Low & Butterfill (2022): Summary so far

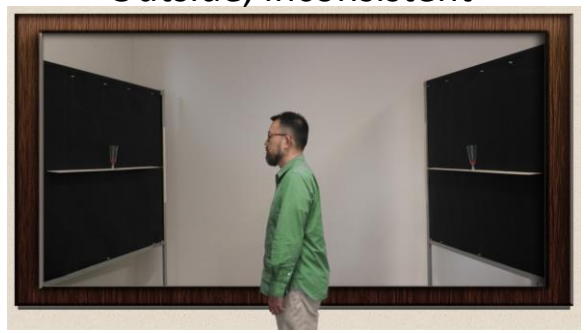
A

Inside, Consistent

Inside, Inconsistent

Outside, Consistent

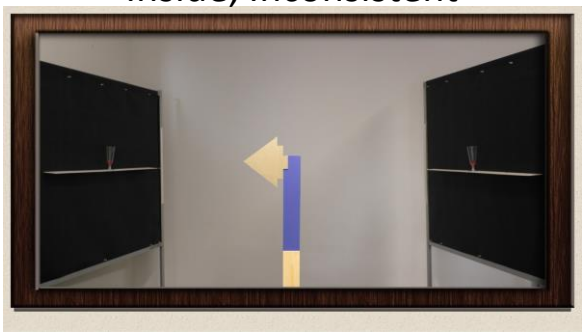
Outside, Inconsistent



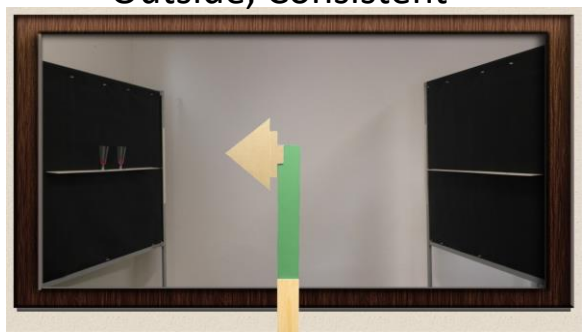
B

Inside, Consistent

Inside, Inconsistent



Outside, Consistent



Outside, Inconsistent

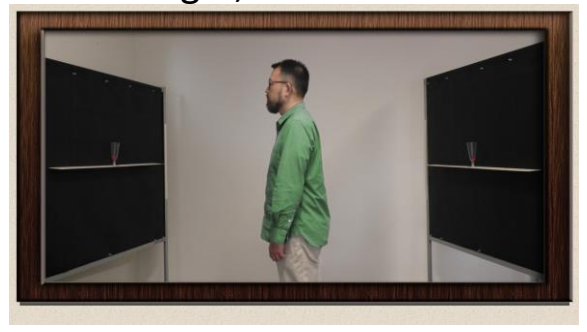
C

“Small”, Consistent

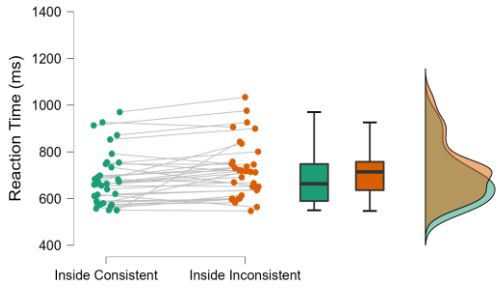
“Small”, Inconsistent

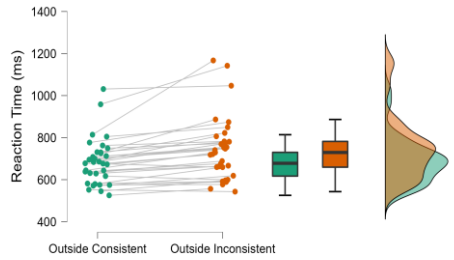
“Large”, Consistent

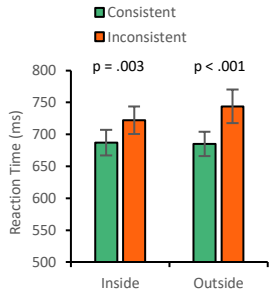
“Large”, Inconsistent

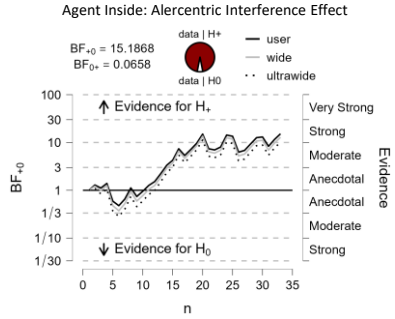


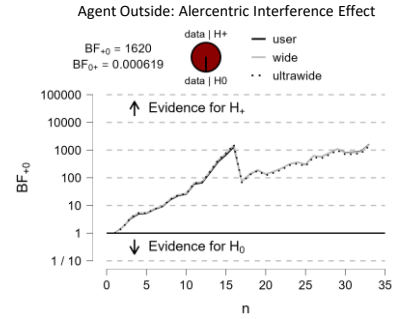
A


Reaction Time (ms)
1400
1200
1000
800
600
400
Inside Consistent
Inside Inconsistent

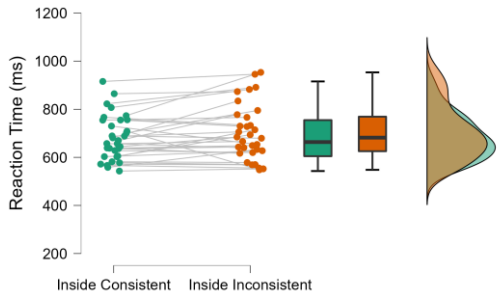

