

# Stylebot Experiment

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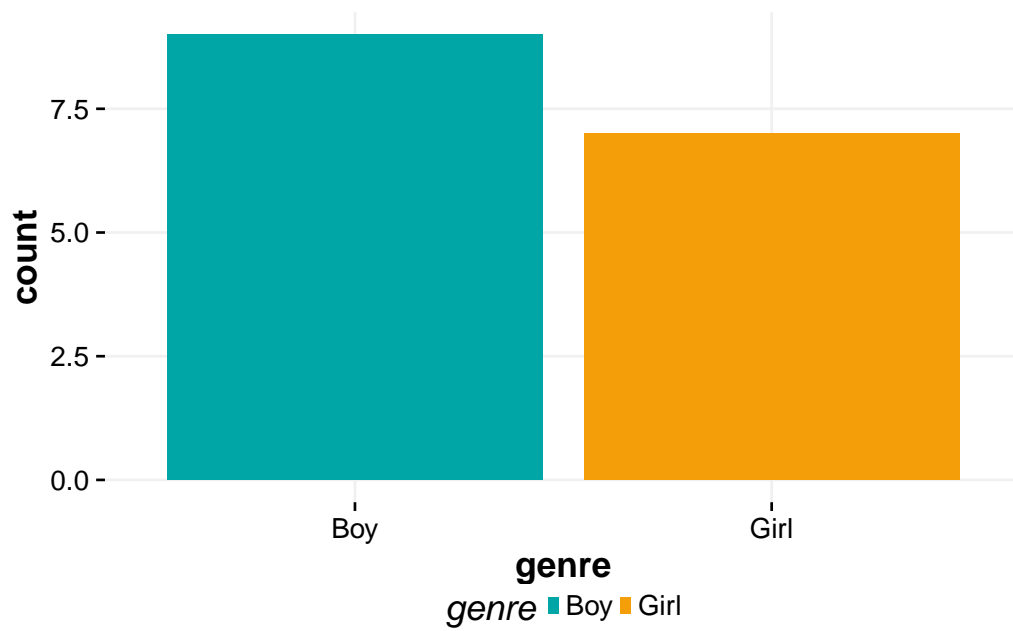
## 1 Interviews

Table 1: Summary statistics of activities metadata

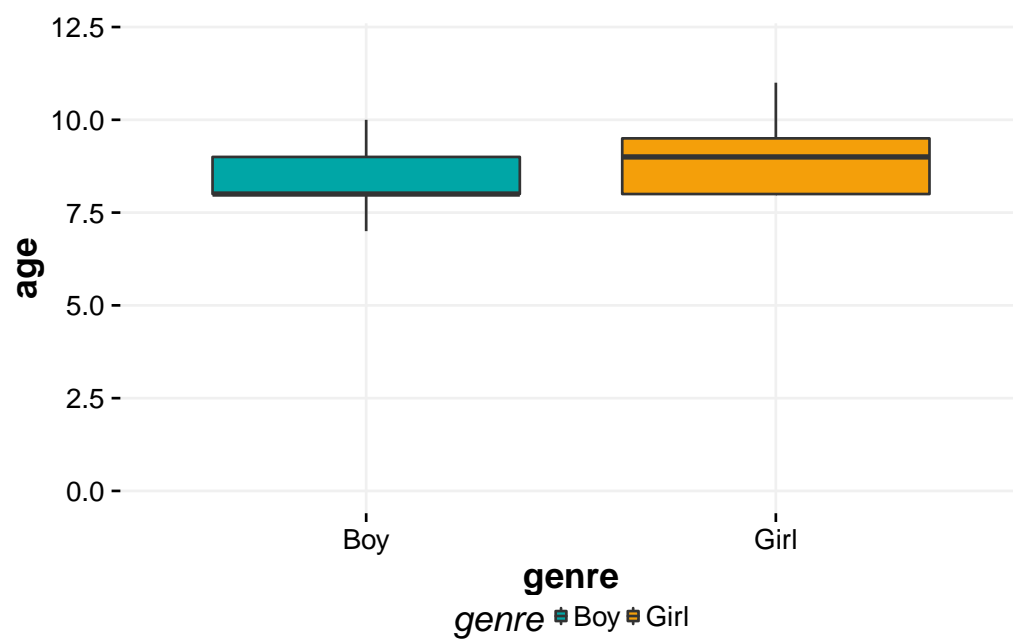
Statistic	N	Mean	St. Dev.	Min	Max
ordre	16	8.500	4.761	1	16
age	16	8.688	1.014	7	11
p_robot	16	3.125	1.258	1	5
p_videogame	16	3.500	1.414	1	5
p_bike	16	2.375	1.310	1	5
p_book	16	2.312	1.138	1	4
p_clothes	16	3.688	1.537	1	5
p_homeworks	16	3.375	1.147	1	4
p_play	16	3.562	0.892	1	4
p_teach	16	3.938	0.250	3	4
p_phone	15	1.867	1.302	1	4
p_webbrowser	15	2.067	1.335	1	4
prefered_session	14	1.643	0.497	1	2
e_robot	13	1.077	0.277	1	2
e_videogame	13	2.615	1.193	1	5
e_bike	12	3.250	0.965	2	5
e_book	12	3.417	1.379	1	5
e_clothes	13	4.308	0.751	3	5
e_homeworks	13	3.115	0.650	2.000	4.000
e_play	13	3.115	0.618	2.000	4.000
e_rules	12	3.167	0.577	2	4
e_learn	13	3.500	0.577	2.500	4.000
e_sport	12	3.000	0.603	2	4
e_teach	12	3.500	0.674	2	4
e_outside	12	2.917	0.900	1	4
e_mood	12	3.375	0.569	2.500	4.000
e_phone	13	2.308	1.109	1	4
e_webbrowser	13	2.500	0.957	1.000	4.000

