



Humans aren't robots: safety & the science of human behaviour

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 @B_I_Tweets

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What we do at the Behavioural Insights Team



Behavioural Science

The study of how humans make choices and behave in real-world contexts

Rigorous Evaluation

Investigating the causal connection between treatment and outcomes

Getting the neurons firing





Take a moment to write
down the words you
remember



Did you remember...?



Snore

Wake

Blanket

Nap

Sleep

No sleep here



Bed

Wake

Snore

Rest

Snooze

Nap

Awake

Blanket

Peace

Tired

Doze


Yawn

Dream

Slumber


Drowsy

If you remembered sleep, you're in good company



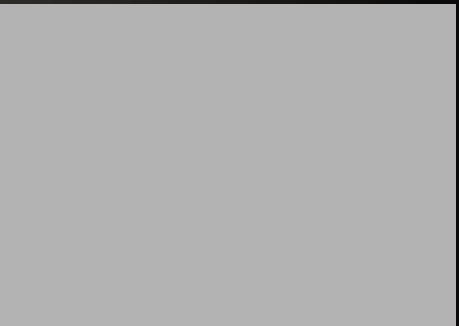
40 – 55% of
people
falsely recall
“sleep”

Source: Roediger, H. & McDermott, K., (1995), 'Creating False Memories: Remembering Words Not Presented in Lists', *Journal of Experimental Psychology: Learning, Memory, and Cognition*, Vol. 21, No. 4, pp. 803-814.

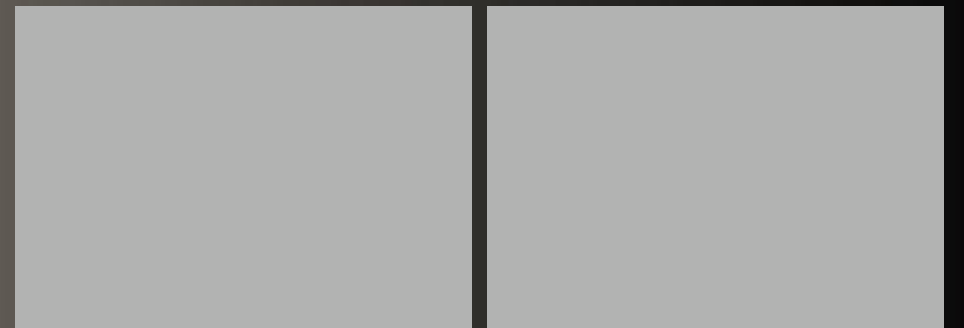




**Our memory is
influenced by context**



**Our judgement is
influenced by
context**





Which would you choose?

Imagine that you want to buy a subscription to The Economist and **you can choose from the following three options:**

1. Online subscription (£59.00)

One-year subscription to Economist.com.

2. Print subscription (£125.00)

One-year subscription to the print edition of The Economist

3. Online + print subscription (£125.00)

One-year subscription to the print edition of The Economist plus online access.

Which would you choose?



