



Book of Abstracts

**12th European Conference on
Gambling Studies and Policy Issues**

11 - 14 September 2018
Grand Hotel Excelsior
Valletta, Malta



Dear participant,

Welcome to the 12th European Conference on Gambling Studies and Policy Issues.
The world of gambling and gaming is an exciting area in to work, to study and to play as well. We will continue to meet and bring people together in forums like these.
I hope you enjoy the conference and it's presentations.



Pieter Remmers,

On behalf of the Executive Committee the European Association for
the Study of Gambling (EASG)

All authors and presenters have been arranged by surname.

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Abarbanel, Brett

UNLV International Gaming Institute

Las Vegas, USA

Player and Fan Perspectives on Cheating in Esports: Implications for Gambling Awareness and Integrity

The rapid growth of esports - professionalised competitive videogame play - has brought with it a similarly rapid growth in esports event betting (Grove, 2016; Superdata, 2017). This growth has resulted in issues similar to those faced by traditional sports and betting industries, such as doping and match-fixing, as well as game integrity issues unique to esports, such as hacking and technological cheats. Integrity in sport and esports competition has a direct impact on betting, which must also maintain a fair and open process to ensure “the ethos, reputation and commercial viability of sports and betting businesses” (Sports Betting Integrity Forum, 2017).

This presentation will cover the authors' recent research on esports player and fan perspectives on cheating in esports and implications for esports betting markets. The core of the presentation will focus on the different views the esports fan/consumer community takes on the concepts of “cheating to win” and “cheating to lose” - a distinct difference in the qualitative data collected from over 1,000 respondents. We will additionally focus on what those differences mean in terms of policy and game integrity as they relate to gambling, and potential next steps for esports stakeholders. In the case of the betting market, for example, the form of cheating (to win or lose) is irrelevant, as it is the act itself that causes a market anomaly. Regulatory agencies, similarly, look to prevent sports betting markets from experiencing *any* corruption, focusing on use of information pertinent to betting activity (Rodenberg & Kaburakis, 2013).

Abbott, Max

Auckland University of Technology

Auckland, New Zealand

Recent WHO and International Gambling Think Tank deliberations and outcomes concerning gambling and gambling-related harm

Two recent international meetings considered gambling-related harm - the inaugural WHO Global Forum on Alcohol, Drugs and Addictive Behaviours (26-28 June 2017, Geneva) and the 4th WHO Meeting on Public Health Implications of Behavioural Addictions (29 Nov-1 Dec 2017, Istanbul). The author gave presentations and wrote invited background papers for both meetings – on public health and diagnostic considerations of gambling disorder and on the convergence of gambling and gaming. His Forum plenary noted research quantifying the gambling-related burden of harm. It included a call for gambling to be firmly placed on international and national public health agendas, strengthened evidence-based policy and prevention strategies and increased early intervention and treatment provision. Outcomes of these and related meetings included inclusion of gaming disorder in the ICD-11 and establishment of a working group to develop WHO screening measures.

WHO participated in the International Think Tank on Gambling Research, Policy and Practice (15-16 February 2018, Auckland) and preceding International Gambling Conference. Think Tanks have been convened annually since 2004. 2018 presentations and discussion included strategies to get gambling on the WHO agenda and increase priority given to reducing gambling-related harm by member states. Other topics included low-risk guidelines, updates on gambling harm research, enriching and growing gambling studies, the Reno RG model and recent critiques, and online interventions. Outcomes included ‘The Auckland Code: A code of ethics for gambling studies’. New working groups included the WHO group, Ethical issues working group, Critical gambling studies group and Early career researcher network. The Knowledge translation and exchange working group will develop a clearinghouse linked to the GREO Conceptual Framework of Harmful Gambling.

