**“I’ve said it before and I will say it again...”:
Repeating statements made by Donald Trump increases perceived truthfulness for
individuals across the political spectrum**

Authors

^aSamuel Murray, ^{a,c}Matthew Stanley, ^{b,c}Jon McPhetres,
^{c,d}Gordon Pennycook, & ^{a,c}Paul Seli

^aDepartment of Psychology and Neuroscience, Duke University, Durham, NC, USA

^bSloan School of Management, Massachusetts Institute of Technology, Cambridge, MA,
USA

^cHill/Levene Schools of Business, University of Regina, Regina, Saskatchewan, Canada

^dDepartment of Psychology, University of Regina, Regina, Saskatchewan, Canada

^eCenter for Cognitive Neuroscience, Duke University, Durham, NC, USA

Author Note

Correspondence may be directed to Samuel Murray, Department of Psychology and Neuroscience, Duke University, 417 Chapel Dr., Durham, NC, 27708. Email: samuel.f.murray@duke.edu.

Abstract: 135

Word Count: 738 (Introduction/Discussion)

References: 17

Abstract

Fact-checking organizations have reported that Donald Trump is prone to repeating patently false statements. Previous research has shown that repetition increases perceived truthfulness of even implausible statements (also known as the illusory truth effect). However, other research has shown that people may engage in motivated reasoning when interacting with someone from a different ideological group. We measured the effect of repeating statements made by Donald Trump on perceived truthfulness. Participants ($N = 465$) rated the truthfulness of different statements made by Donald Trump, some of which were repeated from an earlier phase of the experiment. Our results are striking. We observe an overall effect of repetition on perceived truthfulness that is equally robust regardless of political affiliation. Our results suggest that ideologically-motivated beliefs do not modulate the effect of repetition on perceived truthfulness of statements.

Keywords: truth, repetition, illusory truth, Donald Trump, politics

“I’ve said it before and I will say it again: the Mainstream Media is out to bring down my Administration.”

-Donald Trump, Oct. 14, 2018

On June 16, 2015, Donald Trump announced his candidacy for President of the United States. Trump promised, among other things, to build a wall along the border between the United States and Mexico. In March 2018, after receiving limited Congressional funding for a border fence, Trump stated that construction of the wall had begun. Between March 2018 and December 2018, Trump repeated this false claim a staggering 86 times, despite fact-checking organizations repeatedly pointing out that no wall was being built. This is not an isolated incident: Analysts from *The Washington Post* report that, as of this writing, Trump has made over 15,000 false statements during his presidency, many of which are repeats (Kessler, Rizzo, & Kelly, 2019).

The volume of Trump’s repeated falsehoods invites an important question: Are people likely to believe him? Past research indicates that not only are people likely to continue to believe Trump’s falsehoods despite fact-checker warnings (Berinsky, 2017; Lewandowsky et al., 2012; Nyhan & Reifler, 2010), but repeating falsehoods might actually *increase* belief in them (Dechêne et al., 2010). That is, research has shown that repetition increases perceived truthfulness (Hasher, Goldstein, & Toppino, 1977). This *illusory truth effect* (ITE) was initially demonstrated using ambiguous trivia (Hasher et al., 1977), but has also been found for other kinds of statements (Arkes, Hackett, & Boehm, 1989; Johar & Roggeveen, 2007). More recently, the boundaries of the effect have been extended. Research has demonstrated increases in perceived truth for trivia statements that are known to be false (Fazio et al., 2015), and even for fake-news headlines (Pennycook, Cannon, & Rand, 2018). Furthermore, research has shown that the ITE is likely to be equivalent regardless of how plausible (or implausible) the repeated statements are (once floor and ceiling effects are taken into account; Fazio, Rand, & Pennycook, 2019).

