



## Full length article

## Impact of Internet gambling on problem gambling among adolescents in Italy: Findings from a large-scale nationally representative survey



Natale Canale<sup>a</sup>, Mark D. Griffiths<sup>b</sup>, Alessio Vieno<sup>a</sup>, Valeria Siciliano<sup>c</sup>,  
Sabrina Molinaro<sup>c,\*</sup>

<sup>a</sup> Department of Developmental and Social Psychology, University of Padova, Italy

<sup>b</sup> International Gaming Research Unit, Psychology Division, Nottingham Trent University, United Kingdom

<sup>c</sup> Institute of Clinical Physiology, Italian National Research Council – CNR, Via Moruzzi, 1, 56124, Pisa, Italy

## ARTICLE INFO

## Article history:

Received 13 October 2015

Received in revised form

2 December 2015

Accepted 9 December 2015

Available online 21 December 2015

## Keywords:

Online gambling

Internet gambling

Problem gambling

Adolescent gambling

ESPAD data

## ABSTRACT

**Aims:** The primary aim of the present study was to understand the impact of online gambling on gambling problems in a large-scale nationally representative sample of Italian youth, and to identify and then further examine a subgroup of online gamblers who reported higher rates of gambling problems.

**Design:** Data from the ESPAD<sup>®</sup>Italia2013 (European School Survey Project on Alcohol and Other Drugs) Study were used for analyses of adolescent Internet gambling.

**Setting:** Self-administered questionnaires were completed by a representative sample of high school students, aged 15–19 years.

**Participants:** A total of 14,778 adolescent students.

**Measurements:** Respondents' problem gambling severity; gambling behavior (participation in eight different gambling activities, the number of gambling occasions and the number of online gambling occasions, monthly gambling expenditure); Socio-demographics (e.g., family structure and financial status); and control variables were measured individually (i.e., use of the Internet for leisure activities and playing video games).

**Findings:** Rates of problem gambling were five times higher among online gamblers than non-online gamblers. In addition, factors that increased the risk of becoming a problem online gambler included living with non-birth parents, having a higher perception of financial family status, being more involved with gambling, and the medium preferences of remote gamblers (e.g., Internet cafes, digital television, and video game console).

**Conclusions:** The online gambling environment may pose significantly greater risk to vulnerable players. Family characteristics and contextual elements concerning youth Internet gambling (e.g., remote mediums) may play a key role in explaining problem online gambling among adolescents.

© 2015 Elsevier Ltd. All rights reserved.

## 1. Introduction

The introduction of new technologies has changed the nature of many forms of gambling providing new remote modes of gambling. As specific forms of gambling may impact on development differently, it is important to examine the relationships in adolescence

between specific forms and mediums of gambling (e.g., Internet gambling) and problem gambling severity. Previous research into Internet gambling has shown that a combination of individual, situational, and/or structural characteristics can be important in the acquisition, development and maintenance of Internet gambling (see [Kuss & Griffiths \(2012\)](#) for a review).

Although there has been a significant increase of research into online gambling (e.g., [Dowling, Lorains, & Jackson, 2015](#); [Gainsbury, Russell, Blaszczynski, & Hing, 2015a, 2015b](#); [King & Delfabbro, 2016](#); [King, Delfabbro, Kaptsis, & Zwaans, 2014](#)), the vast majority of studies have limited results due to methodological shortcomings. For example, a vast majority of studies have utilized either self-report methods (e.g., surveys, focus groups, case study interviews,

*List of abbreviations:* ESPAD, European School Survey Project on Alcohol and Other Drugs; SOGS-RA, South Oaks Gambling Screen-Revised for Adolescents; SD, Standard deviation; M, mean; ORs, odds ratios; CI, confidence interval; BGPS, British Gambling Prevalence Survey.

\* Corresponding author.

E-mail address: [molinaro@ifc.cnr.it](mailto:molinaro@ifc.cnr.it) (S. Molinaro).

etc.) with self-selected participants (e.g., Griffiths, Parke, Wood, & Rigbye, 2010; McCormack, Shorter, & Griffiths, 2013, 2014) and/or behavioral tracking data using non-representative samples from online gambling clientele at specific gaming operator sites (e.g., Auer & Griffiths, 2014; Broda et al., 2008; Dragicevic, Tsogas, & Kudic, 2011; LaBrie, Kaplan, LaPlante, Nelson, & Shaffer, 2008; Xuan & Shaffer, 2009). In addition, a large majority of studies do not comprise samples that were representative of the general population (as most utilize self-selected samples). Thus, the principal aim of the present study was to investigate the determinants of problem gambling among a nationally representative sample of adolescents. In particular, the study examined which forms and mediums of gambling (e.g., Internet gambling) are most likely to be associated with problem gambling.

### 1.1. Online gambling during adolescence

Based on the results of the studies reviewed, Kuss and Griffiths (2012) reported that gambling on the Internet was associated with problem gambling more than land-based gambling. One reason for this may be the structural characteristics of the Internet inherent to this technology, namely availability, ease of access, anonymity (especially in underage individuals), and convenience (McCormack & Griffiths, 2013).

