

subject_report_19205

June 25, 2019

0.1 Report Overview

The tutorial is broken into several sections, which are each presented in their own notebook: 1. Section 0.1.1 2. Section 0.1.2 3. Section 0.2 4. Section 0.3 5. Section 0.3.1 * Section 0.3.2 * Section 0.3.2 6. Section 0.4

0.1.1 Packages

The autoreload extension is already loaded. To reload it, use:
`%reload_ext autoreload`

0.1.2 Methods

0.2 General

Screening session for subject 19205 occurred on May 24th. Nine blocks (three blocks of each task) were collected

```
[9]: subject      date SessionType math axcpt stroop
    0   19205  05_24_2019   Screening    3     3      3
```

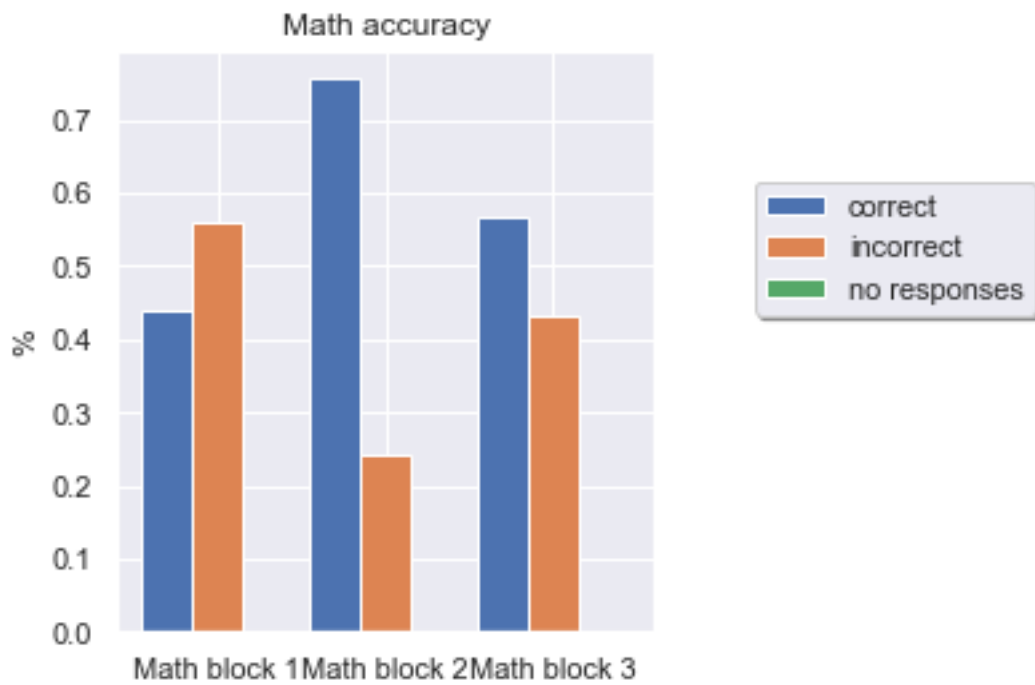
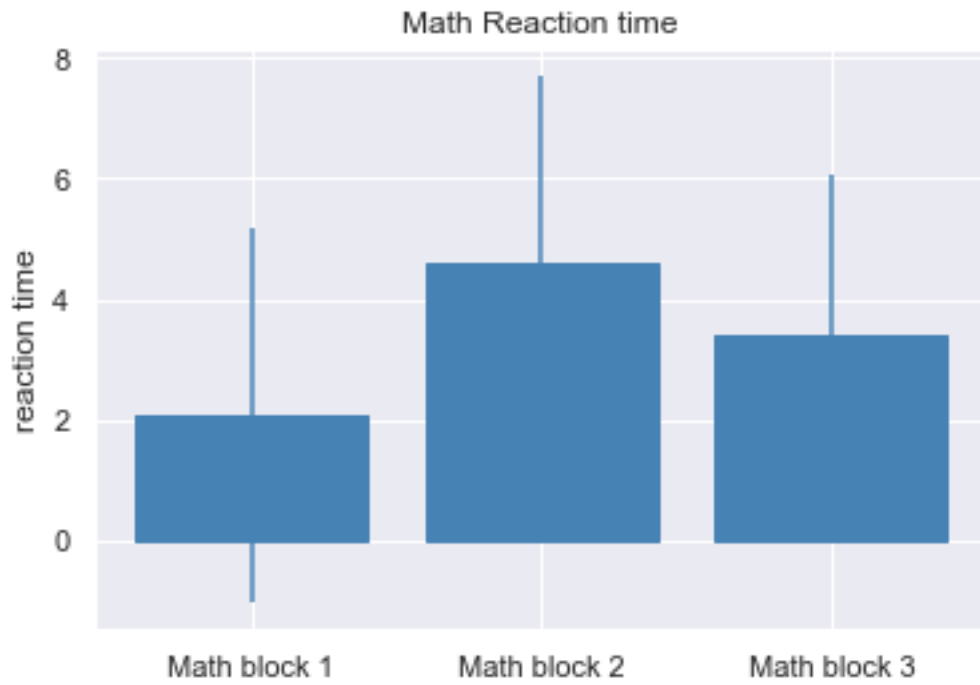
0.3 Task performance

