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# From Nudge to Budge

## Measuring the effectiveness of behaviour change campaigns

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# In this talk...

- What's a nudge?
- Measuring behaviour change campaigns
- Case study – getting people back on the bus
- Conclusion and takeaways

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# What is a nudge?

Nudging is defined as "any aspect of the choice architecture that alters people's behavior in a predictable way without forbidding any options or significantly changing their economic incentives" (Thaler & Sunstein, 2008).

The choice architecture refers to the physical, social, and psychological aspects of the contexts in which our choices take place

For example, putting fruit at eye level counts as a nudge. Banning junk food does not.

# Sometimes clients want Mindlab to help them change consumer behaviour

- **Large drinks manufacturer**
  - Recycling/reusing plastic.
- **Water company**
  – Not flushing wipes down the loo
- **Transport company**
  – Getting people back on the buses post COVID

Typically, we are presented with a set of messages or nudges, and asked to select the most effective one. **But how can we tell?**

# Nudges can take many forms…

**Utilizing defaults**

*i.e., setting/framing the standard choice*

**Harnessing social norms**

*i.e., providing information about others' behaviour and attitudes*

**Utilizing priming techniques**

*i.e., inducing favourable spontaneous mental associations*

**Prompting reward substitution and pre-commitments**

*i.e., facilitating sanctioning plans for failure to meet behavioural goals*

**Prompting action planning**

*i.e., facilitating conversion of behavioural intentions*

# Theories of Behaviour Change

## Social Cognitive Theory (STC)

- ★ Learning occurs in a social context with a dynamic and reciprocal interaction of the person, environment, and behaviour.
- ★ The unique feature of SCT is the emphasis on social influence and its emphasis on external and internal social reinforcement.
- ★ People learn by observing others performing a behaviour, and the consequences of those behaviours.
- ★ Social proof

## Social Norms Theory (SNT)

- ★ Behaviours are influenced by what people perceive to be a norm and not by actual norms
- ★ For example, if someone thinks society regards heavy drinking as unacceptable, this might cause them to decrease their own consumption
- ★ Correcting misperception of perceived norms will most likely result in a decrease in the problematic behaviour or an increase in the desired behaviour.

# The gold standard for testing nudges is to measure actual behaviour:

- ★ **Recycling/reusing plastic**
  – Measure contents of recycle bins
- ★ **Not flushing wipes down the loo**
  – Hard to do without intrusive monitoring
- ★ **Bus usage**
  – Collecting passenger data

This is expensive and time consuming.

# There is another way..

## A short online test

- ★ Mindlab has developed an alternative way to measure the effectiveness of nudges that is much faster and more cost effective –an online test that can be conducted in as little as 15 minutes.
- ★ The methodology uses a series of implicit tasks to measure attitudes and associations that are good proxies for action tendencies.
- ★ While not a perfect measure, the test gives a reasonably good estimate of how likely it is that different nudges will translate into the desired behavior.

# Case Study

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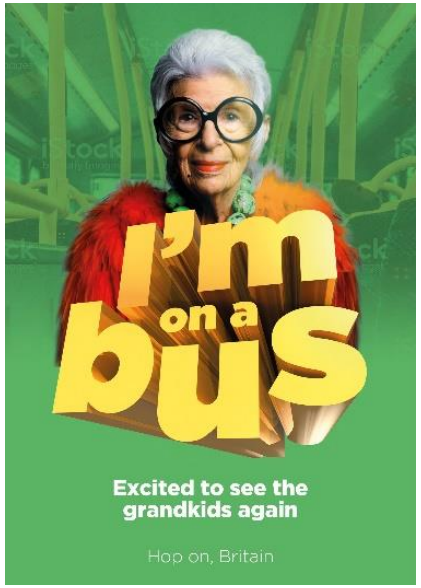
# Background

- ★ Bus usage declined significantly during the COVID-19 lockdowns.
- ★ A transport organization wanted to launch a behaviour change campaign to reverse this decline.
- ★ Four campaigns were developed, each based on a different nudge.
- ★ Mindlab was tasked with selecting the most effective campaign

# The Campaigns

Keep Britain's Wheels Turning (KBT)

It starts with a stop (SWS)




I'm on a bus (OAB)

There's a bus for that (BFT)

# Methodology

Participants were divided into 4 groups, and each group saw just one of the campaigns.