## 1.1 General

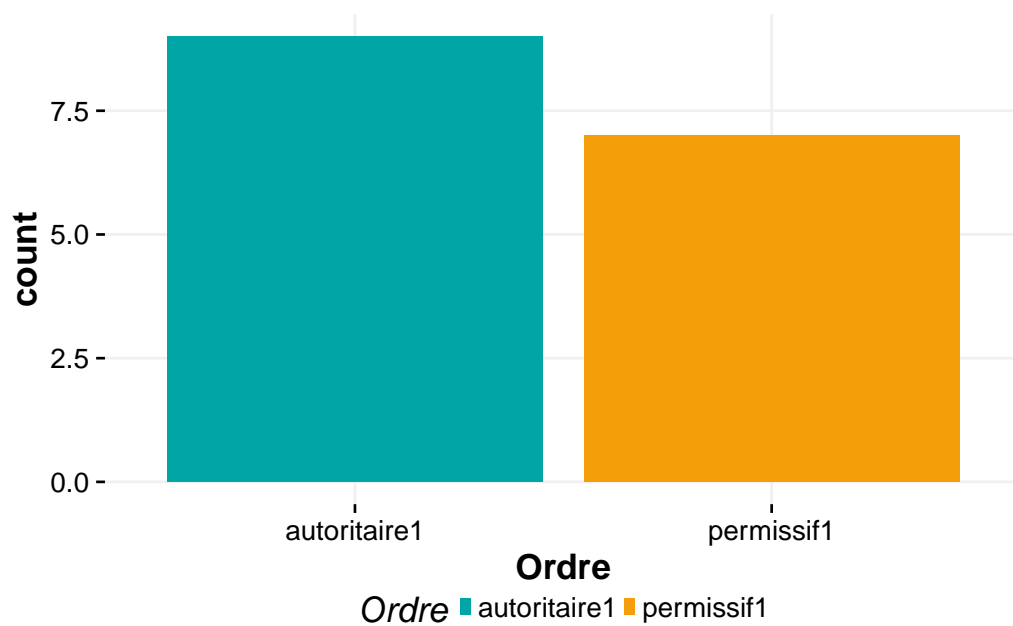
### 1.1.1 Gender



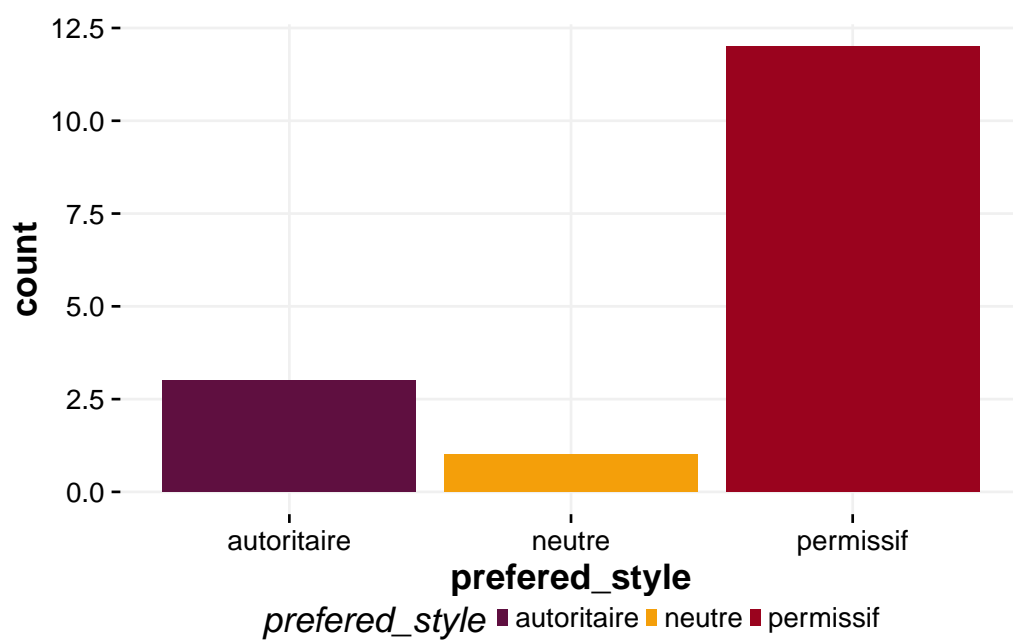
### 1.1.2 Age



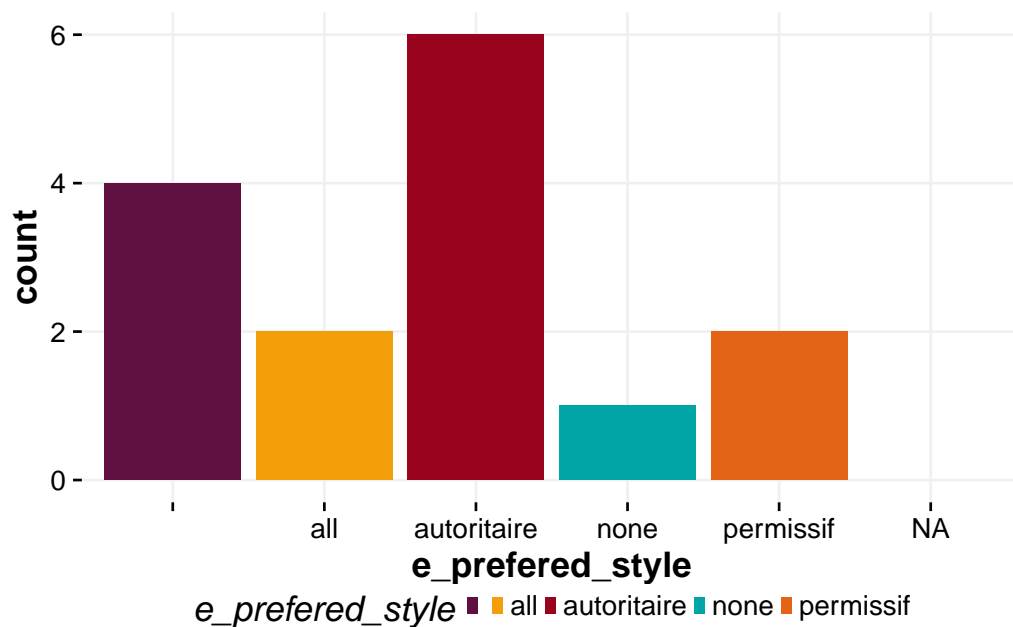