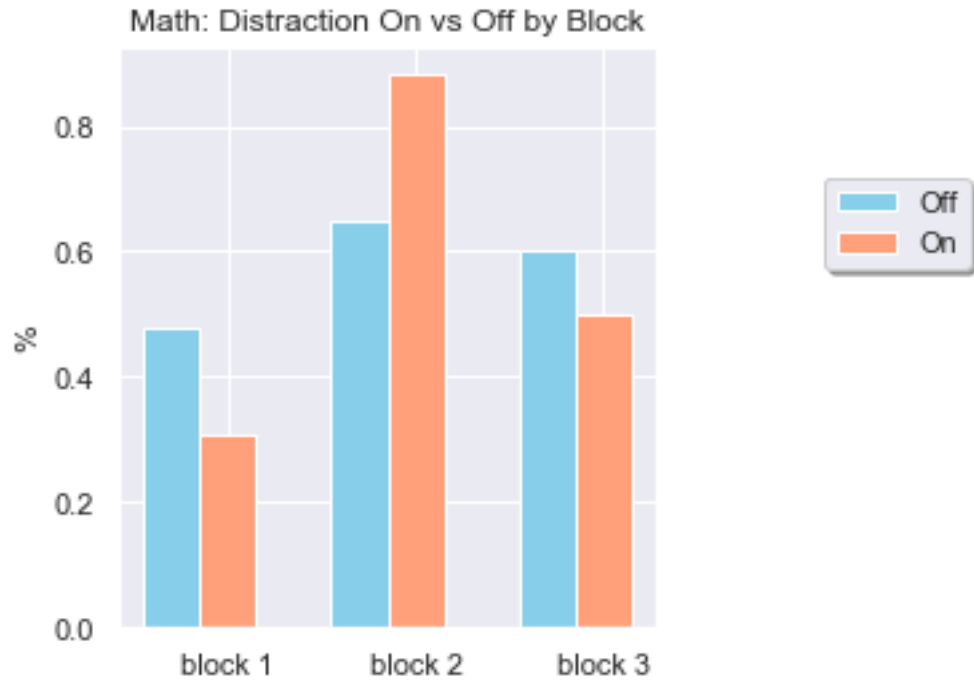
0.3.1 Math

```
[58]: Subject      Date SessionType count   time_s cnt_button1 \
    0   19205  05_24_2019_08_56_17   Screening    59  239.9243      37
    1   19205  05_24_2019_09_19_19   Screening    37  239.9583      17
    2   19205  05_24_2019_09_43_47   Screening    44  235.9673      19

    cnt_button3 num_responses num_correct  mean_rt  mean_crt_rt  sd_rt \
    0          11           59           26  2.057849   2.628592  3.100363
    1          19           37           28  4.625963   4.361215  3.091468
    2          14           44           25  3.426336   3.603887  2.623360

    sd_crt_rt
    0  3.643976
    1  3.040654
    2  2.156784
```



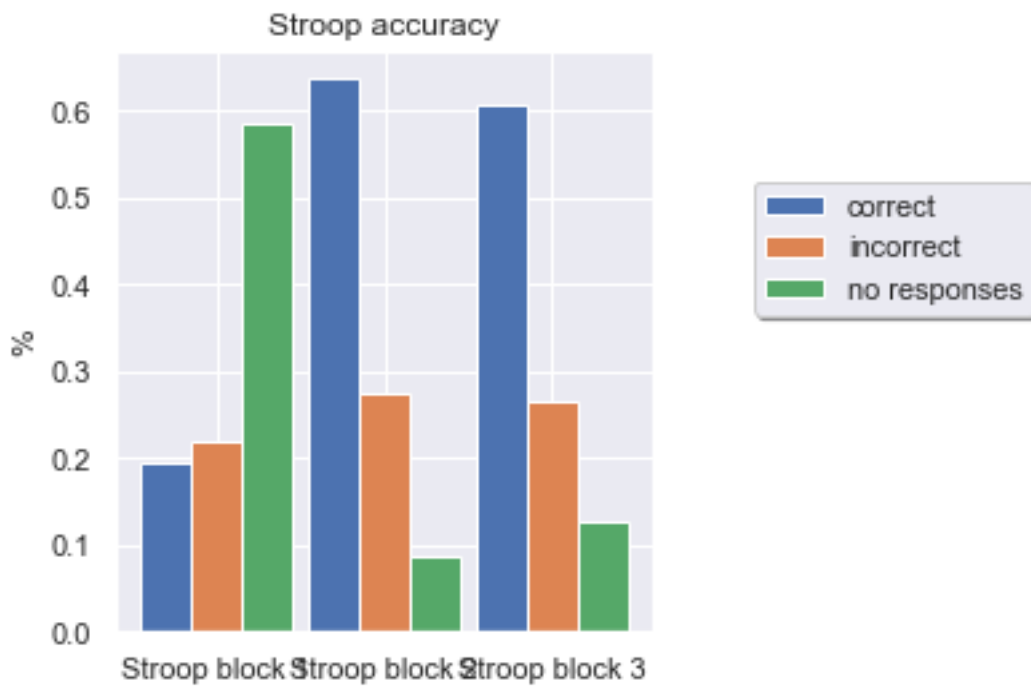
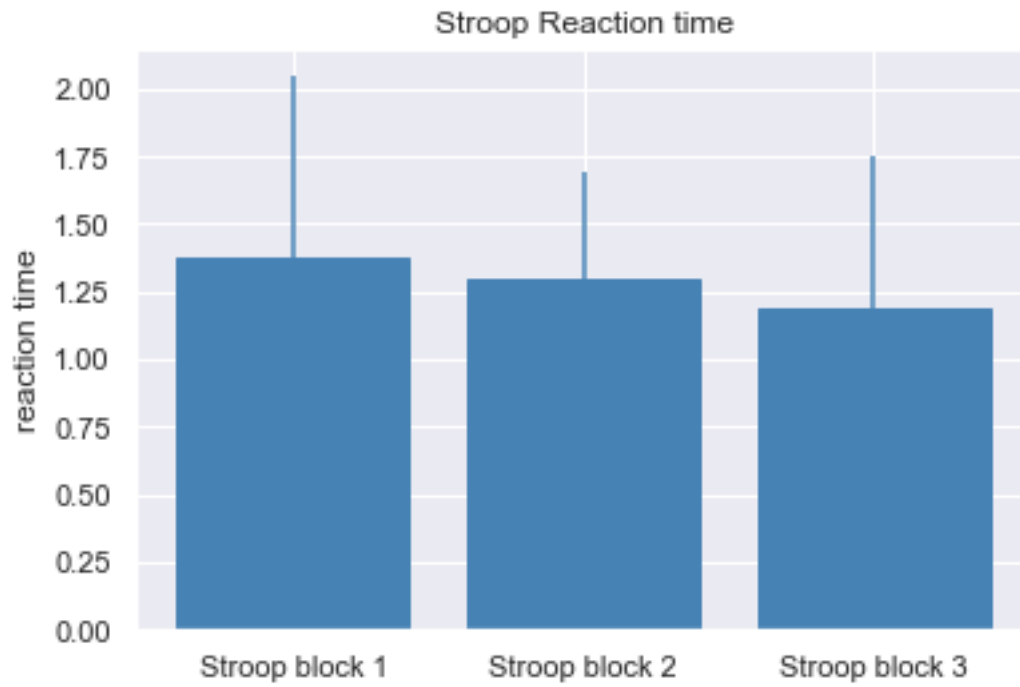


