Mistakes, Overconfidence and the Effect of Sharing on Detecting Lies

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ONLINE APPENDIX

A Instructions

A.1 Instructions for Senders

Below are the instructions presented to senders on paper. The experimenter read the instructions aloud with the sender.

Welcome to the experiment!

In few minutes we will ask you to look at the computer screen. The screen will either have a picture and description of a news event from the New York Times, or be blank. Your task is to describe what you see on the screen for 30 seconds.

- If you see a news event, we ask that you describe it.
- [First 20 videos, Experiments 1 and 3:] If you see a blank screen, you can choose whether to describe a news event that you make up, or report that the screen is blank.
- [Additional 84 videos, Experiment 2:] If you see a blank screen, you can choose whether to describe a news event that you make up (please don't use a real event), or report that the screen is blank.

We will repeat this procedure twice.

On each screen, you will have a 30 seconds timer: when the circle will be completely red, the 30 seconds will be over, and you'll have to stop talking.

Below, we explain how your earnings will be determined. Your description will be videotaped and will later on be shown to another participant. This other participant will be asked to guess whether your description of the news event is truthful or not. Your description is the only information that he or she will have regarding what you saw.

For each of the descriptions that you give, your payment will be determined as follows:

- If the other participant guesses that you saw the news event you described, you will earn $10.
- If the other participant guesses that you saw a blank screen, you will earn $0.

For every correct guess, the other participant will earn $1, and will otherwise earn $0.

To sum up: If the other participant believes that you saw the news event you are describing, you will earn $10. If the other participant does not believe you, you will earn $0. The other participant will be paid $1 for every correct guess, and nothing otherwise. We will repeat this procedure twice, and you can earn up to $20 overall.

The other participant will make several guesses based on your descriptions and those of other participants in your role. He or she will never know whether you were actually seeing a news event or a blank screen, and will only learn the total number of correct guesses.

We may also use this video for future experiments or other potential uses as detailed in the release form, but none of this will affect your payments.

Do you have any questions so far?

A.2 Instructions for Receivers

Below are the instructions presented to participants on AMT via Qualtrics surveys in Experiments 1 and 3. Instructions for Experiment 2 used similar wording and structure. In parentheses treatment differences are indicated.

Instructions

- In this experiment, **you will see** [Experiment 1: **20**] [Experiment 3 R1: **8**] **videos.** [Experiment 3 R2: At the beginning of the experiment we will show you titles and screenshots of 8 videos, and will ask you to choose 4 out of the 8 to watch.]
- In the videos, you will see other participants describing what they see on the screen in front of them.
- The participants in these videos (hereinafter referred to as "other participants") **either saw a photo and a corresponding short description of a news event** taken from the New York Times, **or a blank screen**.

page break

The other participants

- We have **incentivized the other participants to convince the viewer that they were seeing a news event, *regardless of what they actually saw.***
- Specifically, the other participants were paid $10 for each time they convinced someone who watched the video that they saw a picture and description of a news event on the screen.
- Hence, **the videos either contain a true description of a news event or a false one.**

page break

[EXPERIMENT 1 Prior Treatment:

The other participants

Each of the other participants will appear in **2 videos**. For each other participant you'll see:

- **1 video** will contain a **true description** of a news event
- **1 video** will contain a **false description** of a news event]

page break

Guessing task

- After watching each video **you will be asked to guess whether the participant you saw on the video actually saw a news event or was making it up.**
- [Experiment 1: You will see 20 videos and hence make 20 guesses.]
- [Experiment 3 R1: You will see 8 videos and hence make 8 guesses.]
- [Experiment 3 R2: You will see 4 videos and hence make 4 guesses.]
- **One guess** will be randomly selected for payment, and **your payment** will be as follows:
  - **If you guessed correctly, your BONUS will be** [Experiment 1: **$5**] [Experiment 3: **$1**].
  - **If you guessed incorrectly, your BONUS will be $0.**
- Your guesses will not affect the payment of the people in the videos.

page break

Instruction check

1. In the next screens, you will see several videos of other participants. **What was the other participants' task?**

- The other participants' task was to truthfully describe what they saw on each screen

- The other participants' task was to convince the viewer of the video that they were seeing a picture and description of a news event
- The other participants' task was to talk about a recent news event

page break

2. If you **correctly guessed** whether the other participants actually saw a news event or not, what will your **earnings** be (if this question is chosen randomly for payment)?

- $0
- $5

page break

Audio check

Please listen to the audio file below and write what you hear in the box below.

[AUDIO FILE AND BOX]

[Experiment 3 - R2:

[All treatments: We now ask you to choose 4 out of 8 videos to watch. You will see a screenshot and a title of each of these 8 videos.]

[Shared-True, Shared-Believed and Shared-NoIncentive: One of these videos will be marked "**SHARED**." Another participant watched all 8 videos and] [Shared-NoIncentive: chose to recommend this video to you.] [Shared-True and Shared-Believed: was asked to choose any video to recommend to you that he or she thought is both **interesting and** [Shared-True: **true**] [Shared-Believed: **believable**]. If you'll choose to include the shared video as one of your 4 videos to watch and

[Shared-True: this video is true] [Shared-Believed: you believe this video is true], he or she will receive a $0.50 bonus.]

[All treatments: Please choose 4 out of the 8 videos to watch.]

[All 8 videos as option shown with a screenshot and one sentence description]

page break

[Experiment 1 and Experiment 3 R1:

We are now going to start with the videos.
You will first see [Experiment 1: 5] [Experiment 3 R1: 4] videos.
Please consider all your decisions carefully.]

page break

For each video:

[30-SECOND VIDEO]

- The person in the video is truthful. He/she actually saw a photo and description of a news event.
- The person in the video is lying. He/she did not actually see a photo and description of a news event.

page break

After rating each group of [Experiment 1: 5] [Experiment 3 R1: 4] videos:

How many of the [Experiment 1: **5**] [Experiment 3 R1: **4**] **video guesses you just made do you believe are correct?** If the number you choose is correct, you will earn an **additional BONUS of $1**.

[Answer options from 0 to [Experiment 1: 5] [Experiment 3 R1: 4]]

page break

After rating all videos:

You have now seen all [Experiment 1: 20] [Experiment 3 R1: 8]] videos.

We will now ask you [Experiment 1: 3] more questions about the videos. You can earn additional bonuses for each question you answer correctly.

page break

[Experiment 1:

Compared with previous participants in this experiment, how well do you think you did? We ask you to choose a quartile. If you choose the correct one, you will earn an **additional BONUS of $1.**

Relative to the other participants, my number of correct guesses is in the following quartile:

- **Quartile 4:** 75th-100th percentile (better than at least 75% of participants).
- **Quartile 3:** 50th-75th percentile
- **Quartile 2:** 25th-50th percentile
- **Quartile 1:** 0th-25th percentile (worse than at least 75% of participants)]

page break

[Experiment 1 - No Prior treatment:

Which of the videos you have seen would you share with other individuals? If you choose the most popular video (i.e., the one that was chosen the most

by previous participants in this study), you will earn an **additional BONUS of $1.**]

[Experiment 1 - Prior treatment:

Which 5 videos that you have seen would you share with other participants? We have asked the other participants in your role to do the same. As a result, we have the 5 most popular ones. You will earn an **additional BONUS of $0.25** for each one that you choose and is one of the five top ones chosen by others.]

[Experiment 3 - R1:

We now ask you to choose 1 out of the 8 videos to share with another participant. This video should be interesting, so that the other participant chooses to watch it, and it needs to be [Shared-True: **true**] [Shared-Believed: **believed by this other participant**].

Specifically, we will show the pictures and titles of the 8 videos to the other participant, and ask him/her to choose which 4 out of the 8 to watch.

He or she will know which video you chose to share, and that might influence their choice of videos to watch.

You will earn an **additional BONUS of $0.50 if the other participant chooses to watch the video you shared and** [Shared-True: **the person in the video is truthful**] [Shared-Believed: **he/she believes that the person in the video is truthful**].]

[All videos as option shown with a screenshot and one sentence description]

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[Experiment 3 - R1:
Consider the video you shared. **What percentage of participants do you think will believe it was true?**

Please choose an option below. If your choice includes the actual percentage, you will receive a $0.50 additional bonus.]

[20 answer options: 0-5% ... to 96-100%]

page break

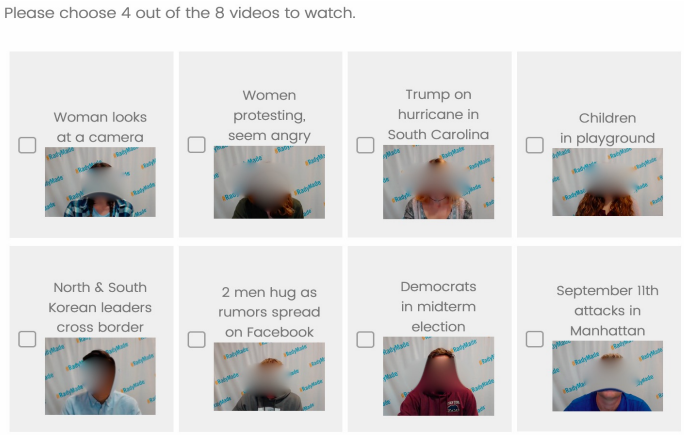
For [Experiment 1: **3 videos**] [Experiment 3 R1: **1 video**] **you saw you can earn an additional BONUS of $0.25 if your guess is correct. Which** [Experiment 1: **3 videos**] [Experiment 3 R1: **video**] **would you choose to receive an additional $0.25 BONUS if your guess was correct?**

[All videos as option shown with a screenshot and one sentence description]

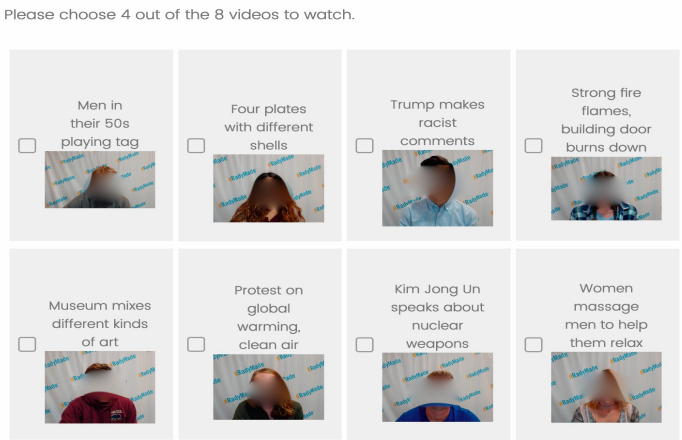
A.3 Screenshots and one sentence description for sharing

In Experiment 3, Receiver 2s saw one of the two groups of screenshots (blurred to preserve anonimity) and titles in Figure A.1, presented in random order. If one was shared, the word "SHARED" was added on top of the title. Receiver 2s always picked 4 out of 8 videos to watch. Receiver 1s were presented with one of two groups of videos during the first part of the experiment. At the end of the experiment, they made their sharing decision (picked 1 video) by selecting one of the screenshots and titles, as shown in Figure A.1. The screenshots were taken from the first frames of each video by a research assistant, who was also tasked with writing a brief descriptive title of the video jointly with one of the authors.

(a) Screenshots and sentences for first group of 8 videos



(b) Screenshots and sentences for second group of 8 videos



A.1. Screenshots and one sentence description

A.4 Headlines from NYT

The following headlines were shown to senders. Due to copyright restrictions, the associated pictures can be obtained from the authors.

News slide	Headline
1	Cubans expect little change
2	Kim's shift on nuclear tests makes others wary
3	Museums shake things up, mixing old and new
4	Challenge is crossing the next Korea line
5	Keeping the men relaxed
6	Murky war ramps up deep in Niger desert
7	Facebook and vengeance
	Fast-spreading rumors fan fatal violence in Sri Lanka and across the globe
8	A movie role that's free of a 'history of ownership'
9	The new Noma, explained (mostly)
10	No thought for the victim
	In village where child was killed, people line up behind the accused men
11	Venezuela's turmoil tests Brazil
12	A royal-to-be poised for global influence
13	Pope finds himself in a populist wilderness
14	These rocks could save planet
	Oman's craggy ridges have a special ability: They turn carbon dioxide into stone
15	Tabloids feel cold royal shoulder
	Only one reporter allowed to attend Prince Harry's wedding later this month
16	Pressure grows on R&B star accused of abuse
17	Xi tightens his grip on tech
18	Facing demons, with no special powers
	With 'Patrick Melrose,' Benedict Cumberbatch can cross last role off bucket list
19	Economy vs. democracy
	An Arab Spring success, Tunisia struggles to meet needs of voters and lenders
20	Opera's perfectionist tries to follow a masterpiece
21	Easy cure for a billion problems
	Other health needs get more attention, but many people lack eyeglasses
22	Images that reflect life on the streets of Paris
	Retrospective explores Willy Ronis, a French humanist photographer
23	The graveyard of ISIS
	After the battle for Mosul, trash collectors are given task of gathering bodies
24	A Pulitzer finalist arises out of nowhere
	Hernán Diaz answered open call for manuscripts by a nonprofit press
25	AIDS devastates ancient culture
26	A battered Iran loses its lifeline
	Unraveling of nuclear deal dims hopes for economy and political moderation
27	Tearing down cultural walls, one goal at a time
	A soccer star, Mo Salah, has given his team's fans a positive image of Islam
28	A brazen act of piracy
	Qatar sports network believes Saudi Arabia is bootlegging its broadcasts
29	Exposed to art, from his head to his ankles
	Visitors wear nothing, except maybe shoes, for tour of the Palais de Tokyo
30	A royal place of pride

