Contents

[bcfs-1 1](#_Toc479757275)

[Target-mask match 1](#_Toc479757276)

[Match X mask speed interaction 2](#_Toc479757277)

[bcfs-1 full model 3](#_Toc479757278)

[mask pattern of motion 3](#_Toc479757279)

[target pattern of motion 4](#_Toc479757280)

[interaction of mask and target motion patterns 4](#_Toc479757281)

[bcfs-1 no-response 5](#_Toc479757282)

[contribution of mask pattern of motion to explaining no-response trials 5](#_Toc479757283)

[bcfs-4 6](#_Toc479757284)

[Target speed effect 6](#_Toc479757285)

[Mask X target speed interaction 7](#_Toc479757286)

[bcfs-5 8](#_Toc479757287)

[The effect of target speed 8](#_Toc479757288)

[Interaction between target and mask speed 9](#_Toc479757289)

[bcfs-6 11](#_Toc479757290)

[Target speed 11](#_Toc479757291)

[Interaction 12](#_Toc479757292)

[bcfs-7 13](#_Toc479757293)

[Mask switching 13](#_Toc479757294)

[Interaction 14](#_Toc479757295)

# bcfs-1

## Target-mask match

> regRand <- lmBF(RT ~ SubjID, data = mdNoNa, whichRandom = 'SubjID')

> regPart <- lmBF(RT ~ maskSpeed\_ctr + SubjID, data=mdNoNa, whichRandom = 'SubjID')

0 %

|----|----|----|----|----|----|----|----|----|----|

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*|

> regPart / regRand

Bayes factor analysis

--------------

[1] maskSpeed\_ctr + SubjID : 3.187036e+51 <U+00B1>1.37%

Against denominator:

RT ~ SubjID

---

Bayes factor type: BFlinearModel, JZS

> regFull <- lmBF(RT ~ mpMatch\_ctr + maskSpeed\_ctr + SubjID, data=mdNoNa, whichRandom = 'SubjID')

0 %

|----|----|----|----|----|----|----|----|----|----|

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*|

> regFull / regRand

Bayes factor analysis

--------------

[1] mpMatch\_ctr + maskSpeed\_ctr + SubjID : 2.187662e+52 <U+00B1>0.73%

Against denominator:

RT ~ SubjID

---

Bayes factor type: BFlinearModel, JZS

> regPart / regFull

Bayes factor analysis

--------------

[1] maskSpeed\_ctr + SubjID : 0.1456823 <U+00B1>1.55%

Against denominator:

RT ~ mpMatch\_ctr + maskSpeed\_ctr + SubjID

---

Bayes factor type: BFlinearModel, JZS

> regFull / regPart

Bayes factor analysis

--------------

[1] mpMatch\_ctr + maskSpeed\_ctr + SubjID : 6.864253 <U+00B1>1.55%

Against denominator:

RT ~ maskSpeed\_ctr + SubjID

---

Bayes factor type: BFlinearModel, JZS

===

The model that includes the effect of matching the target and mask motion is preferred by a factor of 6.86, pointing to incomplete evidence of its contribution.

## Match X mask speed interaction

> regRand <- lmBF(RT ~ SubjID, data = mdNoNa, whichRandom = 'SubjID')

> regNi <- lmBF(RT ~ mpMatch\_ctr + maskSpeed\_ctr + SubjID, data=mdNoNa, whichRandom = 'SubjID')

0 %

|----|----|----|----|----|----|----|----|----|----|

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*|

> regNi / regRand

Bayes factor analysis

--------------

[1] mpMatch\_ctr + maskSpeed\_ctr + SubjID : 2.214771e+52 <U+00B1>1.02%

Against denominator:

RT ~ SubjID

---

Bayes factor type: BFlinearModel, JZS

> regFull <- lmBF(RT ~ mpMatch\_ctr + maskSpeed\_ctr + mpMatch\_ctr:maskSpeed\_ctr + SubjID,

+ data=mdNoNa, whichRandom = 'SubjID')