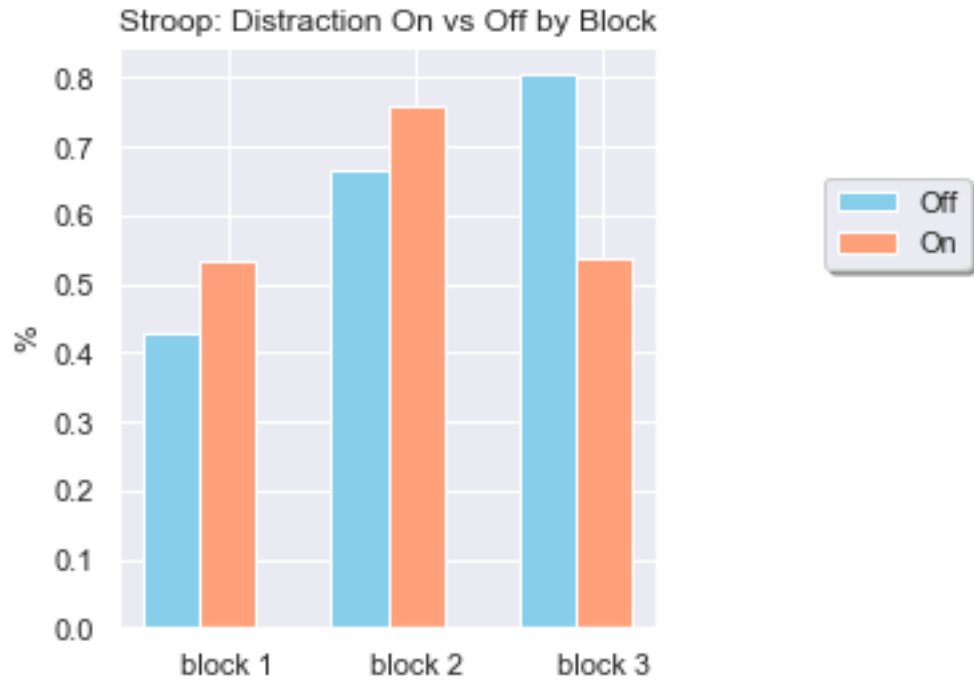
0.3.2 Stroop

```
[18]: Subject          Date SessionType  count  time_s  cnt_button1 \
0    19205 05_24_2019_08_38_35 Screening    87 236.1908      15
1    19205 05_24_2019_09_03_19 Screening    80 236.0488      32
2    19205 05_24_2019_09_28_36 Screening    79 236.0566      40

cnt_button3  num_responses  num_correct  mean_rt  mean_crt_rt  sd_rt \
0           20           36           17 1.373473    1.331347 0.672353
1           39           73           51 1.297126    1.315971 0.390916
2           29           69           48 1.189223    1.211385 0.558750

sd_crt_rt
0 0.686779
1 0.396421
2 0.544111
```



