# A Systematic Literature Review in Machine Learning in Predicting Sports Outcome

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**Abstract:**

A systematic literature review is presented on Machine Learning (ML) applications for predicting sports outcomes, following PRISMA 2020 guidelines, analyzing 30 primary studies from 2020-2025 sourced from Scopus and Google Scholar. Key findings highlight football and basketball as dominant sports (~67% of studies). Artificial Neural Networks (~30%) is the most commonly used method followed by tree-based methods (~24%), statistical & regression methods (~17%) and instant-based and kernel methods (~15%). Most methods use feature selection (~81%), over formal dimensionality reduction, and accuracy is the primary metric (80% of studies). Prediction rates vary from 55% to 93%.