Reproducible analysis of Schroeder & Epley, 2015: Do you come across as smarter when people read what you say or hear what you say

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Abstract

One or two sentences providing a **basic introduction** to the field, comprehensible to a scientist in any discipline.

Two to three sentences of **more detailed background**, comprehensible to scientists in related disciplines.

One sentence clearly stating the **general problem** being addressed by this particular study.

One sentence summarizing the main result (with the words "**here we show**" or their equivalent).

Two or three sentences explaining what the **main result** reveals in direct comparison to what was thought to be the case previously, or how the main result adds to previous knowledge.

One or two sentences to put the results into a more **general context**.

Two or three sentences to provide a **broader perspective**, readily comprehensible to a scientist in any discipline.

Keywords: keywords

Word count: X

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Method

This report reproduces the analysis from experiment 4 in Schroeder & Epley (2015). The data were downloaded from the "open data" folder for this class, from the file named "SchroederEpley2015data.csv." In experiment 4 Schroeder & Epley (2015) replicated the results of experiments 1-3 but here enlisted professional recruiters as participants to improve the ecological validity of their experiment.

Participants

The participants N=39 (mean age=30.85 years, SD= 6.24, 30 females) in experiment 4 were professional recruiters from fortune 500 companies who had agreed to evaluate potential candidates at the University of Chicago Booth School of Business. The experimenters reached out to 66 recruiters who had attended such a jobs conference at the University of Chicago via email to request their participation in a survey. Of the 66 recruiters contacted, 39 responded and agreed to participate.

Materials

The stimuli which were developed for experiment 1, of which a subset were used here in experiment 4, were created from video recordings of MBA students spoken elevator pitches made for potential employers. It was predicted that evaluators would respond more positively to the pitches that they heard rather than those they read, as this would make the candidates appear more thoughtful and intelligent.

The survey then asked participants to rate each potential candidate on 3 dimensions: the candidate's competence (as compared to the average candidate for a similar position),

the candidate's thoughtfulness, and the candidates' intelligence. The recruiters were then asked to rate their general impressions of the candidates with questions that probed how much they liked the candidate, how positive and negative their overall impressions were and whether or not they would opt to hire the candidate.

Procedure

Participants responded to an online survey and were randomly assigned to either listen to recordings of spoken pitches (audio condition) or the same pitch in text (transcript condition) and answered survey questions. The materials were the same as experiment 1 (except that there was no video condition in experiment 4). The survey questions were rated on a likert type scale from 0-10 (e.g. 0 = much less thoughtful, 10 = much more thoughtful).

The recruiters ratings of the job candidates pitches were collapsed into into composite measures of intellect (cronbach's alpha = .92) and general impressions (cronbach's alpha = .93).

Data analysis

We used R [Version 4.0.2; R Core Team (2020)] and the R-packages *crayon* [Version 1.4.0; Csárdi (2017)], *csvread* [Version 1.2.1; Izrailev (2018)], *data.table* [Version 1.13.6; Dowle and Srinivasan (2020)], *dplyr* [Version 1.0.3; Wickham, François, Henry, and Müller (2021)], *ggplot2* [Version 3.3.3; Wickham (2016)], *ggpmisc* [Version 0.3.8.1; Aphalo (2021)], *kableExtra* [Version 1.3.1; Zhu (2020)], *papaja* [Version 0.1.0.9997; Aust and Barth (2020)], *readr* [Version 1.4.0; Wickham, Hester, and Francois (2018)], *tibble* [Version 3.0.6; Müller and Wickham (2021)], *tidyr* [Version 1.1.2; Wickham (2020)], and *tinytex* [Version 0.29; Xie (2019)] for all our analyses.

Results

```
##    CONDITION Intellect_Rating
## 1 transcript         3.648148
## 2      audio         5.634921
```

```
##    CONDITION Impression_Rating
## 1 transcript          4.074074
## 2      audio          5.968254
```