### 1.1.3 order



### 1.1.4 Preferred style parent

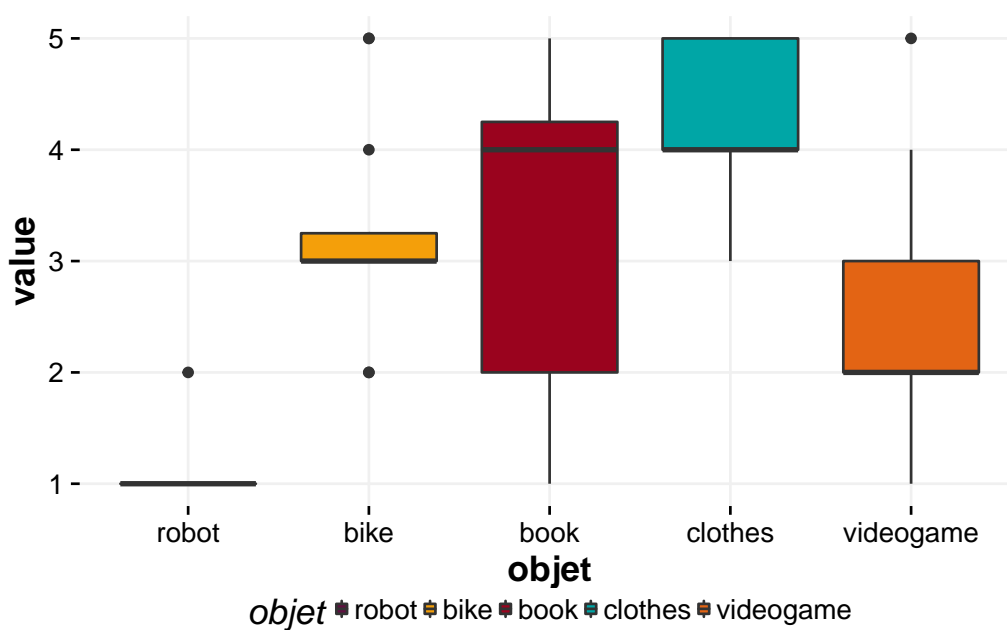


### 1.1.5 Preferred style children

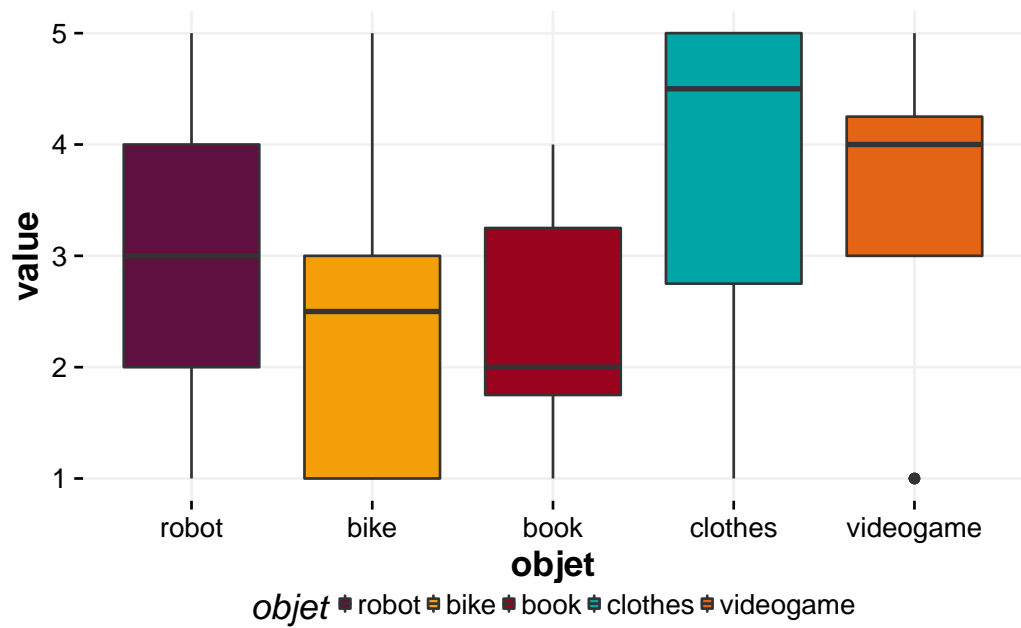


## 1.2 COIRS - CHILD ORIENTAION