Perceiving Fact-Checks as Biased but Nevertheless Persuaded? Effects of Fact-Checking News Delivered by Partisan Media

Pilot Test of Study 2

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1 Participants

For pilot test, we recruited 30 participants with Amazon Mechanical Turk (MTurk). Participants who actually responded to the survey questions received $1. Participants of the pilot test would be excluded when recruiting the sample of main test.

```
df <- read_csv('pilot-test-2-numeric.csv', col_names = TRUE) %>%
  slice(3:n()) %>%
  janitor::clean_names()

df %>% summarise(num_responses = n())
```

```
## # A tibble: 1 x 1
##   num_responses
##           <int>
## 1            30
```

1.1 Attention Check

First of all, we checks whether there are respondents who could not pass the attention checks. The most simple attention checking question requires participants not to answer to specific question. There is only one participant who could not pass the test.

```
df %>% filter(q1_2_1 == 1 & q1_2_2 == 1 & q1_2_3 == 1) %>%
  filter(!is.na(q_attention1)) %>%
  nrow()
```

```
## [1] 1
```

We only leaves those who passed the simple attention check and showing satifactory reCAPTCHA score (above 0.7). There are a few more questions for attention checks but we only take into account only those two criteria in this pilot test.

```
mydata <- df %>% filter(q1_2_1 == 1 & q1_2_2 == 1 & q1_2_3 == 1) %>%
  filter(is.na(q_attention1)) %>%
  mutate(q_recaptcha_score = as.numeric(q_recaptcha_score),
         duration_in_seconds = as.integer(duration_in_seconds)) %>%
  filter(q_recaptcha_score > 0.7 | is.na(.$q_recaptcha_score))

mydata %>% nrow()
```

```
## [1] 29
```

1.2 Duration of Responses

Figure 1 shows how much time did each participant spent to respond the survey.

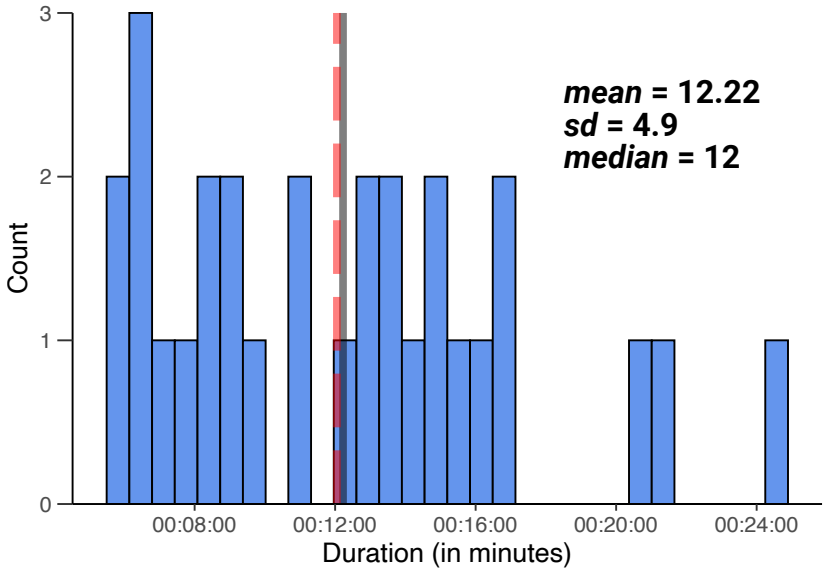

Figure 1: Distribution of duration of each participant

1.3 Distribution of Respondents by Partisanship

We could confirm that the distribution of the partisanship of respondents is skewed.

```
partisanship_tab <- mydata %>%
  group_by(partisanship) %>%
  summarise(n = n())

partisanship_tab %>%
  kbl(booktabs = TRUE, caption = "Distribution of Partisanship") %>%
  kable_styling(position = "center")
```