Reaction Time (ms)
1400
1200
1000
800
600
400
Outside Consistent
Outside Inconsistent

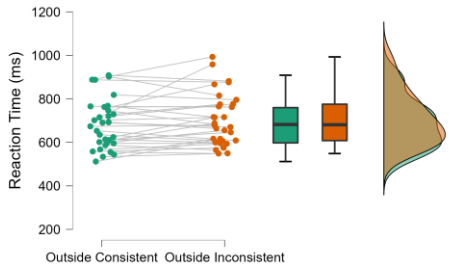

Consistent
Inconsistent
p = .003
p < .001
Reaction Time (ms)
800
750
700
650
600
550
500
Inside
Outside

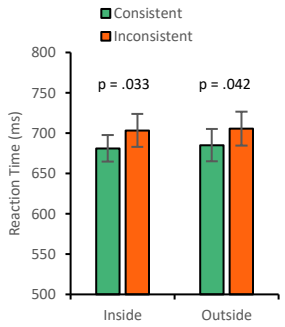

Agent Inside: Alercentric Interference Effect
BF+0 = 15.1868
BF0+ = 0.0658
data | H+
data | H0
user
wide
ultrawide
Evidence for H+
Evidence for H0
BF+0
100
30
10
3
1
1/3
1/10
1/30
Very Strong
Strong
Moderate
Anecdotal
Anecdotal
Moderate
Strong
Evidence
0 5 10 15 20 25 30 35
n

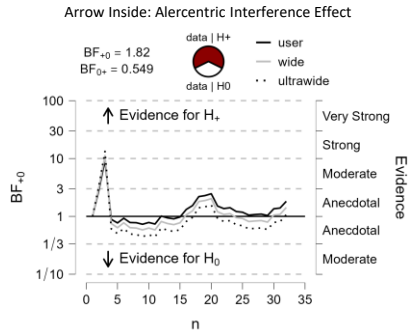

Agent Outside: Alercentric Interference Effect
BF+0 = 1620
BF0+ = 0.000619
data | H+
data | H0
user
wide
ultrawide
Evidence for H+
Evidence for H0
BF+0
100000
10000
1000
100
10
1
1 / 10
0 5 10 15 20 25 30 35
n

