Analysis Study 1

Contents

1 RQ1 **1**

2 RQ2 **2**

3 RQ3 **3**
3.1 Difference between false and true answer acceptance 6

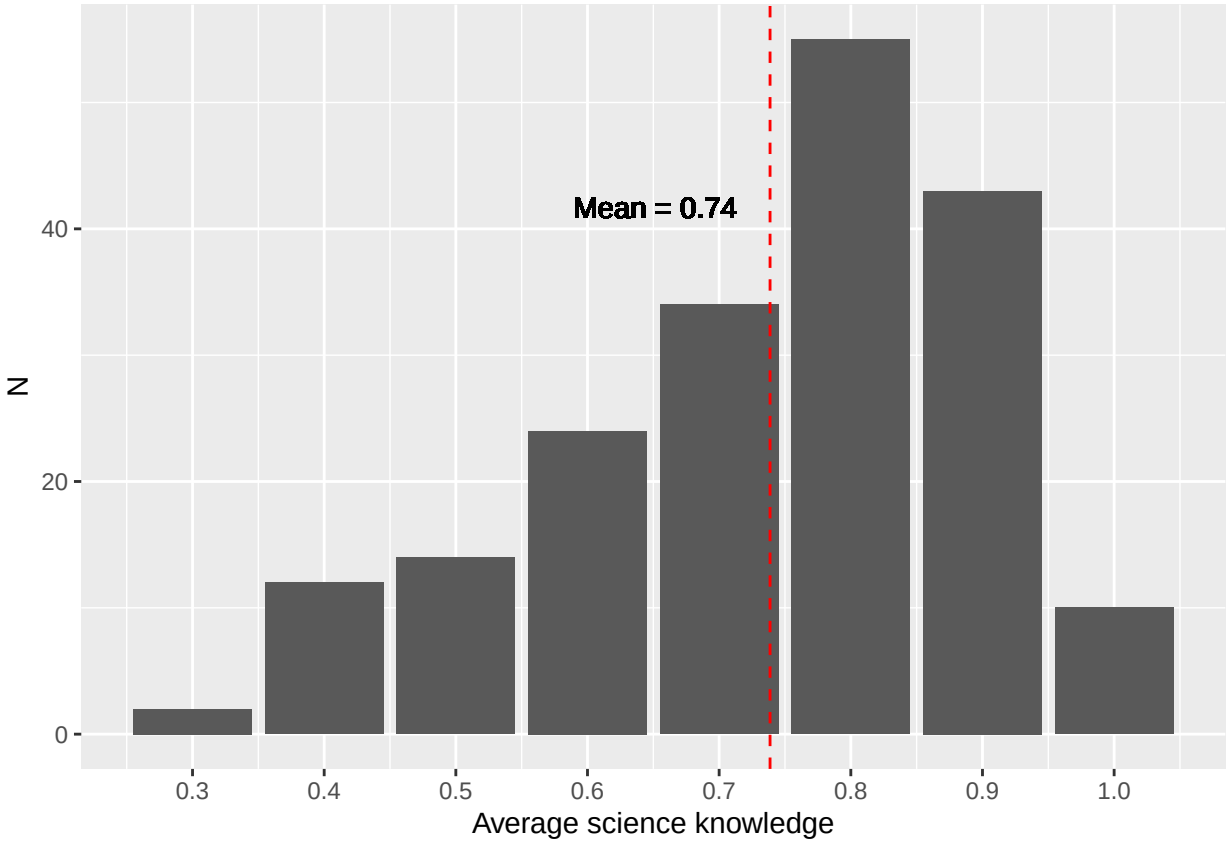
4 RQ4 **6**
4.1 Difference between false and true answer acceptance 9

5 Additional RQs **12**
5.1 Knowledge and Acceptance by science question 12
5.2 Open ended comments 13
5.3 Is the share of correct responses associated with the share of acceptance ? 14
5.4 What were the acceptance rates among true and false answers? 15
5.5 To which extent did people believe the different conspiracy items ? 16