A.5 Transcripts of videos

Experiment	Video ID	Truth	Transcript
1	1	False	Looks like it's some sort of rally probably a political rally not in America maybe like a Latin American country a lot of angry people and the sun is setting
1	2	True	So there's a man sitting on a bench it looks like he is looking at a phone and there's some cactuses cacti on the wall and yeah
1 and 3	3	False	Looks like it looks like it's the September 11th attacks picture of Manhattan and there's the second plane that is flying into the building sky is green or blue smoke from the buildings it looks like the picture is taken pretty far away maybe from a helicopter
1 and 3	4	True	It's a picture of Kim Jong-un and the leader of North Korea and he's wearing glasses and he might be talking about nuclear weapons and he has a black suit on
1 and 3	5	False	So I'm seeing a new story it looks like it's about the midterm elections coming up they're talking about whether or not the Democrats are going to be able to retake the house so I think they're interested in the polling I can see that the Democrats are doing well right now but they're not sure if it's going to be enough to win
1 and 3	6	True	Alright so it looks like it's a new story about a museum they're changing what kind of art they're having or they're combining art between like older art and newer art so it's a combination of Modern Art and classic art some of it is like portrait some of it's like super hard to know what it's about I have no idea what this picture of but
1 and 3	7	False	Wow this is a very interesting subject so New York Times states that Trump has exclaimed some racist subject responding to immigrants coming through talks about how with the midterm elections coming up we need to to work harder bring people together eh not really about that more information about the sports going on today something about baseball
1 and 3	8	True	Alright so challenge of crossing the next Korea line okay so here we have an image of the North and South Korean border the true leaders of these two Nations come together and how they're crossing into each other's borders and they're breaking barriers they're crossing lines yeah it's a symbol of great diplomacy and great works
1 and 3	9	False	So this is a news article about President Trump explaining the hurricane that hit South Carolina and the article is about people reacting negatively to his comments about the hurricane be tremendously wet and article basically is making fun of Trump for his handling of the situation
1 and 3	10	True	It is a news article about somebody that is helping a man to stay relaxed and the news article is detailing ways that it looks like women can keep men relaxed and she's giving him a massage and the article details different things about the way that you can help the men in your life stay relaxed
1	11	False	Okay so this is a hurricane that occurred in the Philippines and it's describing that 12 people died and they're still a few dozen missing
1	12	True	Okay so this news story it's about a war and a Niger desert and it looks like a plane crashed and there's some debris and there's a soldier investigating
1 and 3	13	False	Um okay so there is a fire it looks like a city there is like a skyline in the background the building that's closest is there's like flames kind of around the outside the middle of the building is burned the front door is completely gone it's all dark brown with all kind of ashy there's a dog over in the corner maybe walking by or something
1 and 3	14	True	So it's saying a movie role that's free of the history of ownership there's a picture of a woman who is leaning against a window and she looks kind of upset kind of not I don't know she's wearing a jacket with stripes on it there's like an unmade bed behind her she's staring at the camera looks like daytime outside she looks like she's like mid thirties or forties she has dark hair
1 and 3	15	False	There's a school full of children and they're on the playground they are they are playing with each other on the monkey bars and one of them fell so somebody is coming to get the student to pick up the child and then there are other kids who are eating lunch and just kids who are enjoying recess
1 and 3	16	True	There is an image of four plates with different types of shells on them they can be different foods or different shells found in different parts of the ocean or different oceans and they're all different colors and they have different textures and yeah they are placed in different shades
1 and 3	17	False	I'm looking at a picture describing some sort of issue and protest it looks like might be in a major city regarding global warming there's posters having to do with clean air and trying to tell elected officials to start taking climate change seriously
1 and 3	18	True	I'm looking at a news events that is describing what looks like might be a protest against someone who was accused of killing a child in a small village you've got some women looking very angry and they're holding a banner with some things written in what looks like might be Arabic

1 and 3	19	False	Okay so um This is a story about a group of men in their 50s who have been playing uh I guess tag since they were in fifth or sixth grade and it says that it's actually a follow-up story on something that they had done back in 2008 I guess and essentially they've been playing and they play
1 and 3	20	True	Okay so um let's see so this is a picture of two men hugging this very brief it's discussing that there's rumors of violence in Sri Lanka and across the globe and it's spreading through Facebook and there's not a whole lot of detail here but that's what's being discussed
2	1	False	In this one it reads that a child was kidnapped in Florida it looks like a picture of a kid being taken like in a grocery store next to like the frozen section I feel bad for her mom that's very sad
2	2	True	Chronicled in Multiple voices French singer emerges from cancer siege with a new album and a new memoir I don't know who the singer is but she's an older woman with her palm against her chin and there's a wooden background she's sitting on a green couch there's some sunlight coming through the window yeah that's pretty much it
2	3	False	So there is a pizza shop in Brooklyn New York that got robbed last Sunday at around 5 a.m. and the robber took cash and some jewelry that he saw on the table that was left behind by a customer the pizza shop the alarm went off at about 11 and the police came and took records of it
2	4	True	So this Japanese guy tries to ease so Japan tries to ease aging aging drivers off the road to limit accident so this Japanese man is driving a car and he accidentally drives off the road and he injured himself and some other people so in order to fix this Japan is trying to teach older citizens how to drive by
2	5	False	So it's taking place at a zoo and there are a lot of people standing on the side behind a fence there appears to be a black monkey or a really big ape and there's a child like under in the ditches um the monkey appears to be guarding the boy from other apes and there are a lot of people just standing by the side screaming or it looks like they're screaming
2	6	True	So it's a picture of two guys one is sitting by a window and one is standing leaning against the wall um both of them are middle-aged men and they look like they are in a really tall building it looks like it's taking place in Europe I think they are thinking about something or in the middle of a discussion
2	7	False	So there was recently a shooting in Dallas Texas there was a stabbing it looks like 10 people were killed and the perpetrator or the murderer I guess went around the school and there's a bunch of sheriffs and police cars surrounding area but no one was taken to the hospital and survived a lot of people were hurt I guess yeah
2	8	True	So Iran sees there's a petition and going on and they see opportunity to take over as a deal crumbles there's a lot of distrust within the country and everyone's holding yellow flags there's lightning showing a lot of turbulence going on in the country and
2	9	False	So this is in a small town and there is a music club it's a jazz music club and um there is a pink billboard for the music club and there is a line for people to check in and there also are two
2	10	True	So this event is in a prison and there are two people one is a female and the other one is a male and they are talking uh it seems like the female
2	11	False	So in San Jose the San Jose mayor decided to go to a school community service event for elementary school students where they were raising money for a public health cause and so he went to go show his support for them and show that he was in favor of helping this cause and showing that he's a community man in helping them as well
2	12	True	So the can duh uh It's a lot of people shown at an event of all women of different races it was for a festival that was set up for a harassment hotline and that issued warnings to the people and the hashtag for it was me too
2	13	False	Okay so it looks like a van crashed into storefront in New York so people were probably injured I don't know exactly what happened it's a white vehicle not a New York license plate
2	14	True	This is Megan caught in the tabloids glare she is just standing there staring into the camera the British press it's talking about how the British past shows no mercy and she's and her life is complicated
2	15	False	Alright this time we have a picture of like the metro in Paris it seems and you can tell there a lot of tourists I think American and they seem to be talking pretty loudly and you can see some people who look very stereotypically Parisian kind of glaring at them so it's probably something like taking a jab at how loud Americans are I think
2	16	True	Alright there is a very famous writer sitting down for an interview it seems probably a memoir type of thing a look back on the career there's definitely like a nice are about this writer very satirical political you can tell they have a really good personality
2	17	False	There's tsunami follow er following an earthquake it seems to be on the island of Oahu and so far it seems no one has been evacuated but the devastation is quite severe there is Rubble washed up on the beaches of course and there's a poor dog I think in caught in the waves

2	18	True	In Gaza a Palestinian baby's death became a political tool for two groups in conflict I suppose the picture shows a woman holding on to her baby really tightly and around her are two different women though so they're smiling so I assume they must represent the political factions that the baby's death is being used for
2	19	False	So this is on a street and I see the streets are flooded and there is a truck pulling this one person that is actually kitesurfing I think it has like a surfboard and then he's getting pulled by the truck overall it looks quite fun
2	20	True	I see a bunch of people with very sorrow faces sitting on the street and a very overall gloomy image and there are people from all age groups and it's not raining but it's very cloudy but with a
2	21	False	So essentially in this picture it talks about how in Times Square in New York there was an accident where there was a tourist and he accidentally stole or he didn't accidentally steal but he wanted to steal a locals watch and it describes the events that happened and that took place during this time it was during rush hour no one realized how it occurred and an hour later the local realized that his watch went missing and reports are just showing who took it and when this occurred
2	22	True	So basically there is a star and after decades of waiting for something to occur it finally happened and it is taking her an unlimited energy on a Long Day's Journey so Lesley Manville is writing a book and it talks about this unlimited energy of a Long Day's Journey and she basically is happy to release the book that just occurred and she um the picture is her pondering her life and what she's been through
2	23	False	So it's I think the Germany prime minister Angela she's she's at a press conference with like microphones a podium you know reporters and stuff there's also it looks like a cloudy day she's wearing business attire
2	24	True	There's an elderly man at add a balcony glass balcony holding onto a wooden banister he's looking towards the camera appears to be around 80 or so has glasses rounded back a bit overweight business attire and he's in a building in like a
2	25	False	Okay so I see I see a woman is walking her dog and the other man is coming to her and the man is trying to like scare the woman or something and yeah
2	26	True	Okay So I see the prince and the princess like the Prince and his wife of British of Britain and they are having their wedding and they are waving to the crowd and crowd like the citizens are taking picture of them and yeah and the wife of the prince is so beautiful
2	27	False	See a burning building with two firefighters trying to help these this mother with a little baby in her hand and she looks really distressed thinking she has more people inside the building and one of the firefighters is holding a hose while the other one is sitting inside of the firefight truck
2	28	True	So there is a painting of a mural and there's this female in the middle of this or oval flowers around her with pink flowers and across her body it says my body my choice and this girl has long wavy hair and it's on a black canvas and there's someone in front of it taking a picture and yeah
2	29	False	Two people are in the park talking to each other one person appears to be feeding birds with what looks like seeds of some sort and the other person seems to be looking at that it looks like a nice day out it appears kind of sunny but kind of overcast a little bit the grass is green and it looks like a nice day out it looks like they're having a good time
2	30	True	In the picture I see two women talking to each other one woman is wearing a striped button-down it looks apparently formal and the other woman is wearing a jean jacket both women are wearing glasses one on her face and one on her head they appear to be in some sort of theater and one woman appears to be laughing while the other woman looks at her
2	31	False	Okay I see a house on fire seems like it's in the wilderness I'm not quite sure let's see seems like there's like multiple fires yeah
2	32	True	Okay I see a cemetery and then the title is tragedy on heels of prosperity of Austria's there so many of their farmers killing themselves and then I there's like a cemetery to represent like farmers
2	33	False	So there is a flood in the streets and there is cars trying to go through it there's people trying to walk around looks like it's really hard to get through the flood doesn't seem like a lot of people were too worried about it
2	34	True	So it seems like it's a concert. It's a guy dressed in white he has a microphone to his face there's a piano in front of him in the back. It's like I guess like three guys and they're all playing I think trombones and one's playing I can't tell what instrument it is there's lights shining in front of him
2	35	False	So in the photo I see some trees and there's actually some ashes and it is in an area where there's a lot of trees and there's some helicopters and the sky is also pretty grayish and the trees are kind of withered let's see what else there's also some fire trucks they're coming to pick up

2	36	True	So in this image there's a man and and apparently he's being so it's about a man and he's something about social media and and it says that it might so there is this social media and there might be something bad about this social media so that's why people are
2	37	False	So this one has a singer performing a concert it kind of looks like more of a hippy related one just based off of outfits type of Woodstock Vibe and there appears to be like a really big crowd for this
2	38	True	So there's a man sitting on a couch and it's supposed to be a novelist who explored sex Jewish life and America he is just kind of relaxed on it um I don't really know what else to say kind of old man
2	39	False	On brexit the United Kingdom is still not moving forward it's being stalled even though referendum was a year ago and not much progress is being made on it at all
2	40	True	Portugal is seeing economic prosperity after losing a decade city is now booming sending rents sky high so they might be worried about the price of rent as more economic success comes to the city
2	41	False	There was a construction accident in New York so apparently one of the trucks fell down so two people were injured and there was one casualty and they're still in the hospital right now so the article talks about how the family members are really worried and want them to recover as soon as possible
2	42	True	There's an article about dance and technology in the future there is a green back screen that's used for video editing the image looks really strange because you don't really get to see the environment around them so dance and technology seem to be very incorporated together and seem to be one
2	43	False	Oh so this event here it's describing a collapse of a sweatshop in Sri Lanka and the sweatshop was like a warehouse that was said to house workers from like working to make clothes from Forever 21 and H&M and the factory collapsed it shows here like it's like a mudslide type of thing I guess due to poor in
2	44	True	So this is the news event described is about the Star Wars film and how a bunch of the directors of the Star Wars film are fired and a guy named Robert Howard he was I guess he was because of firing a bunch of people uh no he fired no he was to blame for all the firings that were going on within the star
2	45	False	Oh Jeez.. okay this one this is pretty terrible there's a bunch of rebel it looks like there was a massive explosion you can see a number of people I'm guessing this is in the Middle East that looks like it's in a desert region there's a bunch of people crying and I think there's a reporter there someone taking pictures around the side but it's just the building is completely destroyed there's absolutely nothing there
2	46	True	Okay so we have one two three four probably about 10 people on a road that looks like somewhere in South America their tall palm trees on the side of the road and there's no number of people walking down the side of the road they look like workers they have backpacks on, and it's a nice sunny day
2	47	False	So it's describing weather conditions across the world and so there is new evidence suggesting that some areas that because of global climate change there is increasing weather temperature weather temperatures and rainfall in places that are already experiencing average high temperatures and rainfall in the areas that are often dryer are becoming even more dryers so there is an increased polarization
2	48	True	Okay so there is a picture of the royal couple in England and it is describing how they are becoming wider known in the world because of their influence and now they are becoming because so many people follow the events that are going on it's become very popular and they have so much influence that they are they have a strong ability to influence other people's decisions
2	49	False	In record time UCSD admittances skyrocket over 40,000 and there's an increased need for housing coastal statements, refurbished parking lot in order to create more housing for the next years students
2	50	True	It's the most recent Pope and he appears to be very happy waving at the photographers and he finds himself in a populist wilderness. He's clearly looking at the camera and that's it
2	51	False	Looks like a car crash off the 805 just two cars and near Walmart. Looks like a Porsche and she's female
2	52	True	Rocks... Maybe fell from the sky... They say it has a weird name
2	53	False	Alright so here we see that there are some people standing there, there are some microphones, it looks like they're being interviewed about some some important decision and looks like they're holding American flags
2	54	True	Alright so we have a a prince and a princess and they're surrounded by a lot of people of their holding the British flags and looks like this is a a celebration of some sort

