

## ADDICTIVE POTENTIAL OF ONLINE-GAMBLING. A PREVALENCE STUDY FROM AUSTRIA

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### SUMMARY

There are hints, that online-gambling has a higher addictive potential than offline-gambling. In this study prevalence and sociodemographic distribution of online- vs. offline-gambling in Austria are gathered and possible relations discussed. Problematic gambling-behavior was assessed via Lie-and-Bet questionnaire from Johnson. The results indicate a tendency of younger gamblers and particularly problematic gamblers towards online-gambling. Considering the substantial addictive potential of online-gambling and hints of a future trend away from offline- towards online-gambling, preventive measures like public restrictions for online providers and awareness campaigns for consumers about the dangers of online-gambling offers are reasonable.

**Key words:** gambling – online – offline - lie-and-bet – addiction - prevalence

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### INTRODUCTION

Gambling is classified as an addiction disorder in DSM-5. In the ICD-10 it is listed as impulse disorder under F63. There are hints of higher addictive potential of online gambling in comparison to offline gambling. This might be the result of more local and temporal availability, anonymity, cashless payment and less government control (Griffiths et al. 2009, Kairouz et al. 2012). In accordance to our clinical experience in the treatment of pathological gamblers we presumed a higher percentage of addicted or at least problematic gamblers among online gamblers. Furthermore, we postulated online gamblers to be younger. Studies from other countries show an increase of gambling disorder for young people. A recent Canadian paper pointed out, that young people are increasingly being seduced by the internet to gambling and that the prevalence of problematic gamblers is higher online than offline (Elton-Marshall et al. 2016). A few years ago, an Austrian survey already showed a tendency of younger gamblers towards online gambling and hinted at higher addictive potential with 8.2% pathological gambling among online gamblers versus 1.56% among all gamblers (Kalke et al. 2011).

In our study we raised the prevalence and socio-demographic distribution of online versus offline gambling in Austria.

### METHOD

3043 individuals in Austria were questioned face to face and in-home from May to June 2013. The interviews were realized by IMAS International, an Austrian company for market and social analysis. A representative sample was defined in accordance to the

sociodemographic distribution in Austria. To capture problematic or pathological gamblers, Johnson's Lie-and-Bet Questionnaire (Johnson et al. 1997) was used containing the following two questions:

- Have you ever had to lie to people important to you about how much you gambled?
- Have you ever felt the need to bet more and more money?

A positive reply to one of these two questions is a distinct hint for a problematic gambling behavior in the sense of danger of addiction (Götestam et al. 2004). Further on, type of gambling and sociodemographic data like age, sex, education, occupation, income, marital status and migration background were raised.

### RESULTS

Our findings show a binomial asymmetric distribution. The confidence intervals were calculated by Clopper-Pearson. The main findings of online versus offline gambling are listed in table 1. Summarizing the significant differences, online gamblers were younger, male, more educated and generally more online. Other differences like migration background, income, occupation and local differences within Austria were not significant.

Out of the 240 participants showing problematic gambling behavior by answering one or both Lie-and-Bet questions positively, 9% played mostly online (n=22). Due to the small number, no significant differences among these can be offered. But problematic online gamblers seemed to be even younger than non-problematic online gambler, single and more often male. Interestingly, 31% of all online gamblers showed a problematic gambling behavior, in comparison to only 18% of the offline gambler.

**Table 1.** Online versus offline gambling

Sociodemographic data	Offline gambling % (n)	Online gambling % (n)	Level of significance
Total	100 (1187)	100 (72)	p<0.05
Age 16-29	15.75 (187)	36.11 (26)	p<0.05
Age 30-49	40.02 (475)	52.78 (38)	p<0.05
Age >50	42.80 (508)	11.11 (8)	p<0.05
Female	46.76 (555)	13.89 (10)	p<0.05
Male	51.56 (612)	86.11 (62)	p<0.05
A-level, higher education	22.07 (262)	36.11 (26)	p<0.05
Vocational school, secondary school	47.35 (562)	47.22 (34)	n.s.
Compulsory school	29.40 (349)	16.67 (12)	p<0.05
Intensively online	54.68 (649)	86.11 (62)	p<0.05
Moderately online	19.46 (231)	9.72 (7)	n.s.
Rarely online	25.19 (299)	4.17 (3)	p<0.05
Lie-and-Bet positive	18.37 (218)	30.56 (22)	p<0.05

Main sociodemographic differences between online versus offline gambling in Austria. n.s. (not significant).

Lie-and-Bet positive (positive answer on one or both Lie-and Bet questions)

## DISCUSSION

Younger gambling consumers and especially problematic gamblers seem to tend towards online gambling. As Griffiths stated, this can be explained by the generally stronger affinity of young people towards internet (Griffiths et al. 2009). As there is no reason to believe, that online gamblers will switch to offline gambling when getting older, the ratio of online versus offline gambling should reverse in favor of online in the coming years. In accordance with other authors we postulate a higher addiction potential of online gambling (Elton-Marshall et al. 2016, Griffiths et al. 2009, Kairouz et al. 2012). As a consequence, in future the prevalence of excessive or pathological gambling might rise. Furthermore, many online gambling platforms offer little quality standards in regard to player protection e.g. age limit, built-in alert systems or the possibility of self-locking (Malischnig 2014). The fact, that online gamblers tend to be young and single males (Kairouz et al. 2012) needs to be considered regarding prevention measures. Adolescents and young adults need to be informed about the possible dangers of online gambling. And there is a need for more government control and restrictions for online gambling providers.

### **Contribution of individual authors:**

Kurosch Yazdi contributed to all stages of this paper.  
 Christian Katzian contributed to literature search, interpretation of data and preparing manuscript.

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### **Conflict of interest:**

Independently of this paper Kurosch Yazdi has commercial associations with Janssen Cilag, Amomed, Krka and Lundbeck as lecturer.

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