0 %

|----|----|----|----|----|----|----|----|----|----|

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*|

> regFull / regRand

Bayes factor analysis

--------------

[1] mpMatch\_ctr + maskSpeed\_ctr + mpMatch\_ctr:maskSpeed\_ctr + SubjID : 1.316865e+51 <U+00B1>0.5%

Against denominator:

RT ~ SubjID

---

Bayes factor type: BFlinearModel, JZS

> regNi / regFull

Bayes factor analysis

--------------

[1] mpMatch\_ctr + maskSpeed\_ctr + SubjID : 16.81851 <U+00B1>1.14%

Against denominator:

RT ~ mpMatch\_ctr + maskSpeed\_ctr + mpMatch\_ctr:maskSpeed\_ctr + SubjID

---

Bayes factor type: BFlinearModel, JZS

> regFull / regNi

Bayes factor analysis

--------------

[1] mpMatch\_ctr + maskSpeed\_ctr + mpMatch\_ctr:maskSpeed\_ctr + SubjID : 0.0594583 <U+00B1>1.14%

Against denominator:

RT ~ mpMatch\_ctr + maskSpeed\_ctr + SubjID

---

Bayes factor type: BFlinearModel, JZS

===

The no-interaction model was preferred by a factor of 16.8, suggesting no interaction between mask speed and target-mask match of the motion pattern.

# bcfs-1 full model

## mask pattern of motion

> regFull <- lmBF(RT ~ mpRotMask\_ctr + maskSpeed\_ctr + SubjID, data=mdNoNa, whichRandom = 'SubjID')

0 %

|----|----|----|----|----|----|----|----|----|----|

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*|

> regFull / regRand

Bayes factor analysis

--------------

[1] mpRotMask\_ctr + maskSpeed\_ctr + SubjID : 1.888734e+51 <U+00B1>0.88%

Against denominator:

RT ~ SubjID

---

Bayes factor type: BFlinearModel, JZS

> regPart / regFull

Bayes factor analysis

--------------

[1] maskSpeed\_ctr + SubjID : 1.700346 <U+00B1>1.49%

Against denominator:

RT ~ mpRotMask\_ctr + maskSpeed\_ctr + SubjID

---

Bayes factor type: BFlinearModel, JZS

> regFull / regPart

Bayes factor analysis

--------------

[1] mpRotMask\_ctr + maskSpeed\_ctr + SubjID : 0.5881156 <U+00B1>1.49%

Against denominator:

RT ~ maskSpeed\_ctr + SubjID

---

Bayes factor type: BFlinearModel, JZS

===

No clear contribution from the effect of mask rotation. The partial model is preferred by a factor of 1.7.

## target pattern of motion

> regFull <- lmBF(RT ~ mpRotTarg\_ctr + maskSpeed\_ctr + SubjID, data=mdNoNa, whichRandom = 'SubjID')

0 %

|----|----|----|----|----|----|----|----|----|----|

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*|

> regFull / regRand

Bayes factor analysis

--------------

[1] mpRotTarg\_ctr + maskSpeed\_ctr + SubjID : 2.990946e+51 <U+00B1>0.77%

Against denominator:

RT ~ SubjID

---

Bayes factor type: BFlinearModel, JZS

> regPart / regFull

Bayes factor analysis

--------------

[1] maskSpeed\_ctr + SubjID : 1.073741 <U+00B1>1.42%

Against denominator:

RT ~ mpRotTarg\_ctr + maskSpeed\_ctr + SubjID

---

Bayes factor type: BFlinearModel, JZS

> regFull / regPart

Bayes factor analysis

--------------

[1] mpRotTarg\_ctr + maskSpeed\_ctr + SubjID : 0.9313231 <U+00B1>1.42%

Against denominator:

RT ~ maskSpeed\_ctr + SubjID

---

Bayes factor type: BFlinearModel, JZS

===

No clear contribution of the effect of target pattern of motion.