2	55	False	We have a woman sitting at a park bench she appears to be drinking a can of soda. There's grass nearby and there are several trees in the background as well she's wearing a beige jacket and a yellow dress she's wearing heels and she's sitting with her legs crossed over. She's blonde and has blue eyes
2	56	True	We have a man who's wearing a woolen jacket he's wearing sunglasses and he has a goatee he's African-American and he seems to have piercings on his ear he appears to be staring at something in the distance and he's in a room where he appears to be sitting down the background is blue and has red railings
2	57	False	Okay this is a cop approaching a car, highest flash light out. He gets out of the car and the passenger is African American. He gets arrested. He's being pushed against the cop's car, and then he gets murdered
2	58	True	This is going to be the Chinese president Xi, he is putting limitations on the tech industry within China and it shows he's speaking at a conference he's wearing a suit, has water with him, has flowers in front of him, and has a decorative background of trees
2	59	False	There are two kids in a third world country that were never killed they they were in a poor community, and didn't have that much food and really never had a chance. It was tragic
2	60	True	There's a man. He faces demons with no special powers. His name is Patrick Melrose. He's famous
2	61	False	It appears to be an intercity scene, there's some kids in a classroom by it's pretty worn down wallpapers peeling... The kids they're still learning the teacher and smiling but like there's no good computers that are pretty old Dells from probably the 90s or early 2000s and it seems to be probably an article on intercity school funding or maybe taxes something like that
2	62	True	So this looks like it's in Turkey, there's some Turkish flags and streamers connecting to building sort of the older European style there's depictions of either famous people or leaders on the windows. They have what appears to be dates underneath them so they could be when they were alive, when they served, but the people on the ground they seem to just be talking with each other, they're not paying attention
2	63	False	Oh okay okay so there's a there's a tree in the park and then at the top of it is, I don't know how to describe that color, like a like an orangish I guess it's like an orange cat with the little like white face that's in the firefighters brought one of those, it's like that really giant ladder on the back of the fire truck
2	64	True	Okay so in the picture there's an old man standing in the garden with his hands crossed behind his back he looks really confident and he's a perfectionist of the opera and what he's trying to do is he's trying to be like how he was in his past
2	65	False	So I see a picture of a bunch of people in organized protest looks like in the streets of New York in a major city most of the people are younger people a few people that are older I can see a bunch of different signs not sure what they're saying specifically
2	66	True	So I see a picture of what looks like an optometrist checking an older person's eyesight looks like it's definitely a third world country, the person is apparently poor looks like they're malnourished
2	67	False	So this guy is walking his dog and when he got home there are coyotes coming down to his home so his dog actually wanted to play with them but instead he got.. he tried to defend him off and chased them down he ended up getting bit by the coyotes
2	68	True	Images of life on the streets of Paris. A photographer that take a picture of a couple on the balcony and they're embracing each other but the type of embrace that's kind of more like a mother-son affection rather than like a love couple affection
2	69	False	On a lighter note we have a decent beach some city some sky.. I don't know how can I describe that several story building pretty beach, no people, but I guess the scenery is nice I guess yeah pretty
2	70	True	Okay well there is a truck a lot of trash I'm assuming some dead bodies inside trash bags is not a fun place to be looks like the reminiscence of like a massacre is something that is hideous
2	71	False	Palliation for the rest of the CFO of Huawei in Canada with extradition to the US China has preemptively ended the 90-day trade day truce trade deal truce with the United States of America
2	72	True	Quarter-finalist arises out of nowhere Hernan Diaz answered open call for manuscripts by nonprofit press there's an image of a slightly bald man on a couch with pillows next to him, he is wearing a blue sweater and a pair of blue pants, and there's a mirror behind them
2	73	False	So what I see here is basically what appears to be a white woman she is homeless and basically, it's talking about homeless, homeless people who are in Florida, which appears to be that. Yeah and so basically what it's talking about is these people are affected and they are going to a homeless shelter and these people seem to be not very well fed and there are all kinds of epidemics here in Florida

2	74	True	So here I see a picture and image of basically a scene of what appears to be a black woman or actually a person from the Asian culture and so this article is basically talking about how AIDS affects this culture and so this is an Asian culture, probably it is something in Africa, and basically it just really looks like a woman and baby child who is in pain, who is probably affected by AIDS
2	75	False	Okay so I see an article that says the Lakers won five in a row I just see a picture of kind of LeBron James put his hands in the air he's kind of just there there's a crowd in the background nothing else really much else I'm guessing it's just cuz he won
2	76	True	So I see an article that says "a battered Iran loses its Lifeline unraveling of nuclear deal Dems hopes for economy and political moderation" and see an image of a person I believed to be muslim and they're walking on the street behind it is like a picture of the Statue of Liberty with like kind of death as its face kinda symbolizing something
2	77	False	Okay so I see an airport which is in the middle of the mountains it's like under construction it's not entirely built when you can see the runway and you can see like some small flights and this has mountains in the background essay killing mountains with like trees and stuff and then that I can't really see anything else
2	78	True	Okay so this is a sports event there is the Egyptian player Mohamed Salah and then there is and he's playing the for Manchester United at the Standard Chartered Jersey and he is standing next to another player who's on the ground he has been thrown to the ground and I don't know he's from another team, I don't know which team
2	79	False	Two Armenian men have been arrested in the capital of Armenia for murder and protests against the president who was recently elected in a hung Parliament it is unclear whether or not these men are part of a larger plot that's all I got
2	80	True	A Qatar's Sports Network believes that Saudi Arabia is bootlegging its broadcast it's being called an act of piracy brazen act of piracy there is some images and News Network it appears with a TV screen
2	81	False	So there's a picture it looks to be a mother with two younger children and there's a cloud of looks like smoke or gas blowing up behind her they look like they're in a very dry area and the mother is holding on to arms of her children and pulling them
2	82	True	There's a picture the picture is of a nude male who is leaning to the left and he seems to be staring at another figure that is crouching and wearing what looks to be ceremonial armor with the caption about exposed to art from his head to his ankles
2	83	False	Alright picture of Trump and Putin and describing something that Trump has hidden from the US government some something new I guess meeting with Putin at a time that they were not supposed to be I suppose or maybe something that Putin said to the Trump and secret but it's a picture of them standing side-by-side
2	84	True	Alright so a picture of an African descent girl in the UK and it is about the difference that Meghan Markle has made in the royal family there and it's saying that black londoners feel safe safer

B Additional Results

Appendix B.1. presents a comparison of behavior and sample characteristics across experiments. Appendix B.2. provides additional results on the ability to detect lies and beliefs about ability, including analyses at the video and block level. Appendix B.3. presents additional results on the effects of sharing in Experiment 3. Appendix B.4. provides additional results from a different sharing decision, based on a coordination game.

B.1 Comparisons of Experiments and Waves

Table B.1: Experiment 1 No Prior Treatment- Wave 1 versus Wave 2

	Wave 1 (N=287)	Wave 2 (N=93)	t-test, p-value
Ability	0.51	0.50	0.482
Belief about ability	0.68	0.66	0.159

Notes: This table displays the average share of correctly detected true and false videos and the average believe about ability (absolute overconfidence) in the No Prior Treatment of Experiment 1. The table also shows the p-value from t-tests on an indicator variable for the wave from linear regressions on each variable, controlling for age, gender and readership of the NYT of the participant.

Table B.2: Sample characteristics

		Female	Age	Read NYT daily	N
Experiment 1					
No Prior Treatment	Wave 1	0.39	36.03	0.05	287
	Wave 2	0.53	38.13	0.05	93
Prior Treatment	Wave 2	0.52	37.79	0.04	192
Comparing treatments in Wave 2	χ^2*-test, p-value*	*0.86*	*0.80*	*0.66*	
Comparing treaments both waves	χ^2*-test, p-value*	*0.03*	*0.16*	*0.75*	
Experiment 2		0.50	38.79	0.04	1056
Experiment 3					
Shared - True		0.52	39.67	0.09	768
Shared - Believed		0.51	39.93	0.09	742
Shared - NoIncentive		0.55	38.12	0.12	185
Shared - NoInformation		0.54	38.15	0.10	198
Comparing treatments in Exp 3	χ^2*-test, p-value*	*0.81*	*0.13*	*0.61*	
Comparison across experiments	χ^2*-test, p-value*	*0.02*	*0.00*	*0.00*	

Notes: This table displays the average share of female receivers, their average age, and the share who report reading the NYT daily, for each treatment and experiment.

B.2 Ability and Beliefs about Ability

Figure B.1 presents the distribution of ability in Experiment 1 and Experiment 2.

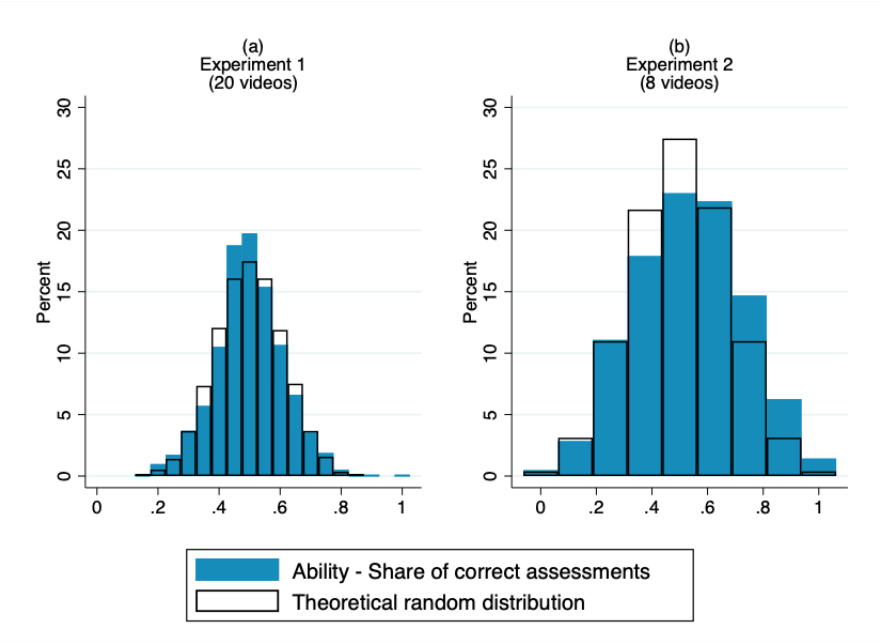
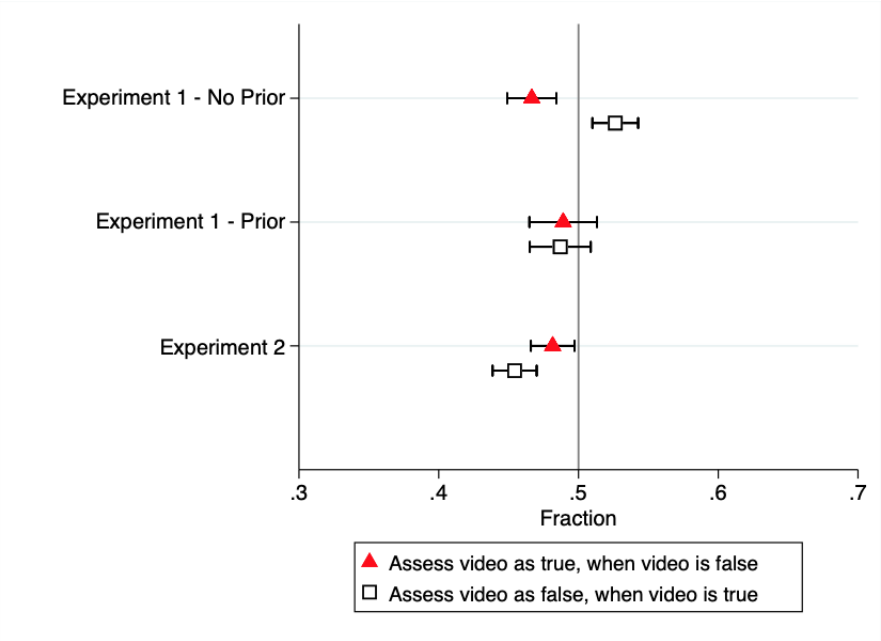


Figure B.1: Distribution of Receivers' Ability to Detect Lies

Figure B.2 presents the frequency of Type I errors, conditional on a video being false, and Type II errors, conditional on a video being true, in Experiments 1 and 2.



Notes: This figure presents the average share of correct assessments (ability) and average confidence (belief about ability) for men and women in Experiments 1 and 2. Error bars indicate 95% confidence intervals.

Figure B.2: Failure to Detect Lies and Truths (Type I and II errors)

Figure B.3 presents the relationship between ability to detect lies and beliefs about the ability to detect lies.

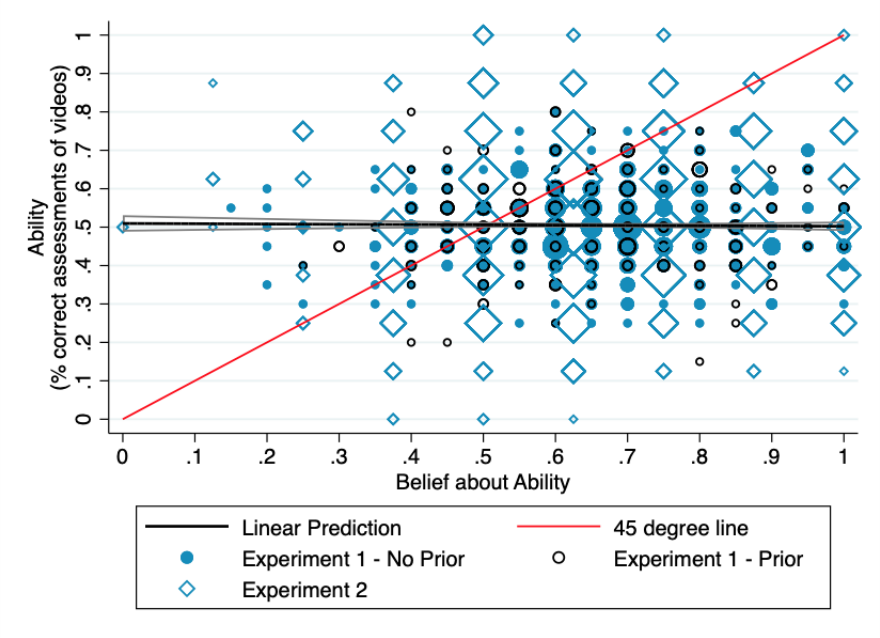


Figure B.3: Confidence and Ability to Detect Lies

Table B.3 presents regression analysis on the determinants of absolute and relative confidence. The table shows that female participants' beliefs about the share of correct assessments was lower, whereas their beliefs about the quartile of distribution on which they lay was higher. We also observe that older receivers were more confident, though their ability was not significantly better. While our sample is from AMT, and thus experienced working online, a potential factor contributing to this finding could be that older adults have relatively lower digital media literacy (Schäffer, 2007) and could be less aware of their limited ability to detect false videos in an online setting. We did not predict this result, but it relates to evidence showing that Facebook users over 65 were significantly more likely to share fake news during the 2016 US presidential campaign (Guess, Nagler, and Tucker, 2019). Consistent with Figure B.3, receivers were also systematically overconfident, independent of their performance: Their actual ability was not related to beliefs about ability.

Table B.3: Determinants of Confidence

	(1)	(2)	(3)	(4)
	Absolute confidence		Relative confidence	
	Believe about share of correct ratings		Believe about quartile	
Share of correct ratings	0.016	0.015	-0.367	-0.281
	(0.013)	(0.013)	(0.250)	(0.244)
Female receiver		-0.043***		0.331***
		(0.009)		(0.054)
Age of receiver		0.010**		-0.051*
		(0.005)		(0.029)
Read NYT daily		-0.027		0.117
		(0.021)		(0.093)
Constant	0.654***	0.695***	2.201***	2.010***
	(0.011)	(0.012)	(0.135)	(0.134)
Experiment	1 and 2	1 and 2	1	1
Number of individuals	1627	1627		
Observations	4,400	4,398	572	572
R-squared	0.001	0.017	0.004	0.067

Notes: Estimates from linear regressions on the share of videos a receiver believed she/he rated correctly (columns (1)-(2)) and the quartile of the distribution of ability she/he believed they were in, from 1 (highest quartile) to 4 (lowest quartile) (columns (3)-(4)). Female receiver is a dummy variable that takes the value of 1 for female receivers; age of the receiver is the standardized age of the receiver; and Read NYT is an indicator variable that takes the value of 1 if the receiver reported reading the NYT daily. All regressions include fixed effects for the group of videos after which confidence is elicited, and experiment/treatment fixed effects. Robust standard errors, clustered at the participant level, are presented in parentheses. ***, **, and * indicate 1%, 5%, and 10% significance levels, respectively.