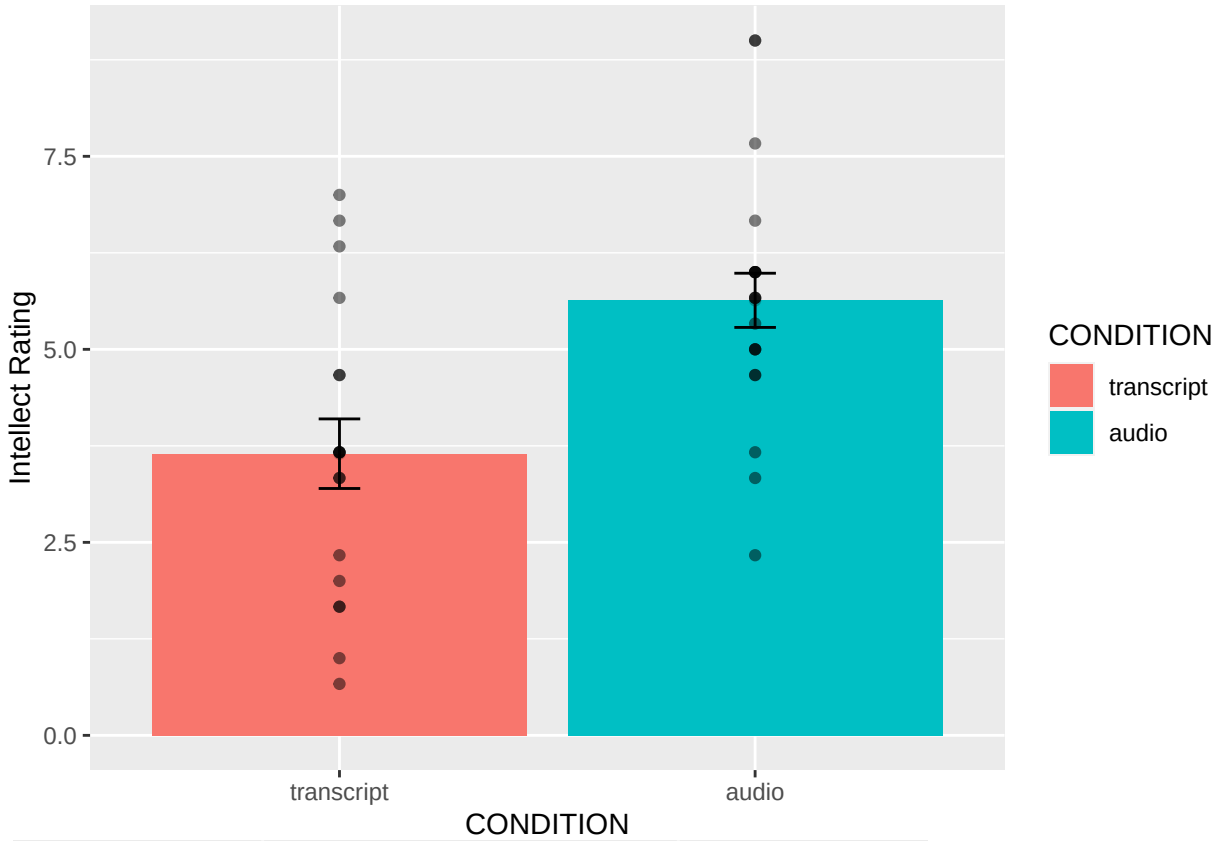
```
##    CONDITION Hire_Rating
## 1 transcript    2.888889
## 2      audio    4.714286
```

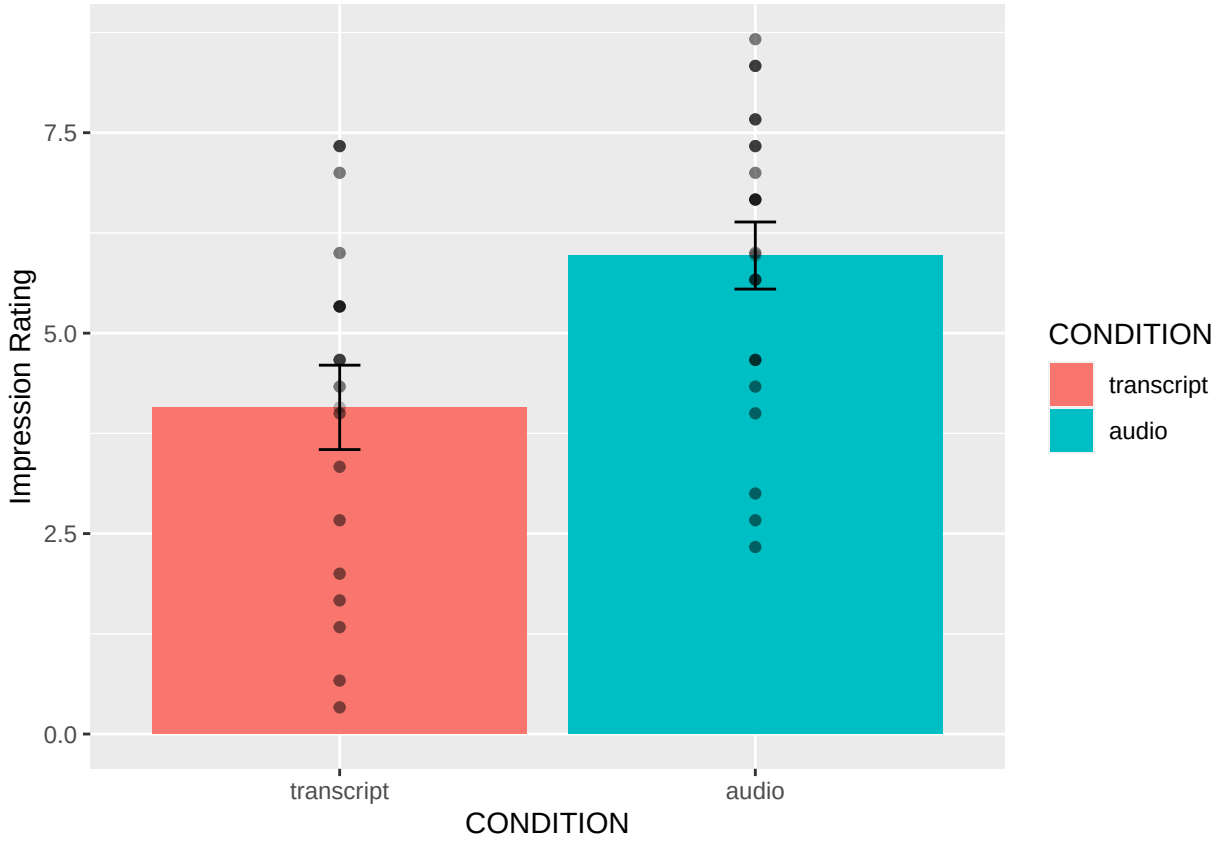
```
##
##  Two Sample t-test
##
## data:  Intellect_Rating by CONDITION
## t = -3.5259, df = 37, p-value = 0.001144
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
##  -3.1284798 -0.8450652
## sample estimates:
## mean in group transcript      mean in group audio
##                 3.648148                 5.634921
```