Their implicit attitudes and associations with bus usage were gathered before and after exposure to the campaign.

Additional measures were gathered such as the likelihood to use the bus given the new information, what they liked and disliked about the campaign, etc.

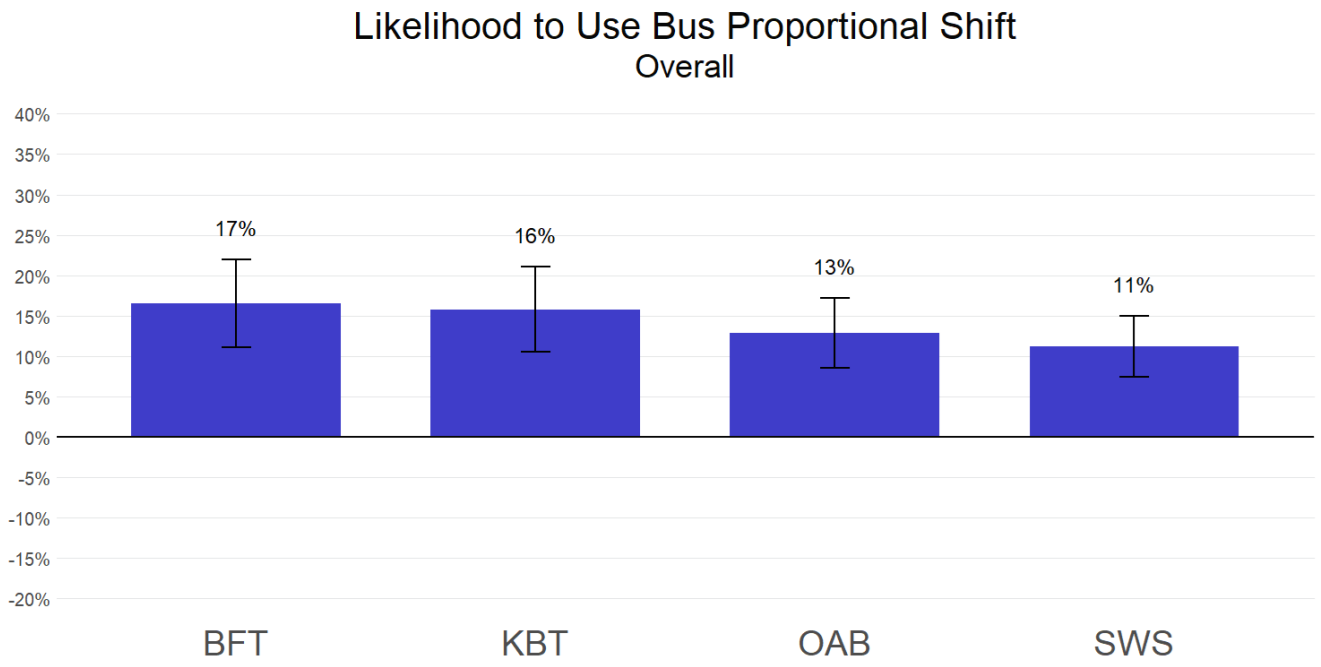
## Participant Journey:

- Demographics
- Pre-Nudge Association Tests
- Exposure to Campaign
- Post-Nudge Association Tests
- Source Credibility Tests
- Explicit Questions

# All of the campaigns had a positive effect on bus usage intention.

## Key measure 1: How likely would you be to take the bus within the next 8 weeks, if the government rules permit it?

We asked this question before and after showing participants the campaigns. Likelihood was measured on a scale of 0-10 (0 = very unlikely, 10= very likely). This graph shows the percentage shift in likelihood after each campaign.




**Campaigns:**

OAB: On a Bus
SWS: It starts with a stop
KBT: Keep Britain's Wheels Turning
BFT: There's a bus for that

All 4 campaigns were strong. BFT & KBT had the strongest positive effect, but the overall difference was small and not statistically significant.