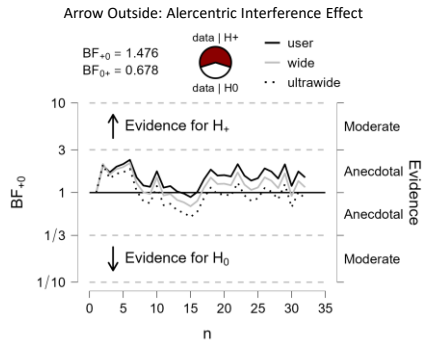
B


Reaction Time (ms)
1200
1000
800
600
400
200
Inside Consistent
Inside Inconsistent

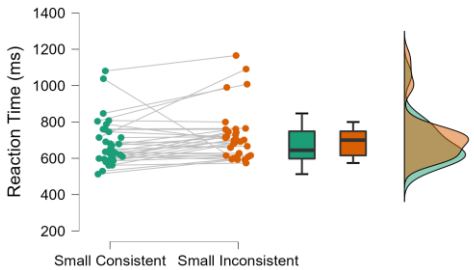

Reaction Time (ms)
1200
1000
800
600
400
200
Outside Consistent
Outside Inconsistent

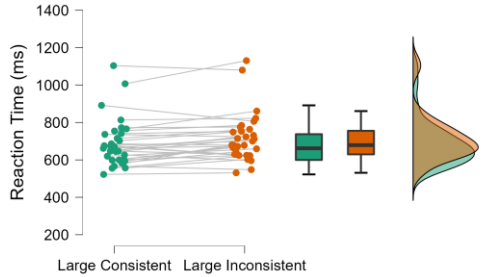

Consistent
Inconsistent
p = .033
p = .042
Reaction Time (ms)
800
750
700
650
600
550
500
Inside
Outside

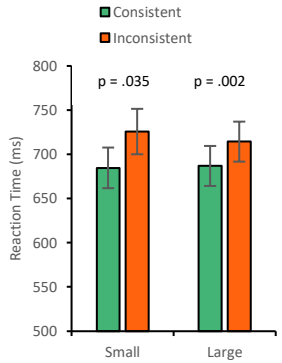

Arrow Inside: Alercentric Interference Effect
BF+0 = 1.82
BF0+ = 0.549
data | H+
data | H0
user
wide
ultrawide
Evidence for H+
Evidence for H0
BF+0
100
30
10
3
1
1/3
1/10
Very Strong
Strong
Moderate
Anecdotal
Anecdotal
Moderate
Evidence
0 5 10 15 20 25 30 35
n

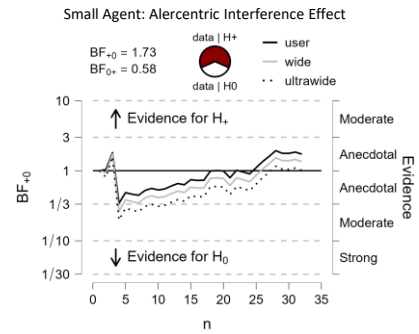

Arrow Outside: Alercentric Interference Effect
BF+0 = 1.476
BF0+ = 0.678
data | H+
data | H0
user
wide
ultrawide
Evidence for H+
Evidence for H0
BF+0
10
3
1
1/3
1/10
Moderate
Anecdotal
Anecdotal
Moderate
Evidence
0 5 10 15 20 25 30 35
n

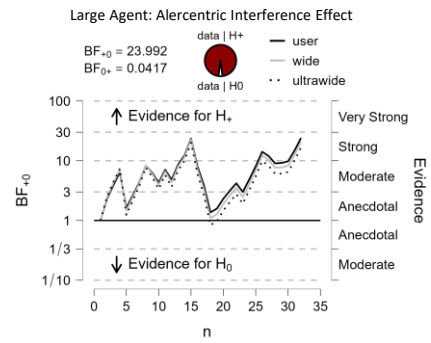
C


Reaction Time (ms)
1400
1200
1000
800
600
400
200
Small Consistent
Small Inconsistent