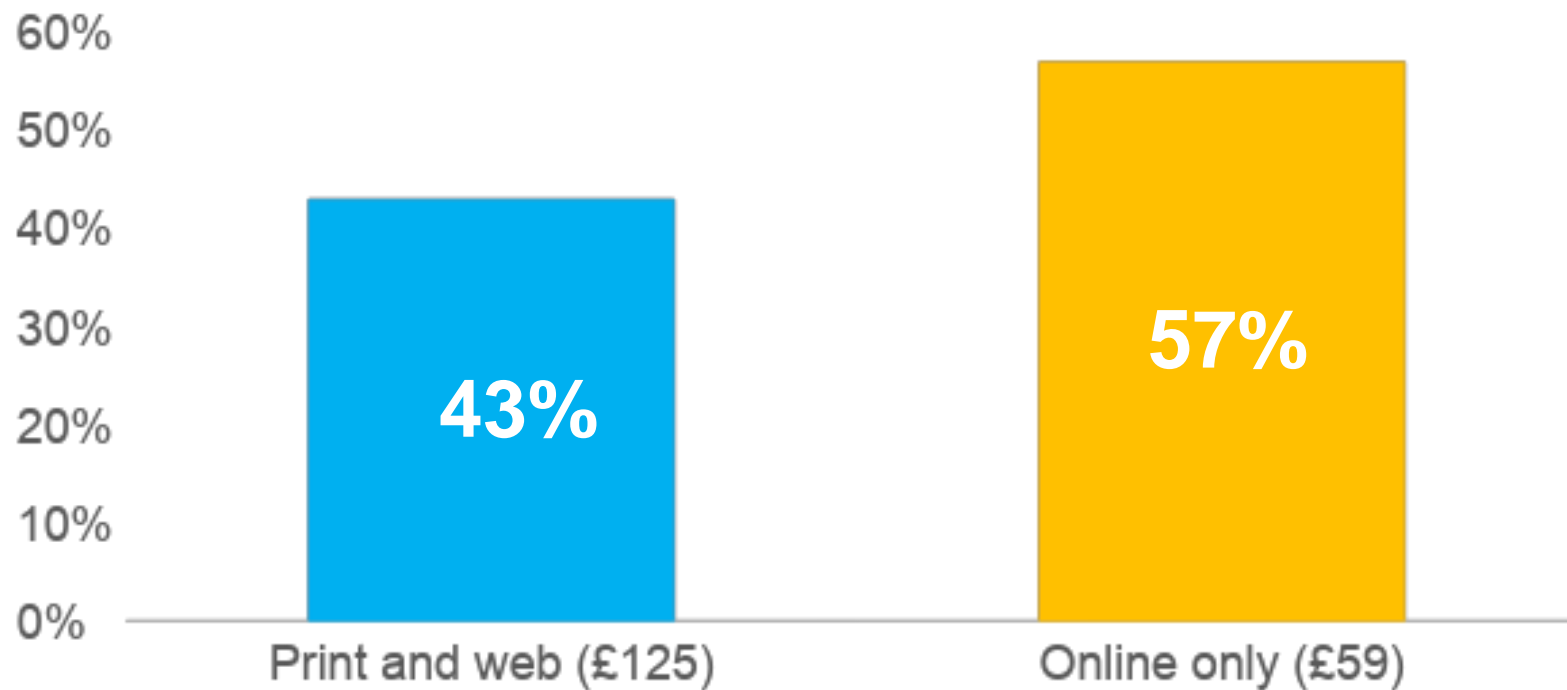
A group of MBA students were asked the same question and this is what they chose:



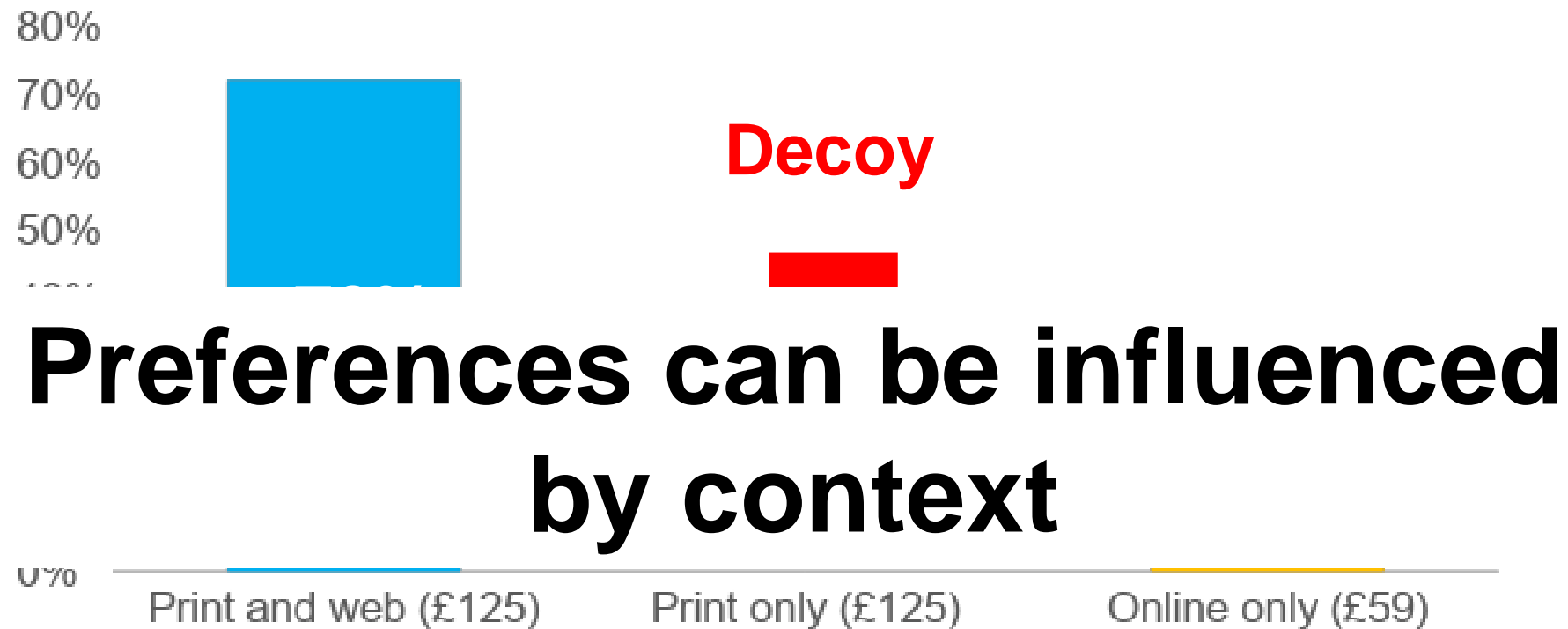
Which would you choose?