6 Redo all analyses without tree question **16**

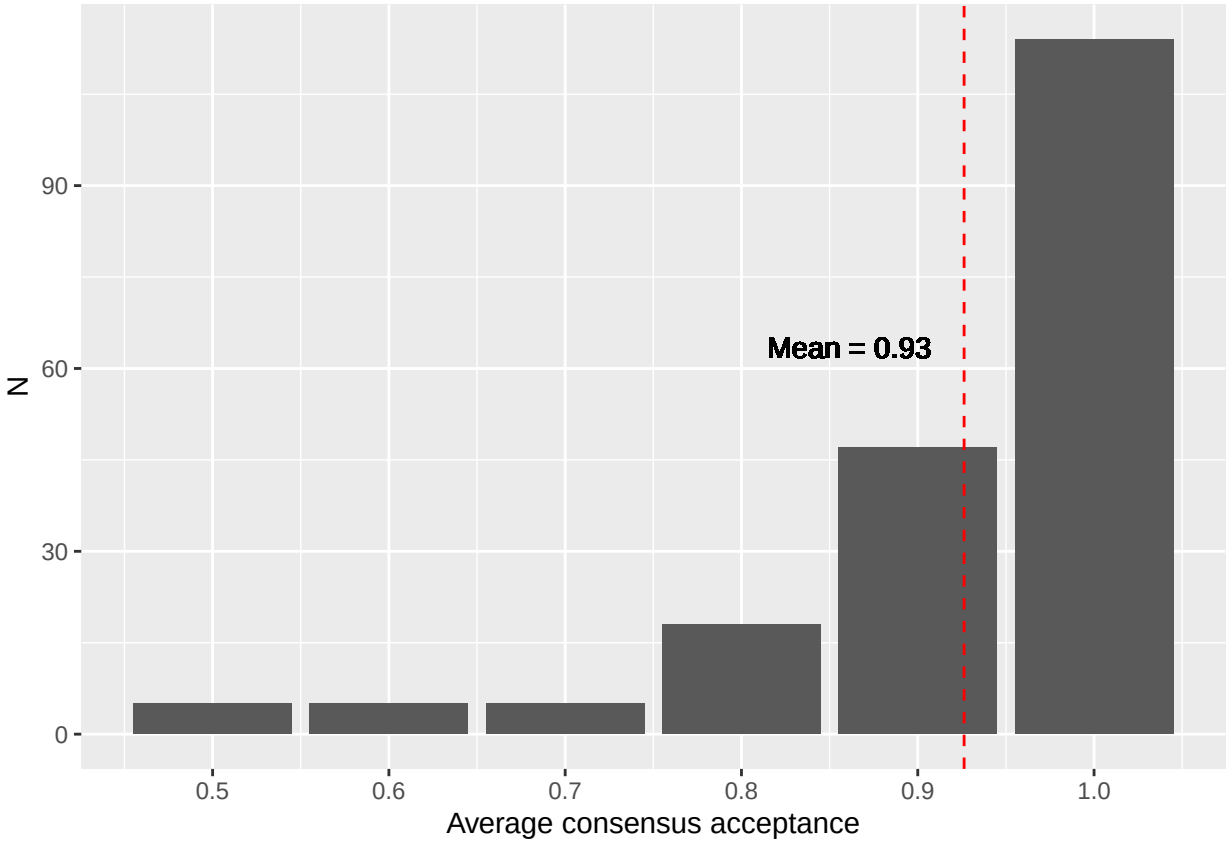
1 RQ1

RQ1: What is the average science knowledge score (1)?



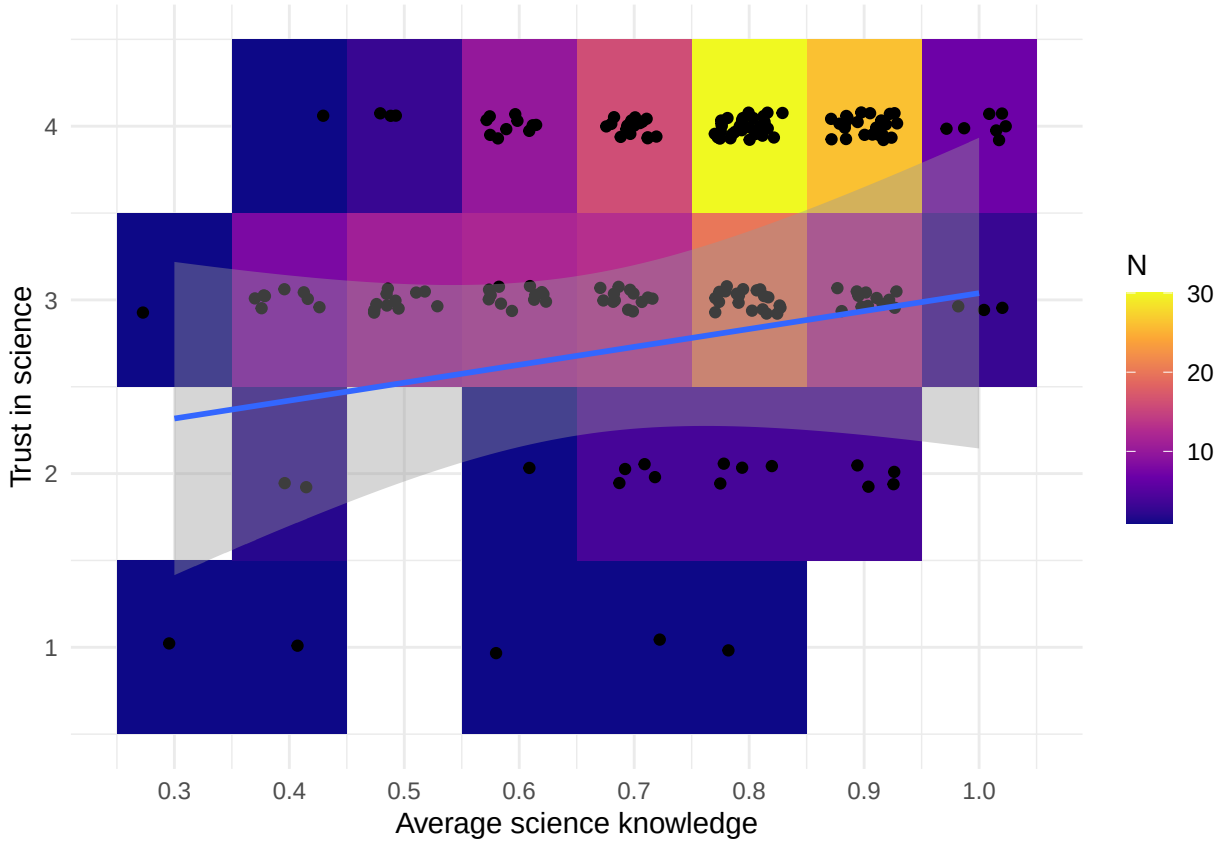
2 RQ2

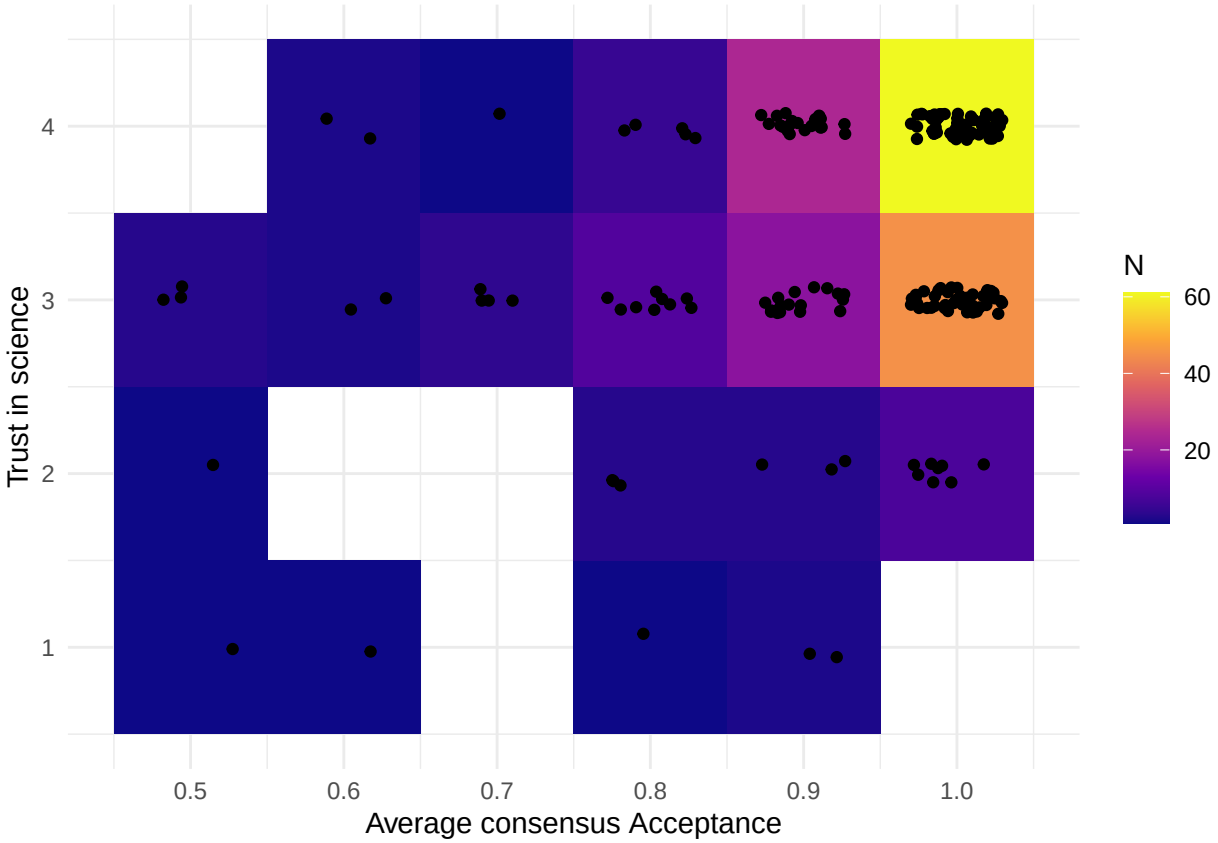
RQ2: What is the average acceptance of the scientific consensus (2)?



