Computation of Significance between Model Evaluations

Imports

ALL MODELS

Data

```
databs <- read.csv("database.csv", header=TRUE)
head(databs)
```

```
##   Participant Model Genre Liking Curiosity Human Complexity GenreAcc
## 1           1     3     5      5         4     3          4        0
## 2           1     3     8      6         3     5          5        0
## 3           1     0     4      5         5     6          4        1
## 4           1     0     3      6         5     6          4        1
## 5           1     2     8      4         3     5          3        0
## 6           1     1     6      2         3     4          2        0
```

```
databs$Model <- as.factor(databs$Model)
databs$Genre <- as.factor(databs$Genre)
```

Liking

```
mod_liking <- mixed(Liking ~ Model * Genre + (1 | Participant), data = databs, method = "KR")
```

```
## Contrasts set to contr.sum for the following variables: Model, Genre
mod_liking
```

```
## Mixed Model Anova Table (Type 3 tests, KR-method)
##
## Model: Liking ~ Model * Genre + (1 | Participant)
## Data: databs
##        Effect       df        F p.value
## 1       Model  4, 882 23.58 ***   <.001
## 2       Genre  9, 882  8.67 ***   <.001
## 3 Model:Genre 36, 882  2.06 ***   <.001
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '+' 0.1 ' ' 1
```

Curiosity

```
mod_curiosity <- mixed(Curiosity ~ Model * Genre + (1 | Participant), data = databs, method = "KR")
```

```
## Contrasts set to contr.sum for the following variables: Model, Genre
mod_curiosity
```

```
## Mixed Model Anova Table (Type 3 tests, KR-method)
```

```
## 
## Model: Curiosity ~ Model * Genre + (1 | Participant)
## Data: databs
##        Effect       df         F p.value
## 1       Model   4, 882 30.37 ***   <.001
## 2       Genre   9, 882 13.60 ***   <.001
## 3 Model:Genre 36, 882  3.19 ***   <.001
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '+' 0.1 ' ' 1
```

Genre Accuracy

```
mod_genre <- mixed(GenreAcc ~ Model * Genre + (1 | Participant), data = databs, method = "KR")
```

```
## Contrasts set to contr.sum for the following variables: Model, Genre
```

```
mod_genre
```

```
## Mixed Model Anova Table (Type 3 tests, KR-method)
## 
## Model: GenreAcc ~ Model * Genre + (1 | Participant)
## Data: databs
##        Effect       df         F p.value
## 1       Model   4, 882 10.79 ***   <.001
## 2       Genre   9, 882 34.53 ***   <.001
## 3 Model:Genre 36, 882  3.68 ***   <.001
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '+' 0.1 ' ' 1
```

Human

```
mod_human <- mixed(Human ~ Model * Genre + (1 | Participant), data = databs, method = "KR")
```

```
## Contrasts set to contr.sum for the following variables: Model, Genre
```

```
mod_human
```

```
## Mixed Model Anova Table (Type 3 tests, KR-method)
## 
## Model: Human ~ Model * Genre + (1 | Participant)
## Data: databs
##        Effect       df         F p.value
## 1       Model   4, 882 33.83 ***   <.001
## 2       Genre   9, 882 18.65 ***   <.001
## 3 Model:Genre 36, 882  2.61 ***   <.001
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '+' 0.1 ' ' 1
```

Complexity

```
mod_complexity <- mixed(Complexity ~ Model * Genre + (1 | Participant), data = databs, method = "KR")
```

```
## Contrasts set to contr.sum for the following variables: Model, Genre
```

```
mod_complexity
```

```
## Mixed Model Anova Table (Type 3 tests, KR-method)
```

```
## 
## Model: Complexity ~ Model * Genre + (1 | Participant)
## Data: databs
##       Effect       df         F p.value
## 1      Model   4, 882 19.84 ***   <.001
## 2      Genre   9, 882 10.28 ***   <.001
## 3 Model:Genre 36, 882   1.68 **     .008
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '+' 0.1 ' ' 1
```