However, when presented with only two choices the proportion of students that choose the print and web option drops to 43%:



Irrelevant decoy information sways choice





**Our preferences are
influenced by context**

Context matters!



Memory



Judgment



Preferences



The two systems driving behaviour



System 1: Fast

Automatic intuitive,
effortless

2x2

Driving

**Daniel
Kahneman,**
Nobel Laureate



System 2: Slow

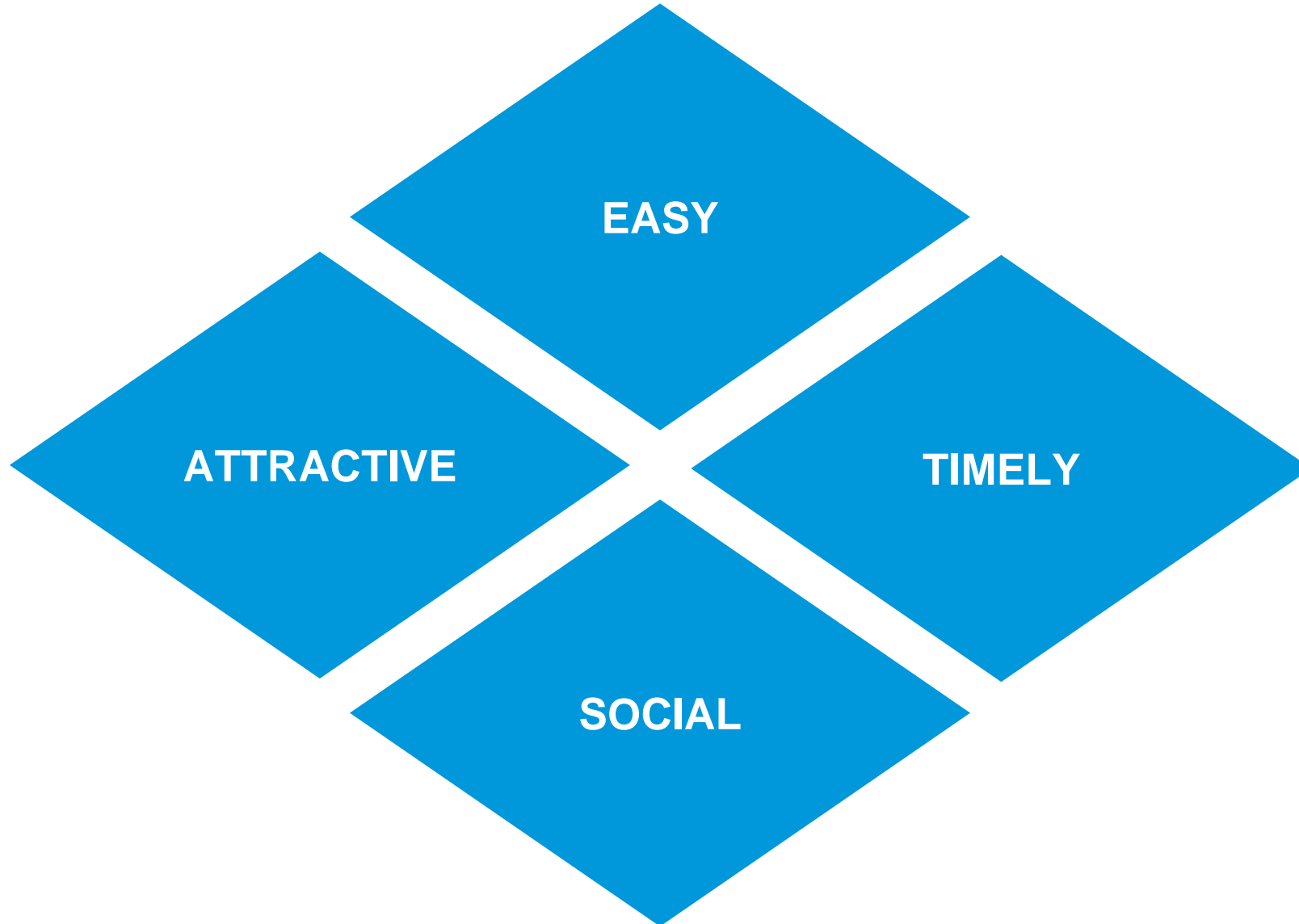
Reflective deliberate,
analytic

24x17

Learning to drive

“It turns out that the environmental effects on behavior are a lot stronger than most people expect” **Daniel Kahneman, Nobel Laureate**


If you want someone to do something, make it...



[illegible]



TREATMENT

REGULAR PRESCRIPTIONS															Date:																			
MEDICINE (Approved name)																																		
EXAMPLE																																		
D	O	S	E	microgram mg g units Other																														
1	5	0																																
OD BD TDS QDS Other				Route																														
				PO																														
Name				Signature											Bleep																			
A. Doctor															4528																			
New	<input checked="" type="checkbox"/>	Start date													Additional information										Pharmacist Initials									
		31/03													After food										A. Name									

An example: make it easy



CONTROL