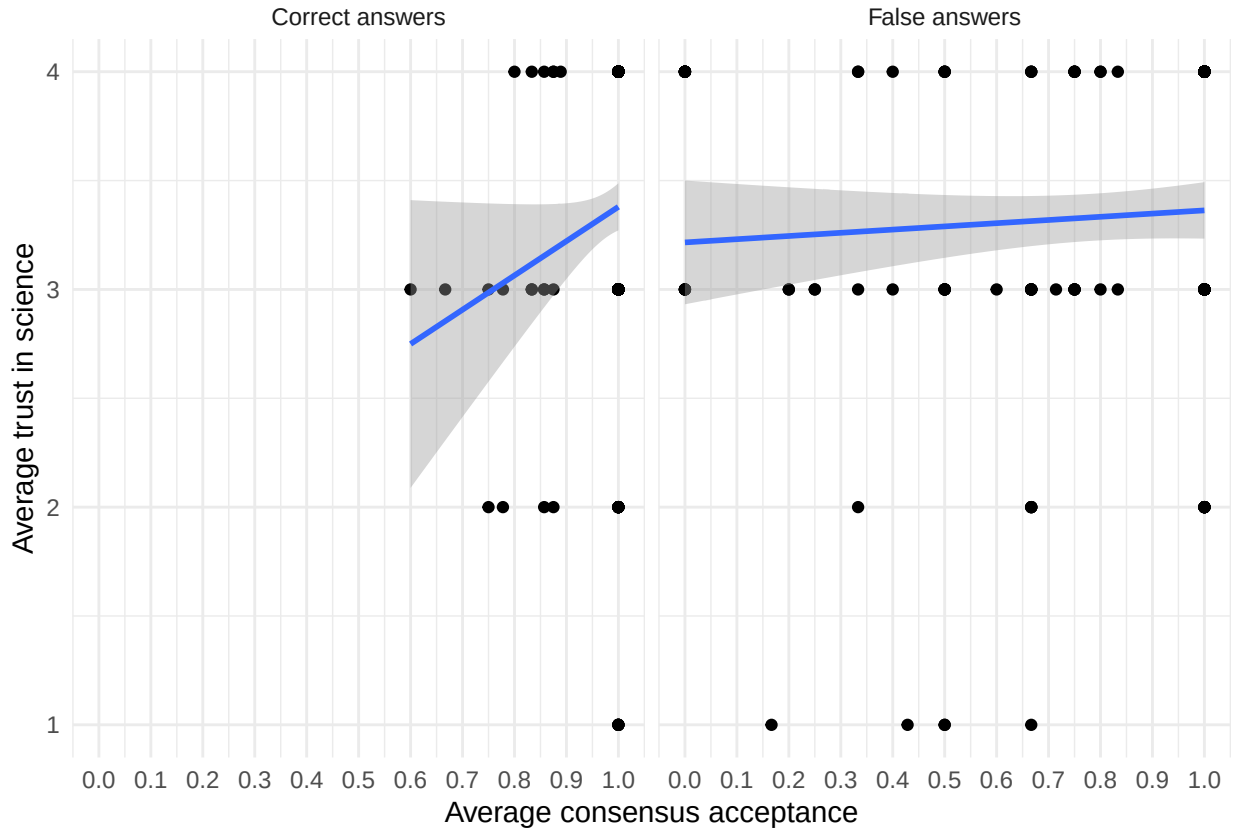
3 RQ3

RQ3: What is the relationship between trust in science and, respectively, knowledge and acceptance?


Trust in science
4
3
2
1
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
Average science knowledge
N
30
20
10

