

Ethical Issues in Video Games: Insights from Reddit Discussions

Yeqian Li,
y43.li@student.vu.nl,

Kousar Aslam
k.aslam@vu.nl



Video games are no longer only entertainment – they are cultural, economic and social forces

Recent years brought a host of ethical concerns to the forefront, including issues related to violence gender representation, addictive game mechanics, and monetization fairness. These concerns have sparked ongoing debates on social media, yet public discussions on these matters remain largely unresearched.

Goal: Seek an understanding of how ethical issues in video games are being perceived and discussed by general public.

RQ1: What types of ethical issues related to video games are discussed in Reddit posts?

RQ2: How are ethical issues in video games (discovered in RQ1) are discussed on Reddit?

RQ3: What is the potential of machine learning algorithms to automate the classification to classify ethical issues in video games on Reddit?

Research Method

Subreddit & Keyword Selection: Identified 15 subreddits spanning demographics (e.g., developers, LGBTQ+, teens); refined ethical issue keywords based on literature and user language.

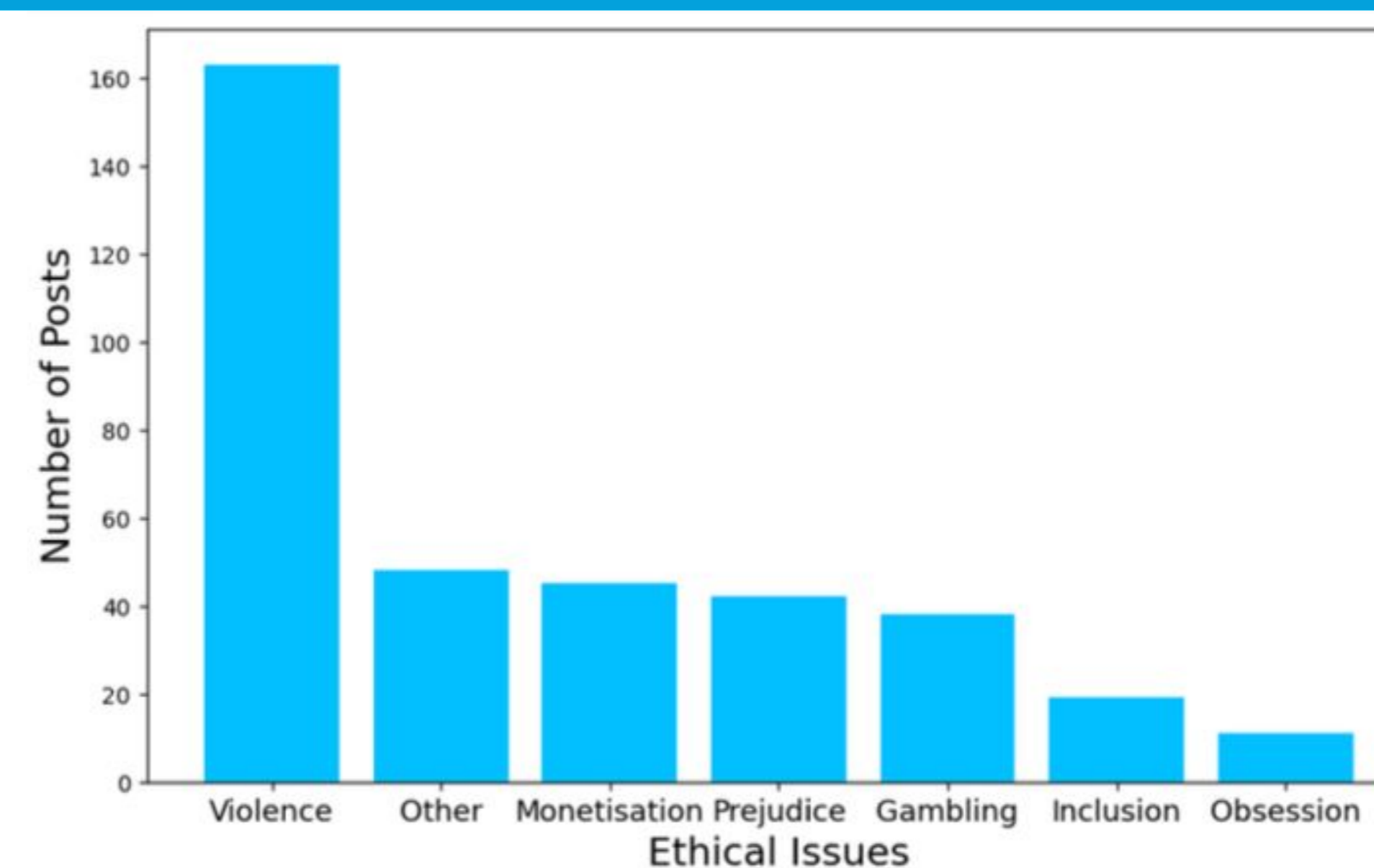
Data Collection & Sampling: Scraped 19,843 Reddit posts using Pushshift & Reddit API; randomly sampled 2,249 posts for further analysis.