## interaction of mask and target motion patterns

> regPart <- lmBF(RT ~ mpRotTarg\_ctr + mpRotMask\_ctr + maskSpeed\_ctr + SubjID, data=mdNoNa,

+ whichRandom = 'SubjID')

0 %

|----|----|----|----|----|----|----|----|----|----|

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*|

> regFull <- lmBF(RT ~ mpRotTarg\_ctr + mpRotMask\_ctr + maskSpeed\_ctr +

+ mpRotTarg\_ctr:mpRotMask\_ctr + SubjID, data=mdNoNa, whichRandom = 'SubjID')

0 %

|----|----|----|----|----|----|----|----|----|----|

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*|

> regPart / regFull

Bayes factor analysis

--------------

[1] mpRotTarg\_ctr + mpRotMask\_ctr + maskSpeed\_ctr + SubjID : 0.09391052 <U+00B1>0.85%

Against denominator:

RT ~ mpRotTarg\_ctr + mpRotMask\_ctr + maskSpeed\_ctr + mpRotTarg\_ctr:mpRotMask\_ctr + SubjID

---

Bayes factor type: BFlinearModel, JZS

> regFull / regPart

Bayes factor analysis

--------------

[1] mpRotTarg\_ctr + mpRotMask\_ctr + maskSpeed\_ctr + mpRotTarg\_ctr:mpRotMask\_ctr + SubjID : 10.64843 <U+00B1>0.85%

Against denominator:

RT ~ mpRotTarg\_ctr + mpRotMask\_ctr + maskSpeed\_ctr + SubjID

---

Bayes factor type: BFlinearModel, JZS

===

Preference toward an interaction model.

# bcfs-1 no-response

## contribution of mask pattern of motion to explaining no-response trials

> regRand <- lmBF(nNa ~ SubjID, data = dsna, whichRandom = 'SubjID')

> regPart <- lmBF(nNa ~ maskSpeed\_ctr + SubjID, data=dsna, whichRandom = 'SubjID')

|----|----|----|----|----|----|----|----|----|----|

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*|

> regFull <- lmBF(nNa ~ mpRotMask\_ctr + maskSpeed\_ctr + SubjID, data=dsna, whichRandom = 'SubjID')

|----|----|----|----|----|----|----|----|----|----|

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*|

> regFull / regRand

Bayes factor analysis

--------------

[1] mpRotMask\_ctr + maskSpeed\_ctr + SubjID : 2256050 ±1.64%

Against denominator:

nNa ~ SubjID

---

Bayes factor type: BFlinearModel, JZS

> regPart / regFull

Bayes factor analysis

--------------

[1] maskSpeed\_ctr + SubjID : 0.9831467 ±1.81%

Against denominator:

nNa ~ mpRotMask\_ctr + maskSpeed\_ctr + SubjID

---

Bayes factor type: BFlinearModel, JZS

> regFull / regPart

Bayes factor analysis

--------------

[1] mpRotMask\_ctr + maskSpeed\_ctr + SubjID : 1.017142 ±1.81%

Against denominator:

nNa ~ maskSpeed\_ctr + SubjID

---

Bayes factor type: BFlinearModel, JZS

No preference toward either partial or full model.

# bcfs-4

## Target speed effect

> regRand <- lmBF(RT ~ SubjID, data = mdNoNa, whichRandom = 'SubjID')

> regPart <- lmBF(RT ~ maskSpeed\_ctr + SubjID, data=mdNoNa, whichRandom = 'SubjID')

0 %

|----|----|----|----|----|----|----|----|----|----|

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*|

> regPart / regRand

Bayes factor analysis

--------------

[1] maskSpeed\_ctr + SubjID : 2.784581e+100 <U+00B1>1.4%

Against denominator:

RT ~ SubjID

---

Bayes factor type: BFlinearModel, JZS

> regFull <- lmBF(RT ~ targSpeed\_ctr + maskSpeed\_ctr + SubjID, data=mdNoNa, whichRandom = 'SubjID')

0 %

|----|----|----|----|----|----|----|----|----|----|

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*|

> regFull / regRand

Bayes factor analysis

--------------

[1] targSpeed\_ctr + maskSpeed\_ctr + SubjID : 5.52591e+151 <U+00B1>2%

Against denominator:

RT ~ SubjID

---

Bayes factor type: BFlinearModel, JZS

> regPart / regFull

Bayes factor analysis

--------------

[1] maskSpeed\_ctr + SubjID : 5.039136e-52 <U+00B1>2.45%

Against denominator:

RT ~ targSpeed\_ctr + maskSpeed\_ctr + SubjID

---

Bayes factor type: BFlinearModel, JZS

> regFull / regPart

Bayes factor analysis

--------------

[1] targSpeed\_ctr + maskSpeed\_ctr + SubjID : 1.984467e+51 <U+00B1>2.45%

Against denominator:

RT ~ maskSpeed\_ctr + SubjID

---

Bayes factor type: BFlinearModel, JZS

===

A clear preference toward a model that includes the target speed.

## Mask X target speed interaction

> regRand <- lmBF(RT ~ SubjID, data = mdNoNa, whichRandom = 'SubjID')

> regNi <- lmBF(RT ~ targSpeed\_ctr + maskSpeed\_ctr + SubjID, data=mdNoNa, whichRandom = 'SubjID')

0 %

|----|----|----|----|----|----|----|----|----|----|

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*|

> regNi / regRand

Bayes factor analysis

--------------

[1] targSpeed\_ctr + maskSpeed\_ctr + SubjID : 5.383381e+151 <U+00B1>0.7%

Against denominator:

RT ~ SubjID

---

Bayes factor type: BFlinearModel, JZS

> regFull <- lmBF(RT ~ targSpeed\_ctr + maskSpeed\_ctr + targSpeed\_ctr:maskSpeed\_ctr + SubjID,

+ data=mdNoNa, whichRandom = 'SubjID')

0 %

|----|----|----|----|----|----|----|----|----|----|

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*|

> regFull / regRand

Bayes factor analysis

--------------

[1] targSpeed\_ctr + maskSpeed\_ctr + targSpeed\_ctr:maskSpeed\_ctr + SubjID : 2.107237e+159 <U+00B1>0.74%

Against denominator:

RT ~ SubjID

---

Bayes factor type: BFlinearModel, JZS

> regNi / regFull

Bayes factor analysis

--------------

[1] targSpeed\_ctr + maskSpeed\_ctr + SubjID : 2.55471e-08 <U+00B1>1.02%

Against denominator:

RT ~ targSpeed\_ctr + maskSpeed\_ctr + targSpeed\_ctr:maskSpeed\_ctr + SubjID

---

Bayes factor type: BFlinearModel, JZS

> regFull / regNi

Bayes factor analysis

--------------

[1] targSpeed\_ctr + maskSpeed\_ctr + targSpeed\_ctr:maskSpeed\_ctr + SubjID : 39143380 <U+00B1>1.02%

Against denominator:

RT ~ targSpeed\_ctr + maskSpeed\_ctr + SubjID

---

Bayes factor type: BFlinearModel, JZS

# bcfs-5

## The effect of target speed

> regRand <- lmBF(RT ~ SubjID, data = mdNoNa, whichRandom = 'SubjID')

> regPart <- lmBF(RT ~ maskSpeed\_ctr + SubjID, data=mdNoNa, whichRandom = 'SubjID')

0 %

|----|----|----|----|----|----|----|----|----|----|

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*|

> regPart / regRand

Bayes factor analysis

--------------

[1] maskSpeed\_ctr + SubjID : 6.823713e+16 <U+00B1>0.79%

Against denominator:

RT ~ SubjID

---

Bayes factor type: BFlinearModel, JZS

> regFull <- lmBF(RT ~ targSpeed\_ctr + maskSpeed\_ctr + SubjID, data=mdNoNa, whichRandom = 'SubjID')

0 %

|----|----|----|----|----|----|----|----|----|----|

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*|

> regFull / regRand

Bayes factor analysis

--------------

[1] targSpeed\_ctr + maskSpeed\_ctr + SubjID : 3.068736e+15 <U+00B1>0.8%

Against denominator:

RT ~ SubjID

---

Bayes factor type: BFlinearModel, JZS

> regPart / regFull

Bayes factor analysis

--------------

[1] maskSpeed\_ctr + SubjID : 22.23624 <U+00B1>1.13%

Against denominator:

RT ~ targSpeed\_ctr + maskSpeed\_ctr + SubjID

---

Bayes factor type: BFlinearModel, JZS

> regFull / regPart

Bayes factor analysis

--------------

[1] targSpeed\_ctr + maskSpeed\_ctr + SubjID : 0.04497164 <U+00B1>1.13%

Against denominator:

RT ~ maskSpeed\_ctr + SubjID

---

Bayes factor type: BFlinearModel, JZS

===

A partial model (without the target speed) is clearly preferred.