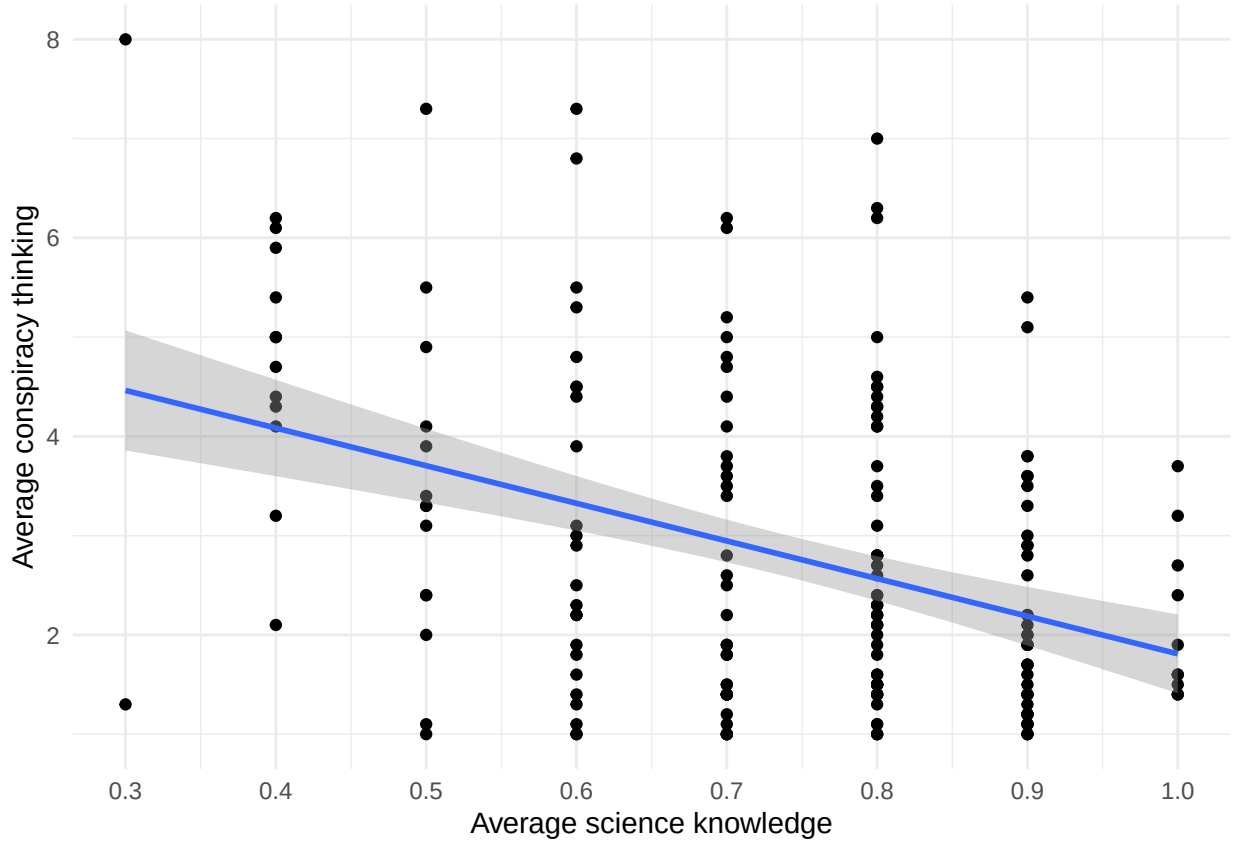

Trust in science
4
3
2
1
0.5
0.6
0.7
0.8
0.9
1.0
Average consensus Acceptance
N
60
40
20

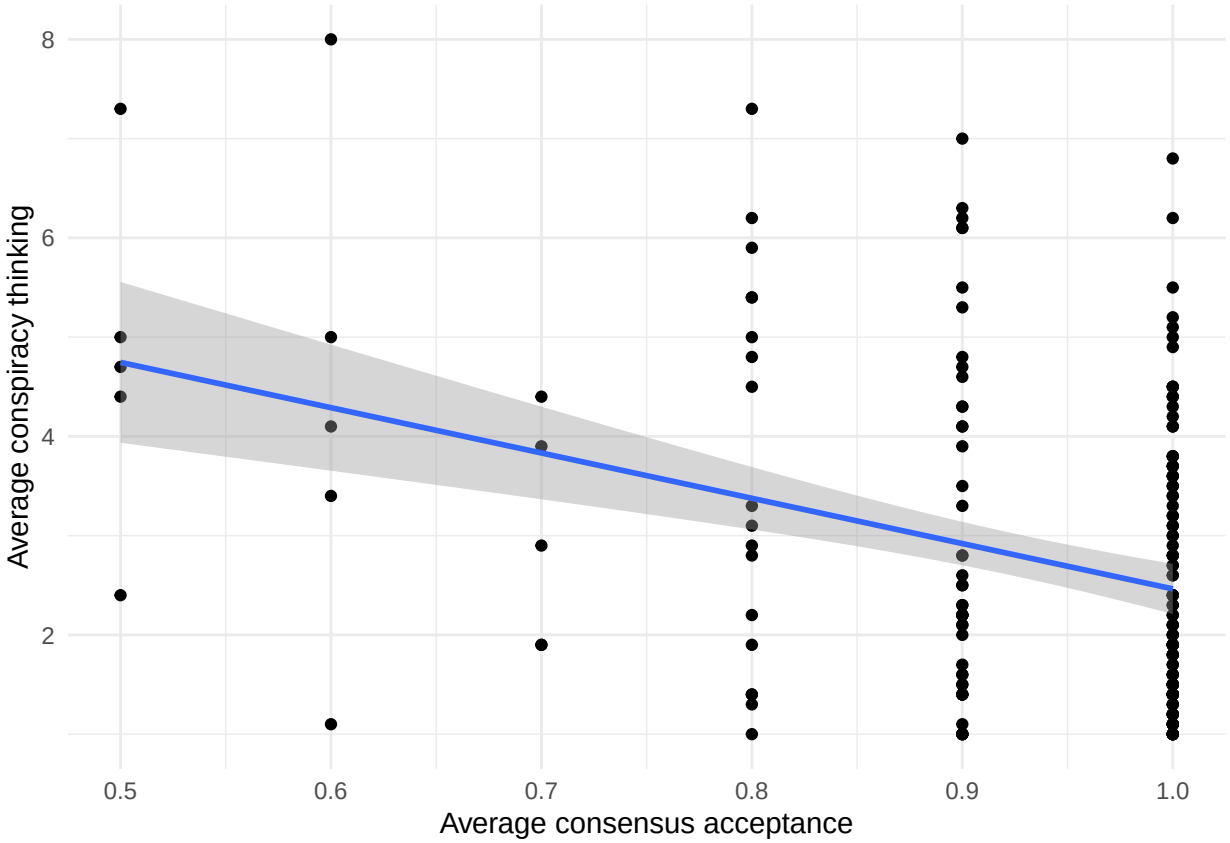
3.1 Difference between false and true answer acceptance