Armstrong, Tess
Central Queensland University
Northgate, Australia

The Australian Environmental Scan: An Assessment of the Features Associated with Automated and Digitalised Gambling Products

Traditional games once free from technological innovation are becoming a prominent feature of many Australian casino floors. Despite the increasing availability of these products, it remains unclear how automated versions of traditional table or community style games may alter the gambling experience compared to their traditional counterparts. In order to determine how automation of traditional games may alter player behaviour, there is a need to identify the features associated with automated and digitalised products. An Australian environmental scan of automated and digitalised table and community style games was conducted to explore the characteristics of technologically enhanced products available to Australian venue operators and consumers. Based on a review of the structural characteristics of electronic gaming machines (Armstrong, Rockloff, Greer & Donaldson, under review), product features were catalogued according to visual and auditory enhancements, illusions of control, cognitive complexity, expedited play, and social customisation. Results suggest that many features identified in automated and digitalised products have the potential to encourage greater betting intensity. Further research is needed to determine how technological enhancements may alter players' behaviour and contribute to harm in real-world gambling environments. gambling.

Statement of Implications

The national environmental scan identifies prominent features of automated and digitalised versions of games traditionally free from technological enhancements. Automated or digitalised games are likely to cause harm given the prevalence of features that have the potential to intensify gambling engagement and encourage excessive gambling.

Auer, Michael
Neccton
Lienz, Austria

The long-term effects of a real-time loss-limit reminder at Norsk Tipping

In regulated markets Online gambling is almost always connected to a strict registration and thus a 1:1 relationship between player and gambling account. However, very few legislations have introduced identified land-based gambling. Among those are Norway, Sweden and Austria, where VLTs can only be operated with player cards. Identified play comes along with detailed player-specific data. This allows for the possibility to track player behaviour and it has been argued that problematic gambling could potentially be identified. Voluntary limits, play breaks, pop-ups and personalized messages are common Responsible Gaming tools which can only be applied when players are identified. Very few studies have investigated the effect of those Responsible Gaming tools in real-world settings with real players. Recently industry experts have argued that real-time feedback should be more effective than batch-driven processes. In this study we investigate the effect of a real-time loss-limit reminder at the Norwegian gambling operator Norsk-Tipping. Players who reach 80% of their personal monthly loss limit receive either a pop-up or a text message, depending on where they play. This is the first study to ever analyse long-term effects of real-time feedback on subsequent gambling behaviour.

Azouri, Tony
Christchurch Casino
Christchurch, New Zealand

The development and use of real-time alerts and facial recognition technology to assist in Host Responsibility at Christchurch Casino

Technology is playing a growing role in our overall Host Responsibility Programme, allowing us to provide improved customer relations and an increasingly-safer gambling environment. This presentation discusses the development and use of two such technologies: Servizio, a mobile-based Host Responsibility alerts application and Cognitec facial recognition technology. The presentation will highlight the industry's ability to develop effective solutions through mutually-beneficial collaborations. Servizio was developed through collaboration with Scientific Games (Bally Technologies) from 2015-2018 and provides real-time alerts for high levels and long periods of play, as well as persons of interest and banned people. Alerts are sent via email and also to any iOS device with the application and allow for enhanced monitoring of both carded and uncarded players, resulting in more targeted observations and interactions aimed at preventing gambling-related harm. Via the iPod Touch or iPhone device, staff record interactions related to an alert and can also make additional reports to Host Responsibility based on their own observations and interactions. All parameters are configurable to suit the individual property's requirements. Facial Recognition technology, introduced at Christchurch Casino in 2017, is used to detect persons either banned, or who are of immediate Host Responsibility concern and whose identity may or may not be known. The system, which also features retrospective-search capabilities, is proving an effective tool in preventing and detecting breaches of Exclusion. Christchurch Casino is currently working with Cognitec on developing the system for use in assisting with identifying customers who have been on site for long periods.

