

# Telecommunications Network Measurements of Online Gambling Behavior in Switzerland: A Feasibility Study

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## Keywords

Online poker · Online gambling · Gambling behavior

## Abstract

**Background:** Methodological shortcomings of gambling studies relying on self-report or on data sets derived from gambling operators tend to result in biased conclusions. The aim of this study was to analyze online gambling behavior using a novel network database approach. **Methods:** From October 13 to October 26, 2014, telecommunications network data from a major telecommunications provider in Switzerland were analyzed. Netflows between mobile devices and a poker operator were quantified to measure the gambling duration and session number. **Results:** Time spent gambling during night and working hours was compared between devices with longest (red group), intermediate (orange group), and shortest gambling time (green group). Online gambling behavior differed depending on overall gambling time,  $F(2, 3,143)$ . Night and working hours gambling was the highest in the red group (53%), compared to the orange (50.1%) and the green groups (41.5%). Post hoc analyses indicated significant differences between the orange and green groups ( $p < 0.05$ ). No differences were ob-

served between the red and orange groups ( $p = 0.850$ ), and the red and green groups ( $p = 0.053$ ). **Conclusions:** On mobile devices, distinct gambling patterns were observed depending on the overall gambling time. This methodology could also be used to investigate online gaming, social media use, and online pornography. © 2017 S. Karger AG, Basel

## Introduction

Internet gambling is steadily increasing in popularity due to a fast-growing online gambling industry [1]. Although most players gamble for fun and never experience serious gambling-related problems, a small proportion of players will experience serious financial and health consequences [2]. These gamblers have great difficulty resisting the impulse to gamble and may fail to control gambling behavior despite negative consequences leading to a detrimental behavior in their personal, business, or family environment [3].

As a result of accessibility, anonymity, affordability, convenience, interactivity, and disinhibition, it has been argued that Internet gambling is a particularly hazardous