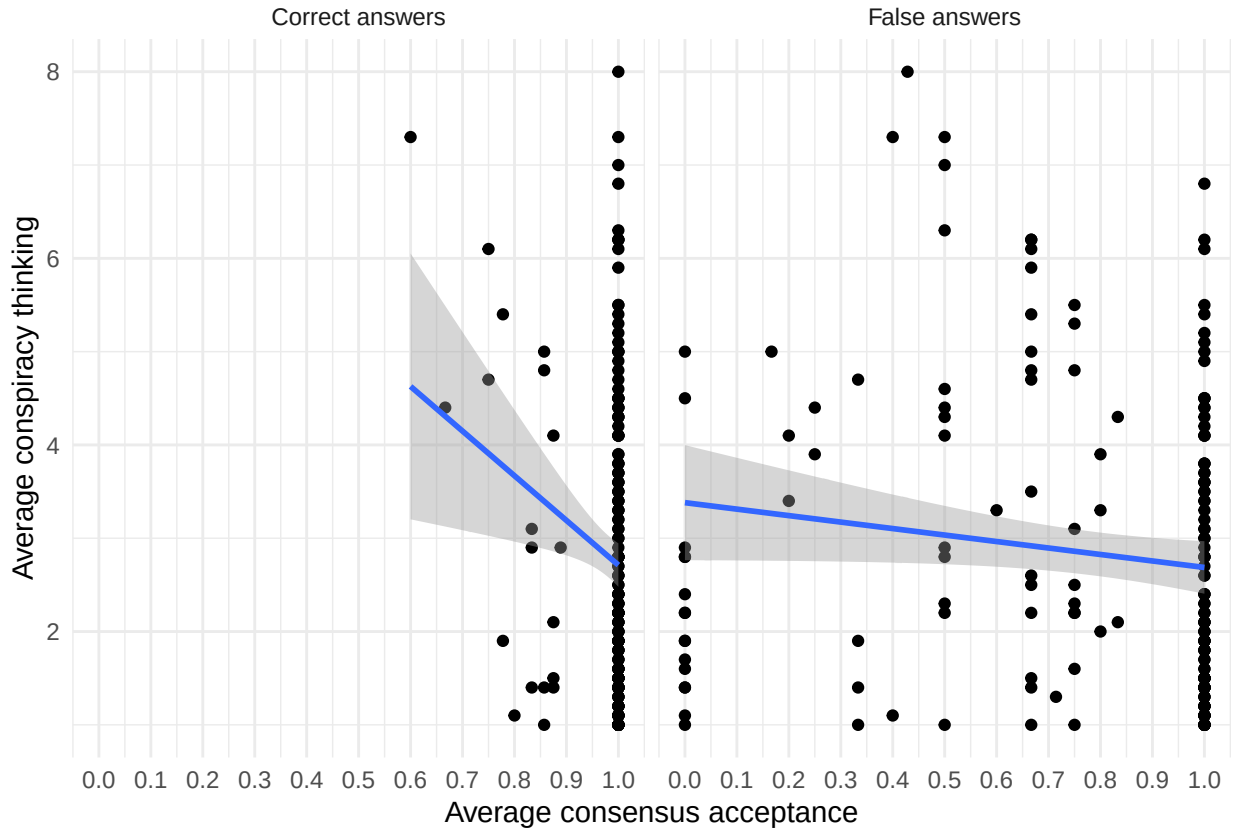
4 RQ4

RQ4: What is the relationship between conspiracy thinking and, respectively, knowledge and acceptance?

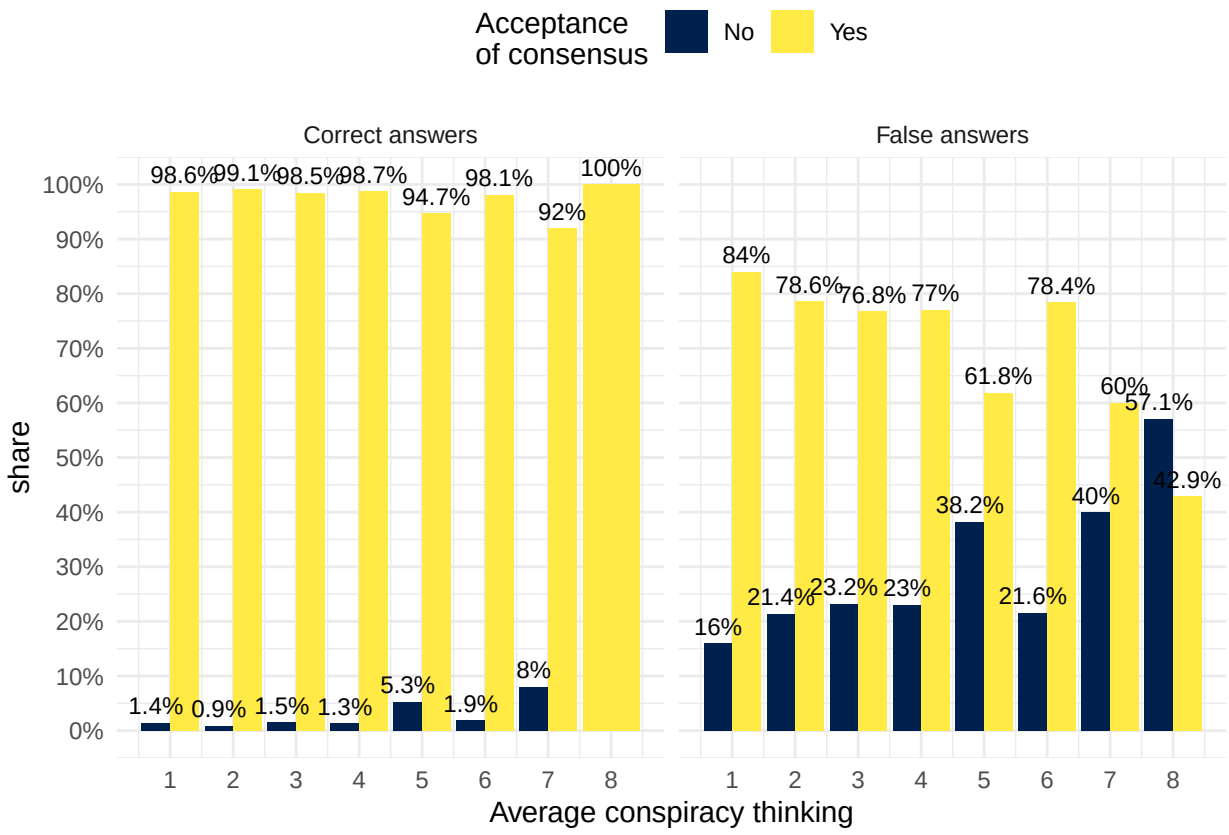

Average conspiracy thinking
8
6
4
2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
Average science knowledge


Average conspiracy thinking
8
6
4
2
0.5
0.6
0.7
0.8
0.9
1.0
Average consensus acceptance