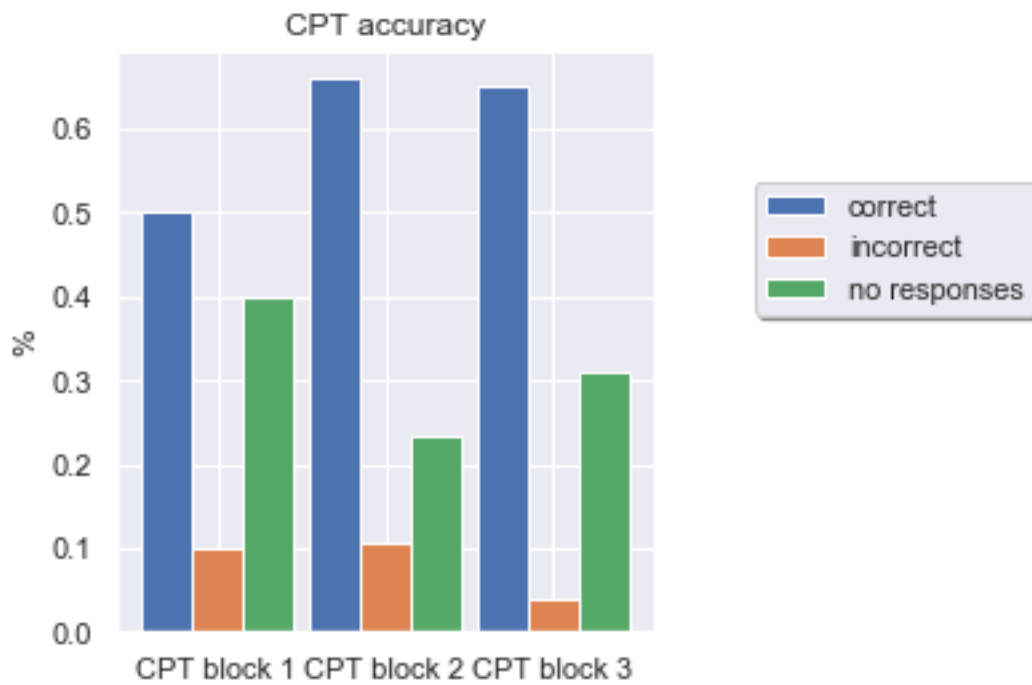
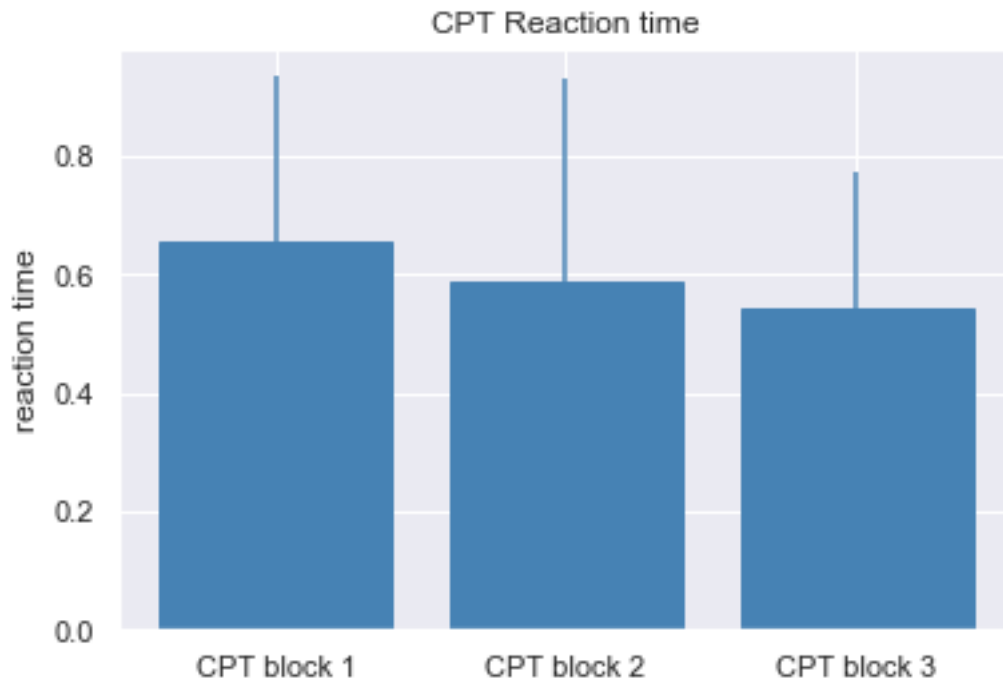


