#### **Participation Agreement**

You have been invited to take part in a research study run by academic researchers at the University of Warwick and ESMT Berlin. The project will require you to answer a number of tasks and make decisions under uncertainty. There will also be some personality and demographic questions. Please read the following statements carefully and answer the question below.

#### Our commitments and privacy policy

We never deceive participants. For example, if we inform you that another participant made a choice on which you can then react, this is indeed the case. We keep our promises made to participants. For example, if we promise a certain payment, participants will indeed receive it. In the event that we are responsible for a mistake that is to the disadvantage of participants, we will inform and compensate the respective participants. We design, conduct, and report our research in accordance with recognized scientific standards and ethical principles. This study has been reviewed and given a favorable opinion by the University of Warwick's Humanities and Social Science Research Ethics Committee (HSSREC).

#### We adhere to the terms of our privacy policy as stated below:

The data in the participants' database will only be used for the purpose of the study. There is no link between the personal data in the participants' database and the data collected during a study. The generated anonymous data will be used for analysis. The end product will be publicly available. Your participation in this study is purely voluntary, and you may withdraw your participation at any time without any penalty to you. Please note that the software (Qualtrics) automatically notes the time you spent on each question and this data will be made available to researchers for analysis. Please refer to the University of Warwick Research Privacy Notice which is available <a href="here">here</a> or by contacting the Legal Compliance Team at GDPR@warwick.ac.uk

Data will be securely stored on the University of Warwick and ESMT Berlin computers and will be processed only for scientific analysis. Summaries may be presented at conferences and included in scientific publications. Data will be reviewed after a period of 10 years, in line with the University of Warwick data retention policy.

### Who should I contact if I wish to make a complaint?

If you would like to make a complaint about the way you have been dealt with during the study or any possible harm you might have suffered please address your complaint to the person below, who is a senior University of Warwick official entirely independent of this study:

Head of Research Governance, Research & Impact Services, University House, University of Warwick, Coventry CV4 8UW

Tel: +44 (0)24 765 75733; Email: researchgovernance@warwick.ac.uk

If you wish to raise a complaint on how we have handled your personal data, you can contact our Data Protection Officer and Information and Data Director who will investigate the matter: DPO@warwick.ac.uk

If you are ha	nny to proceed	nlease tick the	"Lagree" hutton	below to continue

○ I agree			

# **Your Attention and Understanding**

It is important for our research that you understand what you are doing in the experiment. To check this, we will ask you questions on your understanding and attention at certain points.

Also, you are likely to earn a better bonus with a better understanding of the tasks and choices. As such, we ask you to please read the instructions carefully.

I understand

#### **Bonus Payments**

You will have the chance to win a bonus payment.

We quote payments in US dollars. The Prolific platform operates in British pounds. Although we will send bonus payments to match the US dollar amounts we quote, the final amount you receive may be very slightly different due to exchange rate fluctuations.

Please note that bonus payments will be paid when the required number of participants have completed the study. Those who are not eligible for a bonus will not be notified.

O Lunderstand

What is your Prolific ID? (please copy and paste it to avoid typos)

#### **Attention Check**

If we later ask you what the favorite number of "person X" is, please choose "8".

O Lunderstand

[EITHER: CONTROL - coins task]

# Task 1/5: Coin Task

We tossed a fair two-sided coin five times. For each of those tosses, we will ask you to guess whether it landed with "Heads" or "Tails" facing up.

If you are happy with your answer, click the button at the bottom of the screen to continue. If time runs out, any answer entered will be submitted and you will move on automatically. Once you have moved on, you cannot go back.

#### **Bonus Payment**

You will receive up to \$2.50, depending on the quality of the answers you submit.

Next, you have two practice questions. These will allow you to get a feel for the format. They do not count for the bonus.