B.2.1 Ability and Confidence by block of Experiments 1 and 2

Table B.4: Ability and confidence by block

			Block 1	Block 2	Block 3	Block 4
Exp. 1: No Prior treatment (N=380)	Ability	Mean	2.45	2.55	2.5	2.57
		SD	(0.96)	(1.04)	(1.01)	(1.09)
	Belief about ability	Mean	3.43	3.29	3.24	3.28
		SD	(0.95)	(1.03)	(1.06)	(1.03)
Exp. 1: Prior treatment (N=192)	Ability	Mean	2.52	2.56	2.48	2.68
		SD	(1.09)	(1.05)	(0.99)	(1.07)
	Belief about ability	Mean	3.19	3.21	3.21	3.22
		SD	(0.99)	(0.96)	(1.04)	(1.00)
Experiment 2 (N=1056)	Ability	Mean	2.11	2.15	-	-
		SD	(1.10)	(1.06)		
	Belief about ability	Mean	2.69	2.54	-	-
		SD	(0.87)	(0.92)		

B.2.2 Wisdom of the crowd

Although the ability to detect false videos at the individual receiver level appears to be low, "wisdom of the crowd" may exist, that is, a greater collective ability of all receivers to correctly detect false and true video (e.g., Surowiecki, 2004; Lee and Lee, 2017). We examine whether, at the video level, the share of receivers who believed a video was true was larger when the video was actually true, compared to when it was false. If a video was true, 47.4% of receivers in the No Prior treatment of Experiment 1 (correctly) believed it, 51.3% in the Prior treatment, and 55.1% in Experiment 2. If a video was false, 46.7% of receivers in the No Prior treatment of Experiment 1 (incorrectly) believed it, 48.9% in the Prior treatment, and 48.2% in Experiment 2. The "crowd" was therefore directionally more likely to be correct, but the differences are small (Mann-Whitney test, $p = 0.8534$ in the No Prior treatment in Experiment 1, $p = 0.7818$ in the Prior treatment in Experiment 1, and $p = 0.0264$ in Experiment 2).

B.2.3 Video-level results for Experiments 1 and 2

Table B.5: Experiment 1: video-level results

Video ID		(1) Ability	(2) Rate as false	(3) Safe bet
1	False	0.51	0.51	0.20
2	True	0.33	0.67	0.15
3	False	0.53	0.53	0.17
4	True	0.17	0.83	0.09
5	False	0.38	0.38	0.12
6	True	0.73	0.27	0.17
7	False	0.67	0.67	0.30
8	True	0.67	0.33	0.18
9	False	0.39	0.39	0.16
10	True	0.36	0.64	0.18
11	False	0.56	0.56	0.14
12	True	0.38	0.62	0.09
13	False	0.23	0.23	0.16
14	True	0.83	0.17	0.09
15	False	0.89	0.89	0.15
16	True	0.15	0.85	0.19
17	False	0.68	0.68	0.14
18	True	0.67	0.33	0.06
19	False	0.40	0.40	0.15
20	True	0.58	0.42	0.10
N		572	572	572

Notes: This table displays (1) the average share of correctly detected true and false videos, by video (2) the average frequency with which each video rated as false, and (3) how often each video is chosen when individuals are asked to choose 3 videos for which to receive an additional $0.25 bonus, if their true/false rating is correct.

Table B.6: Experiment 2: video-level results

Video ID		Group	(1) Ability	(2) Rate as false	(3) Safe bet	(4) N
1	False	1	0.34	0.34	0.15	93
2	True	2	0.75	0.25	0.22	102
3	False	2	0.64	0.64	0.11	102
4	True	1	0.63	0.37	0.17	93
5	False	3	0.29	0.29	0.24	100
6	True	4	0.57	0.43	0.13	95
7	False	4	0.49	0.49	0.12	95
8	True	3	0.56	0.44	0.03	99
9	False	5	0.4	0.4	0.03	100
10	True	6	0.58	0.42	0.08	103
11	False	6	0.53	0.53	0.15	103
12	True	5	0.56	0.44	0.14	100
13	False	7	0.33	0.33	0.31	95
14	True	8	0.62	0.38	0.18	97
15	False	8	0.58	0.58	0.09	97
16	True	7	0.47	0.53	0.11	95
17	False	9	0.51	0.51	0.1	89
18	True	10	0.69	0.31	0.14	88
19	False	10	0.59	0.59	0.12	88
20	True	9	0.63	0.37	0.07	89
21	False	11	0.53	0.53	0.08	95
22	True	1	0.52	0.48	0.11	93
23	False	1	0.3	0.3	0.17	93
24	True	11	0.7	0.3	0.13	95
25	False	2	0.57	0.57	0.06	102
26	True	3	0.48	0.52	0.08	99
27	False	3	0.46	0.46	0.15	99
28	True	2	0.77	0.23	0.12	102
29	False	4	0.61	0.61	0.24	95
30	True	5	0.54	0.46	0.15	100
31	False	5	0.83	0.83	0.14	100
32	True	4	0.42	0.58	0.07	95
33	False	6	0.5	0.5	0.06	103
34	True	7	0.59	0.41	0.09	95
35	False	7	0.45	0.45	0.06	95
36	True	6	0.34	0.66	0.12	103
37	False	8	0.81	0.81	0.15	97
38	True	9	0.43	0.57	0.16	89
39	False	9	0.34	0.34	0.2	89
40	True	8	0.71	0.29	0.12	97
41	False	10	0.65	0.65	0.18	88
42	True	11	0.48	0.52	0.09	95
43	False	11	0.31	0.31	0.19	95
44	True	10	0.61	0.39	0.07	88

45	False	1	0.58	0.58	0.17	93
46	True	2	0.45	0.55	0.13	102
47	False	2	0.35	0.35	0.16	102
48	True	1	0.51	0.49	0.05	93
49	False	3	0.38	0.38	0.09	100
50	True	4	0.31	0.69	0.05	95
51	False	4	0.59	0.59	0.09	95
52	True	3	0.16	0.84	0.16	99
53	False	5	0.76	0.76	0.08	100
54	True	6	0.56	0.44	0.1	103
55	False	6	0.55	0.55	0.1	103
56	True	5	0.7	0.3	0.03	100
57	False	7	0.57	0.57	0.16	95
58	True	8	0.64	0.36	0.11	97
59	False	8	0.7	0.7	0.11	97
60	True	7	0.23	0.77	0.11	95
61	False	9 and 11	0.42	0.42	0.09	184
62	True	10	0.72	0.28	0.1	88
63	False	10	0.82	0.82	0.05	88
64	True	9 and 11	0.16	0.84	0.19	184
65	False	1	0.58	0.58	0.1	93
66	True	2	0.54	0.46	0.09	102
67	False	2	0.85	0.85	0.13	102
68	True	1	0.45	0.55	0.08	93
69	False	3	0.56	0.56	0.09	99
70	True	4	0.45	0.55	0.08	95
71	False	4	0.22	0.22	0.21	95
72	True	3	0.72	0.28	0.15	99
73	False	5	0.66	0.66	0.18	100
74	True	6	0.47	0.53	0.17	103
75	False	6	0.31	0.31	0.24	103
76	True	5	0.9	0.1	0.25	100
77	False	7	0.33	0.33	0.06	95
78	True	8	0.72	0.28	0.12	97
79	False	8	0.36	0.36	0.1	97
80	True	7	0.71	0.29	0.11	95
81	False	9 and 11	0.59	0.59	0.09	184
82	True	10	0.44	0.56	0.12	88
83	False	10	0.53	0.53	0.22	88
84	True	9 and 11	0.67	0.33	0.11	184

Notes: This table displays, for each video, (1) the average share of correctly detected true and false videos, (2) the average frequency with which each video rated as false, (3) how often each video within a video group is chosen when individuals are asked to choose 1 video for which to receive an additional $0.25 bonus, if their true/false rating is correct, and (4) how many subjects viewed each video. There were 11 groups with 8 videos each. Since there were a total of 84 videos, 4 videos were shown in two groups.

B.2.4 Determinants of lies and beliefs: emotions, expressions and speech

In Section 3, we analyzed the determinants of sender beliefs and truth-telling in videos of news events. We used a facial expression recognition software to analyze the 104 videos by senders. The software could detect the emotions of senders in 102 out of 104 videos, which are hence the focus of the analysis. Below, Table B.7 presents the descriptive statistics of the facial expressions provided by the software as well as sender and receiver characteristics. The total number of observations is 19,692.

Half of senders are female, and 47 percent of receivers. Receivers spend on average 53.6 seconds watching a video. Out of all receivers, five percent report to read the NYT daily. Their average age is 37.7 years old. Using Google sentiment analysis, we obtain an average sentiment score of -0.12, which indicates that sentiment is on average somewhat negative in the videos. On average, senders say 50 words.

The facial expression recognition software detects the intensity of facial expressions classified as happy, neutral, sad, surprised, scared, angry and disgusted. For each frame it gives it a value between 0 and 1. Since multiple expressions and emotions can be detected at the same time, the sum of all can exceed one. The average intensity of each emotion is shown in Table B.7.

The software also detects head and facial movements. Table B.7 shows that the average x-axis head orientation, relative to looking forward, is 2.21 degrees on average. The average y-axis orientation is 0.41 and the average z-axis orientation is -0.03.

Gaze is measured as forward, left, right, or unknown if it cannot be detected. We define eyes gaze forward as the share of times eyes are classified as looking forward. All other eye movements, eyebrow positions, and mouth movement are defined in the same manner. Most frequently senders gaze forward. Specifically, among all eye movements detected, in 92 percent of the cases, the eyes look forward, in 6 percent they look right and in 2 percent they look left. Most frequently eyebrows are neutral, and the left and right eye are open. The mouth is detected as open in 56 percent of

Table B.7: Sender and receiver characteristics and facial expressions

	Mean	SD
Female sender	0.50	0.50
Female receiver	0.47	0.50
Time watching video (in seconds)	53.60	59.60
Ready NYT daily	0.05	0.21
Age of receiver	37.74	11.13
Sentiment score	-0.12	0.44
Word count	50.40	14.98
Happy	0.16	0.18
Neutral	0.55	0.17
Sad	0.11	0.10
Surprised	0.15	0.12
Scared	0.04	0.04
Angry	0.05	0.03
Disgusted	0.04	0.04
x-axis head orientation	2.21	3.78
y-axis head orientation	0.41	9.18
z-axis head orientation	-0.03	3.61
Eyes gaze forward	81.17	15.72
Eyes gaze right	3.69	5.15
Eyes gaze left	2.32	5.78
Right eyebrow neutral	80.03	26.71
Left eyebrow neutral	84.35	25.28
Right eye open	87.96	21.56
Left eye open	79.16	27.12
Mouth open	55.66	36.20

Notes: This table presents summary statistics. Female sender and receiver is the share of senders and receivers that are female. Time watching video is the number of seconds a receiver spends on a given video question. Read NYT is an indicator variable that takes value one if the receiver reports reading they NYT daily, and age is the receiver's average reported age. Sentiment score is obtained from Google sentiment analysis API and word count is the number of words said in a video. All other variables are obtained from a facial expression recognition software and are defined in the text.

the frames within a video.

Table B.8 below presents robustness checks on the regression analyses of the determinants of receivers' beliefs (columns 1-4), as well as senders' truthfulness (columns 5-8). The table presents the coefficients of probit regressions on both variables. All continuous variables are standardized. These regressions allow for different sets of covariates, and yield the same qualitative results throughout.

Table B.8: Determinants of beliefs and truth

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
		Believe video (=1)				Video is true (=1)		
True	0.088	0.215**	0.244**	0.249**				
	(0.102)	(0.104)	(0.099)	(0.099)				
Receiver Characteristics								
Female receiver	0.031	0.041*	0.045**	0.045**				
	(0.025)	(0.022)	(0.023)	(0.023)				
Age	0.010	0.008	0.009	0.009				
	(0.008)	(0.009)	(0.009)	(0.009)				
Read NYT daily	-0.024	-0.022	-0.021	-0.022				
	(0.040)	(0.045)	(0.045)	(0.045)				
Time watching video	-0.016*	-0.018**	-0.020**	-0.020**				
	(0.009)	(0.008)	(0.009)	(0.009)				
Sender Characteristics and Speech								
Female sender	0.035	0.371***	0.437***	0.415***	0.000	-0.257	-0.125	-0.075
	(0.171)	(0.120)	(0.124)	(0.127)	(0.000)	(0.181)	(0.237)	(0.263)
Female sender & receiver	-0.082**	-0.101***	-0.103***	-0.103***				
	(0.033)	(0.037)	(0.038)	(0.038)				
Word Count		0.162***	0.189***	0.180***		-0.155*	-0.211**	-0.266**
		(0.046)	(0.050)	(0.050)		(0.093)	(0.101)	(0.110)
Sentiment Score		-0.051	-0.057	-0.071		0.106	0.085	0.082
		(0.042)	(0.038)	(0.044)		(0.130)	(0.132)	(0.140)
Emotions and Facial Movement								
Valence		-0.177***				0.155*		
		(0.058)				(0.087)		
Arousal		0.115*				0.059		
		(0.062)				(0.154)		
Happy			-0.239***	-0.239***			0.146	0.065
			(0.065)	(0.080)			(0.121)	(0.132)
Sad			-0.068	-0.077			-0.152	-0.247*
			(0.042)	(0.050)			(0.123)	(0.126)
Surprised			-0.011	-0.002			-0.027	-0.049
			(0.066)	(0.069)			(0.130)	(0.134)
Scared			-0.026	-0.014			0.195*	0.310**
			(0.070)	(0.065)			(0.100)	(0.129)
Angry			-0.036	-0.047			-0.107	-0.059
			(0.042)	(0.044)			(0.148)	(0.158)
Disgusted			0.135***	0.126***			-0.033	-0.036
			(0.029)	(0.031)			(0.148)	(0.165)
Y-axis head orientation		0.162***	0.122**	0.101		-0.223**	-0.237**	-0.264**
		(0.048)	(0.059)	(0.069)		(0.089)	(0.107)	(0.127)
X-axis head orientation		-0.153***	-0.186***	-0.204***		-0.045	-0.031	-0.108
		(0.057)	(0.057)	(0.057)		(0.136)	(0.136)	(0.162)
Z-axis head orientation		0.011	0.050	0.048		-0.123*	-0.151*	-0.116
		(0.049)	(0.063)	(0.066)		(0.066)	(0.077)	(0.091)
Eyes gaze right		0.031	-0.000	-0.010		0.091	0.107	0.060
		(0.042)	(0.041)	(0.046)		(0.125)	(0.132)	(0.135)
Eyes gaze left		-0.021	-0.015	-0.009		0.259**	0.214**	0.213*
		(0.039)	(0.039)	(0.041)		(0.122)	(0.109)	(0.112)
Mouth open		-0.072	-0.015	-0.019		0.048	0.032	0.058
		(0.070)	(0.065)	(0.071)		(0.123)	(0.122)	(0.113)
Quality		-0.074	-0.104*	-0.103*		-0.157	-0.184	-0.202
		(0.048)	(0.055)	(0.060)		(0.105)	(0.122)	(0.128)
Left eyebrow neutral				0.041				0.175
				(0.049)				(0.145)
Right eyebrow neutral				-0.044				0.103
				(0.052)				(0.126)
Left eye open				0.010				-0.141
				(0.062)				(0.182)
Right eye open				-0.019				-0.081
				(0.055)				(0.165)
Constant	-0.108	-0.404***	-0.443***	-0.422***	0.000	0.140	0.075	0.048
	(0.116)	(0.126)	(0.129)	(0.131)	(0.000)	(0.104)	(0.130)	(0.146)

Notes: This table presents coefficient estimates of probit regression models on the likelihood that the receiver believes a video (columns 1-4) and that the sender tells the truth (columns 5-8). The regression models in columns 1-3 include experiment fixed effects, and robust standard errors for these models, clustered at the level of the video are presented in parentheses.