B

Bertrand-Danjou, Auréane
Laval University
Courcelette, Canada

Delinquency and gambling problems among services users seeking treatment

Pathological gambling often leads to severe negative impacts in various areas of the person's life. Gambling problems that does not meet criteria to be defined as pathological gambling can also be source of consequences in personal and professional life of the affected individuals. One of the adverse consequences that can be seen is the commission of illegal acts. Gambling disorder has been renamed and reclassified into the "substance-related and addictive disorders" in DSM-5. It was previously classified into the "impulse control disorders" and had a specific diagnostic criteria related to illegal acts committed during the course of the disorder. This criterion has been removed in the newest DSM version because delinquent behaviors are not considered to be a discriminative factor of the disorder, but rather an indication of severity. In line with the literature, preliminary results of the present study shows that individuals with gambling problems that have been found guilty of illegal acts shows consequences in various spheres including mental health, family life and gambling habits. An important proportion of the service users seeking treatment in an addiction rehabilitation center in Québec and showing problem gambling have been convicted for various crimes in their adulthood. The type of illegal act that is the most prevalent is property related offences, especially fraud. In this context, it seems important to address the specific profile of the individuals with gambling problems that seeks treatment and have committed illegal acts to improve the support and adequacy of services that is offered at their arrival into healthcare system.

Billi, Rosa

*Victorian Responsible Gambling Foundation
Melbourne, Australia*

Translating research into policy and practice, the journey Down Under

In an ideal world, evidence would inform the development of policy options and to work out which are likely to achieve the best result. It also helps in implementation where there is concern due to costs and uncertainty as to effectiveness.

In social policy areas such as gambling, where research is still a relatively recent field of study, there have been significant challenges. However, to do nothing until credible evidence become available is untenable. Especially where there is irrefutable evidence of the significant adverse impact that participation in such activity has on some individuals and their families.

The presenters will share the journey that some Australian states and territories have undertaken in the last 20 or so years to reduce the harm for people who gamble. By adopting a public health and consumer policy approach, policy makers have been able to focus on developing and implementing a range of measures while the research base is developed.

The research and evidence base has grown. The causes of gambling disorder are complex and multifactorial and more research is needed. The available research and findings need to be read and understood by the relevant people. Often reports sit in compactus shelving or on websites. The Victorian Responsible Gambling Foundation is working hard to ensure the findings are transferred to the relevant people, bodies and agencies. This presentation will consider significant research studies and how these have been translated and informed practice, policy and programs.

Binde, Per

*Department of Public Health Sciences, Stockholm University & School of Global Studies, University of Gothenburg
Stockholm & Gothenburg, Sweden*

Hight return to player (RTP) percentage: A risk factor for problem gambling?

Forms of gambling with a high return to player (RTP) are typically associated with problem gambling (PG), for example slot machines, roulette and casino card games. Contrarywise, low RTP games, such as lotteries, are seldom the main cause of problem gambling. This observation may lead to policy demands for regulating high RTP games more strictly than low RTP games, or for limiting the RTP level in some forms of gambling. Unfortunately, there is a lack of empirical studies on this issue. I argue that high RTP is in itself not necessarily associated with PG. Theoretically, increasing the RTP of a form of gambling might in some circumstances reduce the prevalence of PG among the gamblers and in some other circumstances increase it. However, for many forms of gambling, the option of substantially increasing or reducing the RTP is not commercially realistic.

The overall conclusion of this conceptual discussion is that RTP (in itself, isolated, and in reality) has little to do with PG. More important factors are the speed of a game, its volatility, and all its other structural characteristics relevant for PG risk.

Blaszczynski, Alex
University of Sydney
Sydney, Australia

Gambling-related harm

Forms of gambling with a high return to player (RTP) are typically associated with problem gambling (PG), for example slot machines, roulette and casino card games. Contrarywise, low RTP games, such as lotteries, are seldom the main cause of problem gambling. This observation may lead to policy demands for regulating high RTP games more strictly than low RTP games, or for limiting the RTP level in some forms of gambling. Unfortunately, there is a lack of empirical studies on this issue. I argue that high RTP is in itself not necessarily associated with PG. Theoretically, increasing the RTP of a form of gambling might in some circumstances reduce the prevalence of PG among the gamblers and in some other circumstances increase it. However, for many forms of gambling, the option of substantially increasing or reducing the RTP is not commercially realistic.

