

# Ignoring Good Advice

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## Motivation: Expert advice seems often ignored

*“America has always been a country of amateurs where the professional, that is to say, the man who claims authority as a member of an elite which knows the law in some field or other, is an object of distrust and resentment”*

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*“Trust me, I'm like a smart person.”*

Donald Trump, arguing he does not need to read intelligence reports, 2017.

# Motivation: Expert advice seems often ignored



**Nigel Farage** ✓

@Nigel\_Farage

Follow



The World Health Organisation is just another club of 'clever people' who want to bully and tell us what to do. Ignore.



**WHO** ✓ @WHO

WHO welcomes the Vatican's decision to ban the sale of cigarettes as of next year.

Tobacco kills more than 7 million people every year #NoTobacco



1:07 PM - 9 Nov 2017

## Motivation: Expert advice seems often ignored

**Edelman survey:** n=33k, 28 countries:

- Trust in institutions and experts is low e.g., in financial services: 60% USA, 45% UK, 35% Germany.

**Brexit survey:** We asked 3,096 UK voters to indicate agreement with:

- “The advice of experts influenced my decision about how to vote” [0,100], mean = 38, CI=[37,39].

# Contribution

## But

- Reality is complex. Myriad reasons why advice may be ignored, many of these context-dependent.
- How much advice is good anyway? If a lot of expert advice is bad, and this is always ignored, then perhaps there is no problem. However, if a lot of good advice is ignored, this is a societal problem.

We run a pre-registered, controlled, online experiment to ask whether, when, and why people ignore good advice.

# Literature

## Advice-taking

**Whether people ignore good advice:** We do not know of papers with an abstracted, controlled experimental setting able to get at this.

**When/why may people not take advice?** Specific contexts & factors:

- Finance: e.g., human  $\succ$  statistical (Önkal et al., '09); advisors' incentives (Mullainathan et al., '12)
- Climate change: e.g., skepticism of experts' incentives (e.g., conspiracies) can drive polarization (Cook & Lewandowsky, '16)
- Credence goods: asymmetric information (Hilger, '16)
- Medical advice: is oft-ignored, relationships matter (Davis, '68)
- Judge-advisor system: face-to-face e.g., van Swol & Snizek ('01, '05)
- Interactions with uncertainty e.g., overweighting own info (Moore & Cain, '07; Weizsäcker, '10); “egocentric discounting” (Yaniv & Kleinberger, '00); overconfidence; risk-attitudes etc.



## Key features of our design:

- Make it an unambiguously rational action to take good advice.
  - Remove uncertainty regarding the value of advice.
  - Remove other elements e.g., corruption, interaction, repeated game or other dynamics.
- Connect propensity to accept good advice to underlying psychological traits that could predict behavior more generally, across contexts.

## Conceptualization of Advice

- Suppose  $i$  and  $j$  independently engage in a costly activity.
- This generates their probabilities of getting a positive payoff  $p_i, p_j$  (with  $1 - p_i, 1 - p_j$ , they get zero).
- $i$  is an advisee and  $j$  an adviser if  $i$  can choose between  $p_i$  and  $p_j$ .
- Advice is good when  $p_j > p_i$ .

*“Binary choice between two dominance-ordered lotteries which are inextricably linked to individuals: one to the adviser, one to the advisee.”*

# Study Outline

## 1. **Whether** people ignore good advice:

- If  $p_j > p_i$ , do people choose  $p_j$ ?

## 2. **When** people ignore good advice:

- The market may promote those more skilled, and that those experts become more highly remunerated.
  - When advisers are more skilled (within)
  - When advisers are highly remunerated (between)

## 3. **Why** people ignore good advice:

- We look at psychological attributes of individuals, which they carry across contexts; those natural given our conceptualization of advice:
  - Envy
  - Stubbornness

# Psychological measures

## Envy

- Why envy? *“Envy occurs when a person lacks another’s superior quality, achievement, or possession and either desires it or wishes that the other lacked it.”* Parrott (1993)
- Root cause of unhappiness in Western societies, but can also be harnessed as a force for good (Russell, 1930).
- Van de Ven et al. (2009) go further: envy is really two separate concepts. A positive force for self-betterment, and a negative force of self-destruction.