B.3. Experiment 3 Additional Results

Table B.9 explores whether the sharing of lies was related to overconfidence. Overconfident Receiver 1s were more likely to share lies. We observe this relationship for receivers whose ability was below median (column (1)), as well as for receivers whose ability was above median (column (2)). We also observe that receivers whose accuracy was below median were more likely to share lies in the Shared-True treatment than in the Shared-Believed treatment. These receivers shared videos, believing they were false, but were more likely to have inaccurate beliefs.

Table B.9: Who Shares A Lie?

	(1)	(2)	(3)
	Share Lie = 1		
	Ability below median	Ability above median	All
Shared-True Treatment	0.090**	0.022	0.057
	(0.046)	(0.050)	(0.038)
Overconfidence (Belief about ability - ability)	0.283***	0.456***	0.402***
	(0.102)	(0.113)	(0.084)
Ability above median			-0.067
			(0.051)
Female receiver	0.013	0.084*	0.047
	(0.046)	(0.050)	(0.038)
Age of receiver	0.020	-0.016	-0.002
	(0.024)	(0.025)	(0.019)
Read NYT daily	-0.017	-0.185**	-0.132**
	(0.087)	(0.093)	(0.066)
Observations	312	443	755

Notes: Marginal effects, calculated at the means of covariates, from probit regressions on the likelihood that Receiver 1 shares a lie (false video). Shared-True treatment is an indicator variable that takes the value of 1 if the receiver is in the Shared-True treatment. Overconfidence is the difference between the receiver's belief about ability and actual ability. Female receiver is an indicator variable that takes the value of 1 for female receivers, age of the receiver is the standardized age of the receiver, and Read NYT is an indicator variable that takes the value of 1 if the receiver reported reading the NYT daily. Column (1) focuses on receivers with below-median ability (who assessed less than 50% of videos correctly), column (2) focuses on receivers with above-median ability, and column (3) includes all receivers. All regressions include fixed effects for the group of videos the receiver saw. Robust standard errors are presented in parentheses. ***, **, and * indicate 1%, 5%, and 10% significance levels respectively.

Table B.10: Experiment 3: Receiver 1 video-level results

				(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
				Shared-True Treatment				Shared-Believed Treatment			
Video ID	Sender ID		Group	Correct assessment	Rate as false	Share	N	Correct assessment	Rate as false	Share	N
3	1	False	2	0.59	0.59	0.11	202	0.62	0.62	0.11	179
4	1	True	1	0.23	0.77	0.03	182	0.23	0.77	0.02	192
5	2	False	2	0.37	0.37	0.13	202	0.36	0.36	0.12	179
6	2	True	1	0.73	0.27	0.09	182	0.79	0.21	0.11	192
7	3	False	1	0.48	0.48	0.23	182	0.58	0.58	0.17	192
8	3	True	2	0.57	0.43	0.22	202	0.54	0.46	0.22	179
9	4	False	2	0.51	0.51	0.16	202	0.51	0.51	0.15	179
10	4	True	1	0.37	0.63	0.05	182	0.44	0.56	0.10	192
13	5	False	1	0.15	0.15	0.31	182	0.18	0.18	0.27	192
14	5	True	2	0.73	0.27	0.12	202	0.75	0.25	0.16	179
15	6	False	2	0.93	0.93	0.04	202	0.90	0.90	0.04	179
16	6	True	1	0.10	0.90	0.02	182	0.15	0.85	0.03	192
17	7	False	1	0.55	0.55	0.08	182	0.49	0.49	0.08	192
18	7	True	2	0.63	0.37	0.15	202	0.69	0.31	0.16	179
19	8	False	1	0.34	0.34	0.20	182	0.34	0.34	0.23	192
20	8	True	2	0.55	0.45	0.06	202	0.56	0.44	0.05	179

Notes: This table displays, for each video, the average share of correctly detected true and false videos, the average frequency with which each video rated as false, how often each video was chosen to be shared in the Shared-True and Shared-Believe treatments how many subjects viewed each video. There were 2 groups with 8 videos each.

Table B.11: Experiment 3: Receiver 2 video-level results

			(1)	(2)	(3)	(4)	(5)	(6)
			No Info Treatment			Shared-True Treatment		
Video ID		Group	Correct assessment	Rate as false	N	Correct assessment	Rate as false	N
3	False	2	0.52	0.52	33	0.55	0.55	103
4	True	1	0.21	0.79	38	0.26	0.74	80
5	False	2	0.47	0.47	43	0.37	0.37	91
6	True	1	0.58	0.42	36	0.76	0.24	83
7	False	1	0.60	0.60	52	0.53	0.53	108
8	True	2	0.50	0.50	38	0.54	0.46	95
9	False	2	0.60	0.60	52	0.44	0.44	129
10	True	1	0.43	0.57	51	0.46	0.54	80
13	False	1	0.23	0.23	57	0.18	0.18	111
14	True	2	0.82	0.18	44	0.76	0.24	97
15	False	2	0.85	0.85	53	0.84	0.84	103
16	True	1	0.16	0.84	44	0.13	0.87	76
17	False	1	0.41	0.41	51	0.54	0.54	93
18	True	2	0.64	0.36	55	0.65	0.35	125
19	False	1	0.24	0.24	51	0.26	0.26	97
20	True	2	0.57	0.43	42	0.54	0.46	65

			(1)	(2)	(3)	(4)	(5)	(6)
			Shared-Believed Treatment			Shared-NoIncentive Treatment		
Video ID		Group	Correct assessment	Rate as false	N	Correct assessment	Rate as false	N
3	False	2	0.44	0.44	86	0.35	0.35	48
4	True	1	0.24	0.76	87	0.20	0.80	46
5	False	2	0.35	0.35	88	0.42	0.42	38
6	True	1	0.84	0.16	82	0.74	0.26	46
7	False	1	0.52	0.52	114	0.52	0.52	66
8	True	2	0.56	0.44	75	0.51	0.49	41
9	False	2	0.36	0.36	107	0.42	0.42	55
10	True	1	0.46	0.54	89	0.35	0.65	43
13	False	1	0.28	0.28	119	0.15	0.15	68
14	True	2	0.78	0.22	85	0.85	0.15	46
15	False	2	0.87	0.87	99	0.86	0.86	44
16	True	1	0.18	0.82	73	0.27	0.73	41
17	False	1	0.49	0.49	107	0.58	0.58	64
18	True	2	0.61	0.39	105	0.65	0.35	62
19	False	1	0.35	0.35	97	0.44	0.44	54
20	True	2	0.55	0.45	71	0.33	0.67	30

Notes: This table displays, for each video, the average share of correctly detected true and false videos, the average frequency with which each video rated as false, how often each video was chosen to be shared in the Shared-True and Shared-Believed treatments, and how many Receiver 2s viewed each video. There were 2 groups with 8 videos each.

Table B.12: Experiment 3: Distribution of shared and not-shared videos, by treatment

		(1)	(2)	(3)	(4)	(5)	(6)
		Shared-True		Shared-Believed		Shared-NoIncentive	
Video ID		Not-Shared	Shared	Not-Shared	Shared	Not-Shared	Shared
3	False	87	16	74	12	40	8
4	True	76	4	83	4	44	2
5	False	74	17	76	12	29	9
6	True	73	10	62	20	40	6
7	False	76	32	94	20	52	14
8	True	64	31	48	27	32	9
9	False	102	27	88	19	47	8
10	True	73	7	76	13	40	3
13	False	62	49	84	35	44	24
14	True	80	17	65	20	38	8
15	False	97	6	93	6	39	5
16	True	73	3	69	4	39	2
17	False	81	12	96	11	52	12
18	True	101	24	85	20	50	12
19	False	69	28	67	30	53	1
20	True	58	7	66	5	26	4

Notes: This table displays, for each video, how many Receiver 2s viewed each video when it was not shared and when it was shared, in each treatment.

Tables B.13 and B.14 present the results of the effects of sharing in two cases. First, if the sample is restricted to shared videos that are watched at least 10 times, as preregistered. Second, if instead of estimating Heckman selection models we separately estimate a linear probability model on the decision to watch a video and a separate one on the decision to believe a video is true. Results remain qualitatively similar to those shown in the main text.

Table B.13: Effect of Sharing: Heckman Selection Model - Restricted Sample

	(1)	(2)	(3)	(4)	(5)	(6)
	Choose video to watch = 1			Believe video = 1		
Shared video	0.304***	0.308***	0.292***	0.137***	0.125***	0.088***
	(0.030)	(0.035)	(0.030)	(0.032)	(0.038)	(0.031)
Shared-True	-0.040**	-0.041**	-0.037**	-0.002	-0.003	0.002
	(0.017)	(0.017)	(0.018)	(0.025)	(0.025)	(0.023)
Shared-Believed	-0.027	-0.027	-0.026	0.018	0.018	0.025
	(0.017)	(0.018)	(0.018)	(0.025)	(0.025)	(0.023)
Shared-No Incentive	-0.021	-0.021	-0.019	-0.010	-0.010	-0.016
	(0.020)	(0.020)	(0.020)	(0.028)	(0.028)	(0.027)
Shared-Believed X Shared video	-0.089**	-0.092**	-0.087**	-0.053	-0.053	-0.063
	(0.042)	(0.042)	(0.042)	(0.046)	(0.046)	(0.045)
Shared-No Incentive X Shared video	-0.102**	-0.110**	-0.109**	0.017	0.018	0.041
	(0.051)	(0.051)	(0.052)	(0.056)	(0.056)	(0.055)
Female sender		0.084***			-0.028	
		(0.012)			(0.017)	
Female sender X Shared video		0.003			0.021	
		(0.037)			(0.041)	
Video on last column/row of screen	-0.019	-0.019	-0.022*			
	(0.012)	(0.012)	(0.012)			
Effect of Shared video:						
- in Shared-Believed treatment	0.000	0.000	0.000	0.005	0.028	0.284
- in Shared-NoIncentive treatment	0.000	0.000	0.000	0.000	0.003	0.003
Video Fixed Effects	No	No	Yes	No	No	Yes
Observations	7,952	7,952	7,952	7,952	7,952	7,952
Selected	4,067	4,067	4,067	4,067	4,067	4,067
Nonselected	3,885	3,885	3,885	3,885	3,885	3,885
ρ correlation in error terms				0.080	0.085	0.068
Wald test of $\rho = 0$				0.061	0.037	0.316

Notes: This table shows the coefficients of the Heckman selection model on the effects of sharing estimated via maximum likelihood. Robust standard errors clustered at the individual level shown in parentheses.

Table B.14: Effect of Sharing on Watching and Beliefs: Linear Probability of Model

	(1)	(2)	(3)	(4)	(5)	(6)
	Choose video to watch = 1			Believe video = 1		
Shared video	0.291***	0.293***	0.268***	0.167***	0.156***	0.085***
	(0.024)	(0.029)	(0.024)	(0.031)	(0.038)	(0.030)
Shared-True	-0.036**	-0.037**	-0.033**	-0.003	-0.003	0.004
	(0.016)	(0.016)	(0.016)	(0.023)	(0.023)	(0.022)
Shared-Believed	-0.028*	-0.028*	-0.025	0.015	0.015	0.026
	(0.016)	(0.016)	(0.016)	(0.023)	(0.023)	(0.022)
Shared-No Incentive	-0.022	-0.022	-0.019	-0.009	-0.010	-0.011
	(0.019)	(0.019)	(0.018)	(0.027)	(0.027)	(0.025)
Shared-Believed X Shared video	-0.068*	-0.070**	-0.064*	-0.055	-0.055	-0.063
	(0.035)	(0.035)	(0.035)	(0.046)	(0.046)	(0.044)
Shared-No Incentive X Shared video	-0.107**	-0.113***	-0.108**	0.022	0.023	0.046
	(0.044)	(0.044)	(0.044)	(0.055)	(0.055)	(0.054)
Female sender		0.068***			-0.023	
		(0.011)			(0.016)	
Female sender X Shared video		0.001			0.020	
		(0.031)			(0.040)	
Video on last column/row of screen	-0.019*	-0.019*	-0.022**			
	(0.011)	(0.011)	(0.011)			
Constant	0.512***	0.478***	0.497***	0.505***	0.518***	0.514***
	(0.015)	(0.016)	(0.026)	(0.018)	(0.020)	(0.036)
Effect of Shared video:						
- in Shared-Believed treatment	0.000	0.000	0.000	0.000	0.009	0.487
- in Shared-NoIncentive treatment	0.000	0.000	0.000	0.000	0.000	0.004
Video Fixed Effects	No	No	Yes	No	No	Yes
Observations	9104	9104	9104	4,552	4,552	4,552
R-squared	0.023	0.027	0.041	0.012	0.012	0.152

Notes: This table shows the coefficients of the OLS regressions on the likelihood that a video is watched and believed. Robust standard errors clustered at the individual level shown in parentheses.

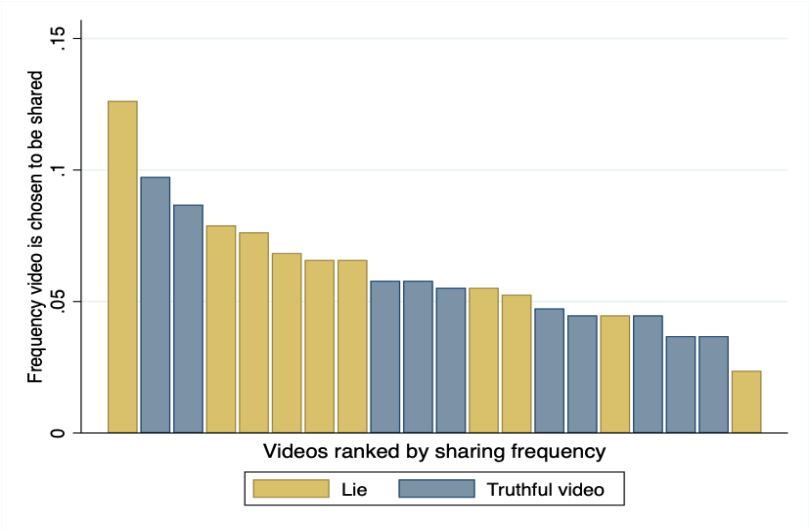
B.4. Sharing decisions using a coordination game

In Experiment 1 we asked participants about their sharing decisions, based on a coordination game. After measuring ability and confidence, we elicited sharing decisions through the use of a coordination game. In the No Prior treatment of Experiment 1, we asked receivers, "Which of the videos you have seen would you share with other individuals? If you choose the most popular video (i.e., the one that was chosen the most by previous participants in this study), you will earn an additional bonus of \$1." This question provides an incentivized measure of receivers' beliefs about what others would choose to share. We were interested in seeing whether the most shared video would be true or false. In the Prior treatment, we used the same measure, but elicited the five most popular videos. This measure served to provide more variation in sharing rates, which we used to examine how information about others' sharing decisions affects the degree to which a receiver believes a particular video. It also allows to see several popular videos and ensure that sharing results are not driven by a particular video. In Experiment 2, we used the same measure as in Experiment 1, and paid receivers \$0.50 if they chose the video most frequently chosen by other receivers who saw the same videos.