The overall conclusion of this conceptual discussion is that RTP (in itself, isolated, and in reality) has little to do with PG. More important factors are the speed of a game, its volatility, and all its other structural characteristics relevant for PG risk.

Bonello, Maris
Kindred Group
Gzira, Malta

RG Proactive Approach for a Gambling Operator

Operators are always trying to be more proactive around responsible gambling and the detection of the early signs of problem gambling. This has been a focus for Kindred for quite some years now and we have seen that a proactive approach is the approach needed for a sustainable business. In this presentation, real life examples will be presented and the manner in how they were followed up and how the customer reacted will be mentioned. Moreover, there will be a presentation on how responsible gambling tools can be implemented and how certain changes have contributed to more responsible gambling tool usage.

Borg, Joseph F
WH Partners
Ta'Xbiex, Malta

The Impact of Blockchain on Gaming

With the introduction of distributed ledger technology ("DLT") such as the Blockchain which does away with the use of intermediaries, we are currently experiencing an unprecedented technological revolution, one which is transforming the way all services are being supplied and consumed. Consequently, it seems clear that the gaming industry has the potential to be impacted significantly by DLT and this can already be seen through the incorporation of blockchain technologies in betting exchanges and provably fair games. The most obvious way to integrate blockchain technology into gaming is to allow the use of cryptocurrencies as a means of payment but it cannot be understated that the use of DLT within the gaming context can have much greater ramifications, including but not limited to, ushering transparency, security and trust through the use of smart contracts, and even prevent money laundering. The presentation we are proposing will be one which highlights the multifaceted reasons why online gaming operators and regulators should be very interested in making use of DLT to further develop one of the fastest growing sectors in the industry.

A special mention will also be given to the Government of Malta's 2017 Blockchain Strategy including, inter alia, the consultation document on the establishment of the Malta Digital Innovation Authority, the framework for the certification of DLT platforms and related service providers, as well as the very

recent position adopted by the Malta Gaming Authority, the leading gaming regulator in the European Union, where it expressed its intention to embrace technological disruptions, especially ones which make use of DLT, to create the right environment for innovation in the gaming industry to flourish.

Breen, Helen
Southern Cross University
Lismore, Australia

Understanding the role of gambling and interaction with the social determinants of health for Indigenous Peoples

Social determinants of health regularly include indicators of people's income, education, employment, living conditions, social support, and access to health services (WHO, 1986). Limited access to resources reduce these determinants usually resulting in inequity, especially underserved and preventable differences in living and health status. Research suggests that social determinants leading to persistent health inequalities for Indigenous people are considered to be colonisation, loss of land rights with subsequent disconnection to cultural practices and traditional economies important for health and wellbeing, poor health linked to poverty and economic disadvantage, a general lack of understanding of Indigenous culture and world views, and interpersonal and institutional racism (Mowbray, 2007).

This review examines particular social determinants of health relevant to Indigenous people and their potential for engagement in gambling. Focussing on cultural factors this presentation analyses how gambling involvement among Indigenous people is interwoven with identity and gender and transitions, both physical and social. Developing an understanding of these factors is helpful for considering whether gambling has become a mediating mechanism in response to continuing stresses experienced by some Indigenous groups. Further, a deeper knowledge of the role that gambling plays may contribute to efforts to reduce gaps in social determinants of health, improving overall health and wellbeing.