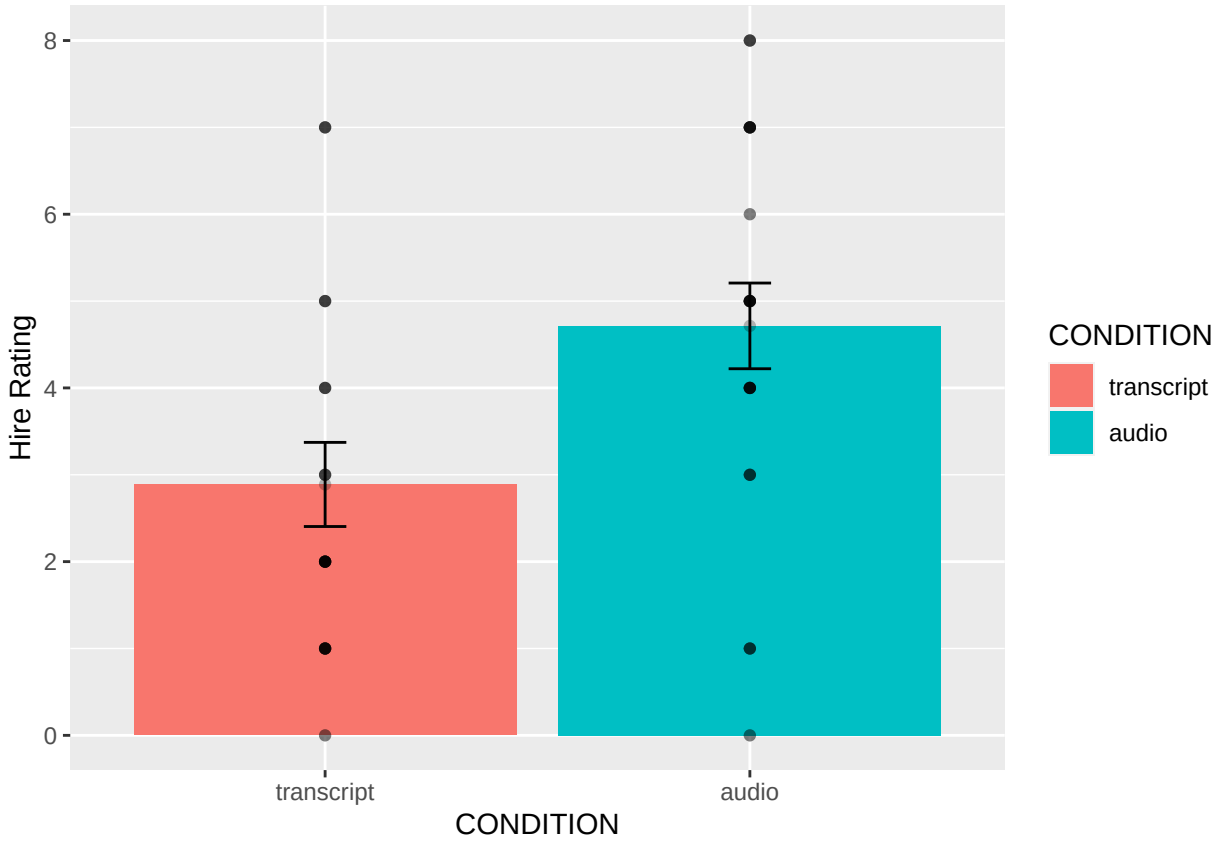
```
##
##  Two Sample t-test
##
```

```
## data:  Impression_Rating by CONDITION
## t = -2.8508, df = 37, p-value = 0.007091
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
##  -3.2404752 -0.5478846
## sample estimates:
## mean in group transcript      mean in group audio
##                 4.074074                 5.968254
```