## Interaction between target and mask speed

> regRand <- lmBF(RT ~ SubjID, data = mdNoNa, whichRandom = 'SubjID')

> regNi <- lmBF(RT ~ targSpeed\_ctr + maskSpeed\_ctr + SubjID, data=mdNoNa, whichRandom = 'SubjID')

|----|----|----|----|----|----|----|----|----|----|

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*|

> regNi / regRand

Bayes factor analysis

--------------

[1] targSpeed\_ctr + maskSpeed\_ctr + SubjID : 3.07595e+15 ±0.75%

Against denominator:

RT ~ SubjID

---

Bayes factor type: BFlinearModel, JZS

> regFull <- lmBF(RT ~ targSpeed\_ctr + maskSpeed\_ctr + targSpeed\_ctr:maskSpeed\_ctr + SubjID,

+ data=mdNoNa, whichRandom = 'SubjID')

|----|----|----|----|----|----|----|----|----|----|

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*|

> regFull / regRand

Bayes factor analysis

--------------

[1] targSpeed\_ctr + maskSpeed\_ctr + targSpeed\_ctr:maskSpeed\_ctr + SubjID : 3.250205e+15 ±0.9%

Against denominator:

RT ~ SubjID

---

Bayes factor type: BFlinearModel, JZS

> regNi / regFull

Bayes factor analysis

--------------

[1] targSpeed\_ctr + maskSpeed\_ctr + SubjID : 0.9463864 ±1.17%

Against denominator:

RT ~ targSpeed\_ctr + maskSpeed\_ctr + targSpeed\_ctr:maskSpeed\_ctr + SubjID

---

Bayes factor type: BFlinearModel, JZS

> regFull / regNi

Bayes factor analysis

--------------

[1] targSpeed\_ctr + maskSpeed\_ctr + targSpeed\_ctr:maskSpeed\_ctr + SubjID : 1.056651 ±1.17%

Against denominator:

RT ~ targSpeed\_ctr + maskSpeed\_ctr + SubjID

---

Bayes factor type: BFlinearModel, JZS

Neither model is preferred when compared to the random intercept-only model or to each other. I.e., the interaction term does not seem to contribute.

# bcfs-6

## Target speed

> regRand <- lmBF(RT ~ SubjID, data = mdNoNa, whichRandom = 'SubjID')

> regPart <- lmBF(RT ~ maskSpeed\_ctr + SubjID, data=mdNoNa, whichRandom = 'SubjID')

0 %

|----|----|----|----|----|----|----|----|----|----|

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*|

> regPart / regRand

Bayes factor analysis

--------------

[1] maskSpeed\_ctr + SubjID : 99744906932 <U+00B1>0.91%

Against denominator:

RT ~ SubjID

---

Bayes factor type: BFlinearModel, JZS

> regFull <- lmBF(RT ~ targSpeed\_ctr + maskSpeed\_ctr + SubjID, data=mdNoNa, whichRandom = 'SubjID')

0 %

|----|----|----|----|----|----|----|----|----|----|

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*|

> regFull / regRand

Bayes factor analysis

--------------

[1] targSpeed\_ctr + maskSpeed\_ctr + SubjID : 3946821691 <U+00B1>0.82%

Against denominator:

RT ~ SubjID

---

Bayes factor type: BFlinearModel, JZS

> regPart / regFull

Bayes factor analysis

--------------

[1] maskSpeed\_ctr + SubjID : 25.27221 <U+00B1>1.23%

Against denominator:

RT ~ targSpeed\_ctr + maskSpeed\_ctr + SubjID

---

Bayes factor type: BFlinearModel, JZS

> regFull / regPart

Bayes factor analysis

--------------

[1] targSpeed\_ctr + maskSpeed\_ctr + SubjID : 0.03956916 <U+00B1>1.23%

Against denominator:

RT ~ maskSpeed\_ctr + SubjID

---

Bayes factor type: BFlinearModel, JZS

===

Partial model (without the target speed) is preferred by a factor of 25.