DRUG (Approved Name)		SEVERE CAP		Benzylpenicillin																	
Route	Dose	Date																			
IV	1-2g	14/03																			
Signature		A Doctor Bleep XXXX		Other																	
DRUG (Approved Name)		SEVERE CAP		Clarithromycin																	
Route	Dose	Date	Pharm.																		
IV	500mg	14/03																			
Signature		A Doctor Bleep XXXX		Other																	
				B/Fast																	
				Lunch		12															
				Supper																	
				Bed Time		24															
				Other																	

milligram = mg
microgram = µg

TREATMENT

REGULAR PRESCRIPTIONS										Date:											
MEDICINE (Approved name)																					
EXAMPLE																					
D	O	S	E	microgram		mg	g	units	Other												
1	5	0																			
OD				BD				TDS				QDS				Other		Route		PO	
Name				Signature				Bleep													
A. Doctor								4528													
New		<input checked="" type="checkbox"/>		Start date		31/03		Additional information		After food								Pharmacist Initials		A. Name	



Correct
frequency

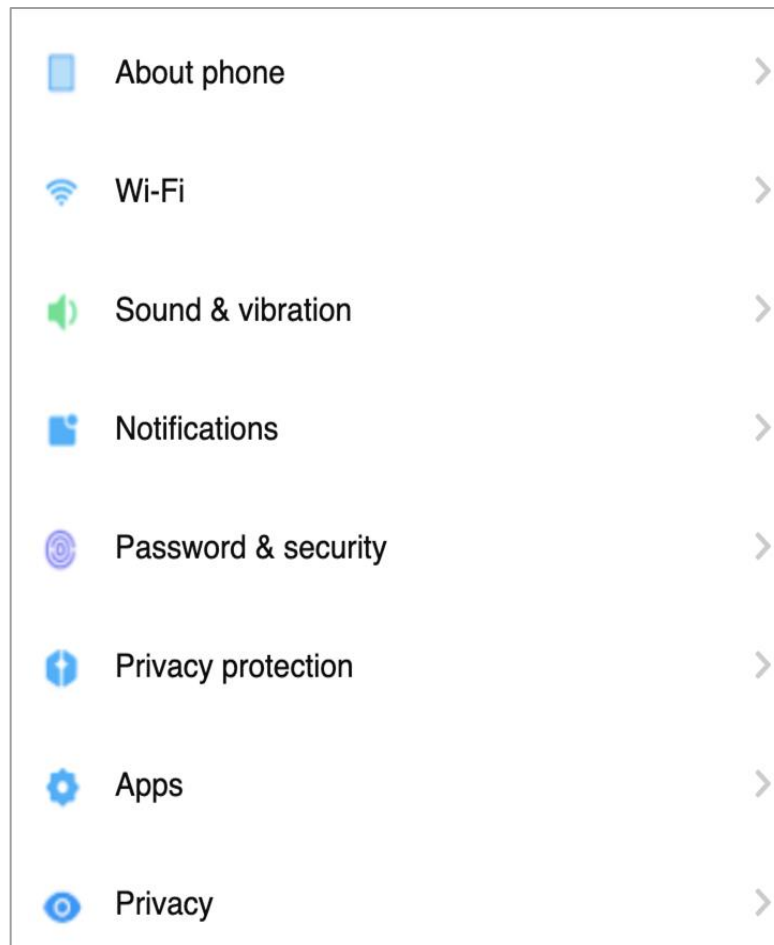
DRUG (Approved Name)				Effect				
SEVERE CAP Benzylpenicillin				06	X			
Route	Dose	Date	Pharm.	Lunch	12			
IV	1-2g	14/05		Supper	18			
Signature				Bed Time	24			
A Doctor Bleep xxx				Other				
DRUG (Approved Name)				Effect				
SEVERE CAP Clarithromycin				Lunch	12			
Route	Dose	Date	Pharm.	Supper				
IV	500mg	14/05		Bed Time	24			
Signature				Other				
A Doctor Bleep xxx								

