

Nordic AI Meet 2026

P2: AI in Health, Medicine, Care & Human Well-being

11. Use of Artificial Intelligence within the Gambling Field: A Scoping Review Protocol

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Abstract: *Introduction.* Almost half of adults worldwide have gambled in the past year, and the global gambling market, valued at \$540 billion in 2023, is expected to grow 6.4% annually. As online gambling expands, so does player account data, fuelling growing AI use. Machine learning has predicted self-reported problem gambling from account data (AUC .67–.73), modelled suicidal ideation among gamblers, and outperformed top human poker players. Large language models have also been explored as anonymous tools helping individuals overcome stigma in seeking help, and as detectors of gambling-related distress in text. A qualitative stakeholder study warns AI capable of consumer protection could equally be repurposed toward more addictive games and persuasive marketing. Despite this, no broad synthesis exists mapping how AI has actually been applied across the gambling field.

Methods. This review will adhere to the Joanna Briggs Institute Reviewers' Manual. The review will be organized along the Population, Concept and Context approach. It will include quantitative peer-reviewed studies that examine the use of AI tools within gambling contexts. Searches for relevant articles will be conducted in Web of Science, APA PsycINFO, Medline (Ovid), ProQuest, CINAHL, and Wiley Online Library. A search for grey literature will be conducted in GreyLit.Org, ProQuest Dissertations and Theses, Google Scholar, and Google search engine, reviewing the first 50 results in Incognito mode. Two independent reviewers will perform screening, selection, and data extraction, with disagreements resolved through discussion or consultation with a third reviewer. The results will be presented in graphical and tabular format, accompanied by a narrative summary following the PRISMA-ScR guidelines. The protocol has been pre-registered in Open Science Framework: <https://doi.org/10.17605/OSF.IO/FMBE6>

Conclusion. AI is increasingly used within gambling, holding promise for predicting behavior, identifying at-risk players, and validating skill, alongside real risk of exploitation. This review offers a broad overview distinguishing risk-detection models relevant to clinicians from predictive modelling relevant to regulators.

Keywords: artificial intelligence, machine learning, gambling, scoping review, protocol.