O Lunderstand these instructions

Practice Toss 1 of 2 The first time we tossed the coin, guess which side landed face up:
O Heads
O Tails
Practice Toss 2 of 2 The second time we tossed the coin, guess which side landed face up:
O Heads
O Tails
You scored [THEIR SCORE]/2 in the practice.
First coin-toss Your guess: [THEIR GUESS] The coin showed: Tails
Second coin-toss Your guess: [THEIR GUESS] The coin showed: Heads
The real questions start immediately on the next page, please make sure you are ready.
[They then proceed to guess the flip of a coin 5 times]
Your Bonus Payment You got X/5.
We will NOT ask you to repeat the task.
On the next page, we explain how your score determines your bonus and give you an opportunity to perhaps increase it.
O I understand

#### **Adviser**

Some time ago, another participant guessed the outcome of the same five coin tosses and then agreed to become an Adviser (allowing their answers to be offered to others, including you, as advice).

They scored 4/5 by choosing Heads-Tails-Tails-Heads-Tails.

# **Bonuses**

They now advise you to submit Heads-Tails-Tails-Heads-Tails, instead of what you chose.

If you accept their advice, it means you get the same score as them (4/5) and you will get  $4 \times 0.50 = 2.00$ . If you ignore their advice, you keep your current score (X/5) and you will get  $X \times 0.50 = Y$ .

# Would you like to accept or ignore their advice?

- O Accept their advice
- O Ignore their advice

### [OR: TREATMENT 1 – counting task]

# Task 1/5: Counting Task

Count the number of 1s you see in blocks of 0s and 1s. You will see 5 blocks, one at a time. You have 30 seconds per block.

If you are happy with your answer, click the button at the bottom of the screen to continue. If time runs out, any answer entered will be submitted and you will move on automatically. Once you have moved on, you cannot go back.

#### **Bonus Payment**

You will receive up to \$2.50, depending on the quality of the answers you submit.

Next, you have a practice block. This will allow you to get a feel for the format and time limit. It does not count for the bonus.

$\sim$		
( )	I understand thes	se instructions

#### **Practice Block**

O	O	O	O	O	O	O	O	O	O
O	O	O	O	1	O	O	O	O	O
O	O	O	O	O	O	O	O	O	O
O	O	O	O	O	1	1	O	O	O
O	O	O	O	O	O	O	O	O	O
O	1	O	O	O	O	O	O	O	O
O	O	O	O	O	O	O	O	O	O
O	O	O	O	O	O	O	O	O	O
O	O	O	1	O	O	O	O	O	O
O	O	O	O	O	O	O	O	O	O
O	O	O	O	O	O	O	O	O	O
O	O	O	O	O	O	O	O	1	O
O	O	O	1	O	O	O	O	O	O
O	O	O	O	O	O	O	O	O	0
O	O	O	O	O	O	O	O	O	O

How many 1s are there?

(Ente	r on	ly nι	umbers	. Do	not	enter	letters,	spaces,	or	any	other	cha	aracte	ers.)

# [If they responded correctly to the question before]

Great job, you got the practice question correct!

The real blocks start immediately on the next page, please make sure you are ready.

# [If they responded incorrectly to the question before]

You got the practice question wrong.

There are 7 number 1s in the practice block (shown again below).

If thought you entered 7, you may also have entered another character like a space by mistake.

You must only enter numbers.

The real blocks start immediately on the next page, please make sure you are ready.

# [5 "blocks" of the counting task were shown. The number of 1s varied each time.]

<b>Your Bonus Payment</b> You got X/5.
We will NOT ask you to repeat the task.
On the next page, we explain how your score determines your bonus and give you an opportunity to perhaps increase it.
O I understand
Adviser Some time ago, another participant faced the same five blocks of 0s and 1s and then agreed to become an Adviser (allowing their answers to be offered to others, including you, as advice).
They scored 4/5 by choosing 9-28-26-63-78.
Bonuses They now advise you to submit $9-28-26-63-78$ , instead of what you chose.
If you accept their advice, it means you get the same score as them $(4/5)$ and you will get $4 \times 0.50 = 2.00$ . If you ignore their advice, you keep your current score $(X/5)$ and you will get $X \times 0.50 = Y$ .
Would you like to accept or ignore their advice?
O Accept their advice
O Ignore their advice

# [Both Control and Treatment Groups]

### **Comprehension Check**

It is important to us that you understood everything so far. Please answer the question below. You can progress once you answer correctly. If wrong, you will have to wait 10 seconds before you can re-try.

