


Chapter 4

Designing Child-Centric Platforms: Best Practices for Social Media and Gaming – The Hidden Dangers of Online Gaming

Romil Rawat

 <https://orcid.org/0000-0002-9195-6846>

*LabGeoInf -Research LABORatory in
GEOmatics and INFormation systems—
National Research Council in Italy,
Rome, Italy*

Prathamesh Muzumdar


 <https://orcid.org/0000-0002-9000-363X>

Mangalayatan University, India

Sanjaya Kumar Sarangi


Utkal University, India

Kuldeep Singh

 <https://orcid.org/0000-0003-1011-6085>


Arkansas Tech University

Hitesh Rawat

 <https://orcid.org/0009-0006-7171-6016>

University of Extremadura, Spain

A. Samson Arun Raj

 <https://orcid.org/0000-0001-5090-5199>

*Karunya Institute of Technology and
Sciences, India*

ABSTRACT

This study explores the risks children face in online gaming, with a focus on scams such as fraud, harassment, and exploitation. These threats are growing in the digital world and pose serious concerns for young players. Using the 2025 “ChildSafe Gaming Dataset,” which includes over 100,000 reported incidents involving minors, the research analyzes the types and patterns of these scams. The data covers cases of fraud, harassment, and exploitation, along with demographic details. A machine

DOI: 10.4018/979-8-3373-2716-7.ch004

learning model called SecurePlay was developed to detect and classify scam-related content using natural language processing and behavioral analysis. Findings revealed that 42.7% of incidents were fraud-related, 33.1% involved harassment, and 24.2% concerned exploitation. SecurePlay achieved 89.6% accuracy, with an 85.3% precision and 92.4% recall rate, proving effective in identifying threats. The results underscore the urgent need for better safety measures to protect minors in digital gaming environments.

1. INTRODUCTION

The proliferation of online gaming has led to a dramatic increase in both its popularity and the associated risks, especially for children. As of 2024, over 2.5 billion people worldwide engage in online gaming, with a significant portion being minors. While gaming platforms provide entertainment and socialization opportunities, they also expose young users to various forms of exploitation, harassment, and fraudulent schemes. These risks are often hidden within the virtual environment, making it difficult for children and their guardians to identify and mitigate threats. Recent studies highlight a surge in scams targeting young players, with reports indicating that approximately 38% of children between the ages of 8-16 have encountered some form of online harassment or scam in gaming platforms (CyberSafe Report, 2024). Among these incidents, financial fraud (such as credit card scams) accounts for 45% of the cases, while 32% involve emotional manipulation and harassment, and 23% are related to sexual exploitation. These alarming statistics underscore the urgent need for effective detection and prevention mechanisms.

To address this issue, we propose the use of cutting-edge tools and methodologies to identify and prevent scam-related activities in online gaming environments. Our approach leverages *SecurePlay*, a machine learning-based detection system, which integrates advanced natural language processing (NLP) for analyzing textual content in chat logs and player interactions. Additionally, behavior pattern recognition algorithms are employed to detect abnormal actions, such as unusual spending habits or aggressive communication patterns, indicative of exploitation or harassment. Using a comprehensive dataset from the *ChildSafe Gaming Dataset* (2025), which includes over 100,000 annotated cases of fraud, harassment, and exploitation incidents, we train and validate our models.

Recent advancements in AI, including *deep learning* models like transformers and recurrent neural networks (RNNs), have significantly improved the accuracy of detecting subtle patterns of harmful behavior. Our study finds that the *SecurePlay* system achieved an impressive detection accuracy of 92.3%, with precision and recall rates of 89.5% and 94.1%, respectively. These results demonstrate the effectiveness of

22 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/designing-child-centric-platforms/384733

Related Content

What We Can Learn From Flat Tax Research

Paulo Jorge Dias and Miguel Tavares (2025). *Assessing Policy Landscapes in Taxation Dynamics* (pp. 515-564).

www.irma-international.org/chapter/what-we-can-learn-from-flat-tax-research/360899

The Relationship Between Ethical Leadership and Innovative Work Behaviour: Role of Appreciative Inquiry

Anubhuti Saxena and Asha Prasad (2024). *Research Anthology on Business Law, Policy, and Social Responsibility* (pp. 1823-1837).

www.irma-international.org/chapter/relationship-between-ethical-leadership-innovative/335800

The Legal Architecture of Energy Diplomacy: India-China Pathways Toward Green Governance and Sustainable Transitions

Abhinash Mohanta, Shaikh Sahanwaz Islam and Nikita Biswal (2026). *Technology Policy and Its Impact on Green Governance and Sustainability* (pp. 229-262).

www.irma-international.org/chapter/the-legal-architecture-of-energy-diplomacy/401086

Where Do I Belong?: Creating Virtual Spaces for Student Engagement

C. Kelsey Ryan (2022). *Education Reform in the Aftermath of the COVID-19 Pandemic* (pp. 91-106).

www.irma-international.org/chapter/where-do-i-belong/297750

Exploring Interdisciplinary Collaboration Through Microsoft Teams in Initial Teacher Education

María Carolina Órdenes Guzmán, María Antonieta Órdenes Guzmán and Eduardo Javier Guzmán Lazón (2026). *The Role of Smart Education in a Complex World* (pp. 177-212).

www.irma-international.org/chapter/exploring-interdisciplinary-collaboration-through-microsoft-teams-in-initial-teacher-education/394493