Reaction Time (ms)
1400
1200
1000
800
600
400
200
Large Consistent
Large Inconsistent


Consistent
Inconsistent
p = .035
p = .002
Reaction Time (ms)
800
750
700
650
600
550
500
Small
Large

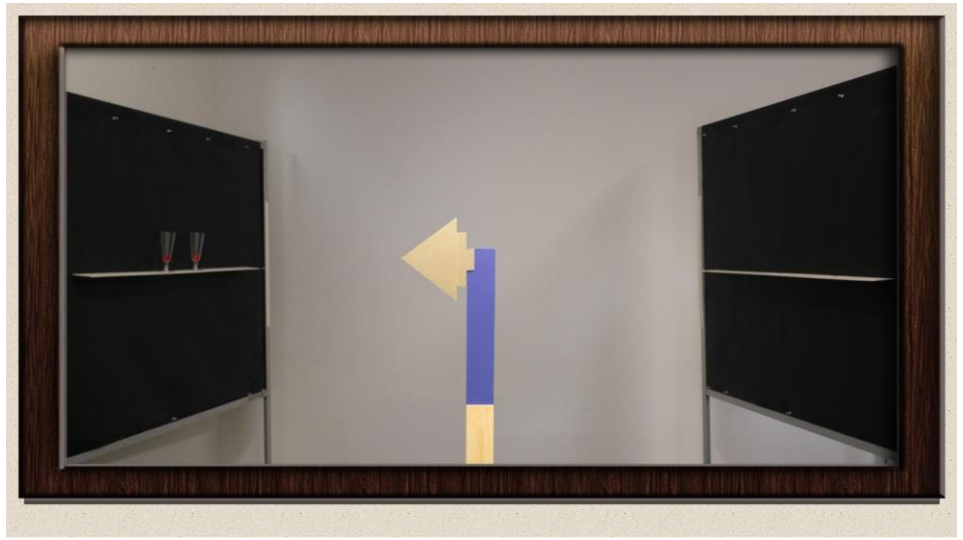

Small Agent: Alercentric Interference Effect
BF+0 = 1.73
BF0+ = 0.58
data | H+
data | H0
user
wide
ultrawide
Evidence for H+
Evidence for H0
BF+0
10
3
1
1/3
1/10
1/30
Moderate
Anecdotal
Anecdotal
Moderate
Strong
Evidence
0 5 10 15 20 25 30 35
n


Large Agent: Alercentric Interference Effect
BF+0 = 23.992
BF0+ = 0.0417
data | H+
data | H0
user
wide
ultrawide
Evidence for H+
Evidence for H0
BF+0
100
30
10
3
1
1/3
1/10
Very Strong
Strong
Moderate
Anecdotal
Anecdotal
Moderate
Evidence
0 5 10 15 20 25 30 35
n