## Interaction

> regRand <- lmBF(RT ~ SubjID, data = mdNoNa, whichRandom = 'SubjID')

> regNi <- lmBF(RT ~ targSpeed\_ctr + maskSpeed\_ctr + SubjID, data=mdNoNa, whichRandom = 'SubjID')

|----|----|----|----|----|----|----|----|----|----|

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*|

> regNi / regRand

Bayes factor analysis

--------------

[1] targSpeed\_ctr + maskSpeed\_ctr + SubjID : 3996770520 ±1.59%

Against denominator:

RT ~ SubjID

---

Bayes factor type: BFlinearModel, JZS

> regFull <- lmBF(RT ~ targSpeed\_ctr + maskSpeed\_ctr + targSpeed\_ctr:maskSpeed\_ctr + SubjID,

+ data=mdNoNa, whichRandom = 'SubjID')

|----|----|----|----|----|----|----|----|----|----|

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*|

> regFull / regRand

Bayes factor analysis

--------------

[1] targSpeed\_ctr + maskSpeed\_ctr + targSpeed\_ctr:maskSpeed\_ctr + SubjID : 107855878 ±1.04%

Against denominator:

RT ~ SubjID

---

Bayes factor type: BFlinearModel, JZS

> regNi / regFull

Bayes factor analysis

--------------

[1] targSpeed\_ctr + maskSpeed\_ctr + SubjID : 37.05659 ±1.9%

Against denominator:

RT ~ targSpeed\_ctr + maskSpeed\_ctr + targSpeed\_ctr:maskSpeed\_ctr + SubjID

---

Bayes factor type: BFlinearModel, JZS

> regFull / regNi

Bayes factor analysis

--------------

[1] targSpeed\_ctr + maskSpeed\_ctr + targSpeed\_ctr:maskSpeed\_ctr + SubjID : 0.02698576 ±1.9%

Against denominator:

RT ~ targSpeed\_ctr + maskSpeed\_ctr + SubjID

---

Bayes factor type: BFlinearModel, JZS

The no-interaction model is clearly preferred here by a factor of 37.

# bcfs-6 no-response

## mask X target interaction

> regRand <- lmBF(nNa ~ SubjID, data = dsna, whichRandom = 'SubjID')

> regPart <- lmBF(nNa ~ targSpeed\_ctr + maskSpeed\_ctr + SubjID, data=dsna, whichRandom = 'SubjID')

|----|----|----|----|----|----|----|----|----|----|

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*|

> regFull <- lmBF(nNa ~ targSpeed\_ctr \* maskSpeed\_ctr + SubjID, data=dsna, whichRandom = 'SubjID')

|----|----|----|----|----|----|----|----|----|----|

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*|

> regFull / regRand

Bayes factor analysis

--------------

[1] targSpeed\_ctr \* maskSpeed\_ctr + SubjID : 138553.7 ±1.49%

Against denominator:

nNa ~ SubjID

---

Bayes factor type: BFlinearModel, JZS

> regPart / regFull

Bayes factor analysis

--------------

[1] targSpeed\_ctr + maskSpeed\_ctr + SubjID : 0.962731 ±1.56%

Against denominator:

nNa ~ targSpeed\_ctr \* maskSpeed\_ctr + SubjID

---

Bayes factor type: BFlinearModel, JZS

> regFull / regPart

Bayes factor analysis

--------------

[1] targSpeed\_ctr \* maskSpeed\_ctr + SubjID : 1.038712 ±1.56%

Against denominator:

nNa ~ targSpeed\_ctr + maskSpeed\_ctr + SubjID

---

Bayes factor type: BFlinearModel, JZS

# bcfs-7

## Mask switching

> regRand <- lmBF(RT ~ SubjID, data = mdNoNa, whichRandom = 'SubjID')