REGULAR PRESCRIPTIONS										Date:											100%	96%
MEDICINE (Approved name)																						
EXAMPLE										10	C	S	M	X	/	X	C	S				
D	O	S	E							08												
1	5	0								12	C	S	O	G	C	S						
				microgram	mg	g	units	Other		18	M	X	/	O	G	M	X					
				OD	BD	TDS	QDS	Other		22												
				Route																		
				PO																		
Name				Signature				Bleep														
A. Doctor								4528														
New	<input checked="" type="checkbox"/>	Start date		Additional information							Pharmacist Initials											
		31/03		After food							A. Name											

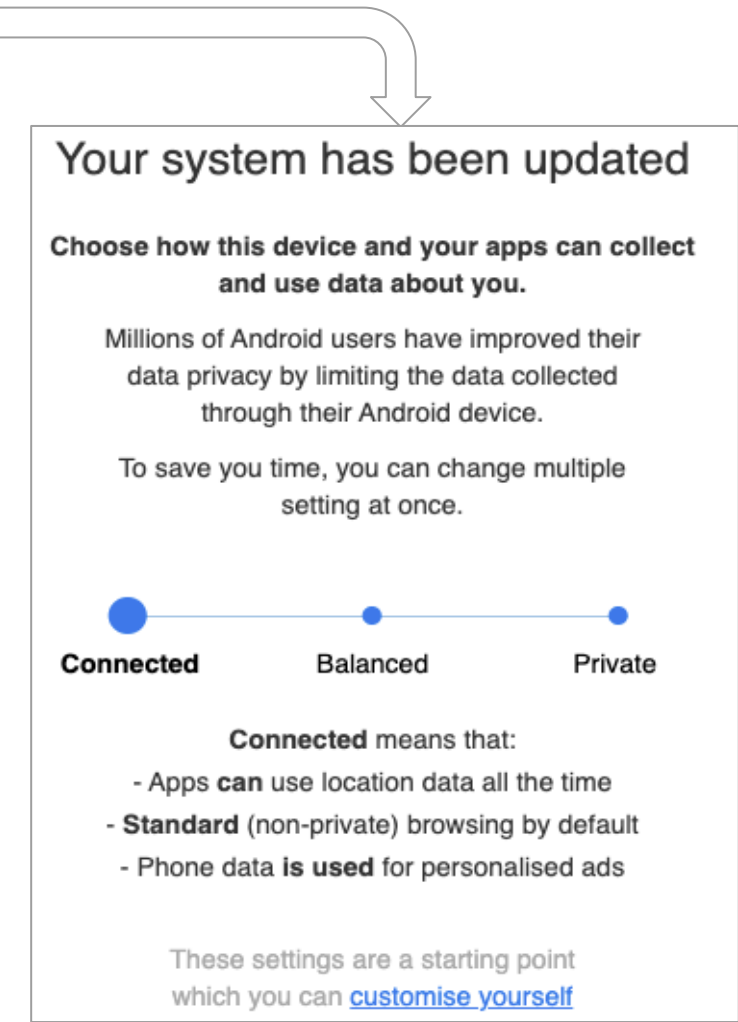
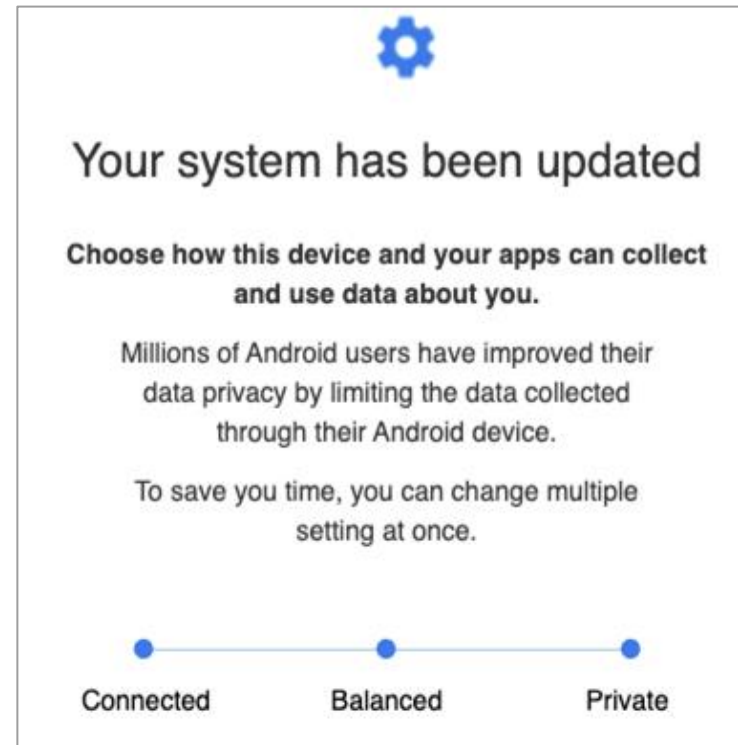
An example: digital safety & 'active' choices