Manual Annotation: 366 posts identified with ethical themes after rigorous review, achieving Krippendorff's alpha > 0.8.

Qualitative Analysis: Used open coding to derive 871 codes; grouped into key ethical themes such as violence, prejudice, and monetization.

Machine Learning Classification: Trained binary and multi-class classifiers (e.g., SVM, CNN, NB); top accuracy: binary (86.2%), multi-class (72.1%).

Results



RQ1: Violence is most frequently discussed ethical issue, followed by concerns about monetization, prejudice, gambling, exclusion and addictive design. Other ethical concerns, particularly around financial practices and equal representation, are also discussed by the gaming community on Reddit.

Model	Precision	Recall	F1-Score	Accuracy
SVM	0.845	0.862	0.849	0.862
Random Forest	0.849	0.851	0.794	0.851
Gaussian NB	0.762	0.799	0.777	0.799
Multinomial NB	0.777	0.811	0.790	0.811
Bernoulli NB	0.809	0.756	0.777	0.756
Complement NB	0.810	0.754	0.775	0.754

Results of binary classification for the presence of ethical issues

Model	Precision	Recall	F1-Score	Accuracy
Bi-LSTM	0.509	0.378	0.427	0.378
CNN	0.624	0.473	0.515	0.473
GRU	0.416	0.297	0.331	0.297
SVM	0.686	0.703	0.644	0.704
Random Forest	0.587	0.568	0.480	0.568
Gaussian NB	0.450	0.481	0.396	0.481
Multinomial NB	0.450	0.481	0.396	0.481
Bernoulli NB	0.558	0.470	0.488	0.470
Complement NB	0.705	0.721	0.711	0.721

Results of multi-class classification for the ethical issues

RQ2: Users express concern over desensitization from violence, biased representation, exploitative monetization, and exclusion in narratives. Reddit presents a vibrant community, offering in-depth critiques of ethical issues in video games.

RQ3: Despite the small number of relevant Reddit posts, both the binary and multiclass classification results are promising. SVM was the top-performing model for binary classification, while the Complement Naive Bayes model excelled in multi-class classification.

Main takeaways

Reddit discussions heavily emphasize concerns about violent content and its psychological impact, especially on younger players.

Microtransactions and loot boxes are frequently criticized for being exploitative and resembling gambling, especially targeting vulnerable users.

Representation issues, including gender and racial stereotyping and lack of LGBTQ+ inclusivity, are central ethical concerns.

Addictive mechanics in game design raise alarms about mental health and the exploitation of compulsive behaviors.

Machine Learning models like SVM and Complement Naive Bayes show strong potential in automating ethical issue identification and classification.



12th ACM Celebration of Women in Computing: womENCourage™
Braşov, Romania
17-19 September, 2025
Theme: Computer Science: a Catalyst for Educational Change