Say someone else scores  $\frac{3}{5}$  (worth 3 x  $\frac{5}{5}$ 0 =  $\frac{5}{1}$ 50) and receives the same advice you did. What

,	they do		, ,			Ψ1.50)	4114 1 66		c same c	aviec year aid. V	
0	Accept	the adv	ice								
0	Ignore	the adv	ice								
0	Doesn'	t mattei	: both o	ptions a	bove giv	ve the sa	ıme bon	us.			
[If the	[If they respond incorrectly, they have to wait for 10 seconds then try again. Max three attempts.]										
	ion Chec		ead bef	ore star	ting the	tasks, w	hat is th	e favori	te numb	er of "person X"?	?
	1	2	3	4	5	6	7	8	9	10	

# [Susceptibility to the Sunk Cost Effect]

# Task 2/5: Hypothetical Scenarios

Next, there are 8 hypothetical scenarios, each of which lead to the question:

"Which point on the scale below best describes how likely you would be to take one action over the other?"

Each time there are two actions for you to consider taking. Use the scale to indicate how likely you would be to do one of them compared to the other. You may think of other things you might do, but please only consider the two actions presented.

O I understand these instructions

[After each scenario, the question above was shown. Below that, responses were recorded via a 6-point Likert scale with the two alternative actions written above the left-most and right-most radio buttons. Here, for each scenario, we provide those words. In each case, exactly one alternative corresponds to behaviour consistent with the sunk cost effect.]

#### Scenario 1/8

You have been looking forward to this year's Halloween party. You have the right cape, the right wig, and the right hat. All week, you have been trying to perfect the outfit by cutting out a large number of tiny stars to glue to the cape and the hat, and you still need to glue them on. On the day of Halloween, you decide that the outfit looks better without all these stars you have worked so hard on.

# [Wear Stars; Go without]

### Scenario 2/8

You have been asked to give a toast at your friend's wedding. You have worked for hours on this one story about you and your friend taking drivers' education, but you still have some work to do on it. Then you realize that you could finish writing the speech faster if you start over and tell the funnier story about the dance lessons you took together.

[Finish the toast about driving; Rewrite the toast about dancing]

#### Scenario 3/8

You are painting your bedroom with a sponge pattern in your favorite color. It takes a long time to do. After you finish two of the four walls, you realize you would have preferred the solid color instead of the sponge pattern. You have enough paint left over to redo the entire room in the solid color. It would take you the same amount of time as finishing the sponge pattern on the two walls you have left.

[Finish the sponge pattern; Redo the room pattern in a solid colour]

#### Scenario 4/8

You have invested a good deal of your time into a project and it is failing. You have the option to start on something different that you now know is more likely to be successful but you know you cannot get the time back that you spent on the project.

[Keep going with the project; Start something different]

#### Scenario 5/8

You have an investment strategy that you have developed over several months. It is not working and you are losing money, but there is no way for you to recover the lost effort put into developing the strategy.

[Start afresh; Keep going]

#### Scenario 6/8

Your relationship with your partner is not going well. You have reasoned it out and you have realized that if you knew how it would go when you started the relationship you would not have gone through with it. You now have the opportunity to break up, but you have been together for many months.

[Keep going; Break up]

#### Scenario 7/8

You have been thinking about how to vote in an election and have invested a good deal of your time to try and make the right decisions including reading newspapers and comment pieces online and thinking hard about the issues. You discover that much of the information you were using is false and a more trustworthy source suggests your initial view was wrong.

[Keep beliefs; Change beliefs]

#### Scenario 8/8

You have been thinking hard about the best route to get to somewhere you haven't been to before. Unfortunately, your internet connection isn't working so you have to base your decision on your beliefs about the town's layout. You come to a conclusion on the best possible route but then suddenly the internet is back online.

[Look up route online; Stick to the planned route]

### Task 3/5: Logic Puzzles

You will face 10 multiple-choice logic puzzles. Each puzzle shows a sequence of nine patterns with one missing. Your task is to select the missing pattern from the list. There is only one correct answer for each question. You have 30 seconds to answer each question.

If you are happy with your answer, click the button at the bottom of the screen to continue. If time runs out, any answer entered will be submitted and you will move on automatically. Once you have moved on, you cannot go back.