Control



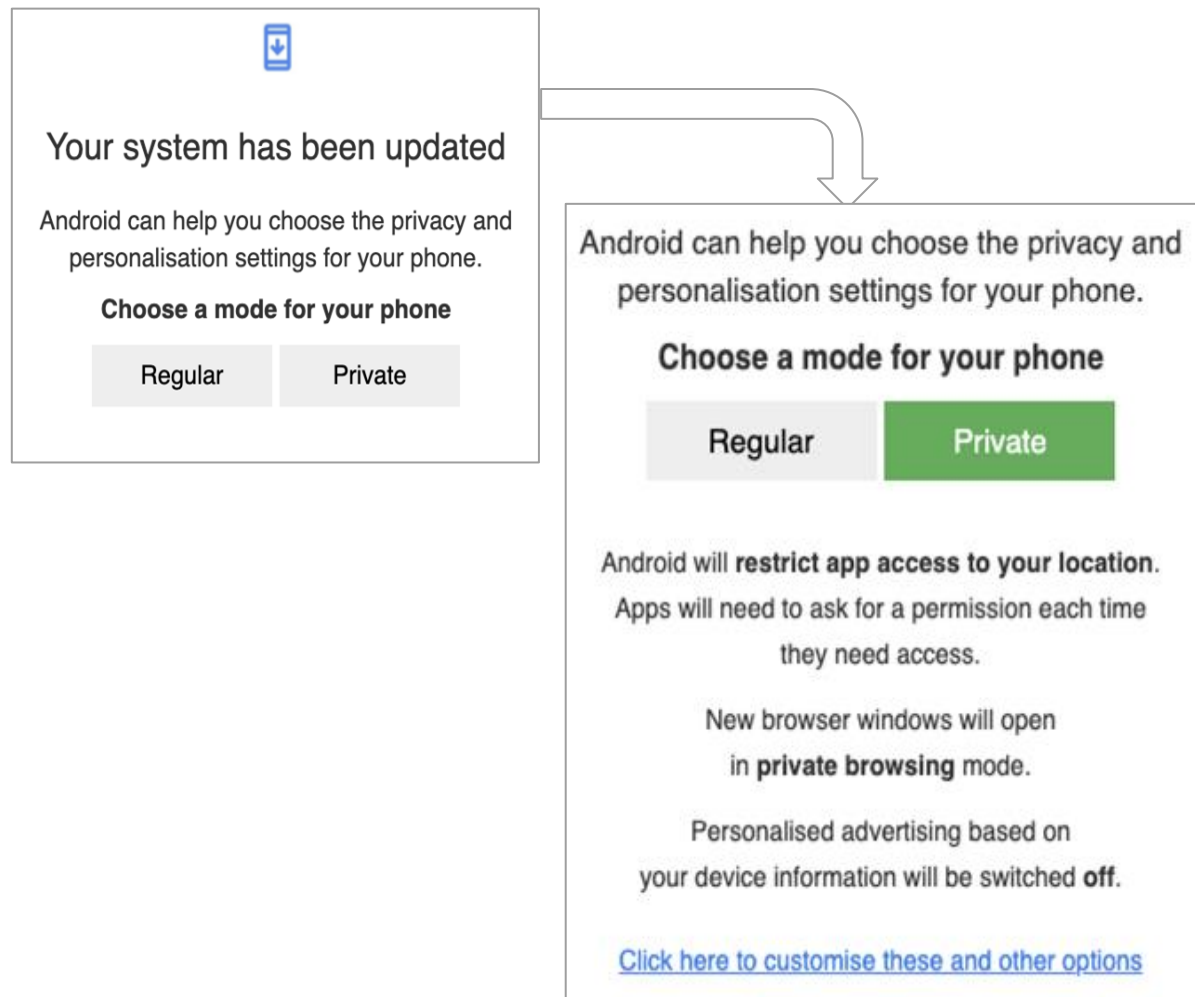
1A: Slider



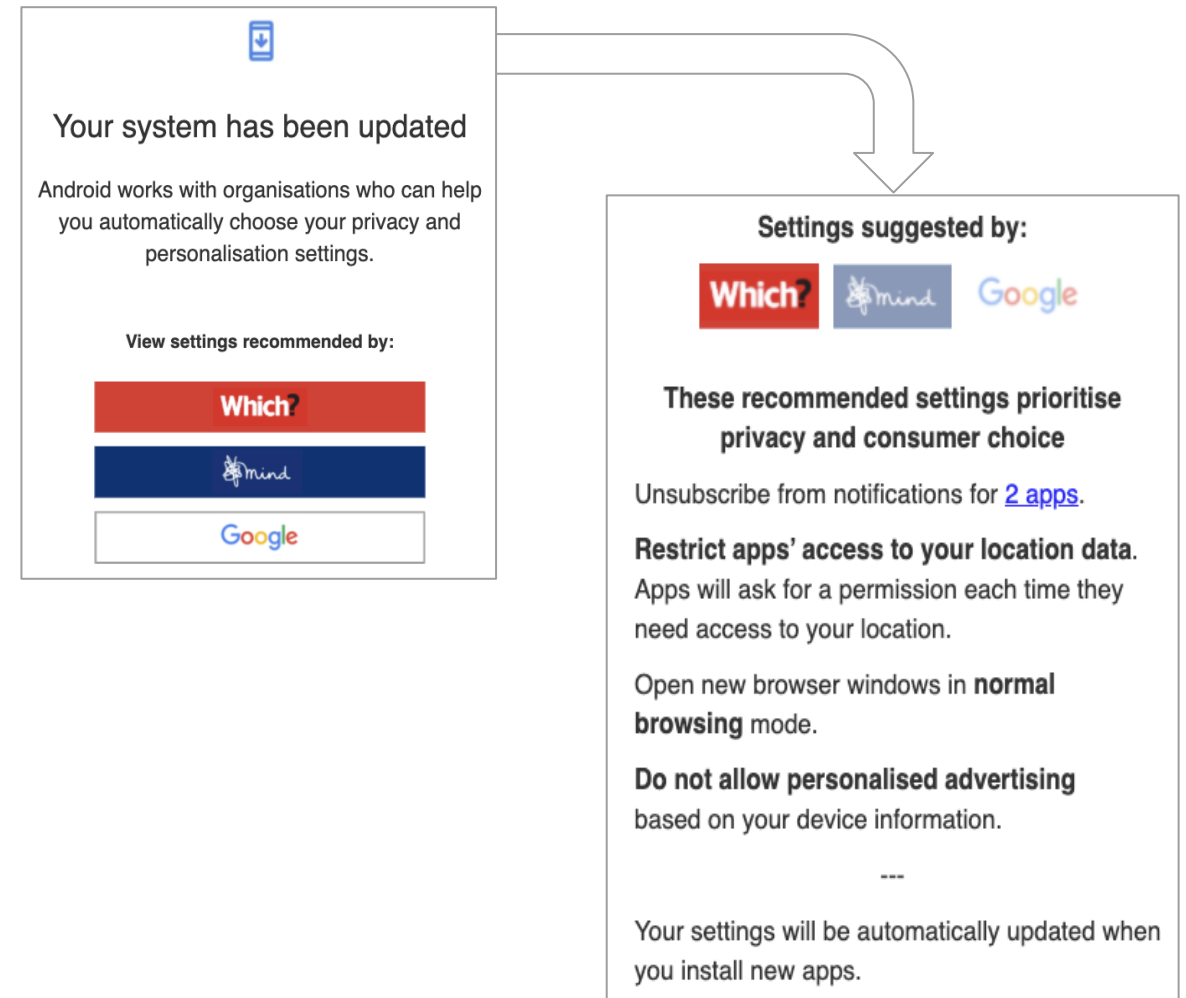


An example: digital safety & ‘active’ choices

1B: Private mode



1C: Trusted third party



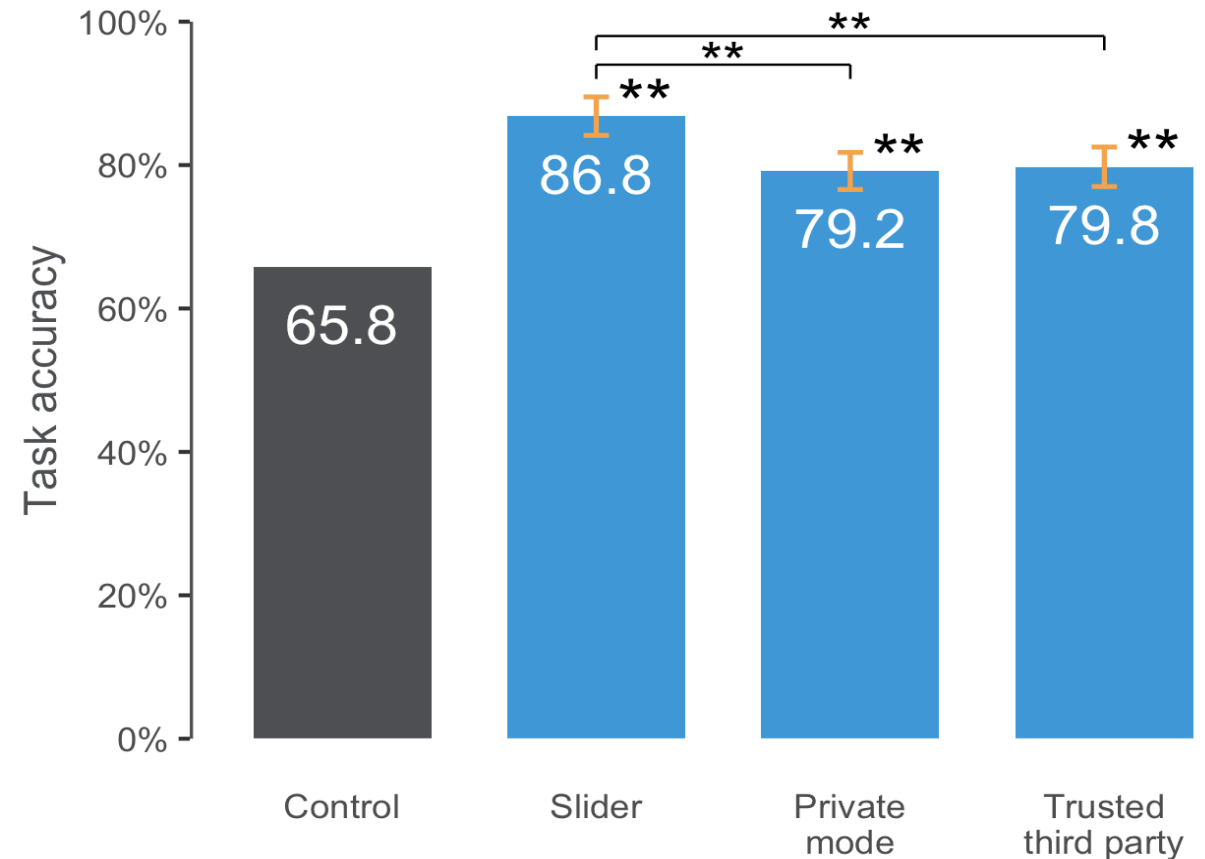
New designs helped people choose settings in line with preferences



Task accuracy = number of correct settings choices out of 4.

Choices related to:

- Notification frequency
- Personalised advertising
- Private browsing (by default or not)
- Location tracking by an app



n = 1,984

** p < .01, * p < .05, + p < 0.1

Primary analysis, with covariates

Data collected by BIT on 1,984 UK adults on 18-26 March 2021.



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