## Stubbornness

- Why stubbornness? Particularly relevant for decision to take advice. It represents a general unwillingness to update or leave one's own position.
- *"I'd probably have a higher chance at a bonus [by taking the advice], but I stick to what I say dammit."*
- Stubbornness may be related to the resources put into forming one's opinion/position/knowledge. To identify this effect over a general preference for the status quo, we construct a SCF-susceptibility scale (Arkes & Blumer, 1985; Thaler, 1999) to pit against a more general stubbornness scale.

# Design

## Wave 1: selecting the experts

**Participants:** 75 Mturk workers, \$2.00 for approx. 5 mins.

### **Experiment:**

1. Two tasks, one in luck (guessing coin flips) and one in skill (Raven's IQ Qs), each of 10 questions.  
\$ Can get bonus of at least \$0.50 if do "especially well".

### **Afterwards:**

- We rewarded all participants who got 10/10 in any task \$0.50.
- We selected our "expert advisors" (7/10 in luck or 9/10 in skill) for our remuneration treatments in wave 2:
  - C: \$0.50 to an expert advisor in each task.
  - RT1: \$100.00 to an expert advisor in each task.
  - RT2: \$0.50 to an expert advisor in each task; +\$0.25 per wave 2 follower.

# Design

## Wave 2: main wave

**Participants:** 1,503 Mturk workers, \$2.00 for approx. 5-10 mins.

### **Experiment:**

1. Two tasks, one in luck (guessing coin flips) and one in skill (Raven's IQ Qs), each of 10 questions.

\$ Can get bonus of at least \$0.50 if do "especially well".

% Randomized into C/RT1/RT2.

2. Told about the experience of the relevant expert advisors. text

3. Told their scores, reminded of expert advisors' scores and remuneration, then asked which they want to submit. The higher the score submitted, the higher the chance of winning a \$0.50 bonus. text

4. Demographics

5. Psychometric scales

### Psychometric Scales:

1. Dispositional Envy Scale (Smith et al., 1999) 8 Qs
2. We constructed a “sunk-cost fallacy susceptibility” scale. 5 Qs
  - Sunk resource can be “time, money or effort” (Arkes & Blumer, 1985)
  - One Q based on Thaler (1999)
3. Stubbornness scale (Wilkins, 2015) 5 Qs



## Questions:

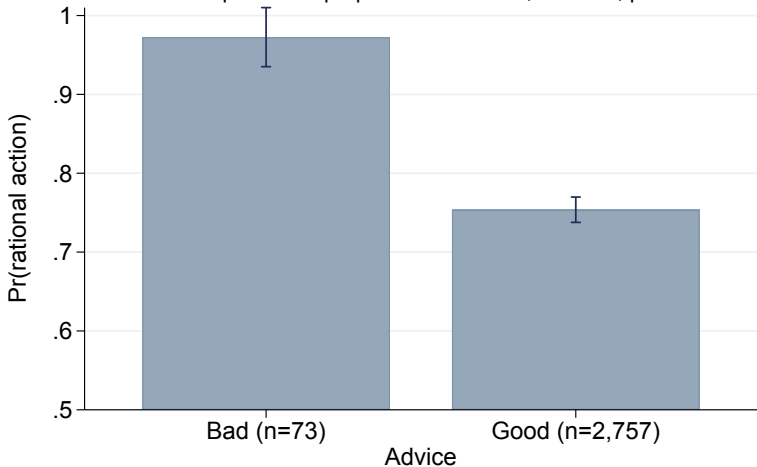
1. Do people ignore good advice?
2. What if the advisor achieved their status being more skillful?
3. What if the advisor is highly remunerated?
4. Do psychological traits predict the propensity to accept good advice?

## Participants' decisions

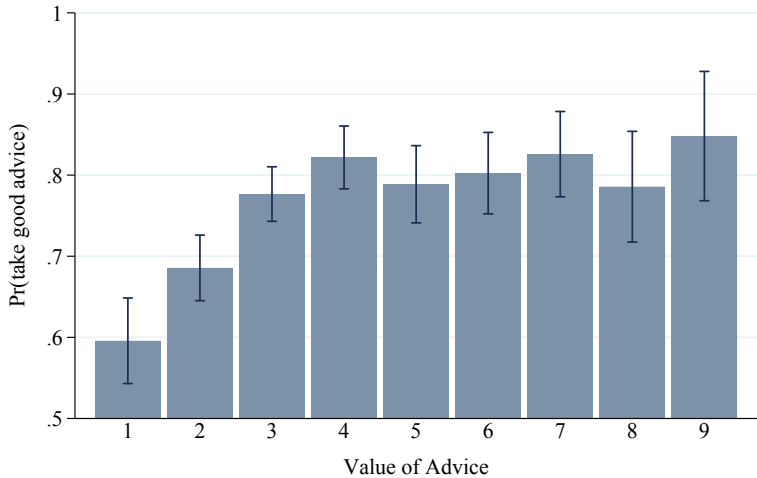
Rational decision	n
Accept	2,757
Indifferent	176
Reject	73
Total	3,006