IN INTERACTING WITH ROBOT

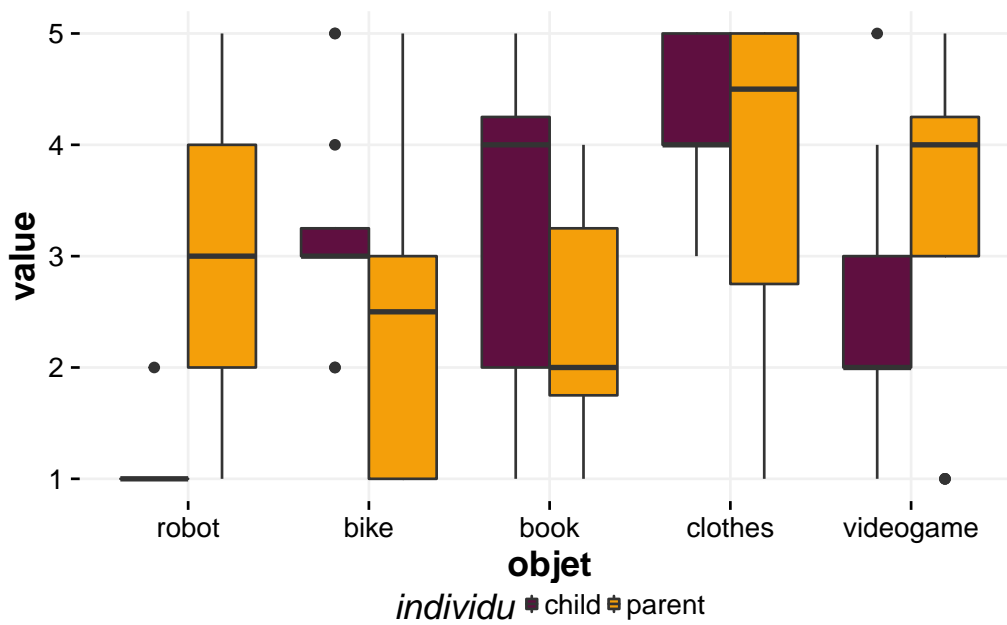
The following plot shows the average ranking for children for each of the object (1: first in the child's wish list)