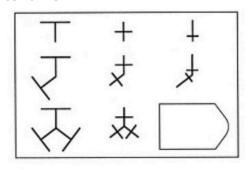
# **Bonus Payment**

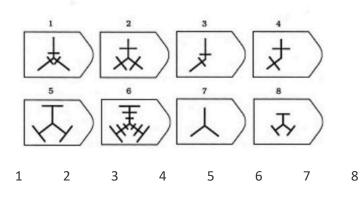
We will choose one of the puzzles at random. If you answered that one correctly, you will be awarded a bonus payment of \$0.50 (in addition to any other bonus payments).

Next, you have a practice puzzle. This will allow you to get a feel for the format and time limit. It does not count for the bonus.

O I understand these instructions

### **Practice Puzzle**





# [If answered the question above correctly]

You got the practice puzzle correct!

The real task will begin immediately on the next page.

Make sure you are ready.

# [If answered the question above incorrectly]

You got the practice puzzle incorrect. Hopefully, you will have better luck with the next questions.

The real task will **begin immediately** on the next page.

Make sure you are ready.

[10 more puzzles were shown]

### [Dispositional envy scale]

### Task 4/5: Personality Questions I

Please respond to the statements below using the scales provided: [each scale was a 5-point Likert scale with "Strongly disagree", "Moderately disagree", "Neither agree nor disagree", "Moderately agree" and "Strongly agree".]

I feel envy every day.

The bitter truth is that I generally feel inferior to others.

It doesn't frustrate me to see some people succeed easily.

Feelings of envy rarely torment me.

No matter what I do, envy always plagues me.

I am rarely troubled by feelings of inadequacy.

To check you are reading, please select "Moderately agree" for this statement.

It somehow doesn't seem fair that some people seem to have all the talent.

The success of my neighbors doesn't make me resent them.

## [Stubbornness scale]

### Task 5/5: Personality Questions II

Please respond to the statements below using the scales provided: [each scale was a 5-point Likert scale with "Strongly disagree", "Moderately disagree", "Neither agree nor disagree", "Moderately agree" and "Strongly agree".]

I do something I want to do even if no one else wants to do it.

I never keep at an idea (or plan) when I know I am wrong.

When others present an idea, I tend to point out all the reasons it won't work.

I agree to or commit half-heartedly to others' requests, when I know all along that I'm going to do something entirely different.

I visibly feel anger, frustration, or impatience when others try to persuade me of something I don't agree with.

### Final Questions 1/2: About you

<ul><li>Female</li><li>Male</li><li>Non-binary</li></ul>	What is your ge
	0
O Non-binary	0
- · · · · · · · · · · · · · · · · · · ·	0
O Prefer not to say	0
O Other	0
What is your age?	What is your ag

What is	s your race?
0	White
0	Black or African American
0	Hispanic or Latino
0	American Indian or Alaska Native
0	Asian American
0	Native Hawaiian or Pacific Islander
0	Other
What is	s your household income? (US dollars, before tax)
0	0-9,999
0	10,000 - 19,999
0	20,000 - 29,999
0	30,000 - 39,999
0	40,000 - 49,999
0	50,000 - 59,999
0	60,000 - 69,999
0	70,000 - 79,999
0	80,000 - 89,999
0	90,000 - 99,999
0	100,000 - 124,999
0	125,000 - 149,999
0	150,000 +
What is	s the highest grade of school you have completed, or the highest degree you have received?
0	No schooling (or less than 1 year)
0	Nursery, kindergarten, and elementary (grades 1-8)
0	High school (grades 9-12, no degree)
0	High school graduate (or equivalent)
0	Some college (1-4 years, no degree)
0	Bachelor's degree (BA, BS, AB, etc)
0	Master's degree (MA, MS, MENG, MSW, etc)
0	Professional school degree (MD, DDC, JD, etc)
0	Doctorate degree (PhD, EdD, etc)

Generally speaking, which point on this scale best describes your political views?
[A slider was presented with range {0,1,,100} with "Entirely Liberal" over 0 and "Entirely
Conservative" over 100.]

I joined Prolific	
O Before February 1, 2020	
O Between February 1, 2020 and February 1, 2021	
O After February 1, 2021	

[End of experiment]