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# Campaigns have a much bigger effect on non-users

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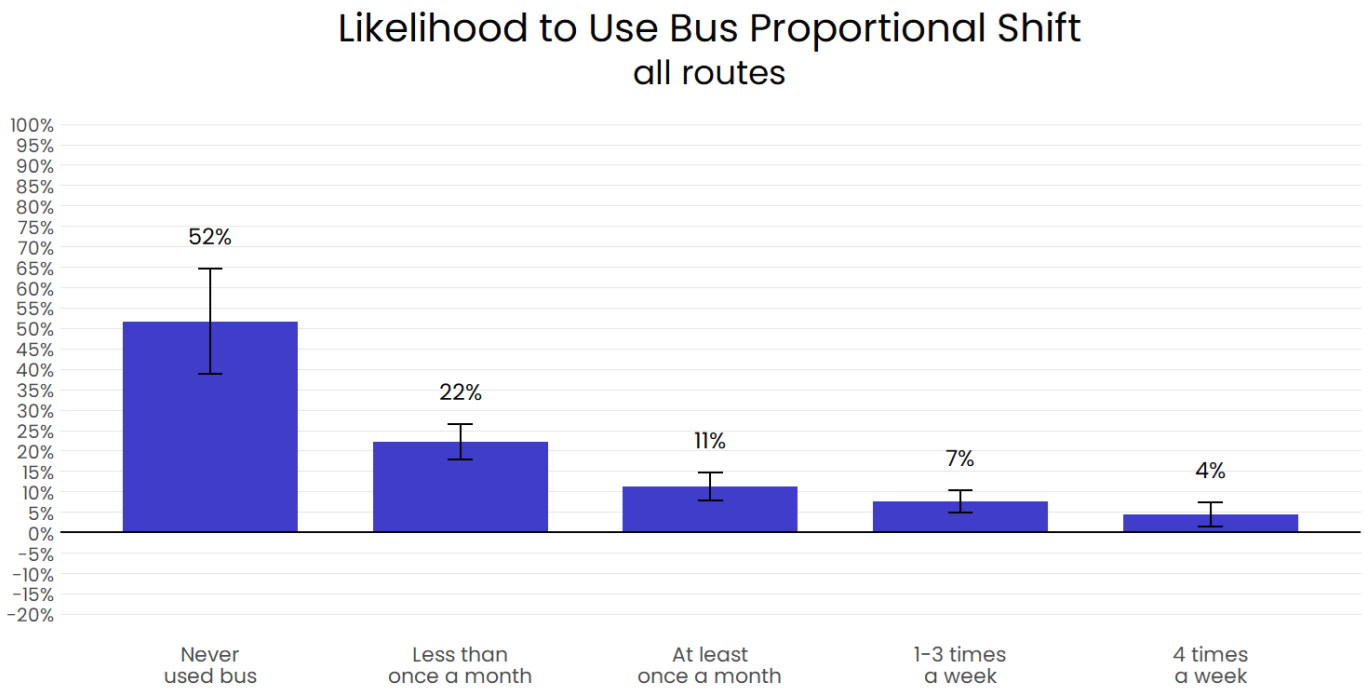


**Campaigns:**

OAB: On a Bus
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# Posters in BFT have stronger associations compared to posters in other campaigns

**All four posters in this campaign had much stronger associations than the other campaigns.**

Poster 1

Poster 2

Poster 3

Poster 4

| | Theres a bus for that poster 1 | Theres a bus for that poster 2 | Theres a bus for that poster 3 | Theres a bus for that poster 4 |
|---|---|---|---|---|
| Friendly | 89% | 87% | 84% | 84% |
| Happy | 92% | 89% | 86% | 82% |
| Confident | 83% | 82% | 81% | 83% |
| Helpful | 86% | 82% | 83% | 85% |
| Useful | 86% | 81% | 85% | 84% |
| Reassuring | 84% | 80% | 74% | 85% |
| Responsible | 81% | 80% | 76% | 88% |
| Fun | 83% | 88% | 83% | 72% |
| Proud | 78% | 69% | 63% | 82% |
| Excited | 83% | 82% | 82% | 68% |
| Value for money | 72% | 68% | 67% | 69% |
| NOT worried | 83% | 79% | 81% | 78% |

**Campaigns:**

OAB: On a Bus
SWS: It starts with a stop
KBT: Keep Britain's Wheels Turning
BFT: There's a bus for that

Key:

- Significantly better than average
- Better than average
- Average (compared to competitors)
- Worse than average
- Significantly worse than average

- ★ Poster 1 had the best performance, showing that 'seeing your family' is a very strong emotional draw for people.
- ★ Poster 2 was seen as very fun, friendly and happy, while poster 4 scored highly on pride, responsibility and confidence.
- ★ Even the more tongue in cheek poster 4 achieved far stronger associations than other campaigns were able to.