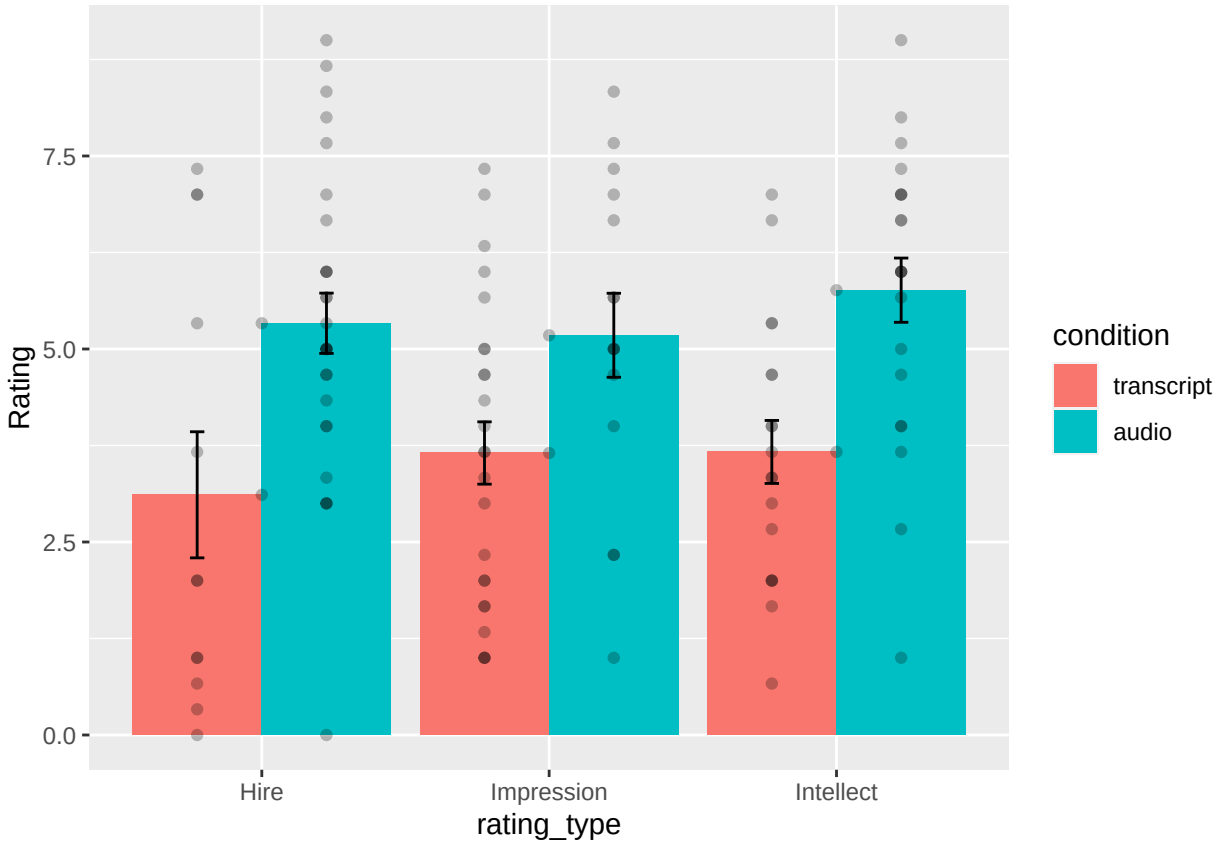
```
##
##  Two Sample t-test
##
## data:  Hire_Rating by CONDITION
## t = -2.6201, df = 37, p-value = 0.01267
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
##  -3.2370242 -0.4137694
## sample estimates:
## mean in group transcript      mean in group audio
##                 2.888889                 4.714286
```


7.5
5.0
2.5
0.0
Intellect Rating
transcript
audio
CONDITION
CONDITION
transcript
audio


7.5
5.0
2.5
0.0
Impression Rating
transcript
audio
CONDITION
CONDITION
transcript
audio


8
6
4
2
0
Hire Rating
transcript
audio
CONDITION
CONDITION
transcript
audio

118


7.5
5.0
2.5
0.0
Rating
Hire
Impression
Intellect
rating_type
condition
transcript
audio

119

Discussion

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