4.1 Difference between false and true answer acceptance

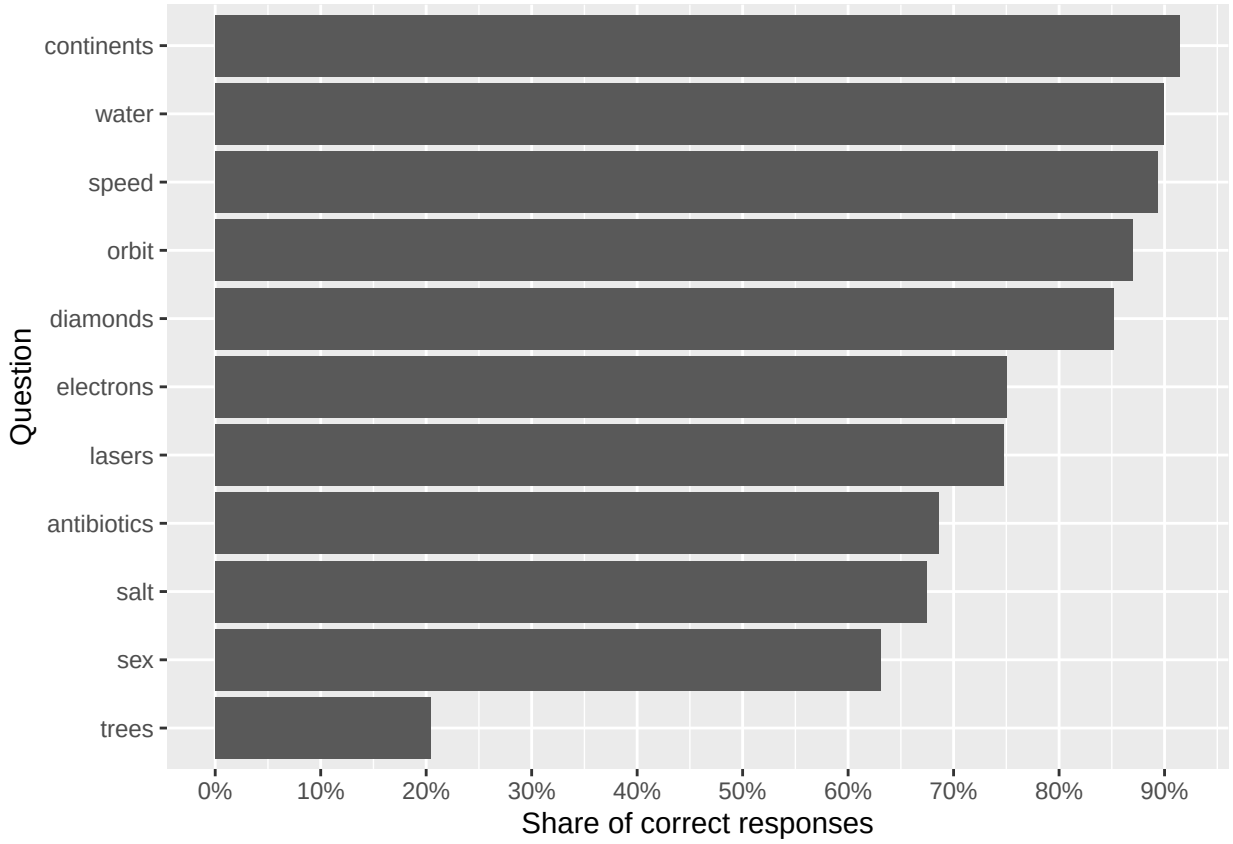


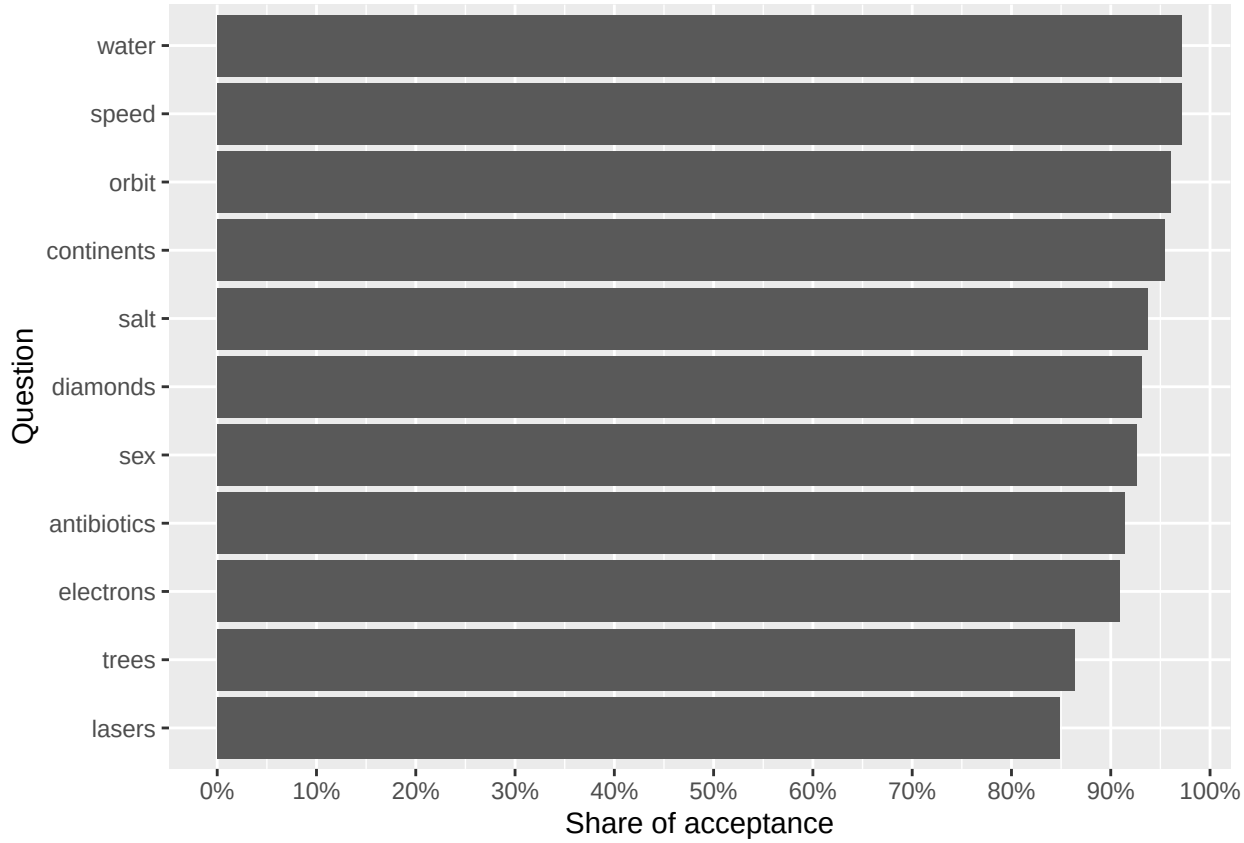
Alternative plot


Acceptance of consensus
No
Yes
Correct answers
False answers
share
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
98.6%
99.1%
98.5%
98.7%
94.7%
98.1%
92%
100%
1.4%
0.9%
1.5%
1.3%
5.3%
1.9%
8%
84%
78.6%
76.8%
77%
61.8%
78.4%
60%
57.1%
16%
21.4%
23.2%
23%
38.2%
21.6%
40%
42.9%
1
2
3
4
5
6
7
8
Average conspiracy thinking

