

## Supplemental Material

### Task Script

“Your task is to play rock paper scissors against three different opponents. Your opponents may be people you recognize. Try to win as many matches as possible. While playing against your opponents, please try to figure out their strategy and adapt your responses accordingly . Your opponents will adapt their strategy based on your performance. The task consists of 150 blocks, where you will face all three opponents but in a random order for each block. There will be breaks within the task where you will be asked to assess your opponents’ abilities.”

### Opponent Ability Survey

Please indicate on a scale of 1 (easy) to 7 (difficult) how challenging is each opponent based on your views of their strategy and ability to play Rock, Paper, Scissors.

#### Scarlett Johansson



<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
Easy						Difficult

#### Mila Kunis



<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
Easy						Difficult

#### Emma Stone



<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
Easy						Difficult

**Supplementary Figure S1.** Opponent ability survey for female participants/opponents.

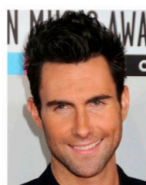
## Opponent Ability Survey

Please indicate on a scale of 1 (easy) to 7 (difficult) how challenging is each opponent based on your views of their strategy and ability to play Rock, Paper, Scissors.

James Franco

1	2	3	4	5	6	7
Easy						Difficult

Adam Levine



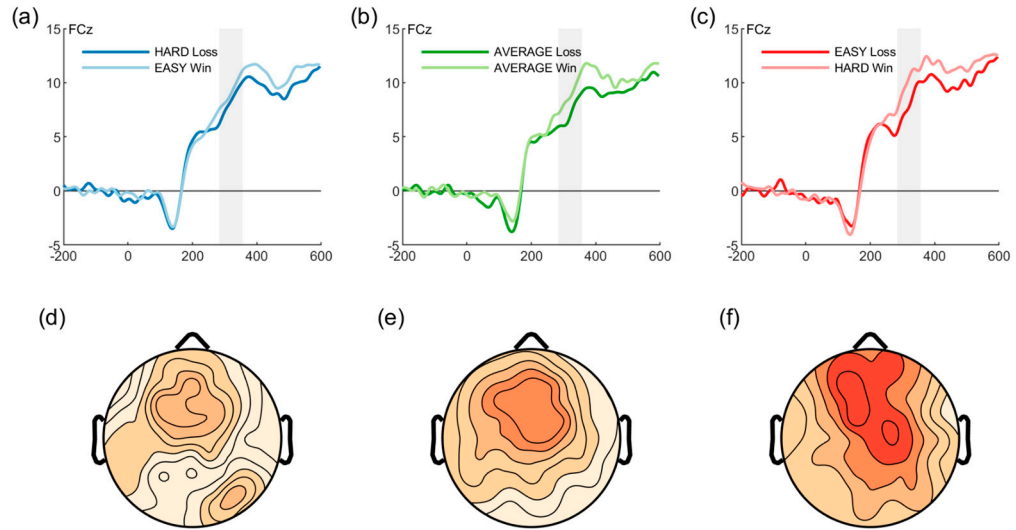
1	2	3	4	5	6	7
Easy						Difficult

Justin Timberlake



1	2	3	4	5	6	7
Easy						Difficult

**Supplementary Figure S2.** Opponent ability survey for male participants/opponents.



**Supplementary Figure S3.** Feedback-locked waveforms for (a) expected feedback, (b) somewhat unexpected feedback, (c) unexpected feedback, and associated scalp topographies (d-f).