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# The Activations

Return to life on us

Hop on to help out

# Testing the Activations

To test the activations, we first asked participants to complete a preference test where they chose between pairs of transport options.

We then asked participants to read a text explaining the concept of the activation.

Then, we showed the activation posters to the participants and gave them the time to process them.

Finally, participants were asked to complete the original preference test again, to see if the activation had altered their preferences.

RETURN TO LIFE ON US

To encourage people to return to the buses, **we simply cover their return fare for free when they return to using the bus.** It's a very positive national message about getting back to life via the bus. Whether that be getting back to the office, seeing friends, going to restaurants or to just getting back to the shops, we'll pick up the return tab.

Continue

HOP ON TO HELP OUT

Help out your local community by hopping on a bus. **We'll give you your return trip for free**. Wherever you need and want to be, the bus can get you there. So hop on a bus to work, the shops or your favourite local restaurant, knowing that you're helping your community get back

Continue

Continue

Continue

Taking a taxi | Taking the bus

| Prefer Left<br>Press A | 1/15 | Prefer Right<br>Press L |
|---|---|---|

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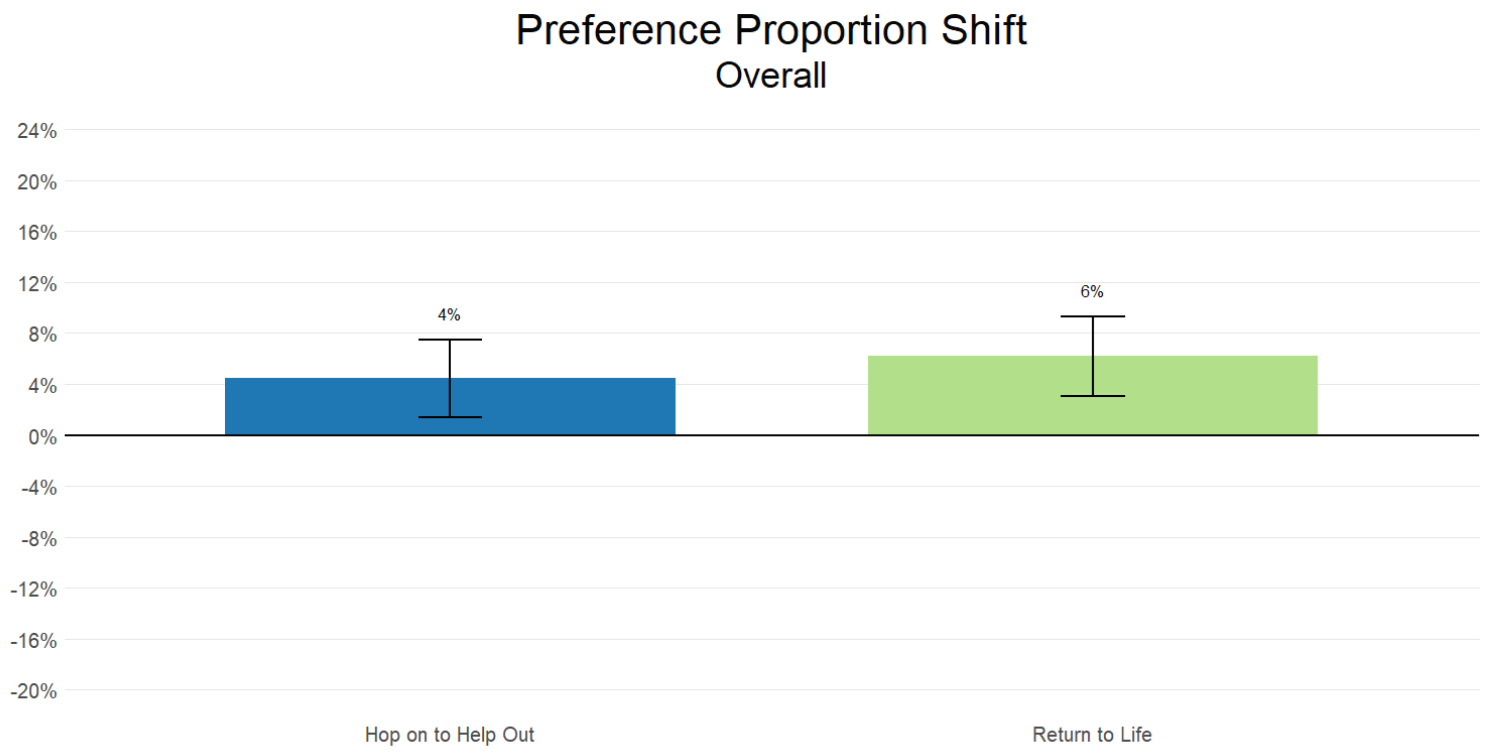
# Testing the Activations