This suggests that Trump’s repetition is likely to be effective. However, the present study differs from past research insofar as participants (especially Democrats) may be resistant to the ITE because of motivated reasoning. Some research has shown that people use source information in a motivated way when judging content (Koch & Forgas, 2012). Recent work has shown that an initial accuracy focus undermines the ITE (Brashier, Eliseez, and Marsh, 2020), and Democrats might focus more on accuracy when initially assessing statements from Trump (Porter, Wood, & Bahador, 2019). When Trump makes a false statement, Democrats are aware that the statement is coming from someone with whom they strongly disagree. As such, motivation to refrain from endorsing Trump’s statements may buffer them from the ITE in this case. However, Pennycook et al. (2018) found an ITE for fake news headlines that were inconsistent with one’s stated political ideology (i.e., Pro-Democratic false headlines among Republicans). However, these headlines were not explicitly labeled as pro-Democratic or pro-Republican. Hence, the lack of source information might have played a role in driving the effect. It is unclear, therefore, whether the ITE will emerge when people across the political spectrum are presented with statements (true or false) made by Donald Trump.

Materials and Method

The data, materials, and preregistration for this study are available at: <https://osf.io/h6bu3>.

Participants. We recruited 526 participants ($M_{\text{age}} = 38.43$ years, $SD_{\text{age}} = 11.9$, female = 210) through Amazon's Mechanical Turk to complete an online study rating statements made by Donald Trump. We only recruited participants located in the United States with a HIT approval rate greater than or equal to 97% and at least 500 previously approved HITs. Based on recent studies of the ITE (Fazio, Rand, & Pennycook, 2019), we aimed to recruit around 500 participants. Participants were made aware that their answers would be anonymous and were monetarily compensated for their participation. This research was approved by the Institutional Review Board of Duke University.

Materials. We used the PolitiFact website to generate a list of 105 statements made by Donald Trump between November 2, 2016 and October 9, 2019 (<https://www.politifact.com/personalities/donald-trump/>). PolitiFact is a non-partisan fact-checking organization dedicated to investigating and verifying statements made by political leaders and political donors. PolitiFact provides independent fact checking for these statements with a rating system that includes 'True', 'Mostly True', 'Half True', 'Mostly False', 'False', and 'Pants on Fire'. We converted these labels into numerical values, with 6 = True, 5 = Mostly True, 4 = Half True, 3 = Mostly False, 2 = False, and 1 = Pants on Fire. 8% of statements (8/105) had a truth value of Pants on Fire, 27% (28/105) had a truth value of False, 19% (20/105) had a truth value of Mostly False, 20% (21/105) had a truth value of Half True, 18% (19/105) had a truth value of Mostly True, and 9% (9/105) had a truth value of True. All stimuli are available at: <https://osf.io/h6bu3>. We randomly divided these statements into two sets, one consisting of 52 statements and the other consisting of 53 statements. Each set contained roughly half of the statements from each truth-rating category.

Procedure. After providing informed consent, participants completed the first phase of the experiment. In this phase, participants were randomly assigned to one of two conditions and asked to rate either 52 or 53 statements for subjective interest using a 6-point scale (1 = very uninteresting, 2 = uninteresting, 3 = slightly uninteresting, 4 = slightly interesting, 5 = interesting, 6 = very interesting). This is a commonly used scale for the first phase of illusory truth studies (see Fazio et al., 2015; Fazio, Rand, & Pennycook, 2019), and the purpose is to ensure that participants actively encode the statements. All participants were explicitly told that Donald Trump made these statements sometime between August 2016 and August 2019. We also informed participants that a bi-partisan fact-checking organization had rated some of these statements as true and others false.

Following the first phase, participants immediately completed the second phase of the experiment. In this second phase, participants rated 105 statements for perceived truthfulness using a 6-point scale (1 = definitely false, 2 = probably false, 3 = possibly false, 4 = possibly true, 5 = probably true, and 6 = definitely true). All participants were again informed that Donald Trump made these statements sometime between August

2016 and August 2019. Participants were also informed that some statements in this phase appeared in the earlier phase of the experiment.

After completing the second phase, participants provided information about their age, gender, education, and political preferences. Participants indicated political preference by identifying as either a Republican, Democrat, or Independent/Other.

