**Justification**

My research focuses on understanding why some movies or videos go viral and how affective responses, measured both behaviorally and neurally, contribute to this process. I approach this question through a neuroforecasting framework, using brain and behavioral signals as early predictors of large-scale audience behavior. Currently, I am developing a temporal decoder to capture dynamic neural signals in order to better predict individual engagement and market demand for naturalistic media. I chose to replicate the behavioral results from Chan et al. (2023) because their findings show that onset emotional “desire-to-watch” ratings can forecast commercial Ad performance. I aim to test whether this effect generalizes to a different type of stimuli—movie trailers—and whether temporal neural markers of affect can enhance the predictive power of behavioral desire ratings in explaining media virality.

**Stimuli and Procedures**

To reproduce the behavioral component, I will collect desire-to-watch ratings for a set of 10-second movie trailers used in my previous study, including 16 comedies and 16 horror films. Participants will rate each trailer on a seven-point Likert scale for liking (“How much did you like this trailer?”), interest in viewing the movie (“How interested are you in watching the full movie?”), and psychological processes during viewing. For the psychological processes, participants will additionally rate two out of four dimensions: (1) Perception — “How good did you find the visuals and sounds in the trailer?”; (2) Language — “How good did you find the dialogue, narration, and/or text in the trailer?”; (3) Social cognition — “To what extent did the trailer make you think about the characters’ feelings and intentions?”; and (4) Emotion — “To what extent did the trailer evoke an emotional reaction in you?”. The box office data for these movies has been collected. Each factor measured from participants will be aggregated across stimuli and tested for its ability to predict both individual desire and market-level demand.

Several challenges may arise in conducting this experiment. First, individual differences in movie preferences, genre familiarity, or prior exposure could introduce variability in desire ratings and psychological process measures. Second, self-report measures are subject to biases, such as social desirability or difficulty accurately introspecting on subtle affective and cognitive responses. Finally, aligning behavioral measures with market-level outcomes is inherently challenging, as box office performance can be influenced by external factors like marketing, release timing, or star power, which are not captured in the experiment. Addressing these challenges will be important for ensuring that the behavioral replication meaningfully informs the study of media virality.