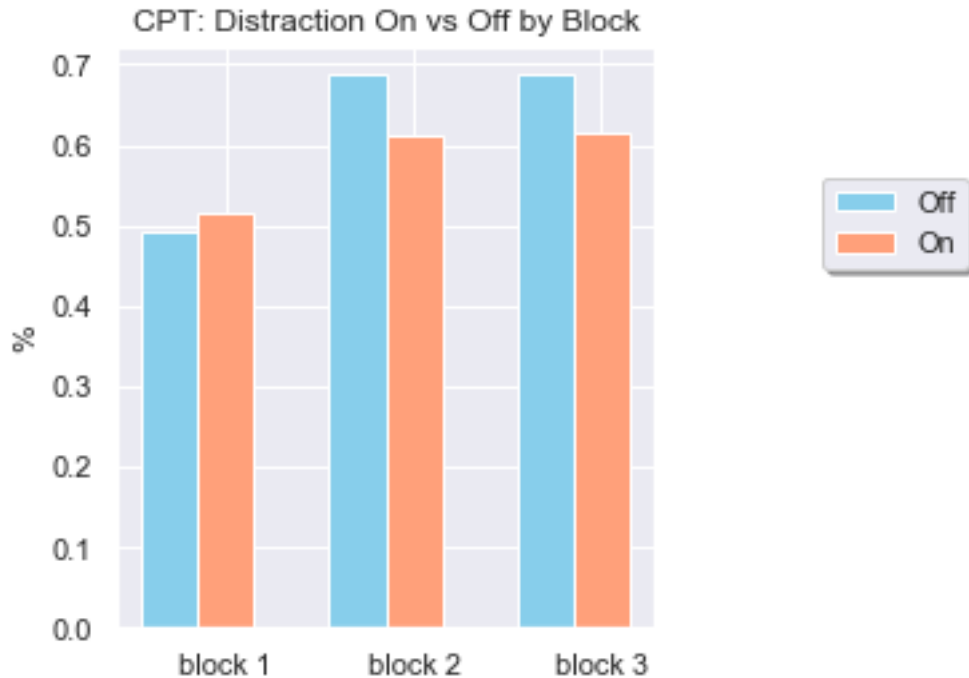
CPT

```
[20]: Subject          Date SessionType  count  time_s  cnt_button1 \
0    19205 05_24_2019_08_44_24 Screening   100  232.5524      48
1    19205 05_24_2019_09_12_35 Screening   103  232.5310      56
2    19205 05_24_2019_09_36_20 Screening   100  232.5962      51

cnt_button3  num_responses  num_correct  mean_rt  mean_crt_rt  sd_rt \
0           11           60           50  0.653527    0.664497  0.280798
1           22           79           68  0.589773    0.552996  0.342849
2           15           69           65  0.541086    0.538277  0.232138

sd_crt_rt
0  0.286075
1  0.179649
2  0.235093
```