Brizuela, Julio Ángel and Cia-Brizuela, Propuesta
Asociación Psiquiátrica de América Latina APAL
Capital Federal, Argentina

Improving strategies in Responsible Gaming Programs: its complete implementation in the Province of Neuquén, Argentina

Responsible Gaming Programs (RGP) have evolved significantly in the last decades since its origin in the gaming industry (1980) by introducing new resources apart from the traditional ones, such as self-exclusion. Upon an agreement between the Gambling Institute of the Province of Neuquén (IJAN) and a team of faculty advisors coordinated by the authors to implement an RGP, and through agreements made by the IJAN with several areas of the Provincial Executive Power, such as the Ministries of Health, Education, Justice and Citizen Involvement, several activities were developed for primary, secondary and tertiary prevention in an integrated pilot plan, which is in force since 2014 and includes the following:

- **Training for the members of public health interdisciplinary teams** so they can offer prevention and free care service in the province to those affected by gambling problems. Two-year joint courses for physicians, psychologists, nurses, social workers, occupational therapists and community workers with supervision of clinical cases.
- **Primary and secondary prevention through psychoeducation for the community and vulnerable groups.** Conferences, supporting material and media presence to eliminate the prejudice and stigma of gambling.
- **Training for specific groups, such as:**
 - primary and secondary school teachers and trainers;
 - members of the judicial power and security forces.

- **Promotion of health care** and offering of recreational, sport and cultural activities (provided by the IJAN).

Bühringer, Gerhard

Technische Universität Dresden

Dresden, Germany

Beyond Rene II: Who cares for vulnerable gamblers?

John Locke's liberalism, post-World War II German Social Market Economy (Rhine Capitalism) and modern consumer protection share the conviction that market participants have equal rights and responsibilities. Within this framework governments and market providers are only responsible to balance deficits of consumers in cases of "asymmetric information". The Reno model for Responsible Gambling appears to be based on similar ideas by setting standards for informing participants on gambling features and procedures as well as by providing feedback during gambling. While such standard consumer protection is adequate for *social gamblers*, the (small) group of *vulnerable gamblers* will probably not profit from a rational information approach to prevent harm. Additional protection and care by gambling providers under public control is needed for this group, e.g. via early identification, agreements on gambling reduction and gambling exclusion as ultima ratio. However, it is important not to confuse this clinical view with socialistic restrictions of individual freedom. Surprisingly, post war Catholic Doctrine on Social Matters could be considered as possible basis to further develop Responsible Gambling standards: it provides a balance between human liberty interests and individual and societal responsibilities within a social-liberal society.

C

Cangianelli, Emmanuele

MAG

Roma, Italy

The Italian Gaming Machines and Gambling Regulated Market 15 years later: keynotes for further market implementation towards the players safety

In 2003, Italy undertook the regulation of gaming machines, setting up a legal industry based on a concessory and authorizatory binary model, capable of ensuring the government of a large part of the gambling offer in the country, thanks also to a rapid extension of telematic control systems and a structured supply chain based on the natural dynamics of the market.

This model is still analyzed today by country regulators wishing to regulate the land-based offer also extended to proximity networks and in which different products coexist together with gaming machines (lotteries, betting, bingo).

In 2010, during the 8th EASG Conference, a scenario of further evolution was presented; in 2017 that evolution was only partially realized, leaving open issues of public policy, in particular regarding the empowerment of social players and the protection of addicted gamblers. In fact, despite the extensive regulation, in recent years regulatory innovation has been somewhat sterile compared to the objectives of responsible gaming, not yet implementing tools that have proved some efficiency in other national contexts. The proposed intervention, summarizing analysis on the Italian context carried out in the last three years for some of the main operators and institutional subjects, takes into consideration gaming demand, technology and distribution channels scenarios, intends to summarize the situation and to present some options for a sustainable evolution of the Italian regulated market in the near future.

Carlbring, Per
Stockholm University
Stockholm, Sweden

Effects of a workplace prevention programme for problem gambling: a cluster randomised controlled trial

Despite being considered a public health problem, no prevention programme for problem gambling in workplace settings has been scientifically evaluated.