## Good advice is ignored

Two-sample test of proportions:  $d = .219$ ,  $z = 4.32$ ,  $p < .001$



## Participants appear to trade off rationality



## Questions:

1. Do people ignore good advice?
2. What if the advisor achieved their status being more skillful?
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## The effect of value and adviser skill

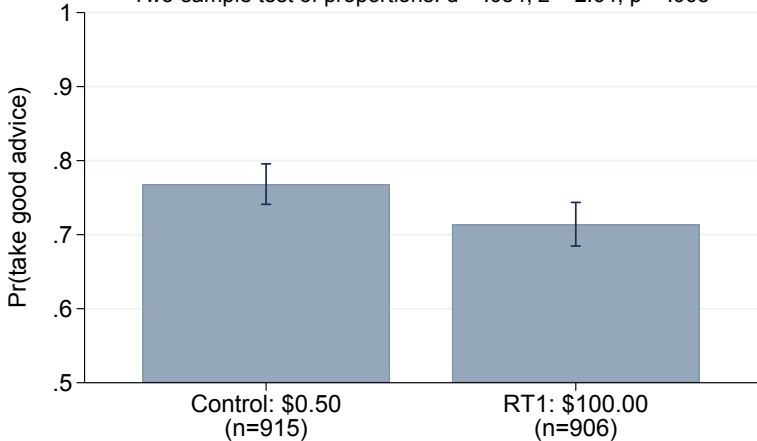
Participants' decisions				Pr(ignore; skill) - Pr(ignore; luck)	P-value from McNemar's test
A: for whom advice was good in both tasks, but more valuable in luck ( $n = 168$ )					
		skill			
		accepted	ignored		
luck	accepted	125	27	0.155	<0.001
	ignored	1	15		
B: for whom advice was good, and equally valuable, in both tasks ( $n = 143$ )					
		skill			
		accepted	ignored		
luck	accepted	115	12	0.084	<0.001
	ignored	0	16		
C: for whom advice was good in both tasks, but more valuable in skill ( $n = 949$ )					
		skill			
		accepted	ignored		
luck	accepted	603	12	-0.154	<0.001
	ignored	158	176		

## Questions:

1. Do people ignore good advice?
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## High lump-sum advisor remuneration reduces the propensity to take good advice

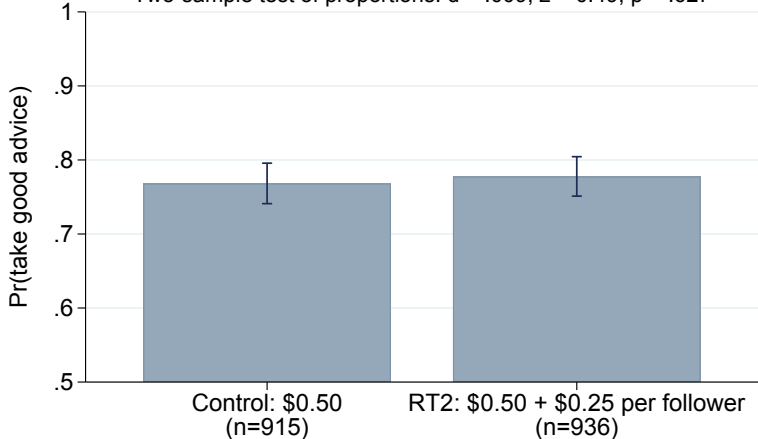
Two-sample test of proportions:  $d = .054$ ,  $z = 2.64$ ,  $p = .008$





## Per-follower advisor remuneration shows no evidence of an effect

Two-sample test of proportions:  $d = .009$ ,  $z = 0.49$ ,  $p = .627$



## Questions:

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## Determinants of following good advice