5 Additional RQs

5.1 Knowledge and Acceptance by science question



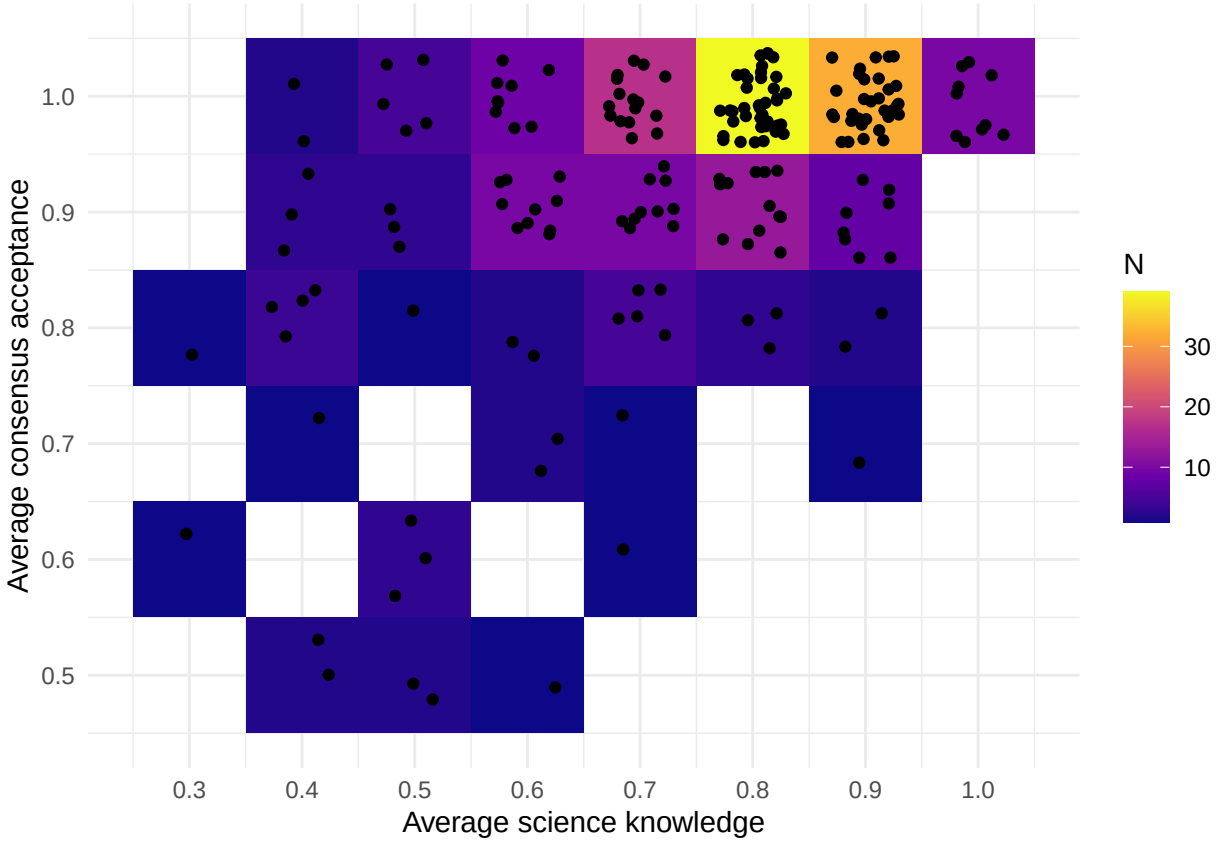


5.2 Open ended comments

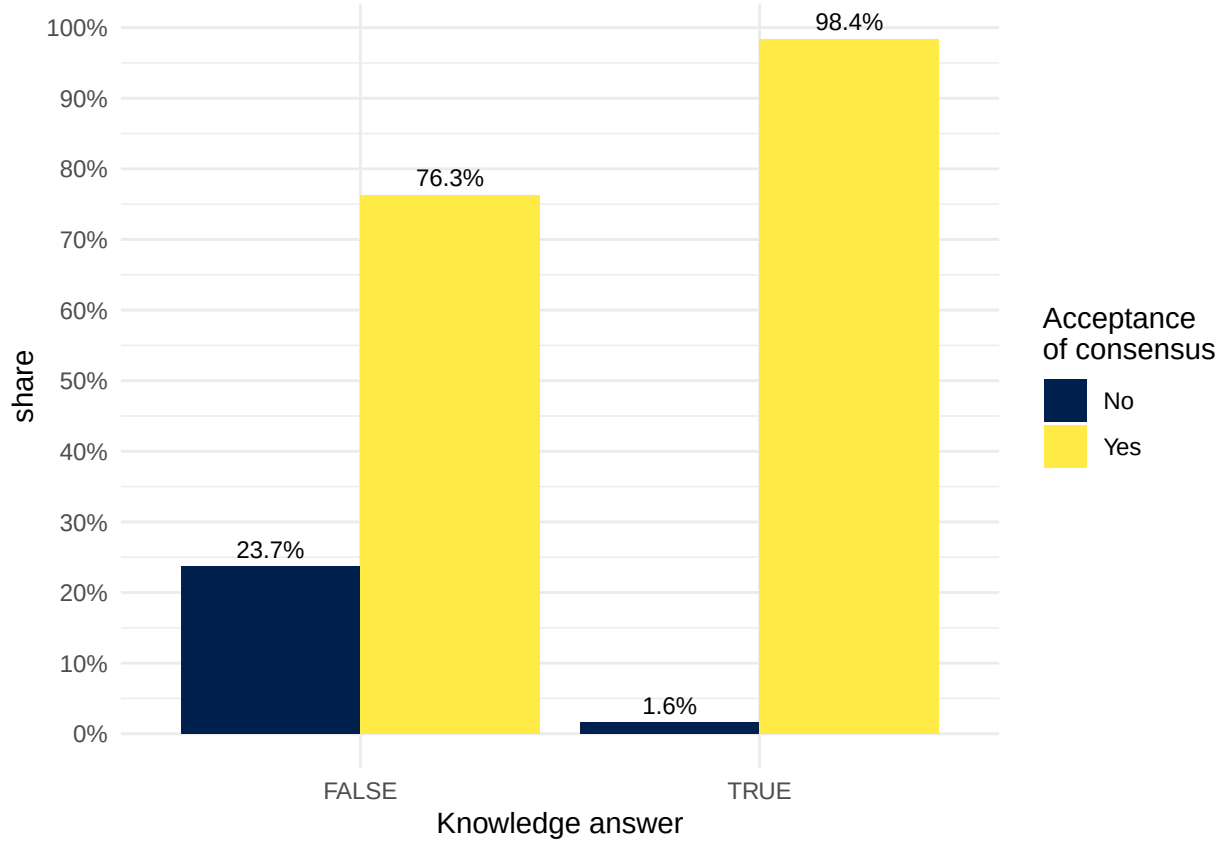
```
##  [1] "Air AND water make up the bulk of trees mass and the water is drawn from the earth. Water has r
##  [2] "Everything in the study was good I enjoyed taking it"
##  [3] "Everything in the survey went fine with no issues. We seem to have a lot of conspiracy theory r
##  [4] "good study"
##  [5] "Great topics! Thank you for this study."
##  [6] "I answered thoughtfully, good luck!"
##  [7] "I appreciate science but understand that if scientists don't go along with what investors/govt
##  [8] "I like the subject content of the survey"
##  [9] "I think scientists are acting in the best interests of science rather than the community direct
## [10] "interesting, thank you."
## [11] "it was interesting"
## [12] "Mo Thanks"
## [13] "n/a"
## [14] "N/A"
## [15] "no"
## [16] "No"
## [17] "No comments"
## [18] "No, thank you."