The following plot shows the average ranking for parents for each of the object (1: first in the parent's wish list as

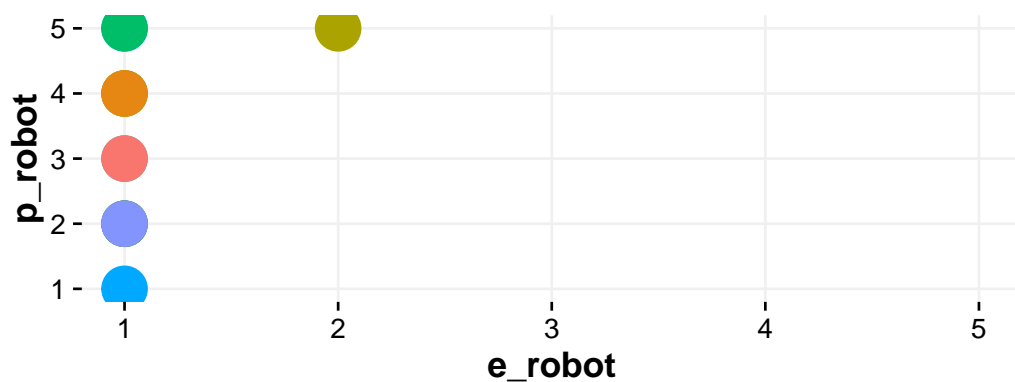


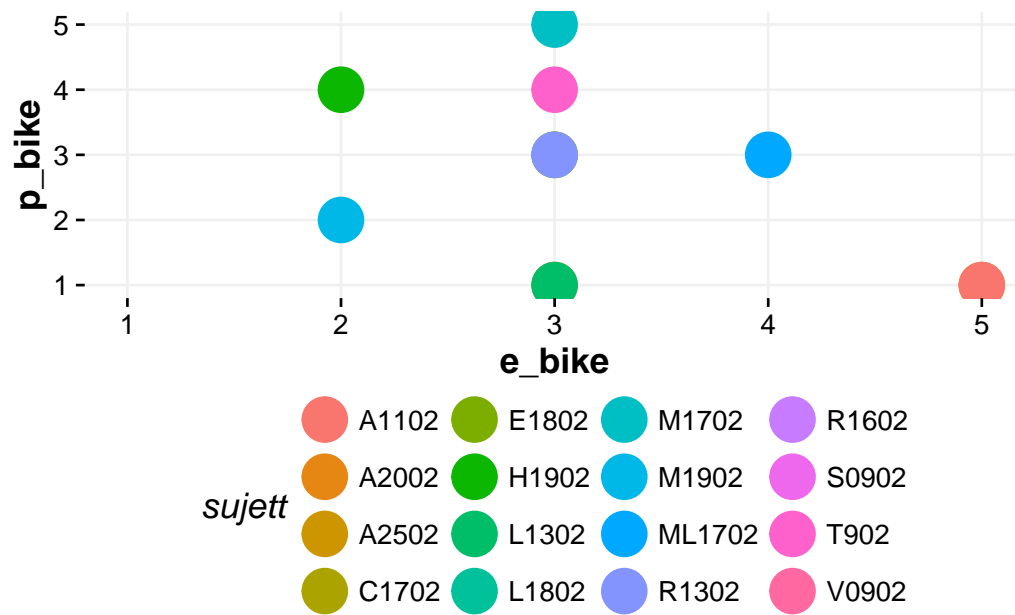
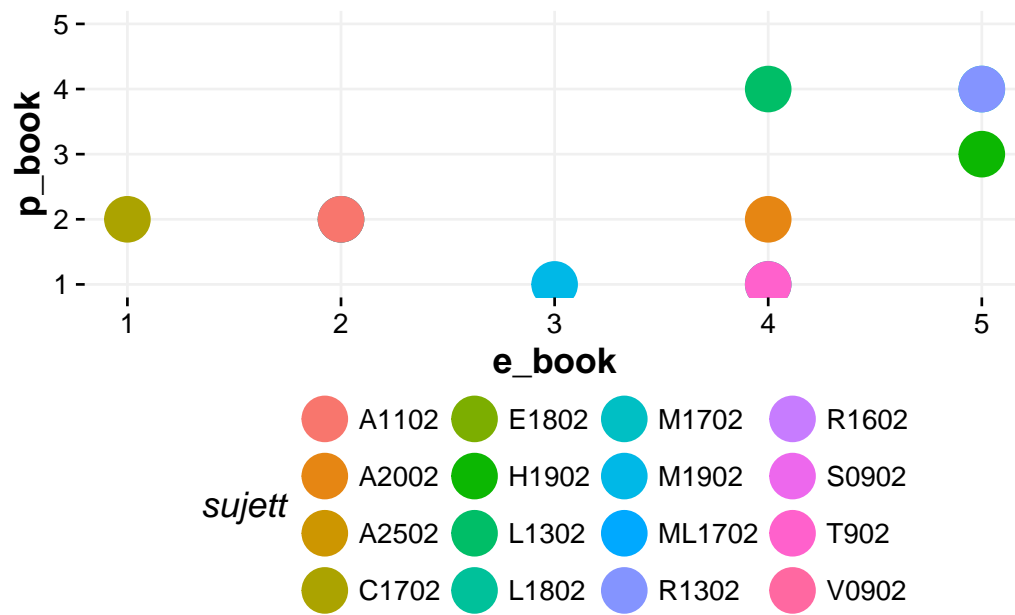
a gift for thei child)

