ABSTRACT

The video game industry has grown rapidly, surpassing other entertainment sectors in revenue and growth. Fighting games remain a popular genre due to their complex mechanics and tactical challenges. This study analyzes the relationship between playtime, game design, and mechanics on positive reviews in the fighting games genre using Large Language Models (LLM) for sentiment and emotion analysis. Data was obtained from over 200,000 user reviews on Steam across 12 popular fighting games. The analysis results indicate that the correlation between playtime and positive reviews is generally weak, although in some games, longer playtime tends to result in more positive reviews. In terms of game design and mechanics, Fantasy settings (92.34%), 2D graphics (94.21%), and Anime visual style (95.12%) are more preferred. From a mechanics perspective, Multiple Meters (93.11%), Advanced Blocking (93.56%), and Wall Boundaries (91.72%) received higher ratings, suggesting that more complex and varied features tend to enhance player satisfaction. Sentiment analysis using LLM reveals that technical issues, such as lag, character imbalance, and DLC quality, are the most common factors leading to negative reviews. This study shows that in fighting games, design and mechanics play a bigger role in shaping player perceptions than playtime.

Keywords: Fighting games, Playtime, Game Design, Game Mechanics, Large Language Models, Steam Reviews