We find that receivers shared false videos more often than true videos, in line with the findings in the main text. Figures B.1(a) and (b) display the frequency with which each of the 20 videos was chosen to be shared in Prior and No Prior treatments. When choosing one video to share, 59.5% of the receivers in the No Prior treatment selected a false one. When choosing five videos to share in the Prior treatment, 57.5% of the chosen videos are false. The results of Experiment 2, in which receivers saw eight videos and choose one to share, were similar: 56.6% of the videos chosen to be shared were false. These frequencies are statistically different from 50% for all three experiments (t-test, p-value< 0.001 in all cases).

A potential reason for this finding could be that receivers believed others would share made-up news events without believing they were true. We examined receivers' beliefs about the credibility of the videos they shared. Receivers believed 54.2%

(a) Sharing frequency when choosing one video to share (No Prior treatment)



(b) Sharing frequency when choosing five videos to share (Prior treatment)

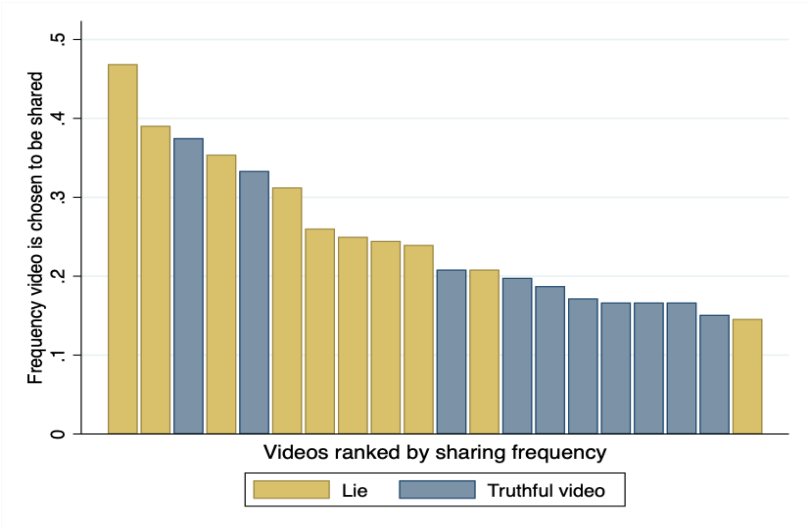


Figure B.4: Sharing Decisions

of the videos they shared in the No Prior treatment, 57.3% of those in the Prior treatment of Experiment 1, and 65.1% of those in Experiment 2. This finding suggests receivers believe others share stories that they themselves tend to believe to be true.

B.5. The Impact of Sharing on Beliefs

We provided a new set of receivers with information about others' sharing behavior, in the coordination game as reported in Section B.4. Specifically, we used the sharing behavior of receivers in the Prior treatment of Experiment 1 to create the information that we presented to a new set of receivers. These new receivers completed the same task as receivers in the Prior treatment in Experiment 1. That is, we asked them to detect whether a video was true or false, for 20 videos. Information about the sharing behavior of receivers, who had previously participated in the Prior treatment of Experiment 1, was provided on the screen on which receivers watched each video. Receivers knew about the incentives of past participants in the sharing decision.

Depending on how the information was presented, there were two new treatments. In the first treatment, the Sharing-Rate Information treatment, receivers were informed about how often other receivers chose to share each video out of the 20. To study the effect of sharing information, while controlling for video fixed effects, we created two versions of sharing-rate information. We did so truthfully, by providing the new set of receivers with either information about the sharing behavior of a group A or a group B of receivers who had previously participated in the Prior treatment of Experiment 1. Receivers in the Sharing-Rate Information were told about the sharing decision of receivers who had previously participated in the Prior treatment (the Baseline treatment), the incentives when making a sharing decision, and they also knew that they would see the sharing behavior of 50 selected previous participants.

Specifically, two groups comprised 50 past receivers each were chosen such that the sharing behavior of these past receivers would be as different as possible. We used an algorithm to create 170,000 such "synthetic" A and B groups of past receivers. In each iteration, the algorithm started by creating two exclusive groups (A and B) of 50 past randomly-drawn participants. Then, it calculated the absolute difference between the sharing decisions of each group, for each of the 20 videos. It averaged and totalled the difference in sharing between the two groups over all 20 videos, over

true videos and over false videos. We ranked each iteration (and thus each pair of synthetic A and B groups) according to the total difference in sharing behavior over all videos, and considered the ten pairs with the highest difference over all videos. A concern could be that, in picking the two groups with the largest difference in sharing rates over all videos, the sharing differences could be concentrated mostly on true or mostly on false videos, which would limit the interpretation of results and reduce the scope to find an effect of sharing information among either true or false videos. To address this concern, we calculated the difference in sharing rates for true and false videos for these ten pairs, and selected the pair which had a similar difference in sharing rates for true and false videos. This was the pair the fifth highest total difference over all videos (the sum of absolute differences for the 20 videos was 240 percentage points), for which the difference was most similar for true (124 percentage points) and for false videos (116 percentage points). We refer to the information regarding the sharing behavior of group A as Version A, and to the information regarding the sharing of group B as Version B.

On average, for each video, we find an absolute difference in sharing rates of 12 percentage points between Version A and B information. For six videos, the difference was less than 10 percentage points (it was 0 for three videos); for seven videos, the difference was between 10 and 15 percentage points; for four videos, the difference was between 15 and 20 percentage points; and for the remaining three videos, the difference was more than 20 percentage points. Detailed information on the difference between the two versions is provided in Table B.15.

In the second treatment, Most-Shared Information, a new set of receivers was informed about which video was most often shared by receivers who had previously participated in the Prior treatment of Experiment 1. As in the Sharing-Rate Information treatment, we selected two groups of past receivers that differed regarding which video, within each block of five videos, was shared most often, thus leading to two versions of sharing information (Version A and B). A new group of receivers then learned, for each block of five videos, which video was the most shared by past re-

Table B.15: Details of sharing information in the Sharing-Rate Information treatment

	Percentage of previous participants who shared the video	
Video ID	Version A	Version B
1	16%	34%
2	14%	24%
3	38%	14%
4	26%	10%
5	38%	28%
6	28%	10%
7	42%	56%
8	26%	54%
9	38%	38%
10	22%	40%
11	24%	20%
12	8%	18%
13	46%	12%
14	18%	18%
15	10%	20%
16	12%	22%
17	20%	22%
18	18%	8%
19	36%	36%
20	20%	16%

ceivers. Because we had four blocks in total, receivers saw eight most-shared videos, across the two versions. Of these, five were false and three were true. The blocks with five videos always consisted of the same videos, such that the only change was which video in the block was most often shared.

Throughout, receivers in the Sharing-Rate Information and Most-Shared Information treatment knew they were going to learn about the sharing decisions and incentives of a group of past participants, who had also completed the same task, as receivers, and then decided about sharing.

For the Sharing-Rate Information treatment, we recruited a new group of 400 receivers to assess the truthfulness of 20 videos, while at the same time receiving

either Version A or B information regarding other receivers' sharing behavior. Similarly, for the Most-Shared Information treatment, we later recruited a new group of 400 receivers, who received either Version A or B of information about which videos were most often shared by past participants. We compare their behavior to that of receivers in the Prior treatment ($N = 192$) who did not have any sharing information. Excluding receivers who failed the control questions yields a total of 952 receivers. The experimental treatments are summarized in Table B.16 below.

Because shared videos in our experiments were more likely to be false, receivers should have believed videos that were shared more often less when information about sharing behavior was provided. We hypothesized that a video that was previously shared may be interpreted as credible, and hence may be more likely to be believed.

Table B.16: Description of Additional Treatments in Experiment 1

Treatment	Description	N
Prior Treatment	No sharing-rate information	192
	Information about:	
Sharing-Rate Information	Sharing rates of a group of other receivers	371
Most-Shared Information	Most shared videos by a group of other receivers	389

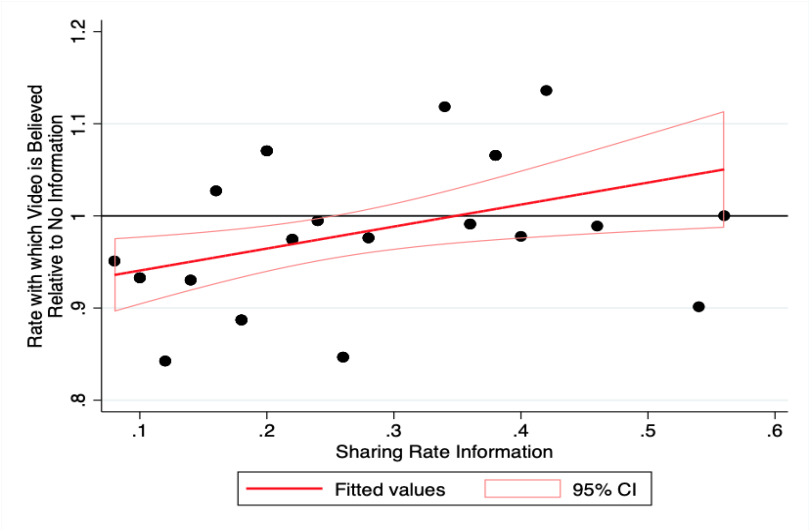
B.5.1 Results

Effects on Beliefs

Figures B.5a and B.5b display the effect of sharing information on the likelihood that a video is believed, relative to the No Information treatment. A relative belief rate of 1 indicates the video was believed as often as in the No Information treatment.

Figure B.5a shows the relative frequency with which videos were believed depending on the sharing rate seen by receivers. On average, the more often a video was shared, the more often it was believed. Receivers tended to believe infrequently shared videos (less than 20% of the time) less often than videos about which no sharing information was given. More frequently shared videos were directionally

(a) Beliefs and Sharing Rate Information



(b) Beliefs and Most-Shared Video Information

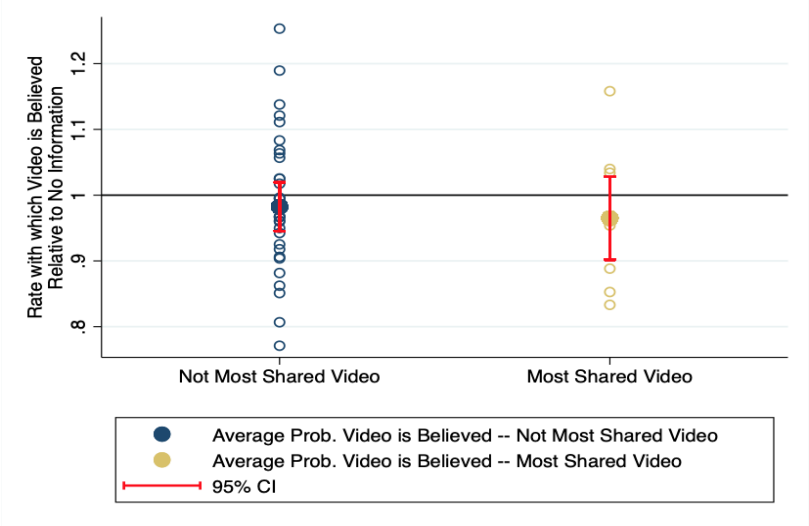


Figure B.5: Video-level sharing information and *relative* credibility of videos

more likely to be believed.

Figure B.5b shows the relative frequency with which videos were believed depending on whether they were the most shared. Providing information about which video was chosen most often did not have an effect on credibility. If receivers learned a video had been the most shared, they believed it slightly less than without such information (0.967), whereas if a video was not among the most shared, receivers believed it at the same rate as without such information (0.990).

These descriptive results are confirmed in regression analyses. Table B.17 tests the effects of both kinds of sharing information on the likelihood that a receiver believed a video. All regressions include an indicator variable for the treatment, Sharing-Rate Information or Most-Shared Information, as well as an interaction term between the treatment and the information provided. In the Sharing-Rate Information treatment we standardize sharing rates within each version of information provided to receivers.[1] Columns (1)-(2) show the effect for the whole sample, with and without video fixed effects, whereas columns (3) and (4) separate the results by the receiver's gender. Consistent with Figure B.2 (a), we observe that an increase in the standardized sharing rate increases the likelihood that a video is believed. Receiving information about the video shared most often, however, did not affect beliefs.

In our experiment, receivers should have been more likely to believe the less frequently shared videos, and less likely to believe the more frequently shared videos. We quantify this relationship by predicting the likelihood that a video is true based on how often receivers shared it in the Prior treatment. More precisely, we predict truthfulness, using a probit regression in which the dependent variable is whether a video is true, and the independent variables are the sharing rates and the squared sharing rate of receivers in the Prior treatment. The results are shown in Figure B.6a. We find the "optimal" belief about a video's truthfulness decreased in sharing information, unless the sharing rate was very high. The data indicate receivers were far from this optimal belief. First, they more often believed videos that were shared more. Second, they reacted little to sharing information, despite its potential informativeness about the credibility of a video.

Figure B.6b displays the average rate with which receivers believed a video, and compares it with the video's actual truthfulness. Actual truthfulness was calculated

[1]This strengthens the results relative to regressions including the absolute level of sharing rate information, which are then marginally significant. By standardizing within each version, we take into account the whole set of sharing rates seen by the receiver. Hence, these effects measure whether seeing a relatively high rate of sharing, given the sharing rates observed in a version, increases the likelihood with which a video is believed. The results indicate that the answer is yes.