Experiment 1 vs. Experiment 2

A

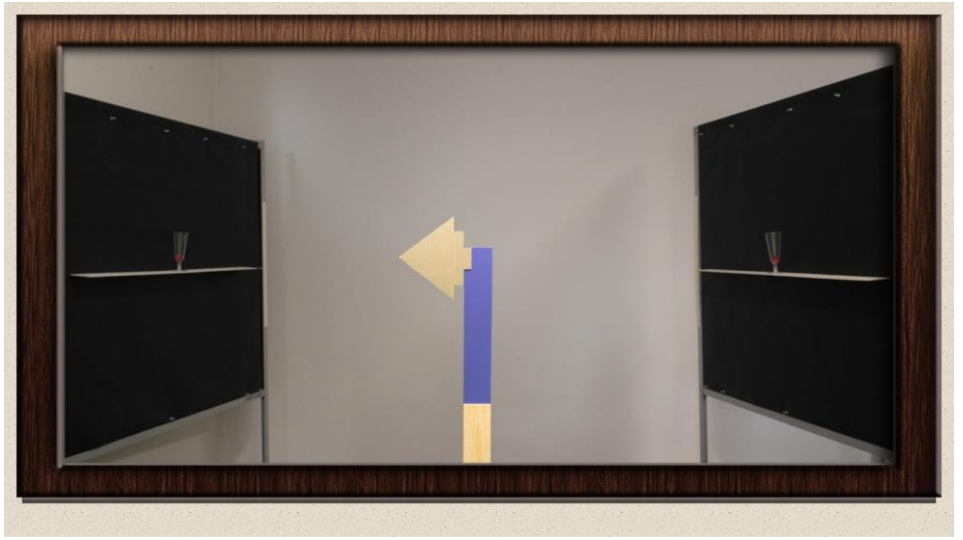
C



Difference in Reaction Time

B

D

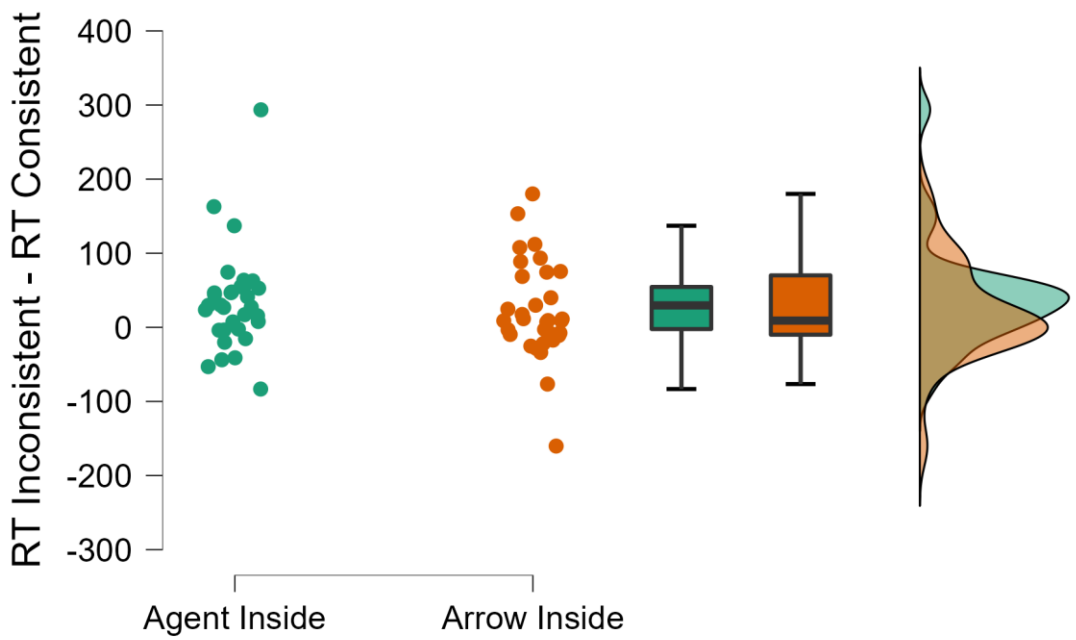


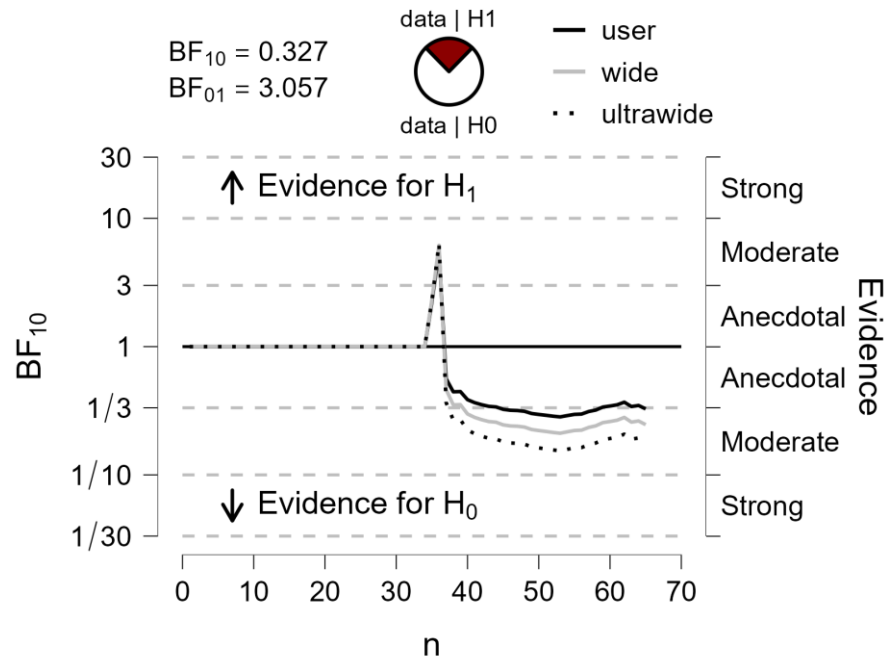
Difference in Reaction Time

Independent Samples T-Test

	t	df	p	Cohen's d
DiffSmall	0.773	63	0.442	0.192

Note. Student's t-test.





Experiment 1 vs. Experiment 2
(non-directional t-test)