## "Return to Life" is a slightly stronger activation

The graph shows the percentage change in **preference for buses** after showing the activation.




**Overall, there was a small difference in the effect of the two activations.**

**Campaigns:**

OAB: On a Bus
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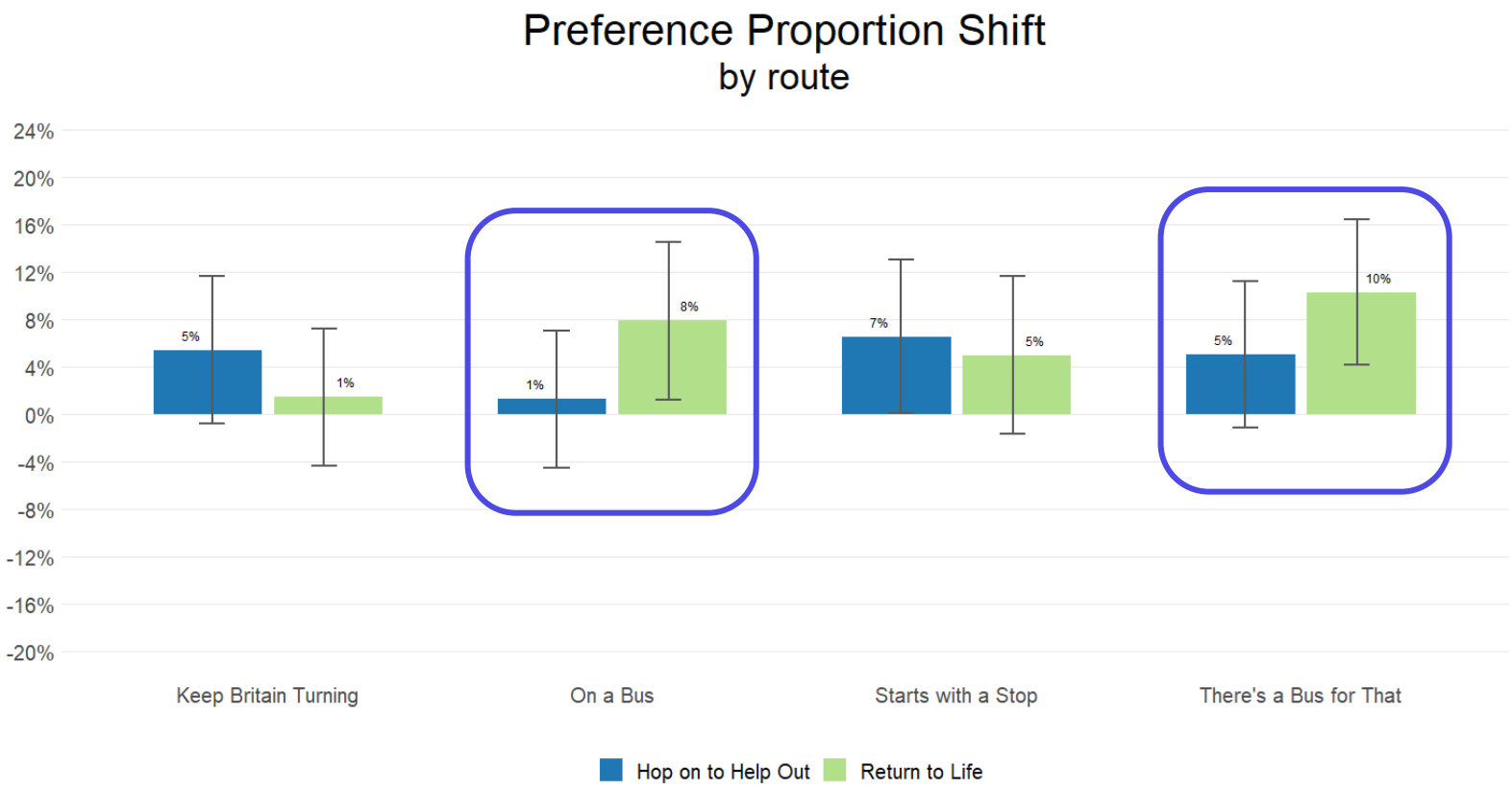
# Activation Testing