> regPart <- lmBF(RT ~ maskSpeed\_ctr + SubjID, data=mdNoNa, whichRandom = 'SubjID')

0 %

|----|----|----|----|----|----|----|----|----|----|

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*|

> regPart / regRand

Bayes factor analysis

--------------

[1] maskSpeed\_ctr + SubjID : 6.615294e+12 <U+00B1>1.76%

Against denominator:

RT ~ SubjID

---

Bayes factor type: BFlinearModel, JZS

> regFull <- lmBF(RT ~ maskSwitch\_ctr + maskSpeed\_ctr + SubjID, data=mdNoNa, whichRandom = 'SubjID')

0 %

|----|----|----|----|----|----|----|----|----|----|

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*|

> regFull / regRand

Bayes factor analysis

--------------

[1] maskSwitch\_ctr + maskSpeed\_ctr + SubjID : 220722077257 <U+00B1>1.06%

Against denominator:

RT ~ SubjID

---

Bayes factor type: BFlinearModel, JZS

> regPart / regFull

Bayes factor analysis

--------------

[1] maskSpeed\_ctr + SubjID : 29.97115 <U+00B1>2.05%

Against denominator:

RT ~ maskSwitch\_ctr + maskSpeed\_ctr + SubjID

---

Bayes factor type: BFlinearModel, JZS

> regFull / regPart

Bayes factor analysis

--------------

[1] maskSwitch\_ctr + maskSpeed\_ctr + SubjID : 0.03336542 <U+00B1>2.05%

Against denominator:

RT ~ maskSpeed\_ctr + SubjID

---

Bayes factor type: BFlinearModel, JZS

===

The partial model without the mask switch is clearly preferred.

## Interaction

> regRand <- lmBF(RT ~ SubjID, data = mdNoNa, whichRandom = 'SubjID')

> regNi <- lmBF(RT ~ maskSwitch\_ctr + maskSpeed\_ctr + SubjID, data=mdNoNa, whichRandom = 'SubjID')

|----|----|----|----|----|----|----|----|----|----|

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*|

> regNi / regRand

Bayes factor analysis

--------------

[1] maskSwitch\_ctr + maskSpeed\_ctr + SubjID : 222848183541 ±1.24%

Against denominator:

RT ~ SubjID

---

Bayes factor type: BFlinearModel, JZS

> regFull <- lmBF(RT ~ maskSwitch\_ctr + maskSpeed\_ctr + maskSwitch\_ctr:maskSpeed\_ctr + SubjID,

+ data=mdNoNa, whichRandom = 'SubjID')

|----|----|----|----|----|----|----|----|----|----|

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*|

> regFull / regRand

Bayes factor analysis

--------------

[1] maskSwitch\_ctr + maskSpeed\_ctr + maskSwitch\_ctr:maskSpeed\_ctr + SubjID : 151448905804 ±0.74%

Against denominator:

RT ~ SubjID

---

Bayes factor type: BFlinearModel, JZS

> regNi / regFull

Bayes factor analysis

--------------

[1] maskSwitch\_ctr + maskSpeed\_ctr + SubjID : 1.471441 ±1.45%

Against denominator:

RT ~ maskSwitch\_ctr + maskSpeed\_ctr + maskSwitch\_ctr:maskSpeed\_ctr + SubjID

---

Bayes factor type: BFlinearModel, JZS

> regFull / regNi

Bayes factor analysis

--------------

[1] maskSwitch\_ctr + maskSpeed\_ctr + maskSwitch\_ctr:maskSpeed\_ctr + SubjID : 0.6796057 ±1.45%

Against denominator:

RT ~ maskSwitch\_ctr + maskSpeed\_ctr + SubjID

---

Bayes factor type: BFlinearModel, JZS

The no-interaction model is slightly more preferred, by a factor of 1.47; however, no definitive evidence of the contribution of the interaction.