Experiment 1 vs. Experiment 2

A

B

C

D

Difference in Reaction Time

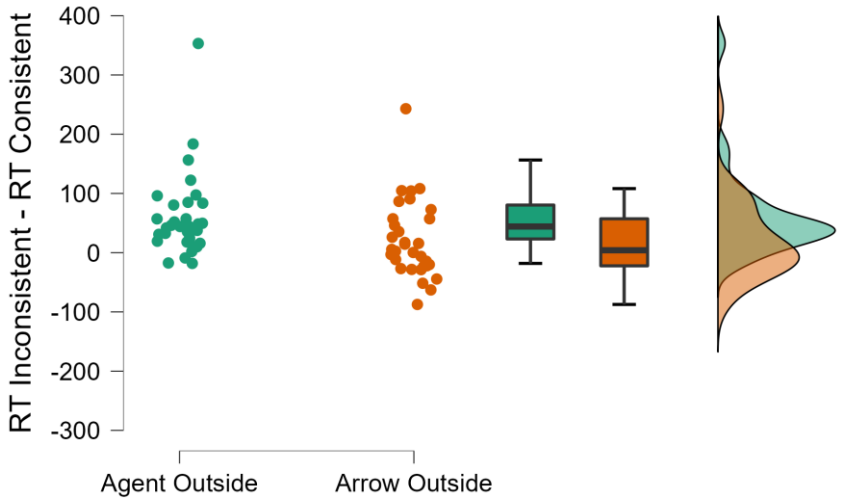
Difference in Reaction Time

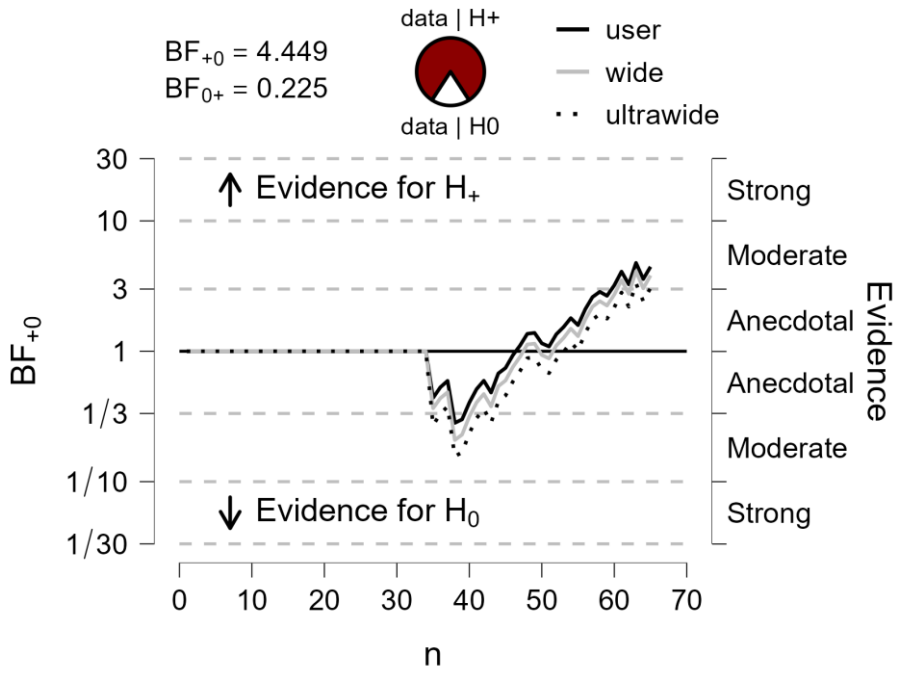
Independent Samples T-Test

	t	df	p	Cohen's d
DiffLarge	2.295	63	0.013	0.569

Note. For all tests, the alternative hypothesis specifies that group *1* is greater than group *2* .

Note. Student's t-test.





Experiment 1 vs. Experiment 2

(Directional t-test where RT difference predicted to be greater for Agent as compared to Arrow)