Table B.17: Effect of Sharing Information on Beliefs

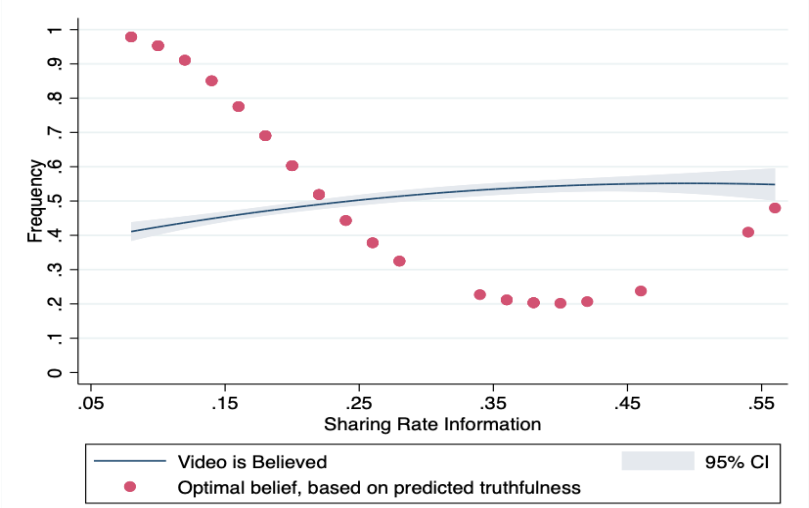
	(1)	(2)	(3)	(4)
		Video is believed (=1)		
	All	All	Male	Female
Sharing Rate Treatment (=1)	-0.012	-0.012	-0.022	-0.001
	(0.011)	(0.011)	(0.015)	(0.016)
Sharing Rate Treatment (=1) X Std. Video Sharing Rate	0.045***	0.013*	0.013	0.014
	(0.006)	(0.006)	(0.008)	(0.010)
Most Shared Treatment (=1)	-0.009	-0.009	-0.027*	0.010
	(0.011)	(0.011)	(0.016)	(0.014)
Most Shared Treatment (=1) X Most Shared Video	-0.008	-0.004	0.015	-0.024
	(0.014)	(0.015)	(0.022)	(0.022)
Female	0.002	0.002		
	(0.008)	(0.008)		
Age	0.000	0.000	0.000	0.000
	(0.000)	(0.000)	(0.001)	(0.001)
Read NYT Daily	0.007	0.007	-0.002	0.022
	(0.017)	(0.017)	(0.020)	(0.029)
Constant	0.488***	0.558***	0.577***	0.542***
	(0.011)	(0.020)	(0.026)	(0.029)
Video Fixed Effects	No	Yes	Yes	Yes
Observations	19,040	19,040	10,520	8,520
R-squared	0.003	0.132	0.128	0.141

Notes: Estimates from linear regressions on whether a participant believes a video is true. Sharing-Rate Treatment and Most-Shared Treatment are indicator variables that take the value of 1 if the treatment is the Sharing-Rate Information treatment or the Most-Shared Information treatment, respectively. The omitted treatment is the Prior treatment. Video fixed effects are included in columns (2)-(4). Column (3) only includes male receivers, and column (4) only includes female receivers. All regressions include controls for the (standardized) age of the receiver, whether the receiver reads the NYT daily, and the time spent watching the video. A control for the order in which videos were presented is also included in all specifications. Robust standard errors, clustered at the participant level, are presented in parentheses. ***, **, and * indicate 1%, 5% and 10% significance levels.

also based on the Prior treatment. For each receiver, four groups of videos were randomly drawn, and the truthfulness of the most shared video and those of those not most shared was calculated. As we find in Table B.17, receivers directionally reacted by being less likely to believe the video that was shared the most often. In this case, their reaction was closer to optimal, though too weak.

Comparing receivers' actual beliefs with optimal beliefs reveals two main patterns. First, receivers did not adjust their beliefs in the correct direction. Although they should have believed the shared videos less, they believed them more. Acting in a

(a) Optimal Beliefs and Sharing Rate Information



(b) Optimal Beliefs and Most-Shared Video Information

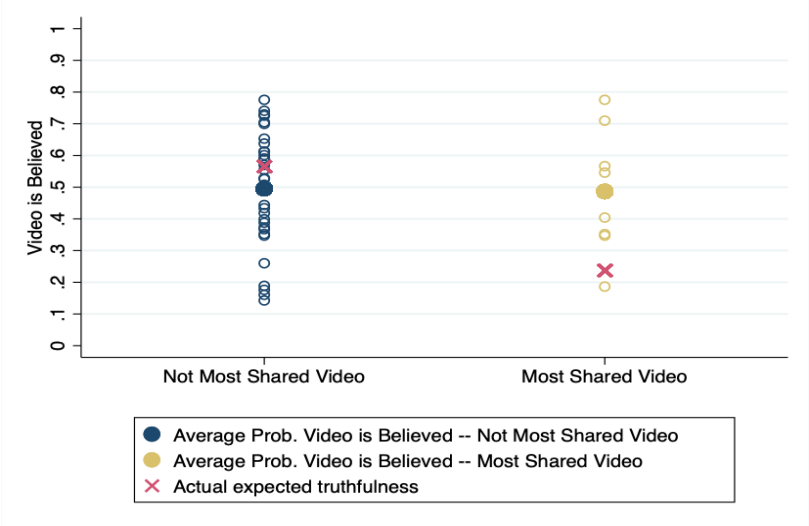


Figure B.6: Optimal and Actual Beliefs in Response to Sharing Information

contrarian manner appears to be less intuitive for individuals (Eyster, Rabin, and Weizsacker, 2018). Second, receivers adjusted their belief less than they should have. Other experiments in which individuals update their beliefs based on signals provided by the experimenter document this conservatism (e.g., Möbius et al., 2014).

Aggregate Effects on Detection Ability

Because receivers used sharing information to weakly update in the wrong direction, their ability to detect lies decreased to 48.4% when information on sharing rates was provided, compared to 51.2% without such information (t-test, $p = 0.0075$). The effect size is small, approximately 3 percentage points, but statistically significant. By contrast, providing information on which video was most often shared did not affect their ability to detect false videos. The percentage of correctly detected videos is 50.3% in the Most-Shared Information treatment (t-test, $p = 0.4004$). The average ability of receivers, as well as their confidence, in each treatment is shown in Figure B.7.

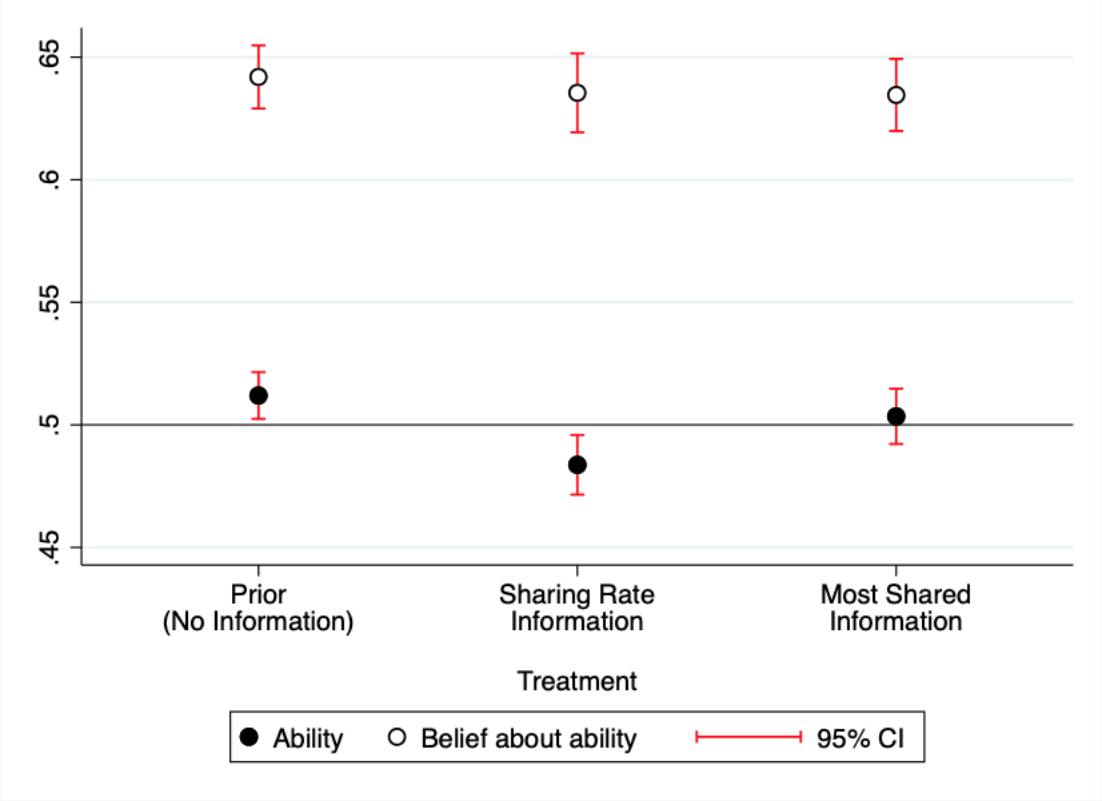


Figure B.7: Detection ability by treatment

Sharing information did not affect receivers' confidence. Receivers remained similarly overconfident about their ability, reporting that they believed they had correctly assessed the truthfulness of 63.5% and 63.4% of the videos in the Sharing-Rate

Information and Most-Shared Information treatments, respectively. These confidence levels are not significantly different from the levels in the Prior treatment, 64.2% (t-test, $p = 0.6446$ and 0.5821, respectively). Similarly, they displayed relative overconfidence, reporting that their average quartile in the distribution was 2.06 and 2.05 in the Sharing-Rate Information and Most-Shared Information treatments. This average reported quartile is not different from that in the Prior treatment, 1.98 (t-test, $p = 0.2088$ and 0.2500, respectively).

References

[1] Eyster, E., Rabin, M. and G. Weizsacker (2018). An Experiment on Social Mislearning. Working paper.

[2] Möbius, M. M., Niederle, M., Niehaus, P. and Rosenblat, T. (2014). Managing Self-Confidence: Theory and Experimental Evidence. Working paper.

[3] Schaeffer, B. (2007). The Digital Literacy of Seniors. *Research in Comparative and International Education* 2 (1), 29-42.

Appendix C. Pre-registration Materials

In what follows we provide the pre-registration materials. Pre-registration numbers are provided in the main text.

ASPREDICTED

(http://credlab.wharton.upenn.edu)

Wharton CREDIBILITY LAB
University of Pennsylvania

As Predicted:"*Lie Detection_Experiment1_Wave1*" (#16666)

Created: 11/18/2018 02:35 PM (PT)

Author(s)
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Uri Gneezy (UCSD) - ugneezy@ucsd.edu

1) Have any data been collected for this study already?
No, no data have been collected for this study yet.

2) What's the main question being asked or hypothesis being tested in this study?
There are two main research questions: (a) how good are people at detecting lies? And (b) how confident are people about their ability to detect lies.
Participants will be shown 20 videos, in blocks of 5, of individuals either truthfully describing a headline and picture of a news event from the New York Times, or making the news event up. They will be compensated for correctly guessing whether the individual in the video was lying or telling the truth.
Our main hypotheses are:
1. People will not be better than chance at guessing whether the person provides a true or false account. This will include believing a false statement (type I error) and not believing a true one (type II error).
2. We expect people to be overconfident about their ability to detect true/false.
3. We expect people to share/think that false videos are more interesting.

3) Describe the key dependent variable(s) specifying how they will be measured.
- Individual score of each participant within a block, and in total over all blocks
- Individual belief about performance in each block (belief about the score)
- Individual belief about performance relative to others (which quartile of the distribution of scores they believe they are in)
- Individual choice of video to share with other participants
- Individual choice of three videos for which to receive a bonus for correctly guessing their veracity
- Aggregate rating of each video as truthful or false
- Likelihood that a truth is detected and likelihood that a lie is detected on aggregate

4) How many and which conditions will participants be assigned to?
As a first step, there will be 1 condition only.

5) Specify exactly which analyses you will conduct to examine the main question/hypothesis.
(a) whether participants are better than chance, and whether the distribution of scores differs from a distribution based on chance
(b) whether participants are better at detecting lies than at detecting truths
(c) whether they are overconfident about their absolute ability to detect lies, and their relative ability to detect lies,
(d) whether there is “wisdom of the crowd”, that is whether the aggregate belief of the crowd is better than chance
(e) whether the video that is considered most popular (to be shared with others) is a lie.
(f) whether videos that are lies are considered more popular than those that are lies
(g) whether the three guesses they are most certain about are correct, and whether they are guesses that the individual lied or told the truth
(h) whether individuals’ confidence is correlated with their actual ability
(i) whether overconfidence decreases with experience
(j) whether men are more overconfident in their ability to detect lies than women

6) Describe exactly how outliers will be defined and handled, and your precise rule(s) for excluding observations.
We will exclude individuals who answer the control questions wrong

7) How many observations will be collected or what will determine sample size?
No need to justify decision, but be precise about exactly how the number will be determined.
We will collect 300 observations.

8) Anything else you would like to pre-register?

(e.g., secondary analyses, variables collected for exploratory purposes, unusual analyses planned?)

We will collect information on gender, age, studies, and readership of the New York Times. We will also measure the time individuals take to make their guesses. We plan to run exploratory analyses based on these participant's characteristics/behaviors.

Also, the 20 videos are composed of news events described by 10 individuals (5 males and 5 females). We will use information on the gender of the individuals of the video to examine what are the drivers of credibility.

We will also explore whether there are characteristics of the speech used, facial expressions and movements in front of the screen that are predictive of lying or truthful behavior.

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Wharton CREDIBILITY LAB
University of Pennsylvania

As Predicted:"*Lie Detection_Experiment1_Wave2_A*" (#18131)

Created: 12/20/2018 05:25 AM (PT)

Author(s)
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Uri Gneezy (UCSD) - ugneezy@ucsd.edu

1) Have any data been collected for this study already?
No, no data have been collected for this study yet.

2) What's the main question being asked or hypothesis being tested in this study?
There are four main research questions: (a) how good are people at detecting lies? (b) how confident are people about their ability to detect lies, (c) do people share fake news more frequently and (d) are videos that are shared more often also more likely to be believed?

Participants will be shown 20 videos, in blocks of 5, of individuals either truthfully describing a headline and picture of a news event from the New York Times, or making the news event up. They will be compensated for correctly guessing whether the individual in the video was lying or telling the truth.

Our main hypotheses are: (1) People will not be better than chance at guessing whether the person provides a true or false account. This will include believing a false statement (type I error) and not believing a true one (type II error). (2) We expect people to be overconfident about their ability to detect true/false. (3) We expect people to share/think that false videos are more interesting. (4) We expect videos that are shared more often are more likely to be believed.

3) Describe the key dependent variable(s) specifying how they will be measured.
The key dependent variables are:
Individual choice of 5 videos to share with other participants
Individual score of each participant within a block, and in total over all blocks
Rating of each video as truthful or false
Individual belief about performance in each block (belief about the score)
Individual belief about performance relative to others (which quartile of the distribution of scores they believe they are in)
Individual choice of three videos for which to receive a bonus for correctly guessing their veracity
Likelihood that a truth is detected and likelihood that a lie is detected on aggregate

4) How many and which conditions will participants be assigned to?
There will be 4 conditions: (1) Baseline, in which individuals will rate the videos without prior information; (2) Prior, same as Baseline but informing individuals that each video has a 50% chance of being true; (3) Sharing Info 1: Individuals will learn about the rate at which each video was shared by a group of 50 selected participants in Prior; (4) Sharing Info 2: Individuals will learn about the rate at which each video was shared by a different group of 50 selected participants in Prior.

5) Specify exactly which analyses you will conduct to examine the main question/hypothesis.
We will test:
(a) whether participants are better than chance, and whether the distribution of scores differs from a distribution based on chance, by treatment.
(b) whether providing information about the prior changes individuals' performance in detecting fake news and the confidence in their detection.
(c) whether the videos that are considered most popular (to be shared with others) are more frequently lies.
(d) whether learning that a video was shared frequently increases the likelihood that the video is believed. We will compare a high frequency to a low frequency (between Sharing Info 1 and 2), controlling for the exact difference. We will also compare Sharing Info treatments to Prior and Baseline where no information was given. We will split videos by median frequency of sharing, to compare above median to below median.