0.4 Eye tracking

C:\Users\Greco\Anaconda3\envs\vrar\lib\site-packages\IPython\core\interactiveshell.py:3049: DtypeWarning: Columns (9,10) have mixed types. Specify dtype option on import or set low_memory=False.
interactivity=interactivity, compiler=compiler, result=result)

```
[23]: Task_duration(min) View_duration_distractor(%) View_duration_other(%) \
0          36.343655          1.709915          24.356625

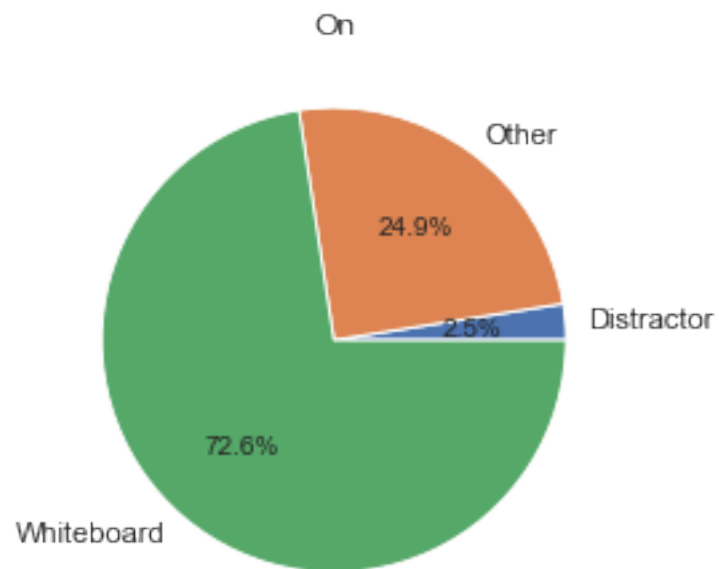
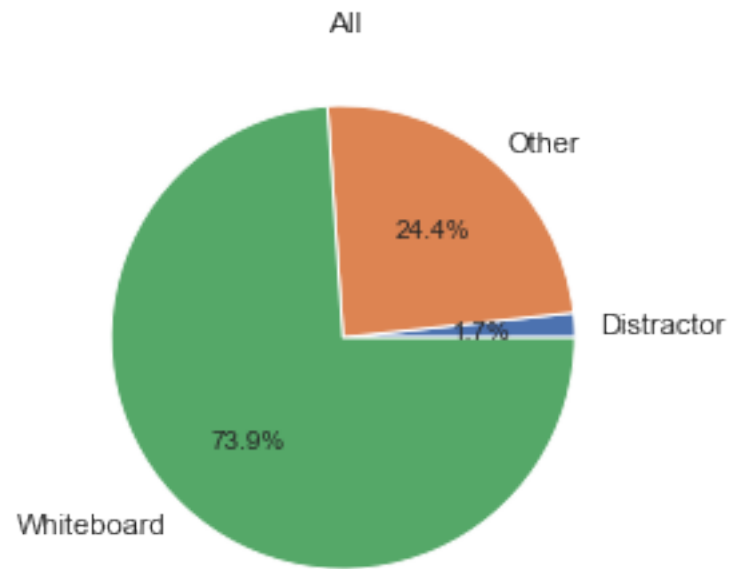
View_duration_whiteboard(%) View_duration_distractor(ms) \
0          73.93346          37286.7346

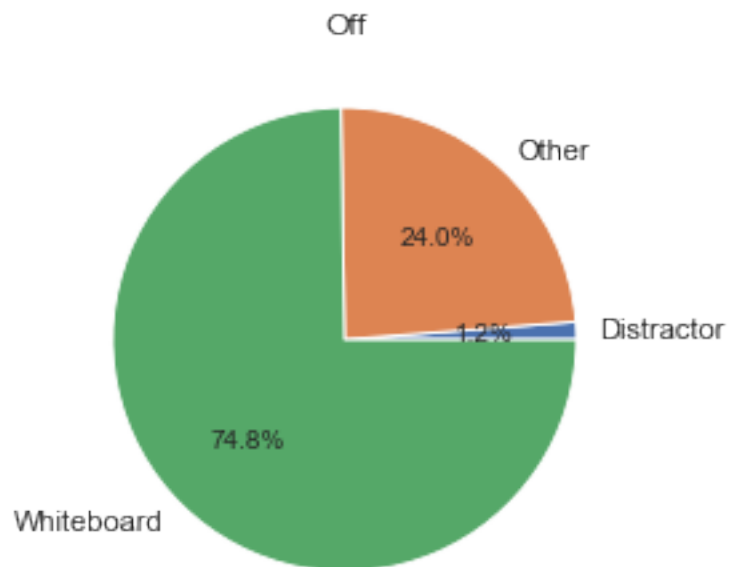
View_duration_other(ms) View_duration_whiteboard(ms) \
0          531125.2677          1.612207e+06

Object_list \
0 [Null, FrontWall, GroundExterior, Kevin, White...

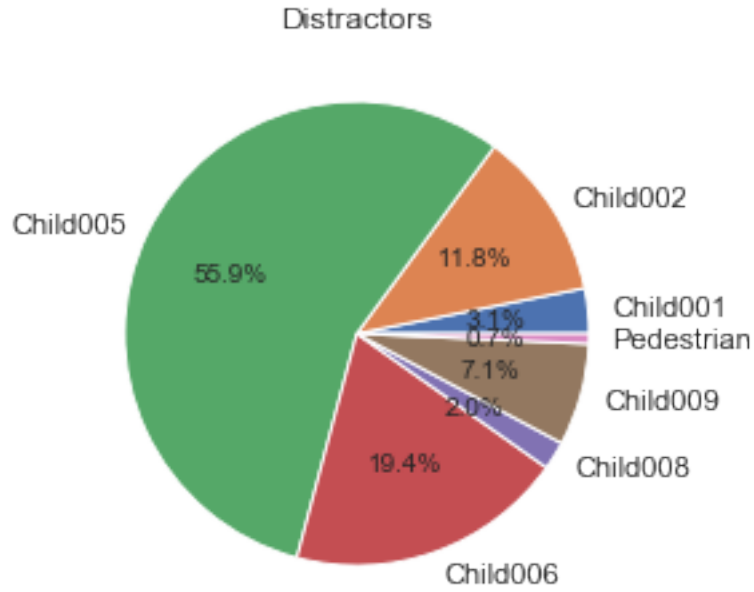
Distractor_list
0 [nan, iPhoneX, Pedestrian, BusSouth, Child009,...

[24]: array([1.7099149188986884, 24.356625185523068, 73.93345989557824],
dtype=object)
```





```
[34]: distractors
1      iPhoneX
2      Pedestrian
3      BusSouth
4      Child009
5      Child002
6      Child006
7      Child001
8      BusNorth
9      iPhoneX2
10     NewestTeacher
11     Child008
12     Child005
13     Car
```

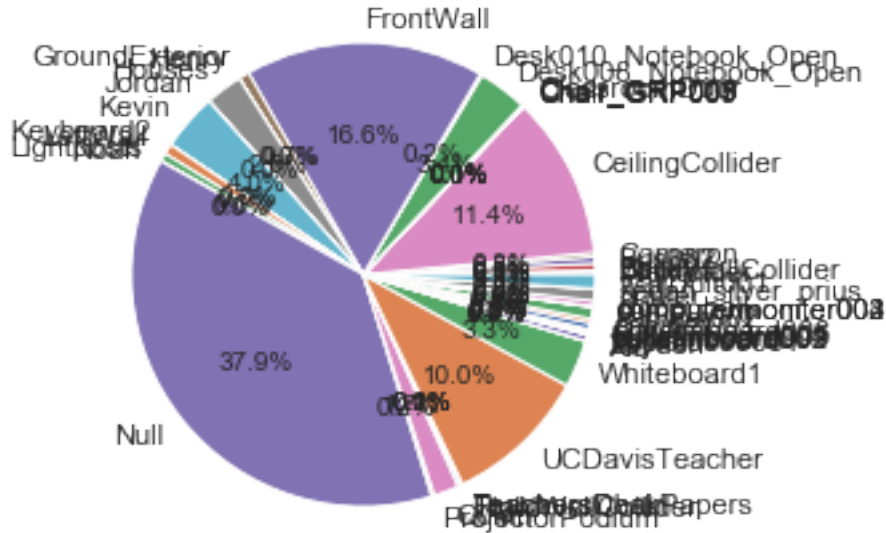


[36]:

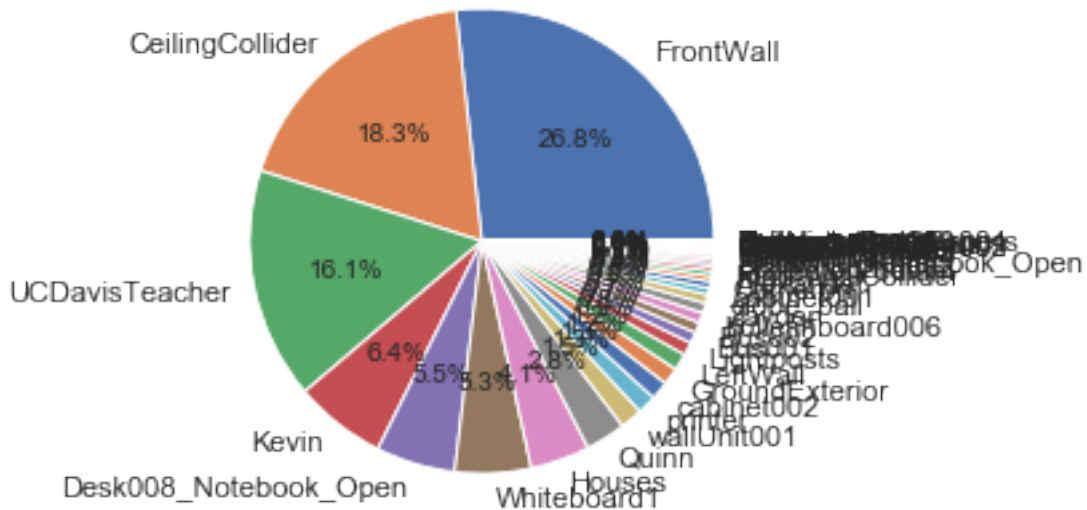
1	classroom objects
2	FrontWall
3	GroundExterior
4	Kevin
5	WhiteBoardWithDisplay
6	UCDavisTeacher
7	Whiteboard1
8	CeilingCollider
9	Quinn
10	printer
11	cabinet002
12	Houses
13	LeftWall
14	Pedestrian
15	Bus002
16	wallUnit001
17	Lightposts
18	globe_ball
19	Xia
20	ProjectorPodium
21	Cameron
22	ClassroomDoor
23	Taylor
24	bulletinboard002
25	RightWallCollider
26	Child006

26	Bailey
27	computermoniter003
28	Alexander
29	Noah
30	Keyboard2
31	Henry
32	TeachersChair
33	Desk010_Notebook_Open
34	Desk008_Notebook_Open
35	computermoniter002
36	computermoniter004
37	Zayden
38	Child009
39	BackWallCollider
40	bulletinboard006
41	Chair_GRP005
42	Chair_GRP009
43	Chair_GRP008
44	Chair_GRP007
45	bulletinboard005
46	bulletinboard003
47	Bus001
48	cabinet001
49	Child002
50	Child001
51	Child005
52	sedan_silver_prius
53	Jordan
54	bulletinboard004
55	Child008
56	bookcase0001
57	TeachersDeskPapers

Non-distractor and main whiteboard distractors



Non-distractor objects plotted without whiteboard and Null



[190]:

	Name	Duration	Type	Percentage
0	Child008	7.377502e+02	distractor	0.000338
1	Child009	2.653759e+03	distractor	0.001217
2	Child006	7.216191e+03	distractor	0.003309
3	Child005	2.085681e+04	distractor	0.009565

4	Child002	4.388061e+03	distractor	0.002012
5	Child001	1.170886e+03	distractor	0.000537
6	Pedestrian	2.632775e+02	distractor	0.000121
7	cabinet001	1.548599e+03	other	0.000710
8	Quinn	9.251466e+03	other	0.004243
9	RightWallCollider	1.164527e+03	other	0.000534
10	Taylor	3.930410e+02	other	0.000180
11	TeachersChair	2.902142e+02	other	0.000133
12	TeachersDeskPapers	1.196910e+01	other	0.000005
13	UCDavisTeacher	5.312409e+04	other	0.024362
14	Whiteboard1	1.746041e+04	other	0.008007
15	Xia	2.174202e+02	other	0.000100
16	Zayden	2.269725e+03	other	0.001041
17	bookcase0001	1.126983e+02	other	0.000052
18	bulletinboard002	8.629303e+02	other	0.000396
19	bulletinboard003	7.978900e+00	other	0.000004
20	printer	4.353711e+03	other	0.001997
21	ProjectorPodium	1.065806e+03	other	0.000489
22	globe_ball	1.965421e+03	other	0.000901
23	computermoniter004	1.595870e+01	other	0.000007
24	computermoniter003	2.242332e+02	other	0.000103
25	computermoniter002	1.805430e+02	other	0.000083
26	bulletinboard004	8.156613e+02	other	0.000374
27	bulletinboard005	3.141599e+02	other	0.000144
28	bulletinboard006	2.322917e+03	other	0.001065
29	cabinet002	4.232688e+03	other	0.001941
30	Alexander	1.240729e+03	other	0.000569
31	Lightposts	2.998924e+03	other	0.001375
32	Noah	1.671988e+02	other	0.000077
33	BackWallCollider	2.763301e+02	other	0.000127
34	Bailey	1.199860e+01	other	0.000006
35	Bus001	2.539783e+03	other	0.001165
36	Bus002	2.440566e+03	other	0.001119
37	Cameron	1.506145e+03	other	0.000691
38	CeilingCollider	6.039454e+04	other	0.027696
39	Chair_GRP005	2.193990e+01	other	0.000010
40	Chair_GRP007	1.994550e+01	other	0.000009
41	Chair_GRP008	1.231584e+02	other	0.000056
42	Chair_GRP009	2.094380e+01	other	0.000010
43	ClassroomDoor	5.043988e+02	other	0.000231
44	Desk008_Notebook_Open	1.820253e+04	other	0.008347
45	Desk010_Notebook_Open	8.591763e+02	other	0.000394
46	FrontWall	8.835492e+04	other	0.040518
47	GroundExterior	3.940247e+03	other	0.001807
48	Henry	3.990100e+01	other	0.000018
49	Houses	1.367097e+04	other	0.006269
50	Jordan	1.007307e+02	other	0.000046