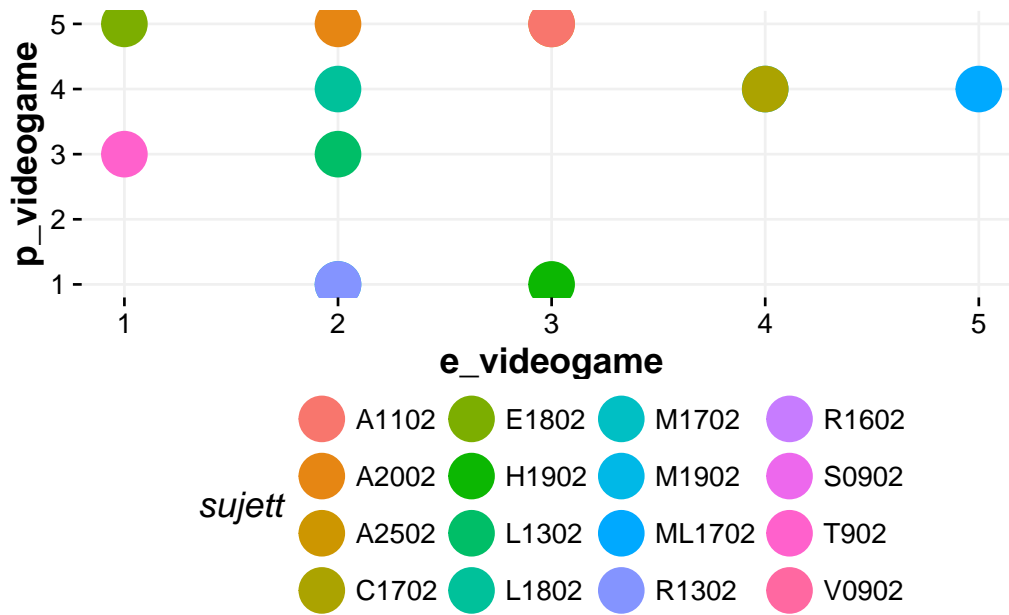


### 1.2.1 Child-parent correlation in object ranking

Next graphs show the correlation between parent and children ranking for each of the child subject