TOP 3

Data

```
databs <- read.csv("database_top3.csv", header=TRUE)
head(databs)
```

```
##   Participant Model Genre Liking Curiosity Human Complexity GenreAcc
## 1           1     0     4      5         5     6          4        1
## 2           1     0     3      6         5     6          4        1
## 3           1     1     6      2         3     4          2        0
## 4           1     4     6      5         3     5          4        0
## 5           1     1     5      4         4     4          2        0
## 6           1     1     7      6         4     6          6        0
```

```
databs$Model <- as.factor(databs$Model)
databs$Genre <- as.factor(databs$Genre)
```

Liking

```
mod_liking <- mixed(Liking ~ Model * Genre + (1 | Participant), data = databs, method = "KR")
```

```
## Contrasts set to contr.sum for the following variables: Model, Genre
mod_liking
```

```
## Mixed Model Anova Table (Type 3 tests, KR-method)
## 
## Model: Liking ~ Model * Genre + (1 | Participant)
## Data: databs
##       Effect       df        F p.value
## 1      Model   2, 522 9.53 ***   <.001
## 2      Genre   9, 522 7.64 ***   <.001
## 3 Model:Genre 18, 522   1.55 +     .070
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '+' 0.1 ' ' 1
```

Curiosity

```
mod_curiosity <- mixed(Curiosity ~ Model * Genre + (1 | Participant), data = databs, method = "KR")
```

```
## Contrasts set to contr.sum for the following variables: Model, Genre
mod_curiosity
```

```
## Mixed Model Anova Table (Type 3 tests, KR-method)
```

```
## 
## Model: Curiosity ~ Model * Genre + (1 | Participant)
## Data: databs
##      Effect      df        F p.value
## 1     Model  2, 522  7.79 ***   <.001
## 2     Genre  9, 522 14.12 ***   <.001
## 3 Model:Genre 18, 522    1.65 *    .045
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '+' 0.1 ' ' 1
```

Genre Accuracy

```
mod_genre <- mixed(GenreAcc ~ Model * Genre + (1 | Participant), data = databs, method = "KR")
```

```
## Contrasts set to contr.sum for the following variables: Model, Genre
```

```
mod_genre
```

```
## Mixed Model Anova Table (Type 3 tests, KR-method)
## 
## Model: GenreAcc ~ Model * Genre + (1 | Participant)
## Data: databs
##      Effect      df        F p.value
## 1     Model  2, 522   6.82 **    .001
## 2     Genre  9, 522 25.54 ***   <.001
## 3 Model:Genre 18, 522  2.42 ***   <.001
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '+' 0.1 ' ' 1
```

Human

```
mod_human <- mixed(Human ~ Model * Genre + (1 | Participant), data = databs, method = "KR")
```

```
## Contrasts set to contr.sum for the following variables: Model, Genre
```

```
mod_human
```

```
## Mixed Model Anova Table (Type 3 tests, KR-method)
## 
## Model: Human ~ Model * Genre + (1 | Participant)
## Data: databs
##      Effect      df        F p.value
## 1     Model  2, 522      1.86    .157
## 2     Genre  9, 522 18.40 ***   <.001
## 3 Model:Genre 18, 522   2.14 **    .004
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '+' 0.1 ' ' 1
```

Complexity

```
mod_complexity <- mixed(Complexity ~ Model * Genre + (1 | Participant), data = databs, method = "KR")
```

```
## Contrasts set to contr.sum for the following variables: Model, Genre
```

```
mod_complexity
```

```
## Mixed Model Anova Table (Type 3 tests, KR-method)
```

```
##
## Model: Complexity ~ Model * Genre + (1 | Participant)
## Data: databs
##        Effect      df        F p.value
## 1       Model  2, 522 7.59 ***   <.001
## 2       Genre  9, 522 9.25 ***   <.001
## 3 Model:Genre 18, 522     1.19    .265
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '+' 0.1 ' ' 1
```