Statistical Analyses. Data were analyzed using R (R Development Core Team, 2009) with the ‘lme4’ software package (Bates, Mächler, Bolker, & Walker, 2015). Data were fit to linear mixed-effects models (LMEM). Item and subject were included as crossed random effects in all models (random intercepts only). The outcome variable in all models was the perceived truth rating provided by participants. Significance for fixed effects was assessed using Satterthwaite approximations to degrees of freedom, and 95% confidence intervals around beta-values were computed using parametric bootstrapping ($n = 1000$). The alpha level for all statistical tests was set at .05.

Results

We first investigated whether previously viewed statements (i.e., repeated statements) were given higher truth ratings than new statements (i.e., non-repeated statements). A LMEM revealed that the judged truth of repeated statements ($M = 3.48$, $SD = 1.50$) was significantly higher than that of non-repeated statements ($M = 3.35$, $SD = 1.52$; $b = .12$, $SE = .01$, $t = 11.10$, $p < .0001$, 95% CI = [.10, .14]).

We next investigated whether the difference in perceived truth between repeated statements and non-repeated statements was dependent upon political party affiliation (Republican, Democrat, Independent/Other). To this end, we included party affiliation into the LMEM (reference case = Republican) along with condition (repeated vs. not repeated) as fixed-factors. The full model is depicted in **Table 1**. As an additional exploratory analysis, to determine whether the ITE persisted for Republicans, Democrats, and Independents/Other, taken separately, we ran three additional LMEMs. Repeated statements were more likely to be judged as true relative to non-repeated statements for Republicans ($n = 119$, $b = .08$, $SE = .02$, $t = 4.10$, $p < .0001$, 95% CI = [.04, .12]), Democrats ($n = 221$, $b = .11$, $SE = .01$, $t = 7.17$, $p < .0001$, 95% CI = [.08, .14]), and Independents/Other ($n = 125$, $b = .15$, $SE = .02$, $t = 7.46$, $p < .0001$, 95% CI = [.11, .19]).

Table 1. Full results from the linear mixed-effects model in Study 1.

Variable	<i>b</i>	<i>SE</i>	<i>t</i>	<i>P</i>	95% CI
Intercept	4.05	.08	47.67	< .0001	[3.87, 4.21]
Condition [T. Repeated]	.08	.02	4.15	< .0001	[.04, .12]
Party [T. Democrat]	-1.03	.09	-11.19	< .0001	[-1.20, -.84]
Party [T. Independent/Other]	-.74	.10	-7.11	< .0001	[-.95, -.54]
Repetition:Party [T. Democrat]	.02	.03	.86	.39	[-.03, .07]
Repetition:Party [T. Independent/Other]	.08	.03	2.61	.009	[.02, .13]

Note. The outcome variable is perceived truth. All 95% CIs are for the beta-estimates.

For additional exploratory analyses, we also identified the particular statements that were rated as ‘false’ and ‘pants on fire’ by PolitiFact. We then computed three LMEMs, one for each party affiliation (Republicans, Democrats, and

Independents/Others). Each model included condition (repeated vs. non-repeated) as a fixed factor and judged truth as the outcome variable. Critically, even for the subset of actually false statements—according to PolitiFact—repetition increased the rating of truthfulness assigned to a statement relative to non-repeated statements for Republicans ($b = .19$, $SE = .04$, $t = 5.22$, $p < .0001$, 95%CI = [.12, .27]), Democrats ($b = .13$, $SE = .03$, $t = 4.90$, $p < .0001$, 95% CI = [.08, .18], and Independents/Others ($b = .17$, $SE = .04$, $t = 4.75$, $p < .0001$, 95% CI = [.10, .25]). Additional analyses can be found in the Supplement.

Discussion

We sought to understand the effect of Trump repeating falsehoods. We've arrived at a simple but consequential finding: Repeating a falsehood makes it seem less false. This was true even for Democrats who, as a group, strongly oppose Trump and are disposed to disbelieve him.