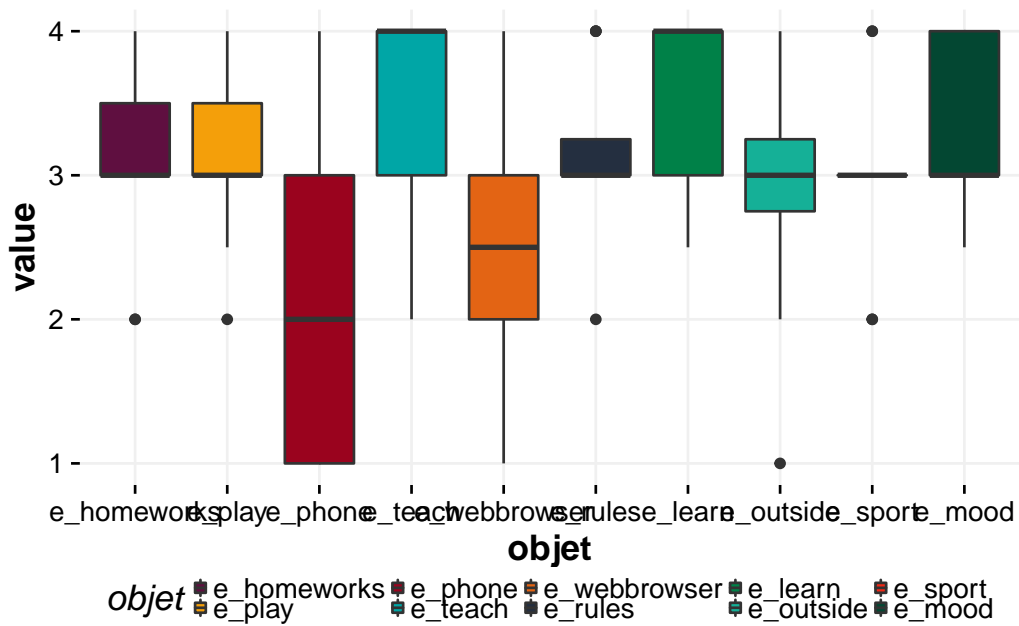






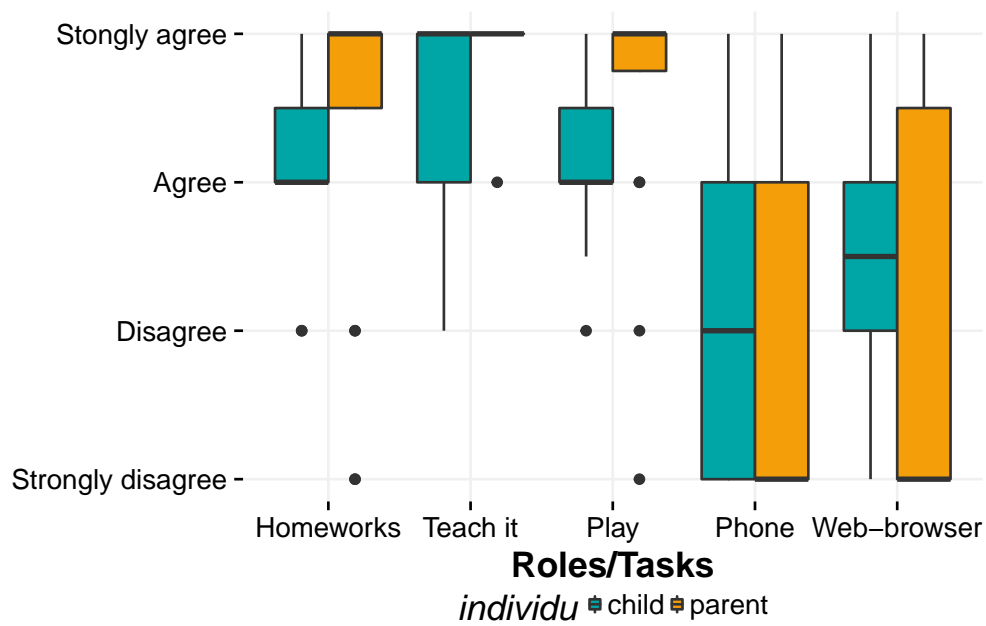
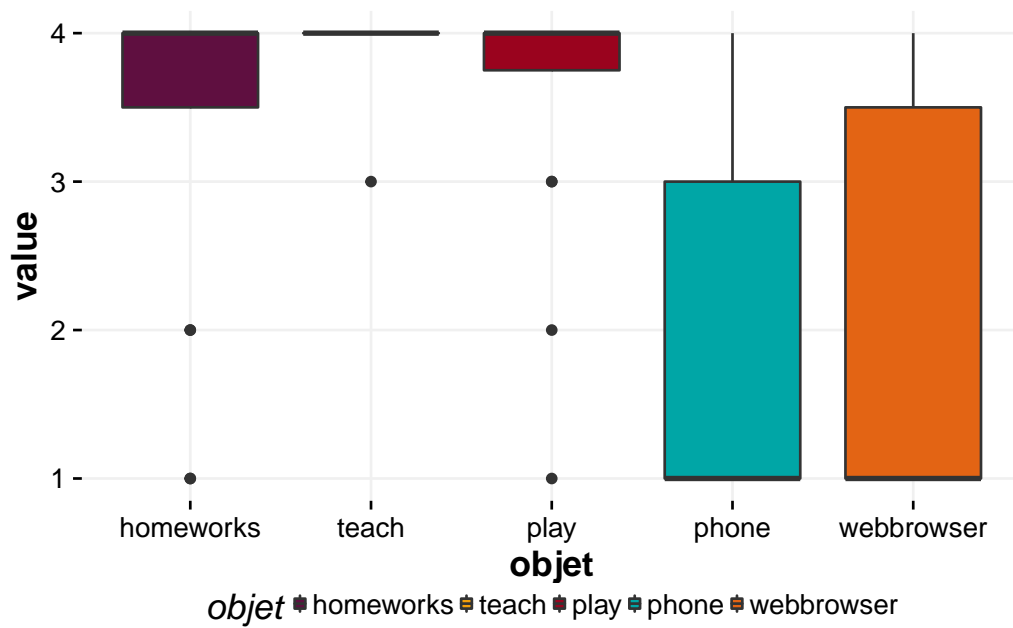
### 1.3 Functionality preferences