## The power of an activation depends on the campaign

In comparison to “Hop on to Help Out”, “Return to life” is much more effective in changing preference for busses when paired with “OAB” and “BFT”. Combining “BFT” with Return to life gave the highest change in preference.

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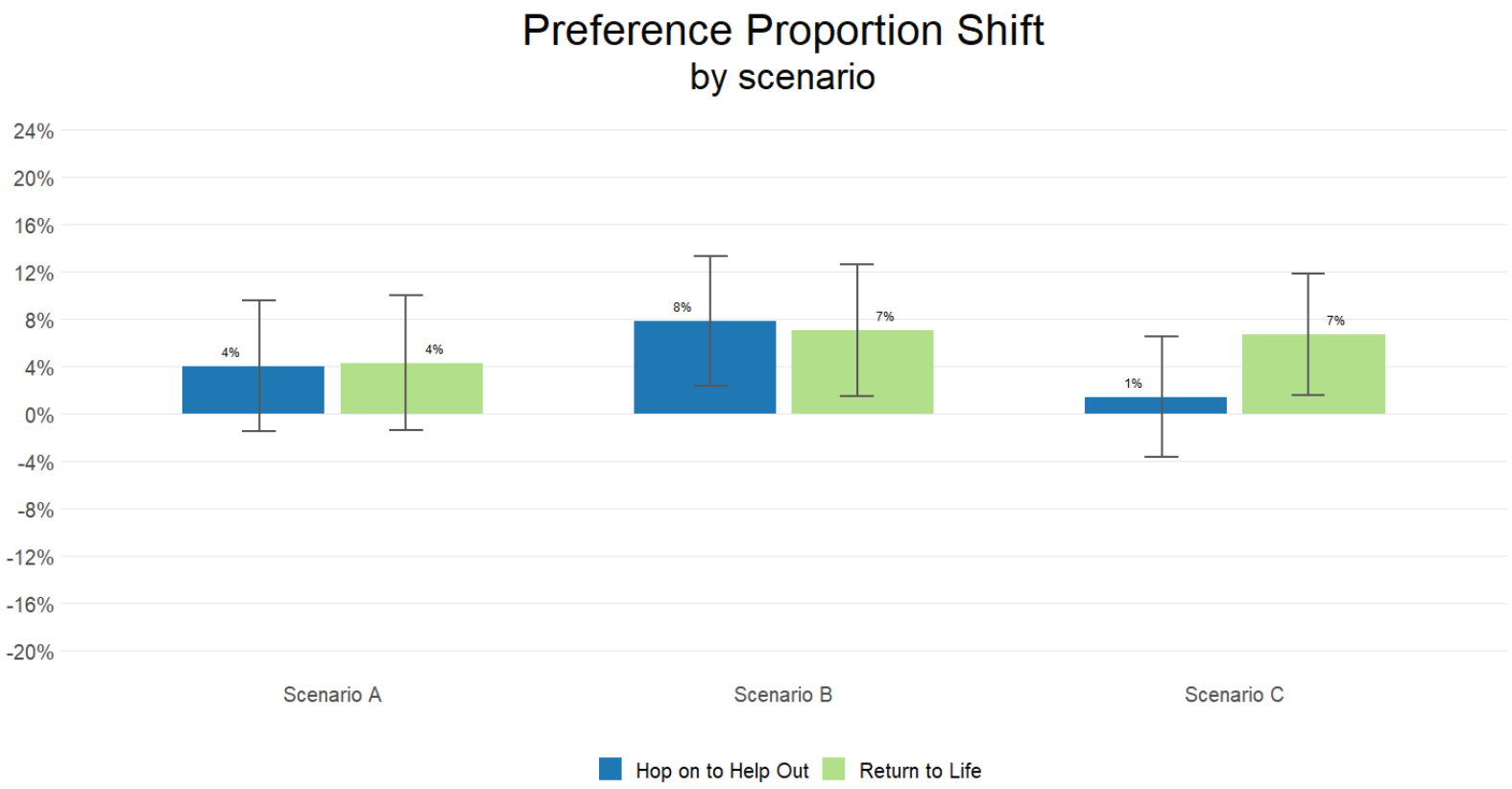
# Activation Testing