51	Kevin	2.115358e+04	other	0.009701
52	Keyboard2	1.296580e+01	other	0.000006
53	LeftWall	3.848417e+03	other	0.001765
54	sedan_silver_prius	1.118252e+02	other	0.000051
55	Null	2.012514e+05	other	0.092291
56	wallUnit001	5.105864e+03	other	0.002341
57	WhiteBoardWithDisplay	1.612207e+06	white board	0.739335

[194]:

	Name	Duration	Type	Percentage
0	WhiteBoardWithDisplay	1.612207e+06	white board	0.739335
1	Null	2.012514e+05	other	0.092291
2	FrontWall	8.835492e+04	other	0.040518
3	CeilingCollider	6.039454e+04	other	0.027696
4	UCDavisTeacher	5.312409e+04	other	0.024362
5	Kevin	2.115358e+04	other	0.009701
6	Child005	2.085681e+04	distractor	0.009565
7	Desk008_Notebook_Open	1.820253e+04	other	0.008347
8	Whiteboard1	1.746041e+04	other	0.008007
9	Houses	1.367097e+04	other	0.006269
10	Quinn	9.251466e+03	other	0.004243
11	Child006	7.216191e+03	distractor	0.003309
12	wallUnit001	5.105864e+03	other	0.002341
13	Child002	4.388061e+03	distractor	0.002012
14	printer	4.353711e+03	other	0.001997
15	cabinet002	4.232688e+03	other	0.001941
16	GroundExterior	3.940247e+03	other	0.001807
17	LeftWall	3.848417e+03	other	0.001765
18	Lightposts	2.998924e+03	other	0.001375
19	Child009	2.653759e+03	distractor	0.001217
20	Bus001	2.539783e+03	other	0.001165
21	Bus002	2.440566e+03	other	0.001119
22	bulletinboard006	2.322917e+03	other	0.001065
23	Zayden	2.269725e+03	other	0.001041
24	globe_ball	1.965421e+03	other	0.000901
25	cabinet001	1.548599e+03	other	0.000710
26	Cameron	1.506145e+03	other	0.000691
27	Alexander	1.240729e+03	other	0.000569
28	Child001	1.170886e+03	distractor	0.000537
29	RightWallCollider	1.164527e+03	other	0.000534
30	ProjectorPodium	1.065806e+03	other	0.000489
31	bulletinboard002	8.629303e+02	other	0.000396
32	Desk010_Notebook_Open	8.591763e+02	other	0.000394
33	bulletinboard004	8.156613e+02	other	0.000374
34	Child008	7.377502e+02	distractor	0.000338
35	ClassroomDoor	5.043988e+02	other	0.000231
36	Taylor	3.930410e+02	other	0.000180
37	bulletinboard005	3.141599e+02	other	0.000144

38	TeachersChair	2.902142e+02	other	0.000133
39	BackWallCollider	2.763301e+02	other	0.000127
40	Pedestrian	2.632775e+02	distractor	0.000121
41	computermoniter003	2.242332e+02	other	0.000103
42	Xia	2.174202e+02	other	0.000100
43	computermoniter002	1.805430e+02	other	0.000083
44	Noah	1.671988e+02	other	0.000077
45	Chair_GRP008	1.231584e+02	other	0.000056
46	bookcase0001	1.126983e+02	other	0.000052
47	sedan_silver_prius	1.118252e+02	other	0.000051
48	Jordan	1.007307e+02	other	0.000046
49	Henry	3.990100e+01	other	0.000018
50	Chair_GRP005	2.193990e+01	other	0.000010
51	Chair_GRP009	2.094380e+01	other	0.000010
52	Chair_GRP007	1.994550e+01	other	0.000009
53	computermoniter004	1.595870e+01	other	0.000007
54	Keyboard2	1.296580e+01	other	0.000006
55	Bailey	1.199860e+01	other	0.000006
56	TeachersDeskPapers	1.196910e+01	other	0.000005
57	bulletinboard003	7.978900e+00	other	0.000004