Experiment 1 vs. Experiment 3

A

C

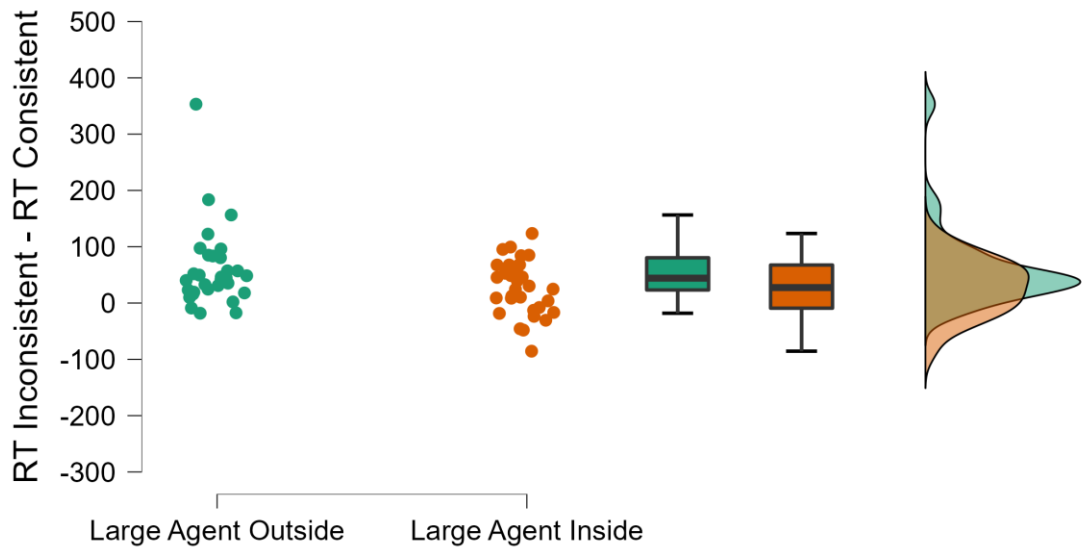
Difference in Reaction Time

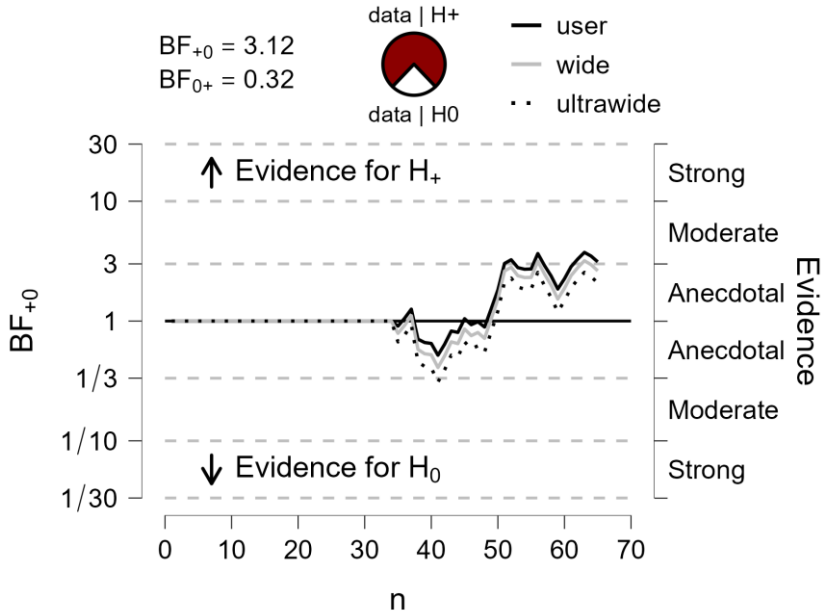
B

D

Difference in Reaction Time

t(63) = 2.103, p = 0.020; Cohen's d = 0.522 (Mean Difference for Large Agent Outside = 58.90 ms & Mean Difference for Large Agent Inside = 27.58 ms) (Directional t-test)