Our results raise a pressing question: What can be done to combat the power of repetition? Recent work shows that the ITE is robust to cognitive individual differences (De Keersmaecker et al., 2019), so the effect is likely difficult to manipulate. In fact, little is known about how to modulate the ITE. Brashier and colleagues recently showed that prompting participants to act as fact checkers undermines the ITE, but only for items for which participants 'know better'. For example, prompting participants with an accuracy focus undermines the ITE when repeating the claim 'The largest ocean is the Atlantic' (Brashier et al., 2020; cf. Rapp et al., 2014). However, people likely do not possess the requisite knowledge to assess many of Trump's political statements concerning—among other things—average household income, employment rates, and gun laws.

More work is needed to understand how to modulate the ITE, especially for those statements with broad social ramifications made by individuals with a highly visible, influential platform.

References

- Arkes, H.R., Hackett, C., & Boehm, L. 1989. "The generality of the relation between familiarity and judged validity," *Journal of Behavioral Decision Making* 2, 81-94.
- Bates, D., Mächler, M., Bolker, B.M., and Walker, S.C. 2015. "Fitting Linear Mixed-Effects Models Using lme4," *Journal of Statistical Software* 67:1.
- Berinsky, A.J. 2017. "Rumors and Health Care Reform: Experiments in Political Misinformation," *British Journal of Political Science* 47:2, 241-62.
- Brashier, N.M., Eliseev, E.D., and Marsh, E.J. 2020. "An initial accuracy focus prevents illusory truth," *Cognition* 194.
- Dechêne, A., Stahl, C., Hansen, J., Wänke, M. 2010. "The Truth about the Truth: A Meta-Analytic Review of the Truth Effect," *Personality and Social Psychology Review* 14:2, 238-57.
- Fazio, L.K., Brashier, N.M., Payne, B.K., and Marsh, E.J. 2015. "Knowledge does not protect against illusory truth," *Journal of Experimental Psychology: General* 144:5, 993-1002.
- Fazio, L.K., Rand, D.G., & Pennycook, G. 2019. "Repetition increases perceived truth equally for plausible and implausible statements," *Psychonomic Bulletin & Review* 26, 1705-10.
- Hasher, L., Goldstein, D., & Toppino, T. 1977. "Frequency and the conference of referential validity," *Journal of Verbal Learning & Verbal Behavior* 16, 107-12.
- Johar, G.V., & Roggeveen, A.L. 2007. Changing false beliefs from repeated advertising: The role of claim-refutation alignment," *Journal of Consumer Psychology* 17, 118-27.
- Kessler, G., Rizzo, S., & Kelly, M. Dec. 16, 2019. "President Trump has made 15,413 false or misleading claims over 1,055 days," *The Washington Post*, retrieved from: <https://www.washingtonpost.com/politics/2019/12/16/president-trump-has-made-false-or-misleading-claims-over-days/>.
- Koch, A. and Forgas, J. 2012. "Feeling good and feeling truth," *Journal of Experimental Social Psychology* 48, 481-85.
- Lewandowsky, S., Ecker, U.K.H., Seifert, C.M., Schwarz, N., and Cook, J. 2012. "Misinformation and Its Correction: Continued Influence and Successful Debiasing," *Psychological Science in the Public Interest* 13:3, 106-31.
- Nyhan, B. and Reifler, J. 2010. "When Corrections Fail: The Persistence of Political Misperceptions," *Political Behavior* 32:3, 303-30.

Pennycook, G., Cannon, T.D., and Rand, D.G. 2018. "Prior exposure increases perceived accuracy of fake news," *Journal of Experimental Psychology: General* 147, 1865-80.

Porter, E., Wood, T.J., and Bahador, B. 2019. "Can presidential misinformation on climate change be corrected? Evidence from Internet and phone experiments," *Research & Politics* 6:3, 1-10.

R Development Core Team. 2009. R: A Language and Environment for Statistical Computing. R Foundation for Statistical Computing, Vienna.

Rapp, D.N., Hinze, S.R., Kohlhepp K., and Ryskin, R.A. 2014. "Reducing reliance on inaccurate information," *Memory & Cognition* 42, 11-26.