Average Marginal Effects	Luck			Skill		
$y = \mathbb{I}(\text{took good advice})$	(1)	(2)	(3)	(4)	(5)	(6)
Envy	.005 (.013)	.006 (.013)	.008 (.013)	.025 (.012)	.025 (.012)	.026 (.011)
Sunk-Cost Fallacy	-.038 (.012)	-.035 (.013)	-.034 (.013)	-.027 (.011)	-.025 (.011)	-.026 (.011)
Stubbornness	-.005 (.013)	-.007 (.013)	-.007 (.013)	-.013 (.012)	-.013 (.012)	-.014 (.011)
Remuneration Treatment 1			-.060 (.030)			-.055 (.026)
Remuneration Treatment 2			-.013 (.029)			-.001 (.025)
Remuneration $\times$ envy			X			X
Psych. interactions		X	X		X	X
Value dummies	X	X	X	X	X	X
Participant demographics	X	X	X	X	X	X
Observations	1,317	1,317	1,317	1,427	1,427	1,427

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Stubbornness	-0.005 (.013)	-0.007 (.013)	-0.007 (.013)	-0.013 (.012)	-0.013 (.012)	-0.014 (.011)
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Psych. interactions		X	X		X	X
Value dummies	X	X	X	X	X	X
Participant demographics	X	X	X	X	X	X
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# Summary of Results

1. **Rationality:** People ignore good advice. In our experiment, 25% did. People seem to trade-off rationality with other factors.
2. **Advisor origins:** When the advisor was more skillful, good advice was ignored more.
3. **Advisor remuneration:** High remuneration caused good advice to be ignored 5.5pp more. No evidence of an effect of RT2.
4. **Psychological traits** predict the propensity to accept good advice.
  - When the advisor was more skillful, we saw the two sides of envy:  
 $+1\sigma \implies +5.6pp$  when the advisor was not highly remunerated.  
 $+1\sigma \implies -1.6pp$  when the advisor was highly remunerated.
  - Our “susceptibility to the sunk-cost fallacy” measure was robustly negatively associated:  $+1\sigma \implies -3pp$
  - In contrast, a more general stubbornness measure was unrelated.
5. **Next steps:** Variations in wording/framing of advice.



*"Give it to me straight, Doc. How long do I have to ignore your advice?"*

Before we reveal your scores...

... we here describe the experiences of two other workers who, some time ago, completed the exact same tasks you have just tried for the same \$2.00 HIT reward. Please pay attention as we will be asking you some comprehension questions about them on the next screen.

These two workers both saw the same instructions you did. This means they were both told that they could receive at least \$0.50 for doing especially well in a task. In addition, they each did especially well in one of the tasks: one scored 7/10 in the coin task, and got a bonus of (\$0.50 / \$100.00); the other scored 9/10 in the logic puzzles task, and got a bonus of (\$0.50 / \$100.00).

[back](#)



## A Chance for a Bonus:

We are not going to ask you to repeat the tasks. On this page we explain how the answers you gave in each task translate into your chances of winning a bonus.

We will choose ten workers at random. If you are chosen, we will pick one question at random, and if you got it right, you will win a bonus. Let's look at your scores:

You got  $X/10$  in the coin task

You got  $Y/10$  in the logic puzzles task

That means if you are chosen and we pick one of the coin questions, there is a  $X$  in 10 chance of you winning the bonus. Similarly, if you are chosen and we pick one of the logic puzzle questions, there is a  $Y$  in 10 chance of you winning the bonus.

But before we go ahead, we would like to give you an opportunity to perhaps boost your odds of getting the bonus. Remember those two other workers we described earlier who did especially well? If you like, instead of us using your answers when we check if you have won the bonus we will look at their answers: that means your chances of getting the bonus would be 7 in 10 if we pick from the coin task or 9 in 10 from the logic puzzles task.

Regarding payment: The other worker got a bonus of (\$0.50 / \$100.00). In your case, the bonus you might win is \$0.50. (Additionally, if you decide to use another worker's answers, they will get a further bonus of \$0.25.)

So, would you like us to use the answers you already gave, or the answers the other worker gave when we check whether you have won a bonus?

## Dispositional Envy Scale (Smith et al., 1999)

1. I feel envy every day.
2. The bitter truth is that I generally feel inferior to others.
3. It doesn't frustrate me to see some people succeed easily.
4. Feelings of envy rarely torment me.
5. No matter what I do, envy always plagues me.
6. I am rarely troubled by feelings of inadequacy.
7. It somehow doesn't seem fair that some people seem to have all the talent.
8. The success of my neighbors doesn't make me resent them.