Experiment 1 vs. Experiment 3

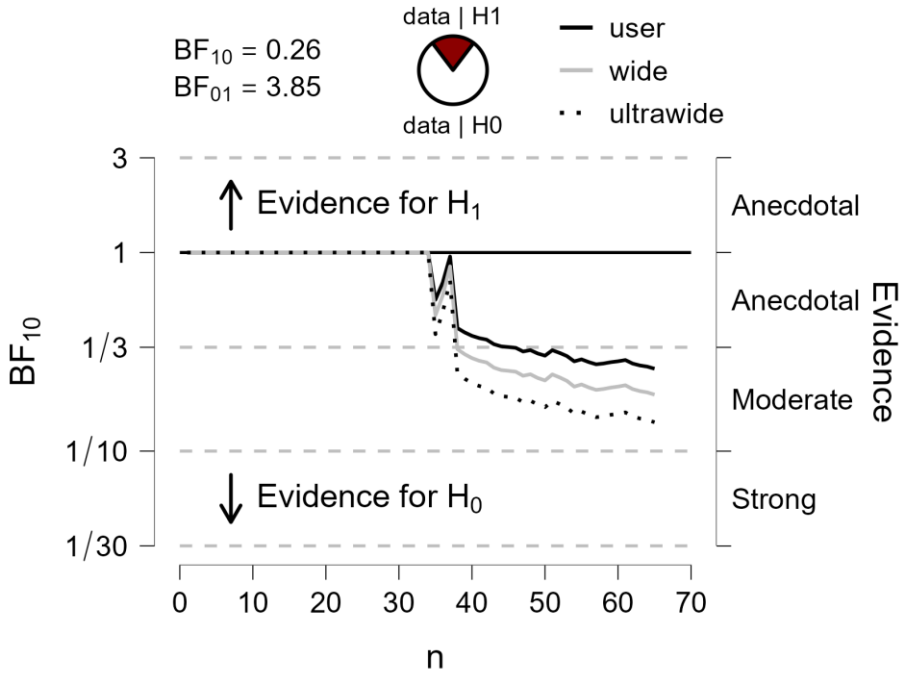
A

B

C

D

Difference in Reaction Time

Difference in Reaction Time

t(63) = -0.237, p = 0.814; Cohen's d = -0.059 (Mean Difference for Small Agent Inside Expt. 1 = 35.17 ms & Mean Difference for Small Agent Inside Expt. 2 = 40.91 ms) (non-directional t-test)