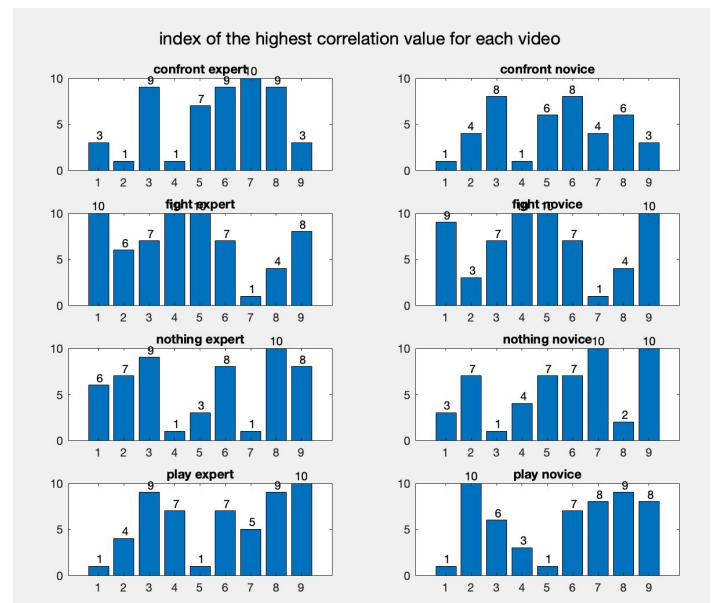
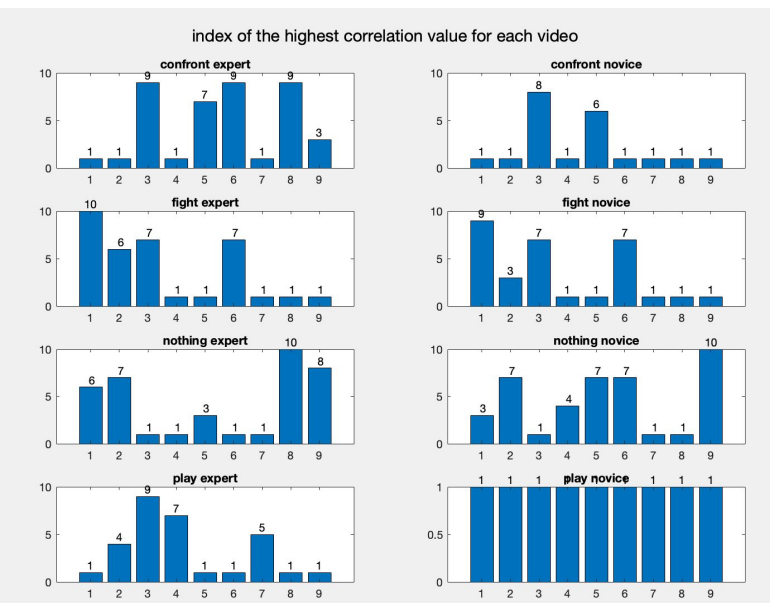


- Left: index with the highest correlation (including frame 1)
- Right: index with the highest correlation (excluding frame 2)
- Excluding frame 1 produces vastly different distribution of the index with highest correlation. -> high bias for frame 1
- I don't have the eye movement data, but I assume that the frame 1 is the very first frame in which a participant (expert or novice) sees actions in each video. The bias is likely due to the "central" bias in our visual attention.
  - I attached the paper "Scene and screen center bias early eye movements in scene viewing" by Markus Bindemann. The research paper shows that we tend to look at the center of the screen when we first view a video on the computer screen.



- Left: I groups 40 frames into 10 chunks, each having 4 frames (e.g. 10th chunk include frames 37~40). Then, I average features in each chunk and obtained the chunk with highest correlation. High bias for chunk 1.
- Right: Same as above, but exclude frame 1 from the first chunk. So the first chunk now includes frame 2~4. Low bias for chunk 1.
- Chunk 1 includes frames in the beginning of the video. Simply removing frame 1 from the first four frames seems to remove the bias for the chunk 1. It is likely that the central bias only influenced the very first frame: frame 1.