Table 1: Distribution of Partisanship

partisanship	n
Democrat	15
Moderate	7
Republican	7

2 Responses to the Dependent Variables

2.1 Persuasive Effect of the Fact-Checking News

In the pre-analysis plan, through H1 to H3, we predicted that the effect of fact-checking news would be persuasive, regardless of the attitude consistency to the content of fact-checking news and political slant of news media. Unlike study 1, we measured the effect of fact-checking news with two questions: agreement on the statement (1: Strongly Agree – 7: Strongly Disagree) and factual belief (1: Very Accurate – 7: Very Inaccurate). That is, the score of each question should increase if the effect of fact-checking news is persuasive. Table 2 shows that, in general, attitude and belief to the statement were changed to the direction suggested by the fact-checking news.

```
persuasion_tab <- mydata %>%
  group_by(partisanship, valence, media_slant) %>%
  summarise(
    n = n(),
    agree_t1 = mean(agree_t1),
    agree_t2 = mean(agree_t2),
    belief_t1 = mean(belief_t1),
    belief_t2 = mean(belief_t2)
  ) %>%
  ungroup()

persuasion_tab %>%
  kbl(booktabs = TRUE, digits = 2,
      caption = "The Effect of Fact-Checking News") %>%
  kable_styling(position = "center") %>%
  collapse_rows(1, latex_hline = "major", valign = "middle")
```

2.2 Bias Perception on the Fact-Checking News

In pre-analysis plan, we predicted that partisans would perceive that the fact-checking news is favorably biased toward opponents when the valence of the fact-checking news is counter-attitudinal. Additionally we predicted that the direction of bias perception also would be varied by the political slant of the news media: when the news media is Fox News Channel, relatively favorable toward conservative and vice versa. `bias_1` and `bias_2` in Table 3 each indicates measurement of the bias perception (1: Strongly biased favorably toward Democrat – 11: Strongly biased favorably toward Republican). We can confirm a quite clear pattern depending on the attitude-consistency and political slant of the news media.

Table 2: The Effect of Fact-Checking News

partisanship	valence	media_slant	n	agree_t1	agree_t2	belief_t1	belief_t2
Democrat	Biden	Fox	3	2.00	3.00	2.33	2.67
	Biden	MSNBC	3	2.33	3.67	2.33	3.00
	Biden	Reuter	2	2.50	6.00	2.00	5.50
	Ducey	Fox	2	3.50	2.50	3.50	2.00
	Ducey	MSNBC	3	4.67	5.33	4.67	5.33
	Ducey	Reuter	2	2.50	4.50	2.50	4.50
Moderate	Biden	Fox	1	2.00	6.00	2.00	7.00
	Biden	MSNBC	1	4.00	7.00	6.00	7.00
	Biden	Reuter	1	2.00	2.00	2.00	2.00
	Ducey	Fox	1	2.00	5.00	2.00	5.00
	Ducey	MSNBC	2	3.50	4.00	4.50	4.00
	Ducey	Reuter	1	6.00	1.00	6.00	6.00
Republican	Biden	Fox	1	7.00	7.00	6.00	6.00
	Biden	MSNBC	1	7.00	7.00	7.00	7.00
	Biden	Reuter	2	4.50	5.00	5.00	5.00
	Ducey	Fox	1	1.00	3.00	3.00	3.00
	Ducey	MSNBC	1	4.00	7.00	6.00	7.00
	Ducey	Reuter	1	1.00	1.00	2.00	2.00

```
bais_tab <- mydata %>%
  group_by(partisanship, valence, media_slant) %>%
  summarise(
    n = n(),
    bias_1 = mean(bias_1),
    bias_2 = mean(bias_2)
  ) %>%
  ungroup()

bais_tab %>%
  kbl(booktabs = TRUE, digits = 2,
      caption = "Bias Perception on the Fact-Checking News") %>%
  kable_styling(position = "center") %>%
  collapse_rows(1, latex_hline = "major", valign = "middle")
```

Table 3: Bias Perception on the Fact-Checking News

partisanship	valence	media_slant	n	bias_1	bias_2
Democrat	Biden	Fox	3	7.67	8.67
	Biden	MSNBC	3	6.67	6.67
	Biden	Reuter	2	7.00	6.00
	Ducey	Fox	2	6.50	7.00
	Ducey	MSNBC	3	6.67	6.33
	Ducey	Reuter	2	6.00	6.50
Moderate	Biden	Fox	1	7.00	6.00
	Biden	MSNBC	1	6.00	6.00
	Biden	Reuter	1	7.00	7.00
	Ducey	Fox	1	6.00	6.00
	Ducey	MSNBC	2	3.50	3.50
	Ducey	Reuter	1	1.00	1.00
Republican	Biden	Fox	1	6.00	6.00
	Biden	MSNBC	1	3.00	3.00
	Biden	Reuter	2	6.00	6.00
	Ducey	Fox	1	2.00	1.00
	Ducey	MSNBC	1	4.00	3.00
	Ducey	Reuter	1	3.00	2.00