# Proneness to the Sunk-Cost Fallacy Scale

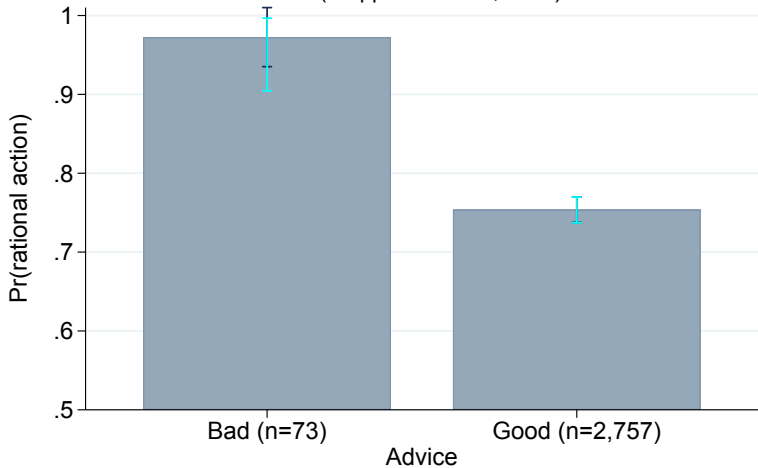
1. You have invested a good deal of your time into a project and it is failing. You have the option to start on something different that you now know is more likely to be successful but you know you cannot get the time back that you spent on the project so you decide to keep going with it.
2. You have an investment strategy that you have developed over several months. It is not working and you are losing money. There is no way for you to recover the lost effort put in to developing the strategy but you decide that it is better to start afresh anyway.
3. Imagine that you have spent \$20 on a ticket to a concert. The day of the concert comes and unfortunately it is snowing heavily, and you feel tired after a tough day. You know you would not have decided to go to the concert if you hadn't already bought the ticket, but you also know that you cannot get a refund. On balance you decide not to go to the concert. (Based on Thaler, 1999)
4. You are staying in a hotel room, and you have just paid \$6.95 to see a movie on pay TV. You find that you are bored 5 minutes into the movie and that the movie seems pretty bad. You decide that since you cannot get a refund you might as well continue watching the movie.
5. 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 have the opportunity to break up but since you have been together for many months you decide to keep going.

## Stubbornness Scale (Wilkins, 2015)

1. I do something I want to do even if no one else wants to do it.
2. I never keep at an idea (or plan) when I know I am wrong.
3. When others present an idea, I tend to point out all the reasons it won't work.
4. I agree to or commit half-heartedly to others' requests, when I know all along that I'm going to do something entirely different.
5. I visibly feel anger, frustration, or impatience when others try to persuade me of something I don't agree with.

## Good advice is ignored

With "exact" (Clopper-Pearson, 1934) intervals



## Results from a Brexit survey ( $n = 3,096$ )

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$y =$  The advice of experts influenced my decision about how to vote.

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Experts earn too much money.	-0.107 (0.028)
I feel that expert advice was generally objective and unbiased.	0.436 (0.023)
Too often, experts have their own agenda.	-0.177 (0.034)

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## Next Steps: Wave 1

Consider for example the following text for wave 1 subjects:

Other workers will do the same questions you just did. Do you agree to be an adviser to them? [If yes, your answers will be offered to them as your advice, which they can choose to accept in place of their own answers to determine their bonus payment.]

- YES
- NO

## Next Steps: Wave 2

And for wave 2 subjects:

Some time ago, two other workers completed the same tasks. They did very well and were asked (and agreed) to become advisers. In particular, they advise you take their answers rather than your own to determine your bonus. One adviser scored 4/5 in the coin task; the other scored 4/5 in the logic puzzles task. Just like you, both advisers were told they would get at least \$0.25 per correct answer;

- C: and like you, they both received  $4 \times \$0.25 = \$1.00$
- RT1: but unlike you, they both received  $4 \times \$25.00 = \$100.00$
- RT2: and like you, they both received  $4 \times 0.25 = 1.00$  for their work, but if you accept their advice, they will receive an additional \$0.25.

Would you like to accept or ignore their advice?

- BUTTON 1 (order randomized): Ignore the advice and use my own answers
- BUTTON 2 (order randomized): Accept the advice and use the adviser's answers