The following plot shows the average preference of children for each functionality (4: very preferred, 1: not preferred)

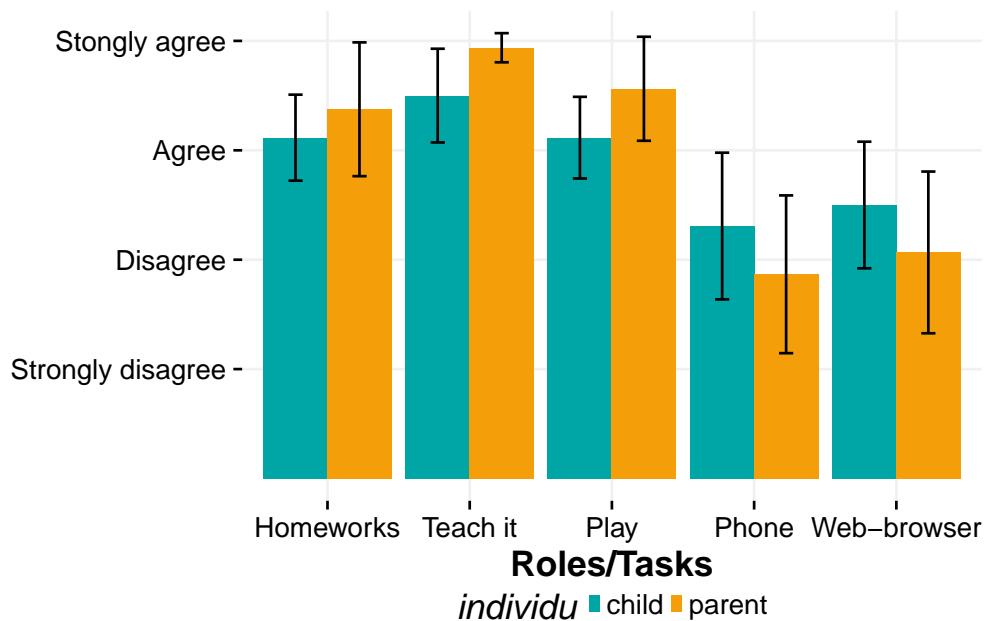


The following plot shows the average preference of parents for each functionality (4: very preferred, 1: not preferred)





	objet	individu	N	value	sd	se	ci
1	homeworks	child	13	3.115385	0.6504436	0.1804006	0.3930592
2	homeworks	parent	16	3.375000	1.1474610	0.2868652	0.6114388
3	teach	child	12	3.500000	0.6741999	0.1946247	0.4283662
4	teach	parent	16	3.937500	0.2500000	0.0625000	0.1332156
5	play	child	13	3.115385	0.6175842	0.1712870	0.3732024
6	play	parent	16	3.562500	0.8920949	0.2230237	0.4753638
7	phone	child	13	2.307692	1.1094004	0.3076923	0.6704039
8	phone	parent	15	1.866667	1.3020131	0.3361783	0.7210308
9	webbrowser	child	13	2.500000	0.9574271	0.2655425	0.5785674
10	webbrowser	parent	15	2.066667	1.3345233	0.3445724	0.7390344



```
> attach(df)
> summary(df)
```

```
      sujet      age      genre      Ordre      individu
A1102 : 10  Min.   : 7.000  Boy :90  autoritaire1:90  Length:160
A2002 : 10  1st Qu.: 8.000  Girl:70  permissif1 :70  Class :character
A2502 : 10  Median : 8.500
C1702 : 10  Mean   : 8.688
E1802 : 10  3rd Qu.: 9.000
H1902 : 10  Max.   :11.000
(Other):100
      objet      value
homeworks :32  Min.   :1.000
teach      :32  1st Qu.:2.000
play       :32  Median :3.000
phone      :32  Mean   :2.947
webbrowser:32  3rd Qu.:4.000
           :32  Max.   :4.000
           :32  NA's   :18
```

```
> summary(aov(df$value~df$objet*df$individu))
```

```
      Df Sum Sq Mean Sq F value Pr(>F)
df$objet      4  60.25  15.062  16.335 6.81e-11 ***
df$individu      1   0.11   0.112   0.121   0.729
df$objet:df$individu  4   5.78   1.445   1.567   0.187
Residuals    132 121.71   0.922
```

```
---
```

```
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
18 observations deleted due to missingness
```

### 1.3.1 Child-parent correlation in functionality preference

Next graphs show the correlation between parent and children ranking for each of the child subject