We will also analyze whether: (e) whether participants are better at detecting lies than at detecting truths, and the influence of sharing information on this ability; (f) whether they are overconfident about their absolute ability to detect lies, and their relative ability to detect lies; (g) whether there is "wisdom of the crowd", that is whether the aggregate belief of the crowd is better than chance; (h) whether videos that are lies are considered more popular than those that are lies; (i) whether the three guesses they are most certain about are correct, and whether they are guesses that the individual lied or told the truth; (j) whether individuals' confidence is correlated with their actual ability; (k) whether overconfidence decreases with experience; (l) whether men are more overconfident in their ability to detect lies than women; (m) whether there are gender differences in the effect of sharing information.

6) Describe exactly how outliers will be defined and handled, and your precise rule(s) for excluding observations.

We will exclude individuals who answer the control questions wrong

7) How many observations will be collected or what will determine sample size?
No need to justify decision, but be precise about exactly how the number will be determined.
We will collect 100 observations for Baseline, 200 for Prior, Sharing Info 1 and Sharing Info 2. We will merge Baseline with AsPredicted Preregistration #16666 if results are similar.

8) Anything else you would like to pre-register?

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Wharton CREDIBILITY LAB
University of Pennsylvania

As Predicted:"*Lie Detection_Experiment1_Wave2_B*" (#19263)

Created: 02/04/2019 09:25 AM (PT)

Author(s)
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Uri Gneezy (UCSD) - ugneezy@ucsd.edu

1) Have any data been collected for this study already?
No, no data have been collected for this study yet.

2) What's the main question being asked or hypothesis being tested in this study?
In a series of experiments, we have examined how good people are at detecting lies, how confident they are about their ability to detect lies, whether they share fake news more frequently and whether providing information about sharing rates increases the credibility of news events. In this experiment, using the same experimental design, we aim to test whether learning that a video was the most frequently shared within a group increases its credibility.
Participants will be shown 20 videos, in blocks of 5, of individuals either truthfully describing a headline and picture of a news event from the New York Times, or making the news event up. They will be compensated for correctly guessing whether the individual in the video was lying or telling the truth.
Our main hypothesis is that videos that are shared most often are more likely to be believed.

3) Describe the key dependent variable(s) specifying how they will be measured.
The key dependent variables are: (a) Whether an individual correctly detects true and fake news events, and (b) Rating of each video as truthful or false.
Also:
-Individual belief about performance in each block (belief about the score)
-Individual belief about performance relative to others (which quartile of the distribution of scores they believe they are in)
-Individual choice of three videos for which to receive a bonus for correctly guessing their veracity
-Likelihood that truth is detected and likelihood that a lie is detected on aggregate

4) How many and which conditions will participants be assigned to?
-Most Shared A: Individuals will learn which video, within groups of 5, was most often shared by a group of 50 selected participants from the Prior treatment (see AsPredicted #18131).
-Most Shared B: Individuals will learn which video, within groups of 5, was most often shared by a different group of 50 selected participants from the Prior treatment (see AsPredictec #18131).

5) Specify exactly which analyses you will conduct to examine the main question/hypothesis.
We will test:
(a) whether participants are better than chance, and whether the distribution of scores differs from a distribution based on chance.
(b) whether learning that a video was the most shared increases the likelihood that the video is believed. We will compare the credibility of a video when individuals are informed that it is shared most often, to cases in which it is not. As a benchmark, we will compare the Most Shared A and B treatments to Prior and Baseline where no information was given. We will also compare the effect of sharing information on fake news events and true news events.
We will also analyze whether:
(c) whether sharing information affects the ability to detect fake and true news events.
(d) whether participants are equally overconfident about their absolute ability to detect lies, and their relative ability to detect lies,
(e) whether there is the same “wisdom of the crowd”, that is whether the aggregate belief of the crowd is better than chance
(f) whether the three guesses they are most certain about are correct, and whether they are guesses that the individual lied or told the truth
(g) whether men are more overconfident in their ability to detect lies than women
(h) whether there are gender differences in the effect of sharing information

6) Describe exactly how outliers will be defined and handled, and your precise rule(s) for excluding observations.
We will exclude individuals who answer the control questions wrong.

7) How many observations will be collected or what will determine sample size?
No need to justify decision, but be precise about exactly how the number will be determined.
We will collect 200 observations for Most Shared A and Most Shared B, each.

8) Anything else you would like to pre-register?
(e.g., secondary analyses, variables collected for exploratory purposes, unusual analyses planned?)
We will collect information on gender, age, studies, and readership of the New York Times. We will also measure the time individuals take to make their guesses. We plan to use these participant's characteristics/behaviors as controls in the analysis of the determinants of individuals' ability to detect fake and true news.

To share this pre-registration you need to make a .pdf. If you are submitting for peer-review you probably want to first make an anonymous .pdf, and once the paper is accepted

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(http://credlab.wharton.upenn.edu)

Wharton CREDIBILITY LAB
University of Pennsylvania

As Predicted:"*Lie Detection_Experiment2_84videos*" (#19319)

Created: 02/05/2019 11:57 AM (PT)

Author(s)
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Uri Gneezy (UCSD) - ugneezy@ucsd.edu

1) Have any data been collected for this study already?
No, no data have been collected for this study yet.

2) What's the main question being asked or hypothesis being tested in this study?
In a series of experiments, we have examined how good people are at detecting lies, how confident they are about their ability to detect lies, whether they share fake news more frequently and whether providing information about sharing rates increases the credibility of news events.
In past experiments, participants were always shown the same 20 videos in which individuals either truthfully described a headline and picture of a news event from the New York Times, or made the news event up. We have collected 84 additional videos, from a new set of individuals who performed the same task and were incentivized to convince the reader that they were seeing an actual news event. These 84 videos have been split into 11 groups of 8 videos (4 true, 4 false, and also 4 by men and 4 by women). We will show each new participant 8 videos.
Our main hypotheses are as before (with 20 videos): (1) People will not be better than chance at guessing whether the person provides a true or false account. This will include believing a false statement (type I error) and not believing a true one (type II error); (2) We expect people to be overconfident about their ability to detect true/false news reports; (3) We expect people to share/think that false videos are more interesting.

3) Describe the key dependent variable(s) specifying how they will be measured.
The key dependent variables are: -Individual score of each participant within a block, and in total; -Rating of each video as truthful or false; -Individual choice of 1 video to share with other participants.
Also: -Individual belief about performance in for each block of 4 videos (belief about the score); -Individual choice of one video for which to receive a bonus for correctly guessing its veracity; -Likelihood that a truth is detected and likelihood that a lie is detected on aggregate.

4) How many and which conditions will participants be assigned to?
There will be 1 main condition, in which individuals will rate the videos.

5) Specify exactly which analyses you will conduct to examine the main question/hypothesis.
We will test:
(a) whether participants are better than chance, and whether the distribution of scores differs from a distribution based on chance, by treatment.
(b) whether the videos that are considered most popular (to be shared with others) are more frequently lies.
(c) whether participants are better at detecting lies than at detecting truths,
(d) whether they are overconfident about their absolute ability to detect lies,
(e) whether there is “wisdom of the crowd”, that is whether the aggregate belief of the crowd is better than chance
(f) whether videos that are lies are considered more popular than those that are lies
(g) whether individuals’ confidence is correlated with their actual ability
(h) whether overconfidence decreases with experience
(i) whether the one guess they are most certain about is correct, and whether it is a guess that the individual lied or told the truth
(j) whether men are more overconfident in their ability to detect lies than women
(k) whether the credibility of news events depends on the gender of the reporter

6) Describe exactly how outliers will be defined and handled, and your precise rule(s) for excluding observations.
We will exclude individuals who answer the control questions wrong

7) How many observations will be collected or what will determine sample size?
No need to justify decision, but be precise about exactly how the number will be determined.
We will collect 1100 observations.

8) Anything else you would like to pre-register?
(e.g., secondary analyses, variables collected for exploratory purposes, unusual analyses planned?)

We will collect information on gender, age, studies, and readership of the New York Times. We will also measure the time individuals take to make their guesses. We plan to run exploratory analyses based on these participant's characteristics/behaviors.
As mentioned above, the 84 videos are composed of news events described by 42 individuals (20 males and 21 females). In addition to using information on the gender of the individuals of the video to examine what are the drivers of credibility, we will explore whether there other characteristics of the person of the video, and his/her behavior in front of the screen that are predictive of lying or truthful behavior.

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As Predicted:"*Lie Detection_Experiment3_A*" (#41933)

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Author(s)
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1) Have any data been collected for this study already?
No, no data have been collected for this study yet.

2) What's the main question being asked or hypothesis being tested in this study?
There are four main research questions: (a) how good are people at detecting lies? (b) how confident are people about their ability to detect lies, (c) do people share fake news more frequently and (d) are videos that are shared more likely to be believed?
Participants in the role of R1 will be shown 8 videos, in blocks of 4, of individuals either truthfully describing a headline and picture of a news event from the New York Times, or making the news event up. They will be compensated for correctly guessing whether the individual in the video was lying or telling the truth. They will also be compensated for selecting a video to share with another participant, R2, if that participant chooses to watch it and the video is true (or is believed).
Our main hypotheses are: (1) R1 will not be better than chance at guessing whether the person provides a true or false account. This will include believing a false statement (type I error) and not believing a true one (type II error); (2) R1 will be overconfident about their ability to detect true/false; (3) R1 will be more likely to share false videos than true ones; (4) We expect that R2 will be more likely to believe a video that R1 shared than when it is not.

3) Describe the key dependent variable(s) specifying how they will be measured.
The key dependent variables are: R1 choice of which video (true or false) to share with R2; R1 and R2 performance within a block, and in total over all blocks; Rating of each video as truthful or false.
Also: R1 and R2 belief about their performance in each block; Belief about performance relative to others (which quartile of the distribution of scores they believe they are in); Individual choice of 1 video for which to receive a bonus for correctly guessing their veracity; R1 belief about the likelihood that another participant will believe the shared video; Likelihood that a truth is detected and likelihood that a lie is detected on aggregate.

4) How many and which conditions will participants be assigned to?
There will be 5 conditions: First, two conditions in which sharing decisions are made: Baseline-True, in which R1 will rate 8 videos as true or false and be incentivized to be correct. Then R1 will choose a video to share with R2, and will earn a bonus if R2 will choose to watch it and the video is actually true. Baseline-Believed: Same as Baseline True, but instead of the video being true for R1 to earn the bonus, it needs to be believed by R2.
Second, two conditions in which viewing decisions are made based on sharing: Sharing-True: R2 will learn which video was shared by R1 s/he is matched with in Baseline-True. Sharing-Believed: R2 will learn which video was shared by a R1 s/he is matched with in Baseline-Believed.
Since participants in Sharing 1 and 2 will choose a subset of videos to watch, we will run an additional control condition (Baseline-Choice), in which participants also choose a subset of videos to watch, but do not receive any sharing information.

5) Specify exactly which analyses you will conduct to examine the main question/hypothesis.
We will test: (a) whether participants are better than chance, and whether the distribution of scores differs from a distribution based on chance, by treatment; (b) whether the videos that are shared are more frequently lies; (c) whether learning that a video was shared increases the likelihood that the video is believed. We will compare beliefs about a video that is shared, compared to the same video when it has not been shared. We will also compare videos against the baseline without sharing information. We will only include videos for which there are at least 10 observations of beliefs when the video was shared.
We will also analyze whether: (d) they are overconfident about their absolute ability to detect lies, and their relative ability to detect lies, (e) there are gender differences in the effect of sharing information.

6) Describe exactly how outliers will be defined and handled, and your precise rule(s) for excluding observations.
We will exclude individuals who answer the control questions wrong

7) How many observations will be collected or what will determine sample size?
No need to justify decision, but be precise about exactly how the number will be determined.
We will collect 400 observations for Baseline-True, 400 for Baseline-Believed, 400 for Sharing-True, 400 for Sharing-Believe and 200 for Baseline-Choice. We will merge Baseline-Choice, both Baseline-True and Baseline-Believed, and with AsPredicted Preregistration #16666 if results are similar. We will also merge Sharing-True and Sharing-Believed if results are similar.

8) Anything else you would like to pre-register?
(e.g., secondary analyses, variables collected for exploratory purposes, unusual analyses planned?)
We will collect information on gender, age, studies, and readership of the New York Times. We will also measure the time individuals take to make their guesses. We plan to run exploratory analyses based on these participant's characteristics/behaviors.

To share this pre-registration you need to make a .pdf. If you are submitting for peer-review you probably want to first make an anonymous .pdf, and once the paper is accepted

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Wharton CREDIBILITY LAB
University of Pennsylvania

As Predicted:"*Lie Detection_Experiment3_B*" (#42342)

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Author(s)
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1) Have any data been collected for this study already?
No, no data have been collected for this study yet.

2) What's the main question being asked or hypothesis being tested in this study?
This pre-registration adds one more treatment to pre-registration #41933 (with data collection in progress currently), in which we asked whether people share lies more frequently and whether videos that are shared more likely to be believed. This treatment focuses on participants in the role of R2, who will be shown 8 videos, and indicated which video was shared by another participant in the role of R1. In this treatment, R2s will not know about the incentives of R1 when choosing to share a video. Our main hypothesis is that R2 will be more likely to believe a video that R1 shared.

3) Describe the key dependent variable(s) specifying how they will be measured.
The key dependent variables are:
- R2 performance in detecting videos as lies or truths
- Rating of each video as truthful or false
Also, R2 belief about their performance.

4) How many and which conditions will participants be assigned to?
There will be one condition in which R2 will learn which video was shared by a previous participant in the role of R1. He/she will not know the incentives of R1.

5) Specify exactly which analyses you will conduct to examine the main question/hypothesis.
We will test:
(a) whether participants are better than chance, and whether the distribution of scores differs from a distribution based on chance, by treatment.
(b) whether learning that a video was shared increases the likelihood that the video is believed. We will compare beliefs about a video that is shared, compared to the same video when it has not been shared. We will also compare videos against the baseline without sharing information. We will only include videos for which there are at least 10 observations of beliefs when the video was shared.
We will also analyze whether they are overconfident about their absolute ability to detect lies, and their relative ability to detect lies and whether there are gender differences in the effect of sharing information.

6) Describe exactly how outliers will be defined and handled, and your precise rule(s) for excluding observations.
We will exclude individuals who answer the control questions wrong.

7) How many observations will be collected or what will determine sample size?
No need to justify decision, but be precise about exactly how the number will be determined.
We will aim to collect 200 observations. We aim to merge these results with those of AsPredicted Preregistration #41933, which is currently being collected.

8) Anything else you would like to pre-register?
(e.g., secondary analyses, variables collected for exploratory purposes, unusual analyses planned?)
We will collect information on gender, age, studies, and readership of the New York Times. We will also measure the time individuals take to make their guesses. We plan to run exploratory analyses based on these participant's characteristics/behaviors.