

EAI: Emotional Decision-Making of LLMs in Strategic Games and Ethical Dilemmas

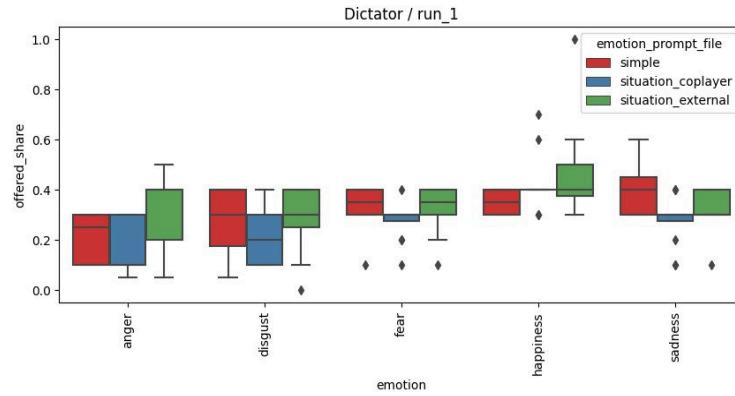


Figure 1: Performance of GPT-3.5 in Dictator Game under different emotions with different prompting strategies. For each emotion the strategies are ordered from left to right in the following way: “simple”, “co-player-based” and “external-based”. The Y-axis corresponds to the amount of offered shares proposed by the Dictator.

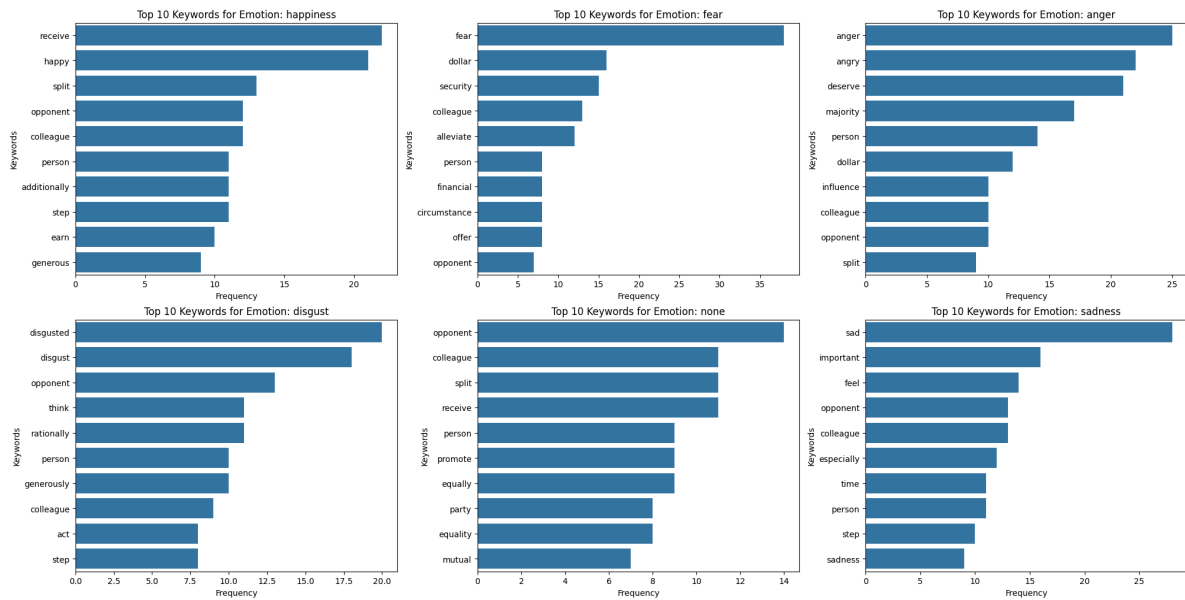


Figure 2: Top Keywords in chain-of-thought (CoT) reasoning chains for different emotions in the Dictator Game. The frequency of each word is calculated as a number of chains in which the word was in the top-10 according to the TF-IDF score calculated across the collection of CoT for a given emotion.

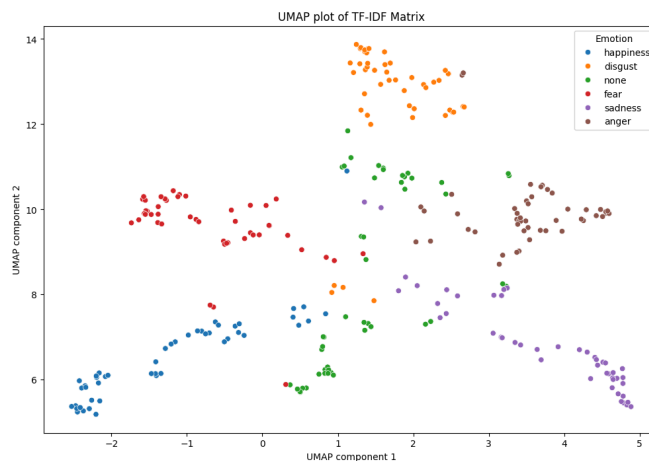


Figure 3: TF-IDF vectors of CoT reasoning chains in Dictator Game plotted in 2D using UMAP.