## Scenario C is the only scenario with a big difference between activations

The activations had about the same effect on participants who were exposed to scenarios A and B. In scenario C, “Return to life” was more effective in changing preference for buses than “Hop on to Help Out”.




**Campaigns:**

OAB: On a Bus
SWS: It starts with a stop
KBT: Keep Britain’s Wheels Turning
BFT: There’s a bus for that

**Scenarios:**

A: Pandemic continues
B: Pandemic lessening
C: Pandemic over

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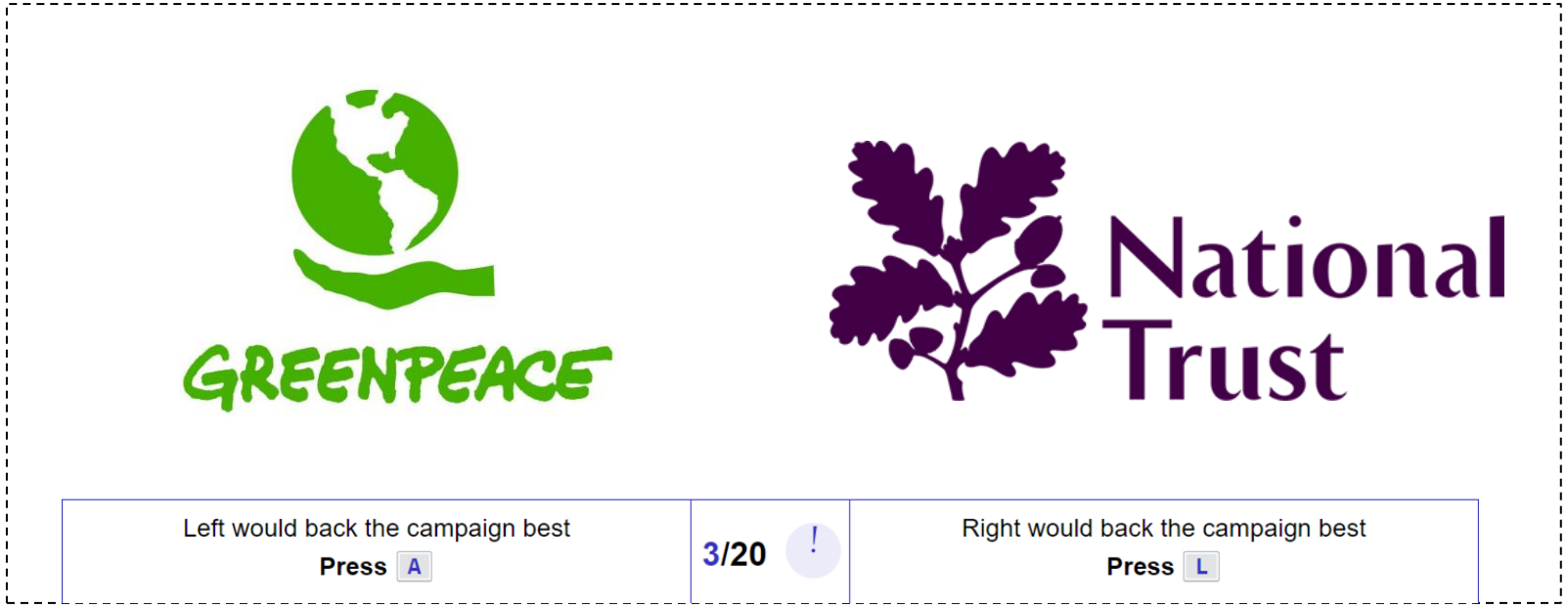
# Source Credibility Test

**In order to find out which source should be associated with the campaign, we asked participants to "indicate which organization would best back the campaign".**

Participants had to do this under time pressure and their reaction times were measured. This enables us to  measure gut feelings rather than considered, explicit responses..

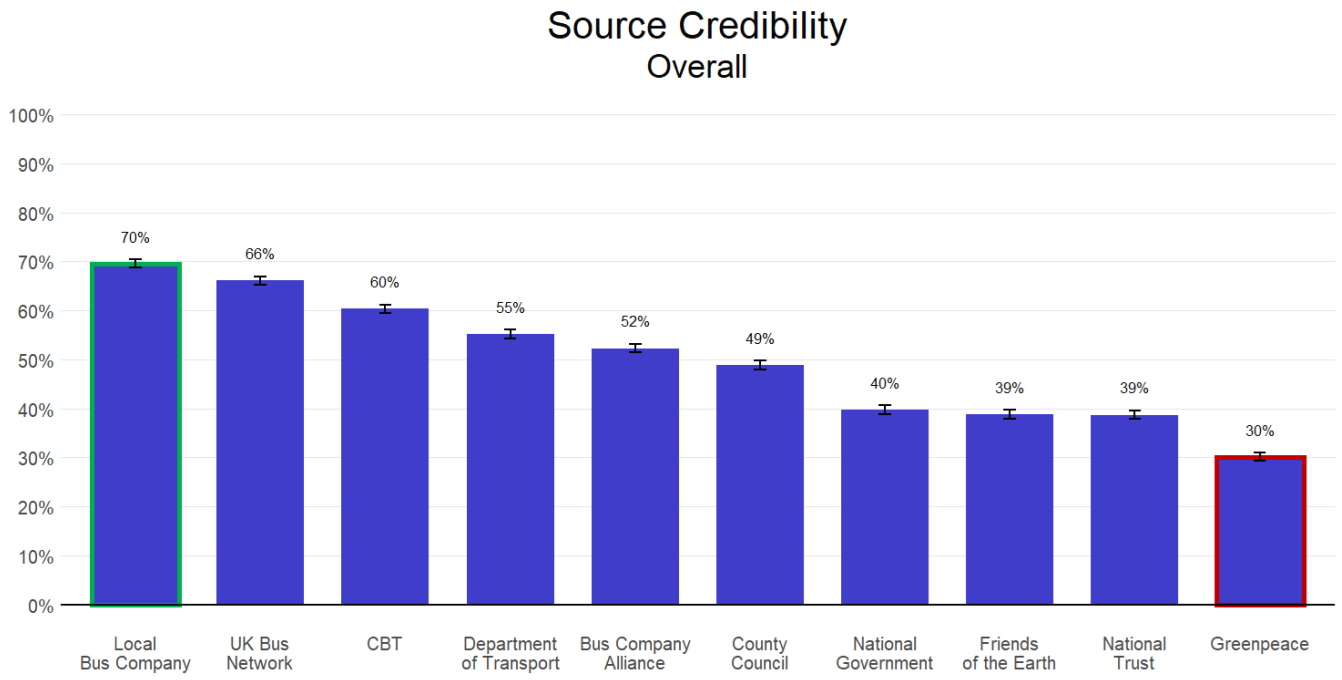


# Who would best back this campaign?

## A Local Bus Company would best back this campaign.

Overall, participants intuitively think that this campaign would be best backed by the Local Bus Company. The second most popular option is the UK Bus Network.

Greenpeace and other environmental organizations were the least suitable sources to be behind this campaign. National government ranked very low, comparable to the environmental organizations.



# Some takeaways..

Nudges are everywhere, but we need to measure their effectiveness before deploying them.

Online tests can be used to measure the effectiveness of nudges by tapping into implicit attitudes and associations.

Online tests provide a much cheaper and faster alternative to measuring actual behaviour.

While not a perfect measure, online tests give a reasonably good estimate of how likely it is that different nudges will translate into the desired behavior

# Thank you!

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