Although there is now much research into adolescent gambling more generally (e.g., Molinaro et al., 2014), adolescent Internet gambling is much less researched. A review of youth Internet gambling studies (Griffiths, Derevensky, & Parke, 2012) on eight studies with sample sizes of over 1000 adolescents (including two British studies with over 8000 participants) reported past-year Internet gambling prevalence rates of 2% (USA), 4–8% (Canada), 1–8% (Great Britain), and 20–24 percent (Iceland). Among these studies that had also assessed problem gambling, the problem gambling rates among adolescent online gamblers ranged from 7.5% to 37% and was significantly higher than the rates of problem gambling among offline-only gamblers (1.5%–3%). However, most of these studies utilized non-representative convenience samples.

### 1.2. Individual, family and contextual factors influencing gambling during adolescence

Derevensky and Gilbeau (2015) recently examined the empirical evidence concerning the many correlates of adolescent gambling over the past 25 years. This body of evidence suggests that male adolescents are more likely to be problem gamblers than females, and that initial gambling experiences often begging in their own homes with family members. Beyond the strong association between Internet gambling and gambling problems, investigating specific factors that may promote participation in remote gambling (e.g., family and medium preferences of remote gamblers) may help in the development of early interventions (e.g., interventions to reduce gambling-related harms). Consequently, it is important to adopt a broader perspective in the consideration of problem (and pathological) gambling, focusing on the role of social relationships (e.g., family) and contextual factors including situational and structural characteristics (Griffiths & Delfabbro, 2001; Molinaro et al., 2014; Reith, 2012).

In relation to potential risk factors, it has been suggested that family structure may mediate the expression of temperamental risk in substance use behavior (Hoffmann, 2002; Scalese et al., 2014). More specifically, single-parent families and 'reconstituted families' (i.e., blended families) have been associated with an increased risk of substance use disorders (Scalese et al., 2014). With regard to gambling problems, research findings concerning the relationship between family socio-demographic characteristics (e.g., family

structure, family socioeconomic status) and adolescent problem gambling have been inconsistent. For instance, while some studies have found that family structure is not related to problem gambling (e.g., Hayer, 2012; Molinaro et al., 2014), other empirical studies have reported that adolescents from single-parent families are at greater risk of being classified as problem gamblers (McComb & Sabiston, 2010).

The issue of problematic adolescent gambling also needs to be studied in lights of its association with excessive use of other entertainment technologies, such as computer and video games, and the Internet (Parker, Summerfeldt, Taylor, Kloosterman, & Keefer, 2013). Research studies have demonstrated that adolescent problem gamblers are more likely to engage in problematic video gaming and Internet abuse (e.g., Wood, Gupta, Derevensky, & Griffiths, 2004; Hayer & Griffiths, 2015). In addition, participation in online gambling is significantly associated with greater rates of problem gambling among adolescents (Griffiths et al., 2012; Potenza et al., 2011). A recent review of the online gambling literature by Hing et al. (2014) reported that medium preferences of remote gamblers are associated with problem gambling (e.g., personal computer). In addition, the increased use of gaming consoles with an Internet connection as well as interest in online gambling and gaming has led to video gaming operators partnering with online gambling providers to bet on the outcome of games arguably determined by skill (Griffiths, King, & Delfabbro, 2014). Thus, specific investigation of the family structure and contextual elements surrounding Internet gambling among youth (e.g., remote mediums such as mobile phone and digital television) on problem gambling in youth warrant consideration.

### 1.3. The present study

As the preceding literature demonstrates, most empirical studies into online gambling have not used representative samples, and relatively little research has been carried out into adolescent gambling online. Therefore, the following study examines data collected from a large-scale nationally representative sample of Italian youth. The specific objective of the present study was to further the understanding of the impact of online gambling in facilitating gambling problems. The primary study objective was to evaluate the prevalence and characteristics (mode of access) of Internet gambling among Italian adolescents. A second objective was to identify and then examine more closely a subgroup of online gamblers who have reported higher rates of gambling problems. Therefore, the current study examines the potential differences between problem and at-risk gamblers, taking into consideration use of online in addition to non-online gamblers on socio-demographic characteristics, gambling participation and gambling problems. Understanding specific factors that are associated with problem online gamblers are likely to help identify the areas where researchers and policymakers should concentrate their efforts. The overarching objective of this study was to further the understanding of the impact of Internet gambling on adolescent problem gambling in an attempt to aid the theoretical understanding of disordered gambling and enable the creation of more effective prevention, harm minimization, and treatment strategies.

### 1.4. Research questions and hypotheses

Following the review of the literature and based on exploratory expectations, this study was designed to ascertain the epidemiology of online adolescent gambling in Italy. Related research questions that were investigated included whether: (i) online adolescent gamblers would present with more gambling problems

Download English Version:

<https://daneshyari.com/en/article/350218>

Download Persian Version:

<https://daneshyari.com/article/350218>

[Daneshyari.com](https://daneshyari.com)