## [19] "none"
## [20] "None"
## [21] "None - thank you!"
## [22] "none, tysm!"
## [23] "None."
## [24] "Nope"
```

```
## [25] "Not virus, just metals/DDT. And I think it would be impossible for dinosaurs to have sex with
## [26] "Should've clicked agree about plants getting carbon from the air, but I wanted to look it up f
## [27] "thanks"
## [28] "Thanks for the opportunity!"
## [29] "Thanks, have  good day"
## [30] "The study was great."
## [31] "To provide context for my responses, I currently study physiology (STEM) and perform academic
## [32] "very interesting"
## [33] "Very interesting study."
```

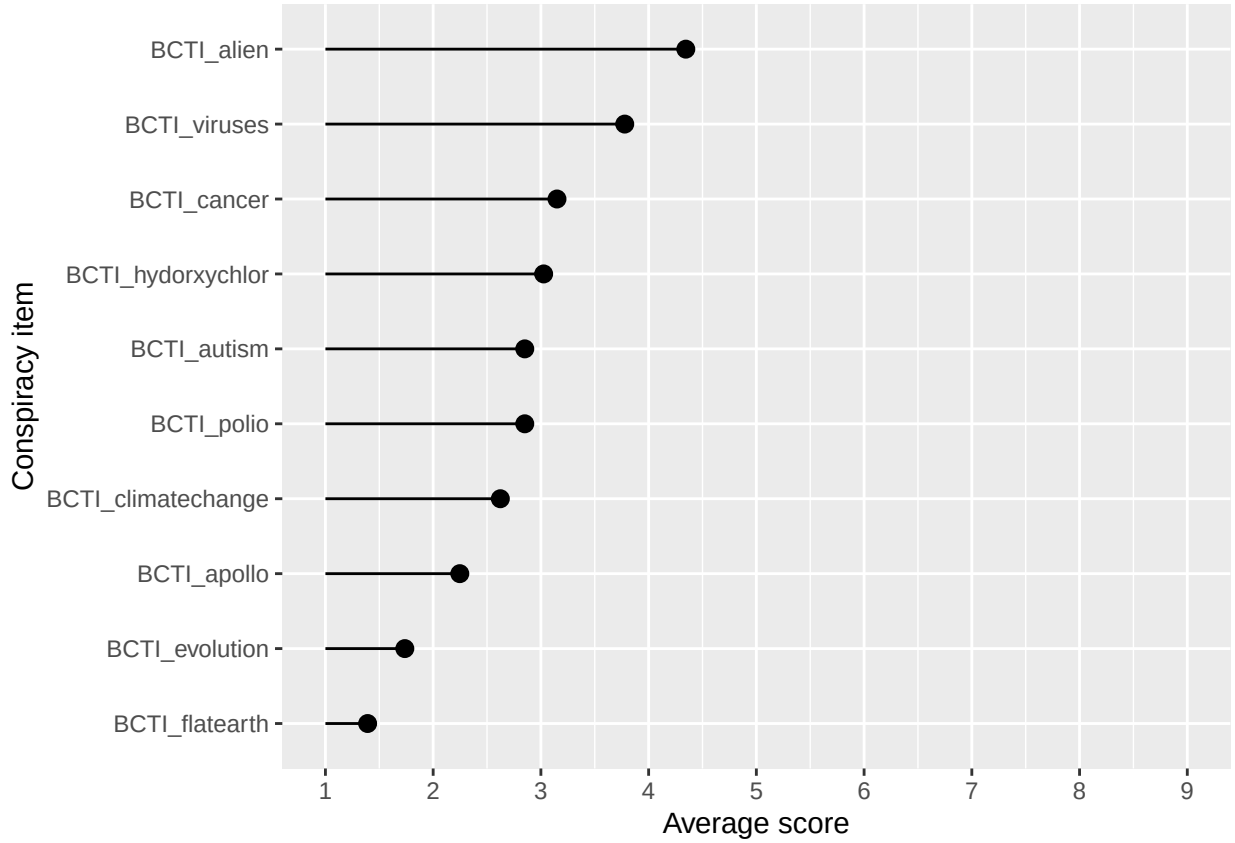
5.3 Is the share of correct responses associated with the share of acceptance ?



5.4 What were the acceptance rates among true and false answers?



5.5 To which extent did people believe the different conspiracy items ?



6 Redo all analyses without tree question