Setup

In [1]:
```
import pandas as pd
from pathlib import Path
from matplotlib import pyplot as plt
from IPython.display import display, HTML
```

In [2]:
```
locations = {
    'staging':Path.cwd().joinpath('staging'),
    'analysis':Path.cwd().joinpath('analysis'),
    'reports':Path.cwd().joinpath('reports')
}
```

Functions

In [3]:
```
def count_resignations(series):
    return series.isna().sum()
```

Load Tables

In [4]:
```
games = pd.read_csv(locations['staging'].joinpath('games.csv'), index_col=0)
views = list(locations['analysis'].glob('*.csv'))

analysis_views={}
for view in views:
    analysis_views[view.stem] = pd.read_csv(view, index_col=0)
```

In [5]:
```
analysis_views['game_scores'].head()
```

Out[5]:

	game_id	seat	players	scores	place
0	7472433	orange	micah	325.0	3.0
1	7472433	purple	david	177.0	4.0
2	7472433	green	xan	357.0	2.0
3	7472433	grey	teddy	380.0	1.0
4	7472434	orange	teddy	267.0	1.0

Reports

player performance

In [28]:
```
data_source = analysis_views['game_scores']
```

```
player_list = data_source['players'].unique().tolist()
game_count = data_source['game_id'].nunique()

for focus_player in player_list:
    filtered_data = data_source.loc[data_source['players']==focus_player]
    overall = filtered_data.groupby('seat').agg({'game_id':'count', 'scores':['m
    overall.columns = ['count', 'max culture', 'mean culture', 'median culture',
    place_counts = filtered_data.groupby('seat')['place'].value_counts().unstack
    place_counts.columns=['1st', '2nd', '3rd', '4th']
    overall.index = pd.CategoricalIndex(overall.index, ['orange','purple','green

    player_counts = overall.sort_index().join(place_counts)
    print(focus_player)
    display(player_counts)
```

micah

seat	count	max culture	mean culture	median culture	resignations	1st	2nd	3rd	4th
orange	14	325.0	185.571429	177.0	0	3	2	6	3
purple	13	370.0	196.909091	188.0	2	5	2	2	2
green	15	352.0	190.538462	167.0	2	2	3	5	3
grey	11	204.0	126.500000	131.0	1	1	1	4	4

david

seat	count	max culture	mean culture	median culture	resignations	1st	2nd	3rd	4th
orange	11	344.0	219.090909	197.0	0	5.0	5.0	1.0	0.0
purple	14	297.0	188.285714	194.0	0	8.0	2.0	1.0	3.0
green	12	342.0	203.083333	192.5	0	2.0	6.0	3.0	1.0
grey	16	320.0	197.785714	183.5	2	4.0	3.0	5.0	2.0

xan

seat	count	max culture	mean culture	median culture	resignations	1st	2nd	3rd	4th
orange	17	375.0	197.647059	196.0	0	7	4	3	3
purple	14	354.0	198.923077	199.0	1	2	3	4	4
green	11	357.0	182.909091	165.0	0	2	3	3	3
grey	11	238.0	179.818182	176.0	0	3	3	2	3

teddy

seat	count	max culture	mean culture	median culture	resignations	1st	2nd	3rd	4th
orange	11	307.0	190.545455	191.0	0	3	5	2	1
purple	12	313.0	173.090909	172.0	1	2	2	4	3
green	15	301.0	186.066667	175.0	0	2	7	2	4
grey	15	380.0	198.642857	181.0	1	3	1	6	4

seating order randomization

In [ ]: