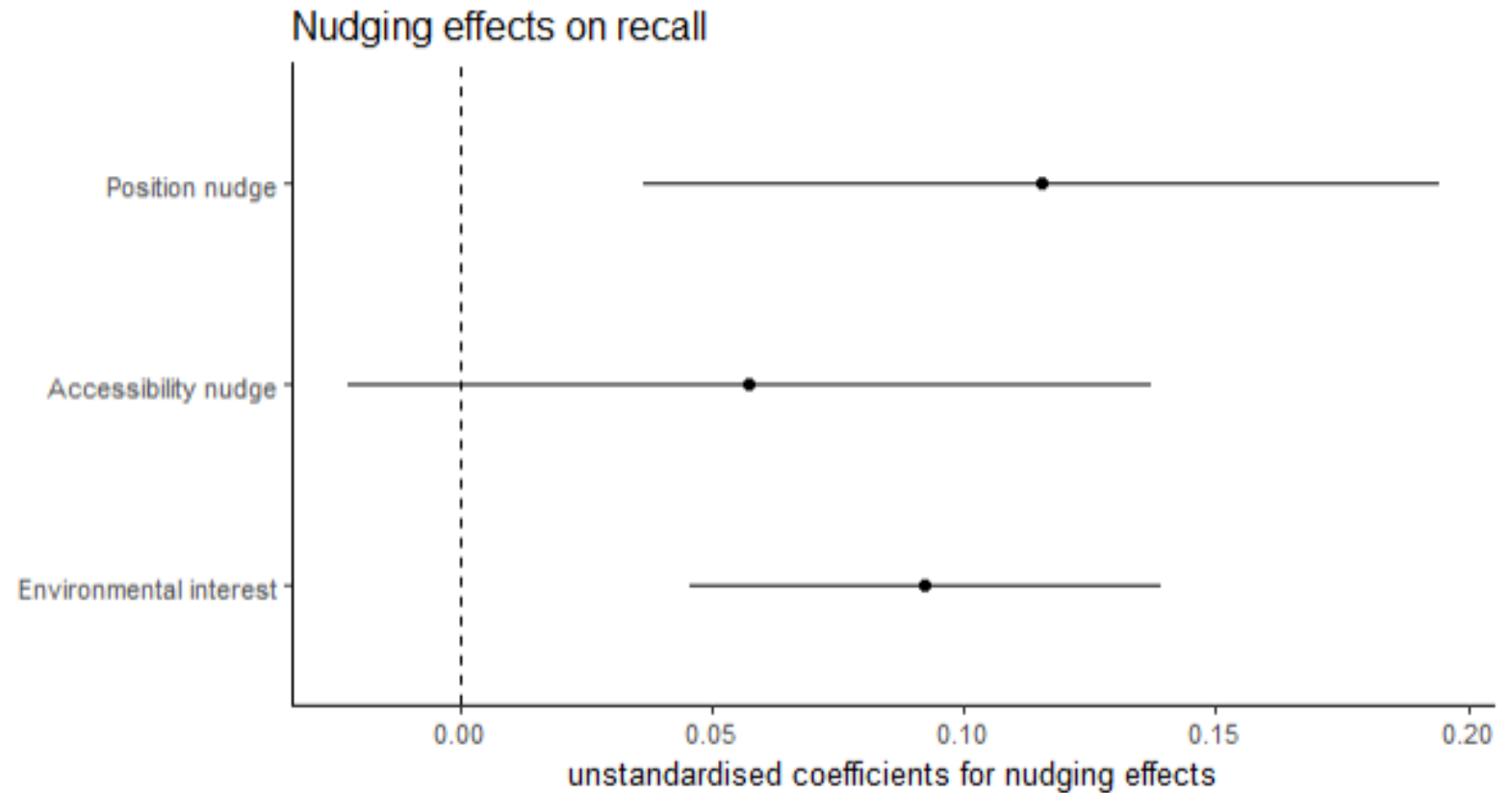
# Results for news engagement (w1)

- **Multilevel LM** with random intercepts for username, day
- **Controls:** age, gender, education, text length, environmental discussions, news interest, issue importance, news selection preferences



## Results for recall (week 1)

- **Multilevel LM** with random intercepts for username, day
- **Controls:** age, gender, education, environmental discussions, news interest, issue importance, news selection preferences, days since



# Take home message

- The ***position nudge*** worked!
  - Facilitated selection & recall
  - Did not decrease reading time & user satisfaction
  - However: no effect on subjective knowledge
- The ***accessibility nudge*** had no significant effects
- ***In practice:***
  - Deliberate article positioning is can be a powerful way of increasing meaningful engagement without sacrificing user satisfaction (even over time)
  - Decreasing text complexity seems less promising

Got a question?

Please let us know!

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