The aim of this study was to investigate the effects of a problem gambling (PG) prevention programme in a workplace setting. It was hypothesised that the workplace PG prevention programme will result in (1) managers reporting a higher inclination to engage in a conversation with an employee when suspicion or worry about PG arises, (2) an increase in the employees' knowledge about where in the workplace one might get support regarding problem gambling, (3) an increased number of early interventions by the managers (eg, engage in a conversation) to help employees with PG or other types of harmful use, (4) managers and employees engaging in more sustainable gambling practices as measured by sum of Problem Gambling Severity Index (PGSI) scores, (5) fewer cases of PG among managers and employees as measured by PGSI categories and (6) managers reporting being more confident in handling gambling and PG in the workplace.

Ten organisations, with a total of n=549 managers and n=8572 employees, were randomised to either receiving a prevention programme or to a waitlist control condition. Measurements were collected at the baseline and 3, 12 after intervention. At the time of the EASG-conference 12-month follow-up data will be available in addition to the already collected post-assessment data (analyzed according to the intention-to-treat principle).

Voluntary deposit-limit as a tool for reducing gambling intensity among customers of an online gambling platform: A randomized controlled trial

Problem gambling is a growing phenomenon in Italy, and there is increasing interest in studying the reasons for gambling in the Italian community. The Gambling Functional Assessment-Revised (GFA-R) was developed to assess two contingencies maintaining gambling behaviour: positive reinforcement and escape. The study hypothesized that the GFA-R could be translated and adopted in the Italian context. The main purpose of this study was to test the factor structure of the Italian version of the GFA-R by means of confirmatory factor analysis, its internal consistency and validity, in a sample of 667 Italian-speaking adults, recruited at universities, banks, offices, industries, markets, public parks and shops in five regions: Piemonte, Veneto, Lazio, Calabria and Puglia.

The study found that the scale was internally consistent, and results showed that the original two-factor model fitted the data well. It also found moderate correlations between the GFA-R-I and both SOGS scores and GRCS scores. These results will allow Italian psychologists, educators and policymakers to identify specific contingencies maintaining gambling behaviour (positive reinforcement vs. escape) in the Italian community, detecting people more at risk of developing disordered gambling, with significant improvements in terms of prevention and clinical intervention.

Carran, Malgorzata Anna
The City Law School
London, United Kingdom

Gambling Regulation and Vulnerability

Since the UK Gambling Act of 2005 was introduced, gambling has stopped being seen, politically and legally as an inherent vice and is now viewed as a legitimate form of entertainment.

Gambling Regulation and Vulnerability explores the laws around gambling that aim to protect society and individuals, examining the differences between regulatory rhetoric and the impact of legislative and regulatory measures. Malgorzata Carran finds that although the Gambling Act introduced many positive changes to gambling regulation, it has created an environment in which protection of vulnerable individuals becomes difficult. Carran challenges the existing legislative premise that regulation alone is able to balance the effect of liberalisation for those who are vulnerable. Uniquely, this book's findings are underpinned by empirical data from focus groups carried out with children and young people in secondary schools. The young people interviewed have experienced the transition from a contained, to liberalised gambling industry and unless there is a reversal in policy, no comparable empirical data is ever likely to be collected.

This title will appeal to academics exploring regulation, sociology, and law and society. Similarly, regulators and those working with the gambling industry will find this an insightful and illuminating text.

Contents 1. The concept of vulnerability and gambling – related harm 2. Regulatory responses 3. Gambling meaning and categorisation. Are English definitions sufficiently inclusive for the protection of minors? 4. Prevention of underage gambling 5. Minors and gambling advertising 6. Minors and social gaming Epilogue Index

Chagas, Bernardo T.

SCML / ISEG

Lisbon, Portugal

Lottery consumer behaviour on the Internet: An empirical analysis of Portuguese lottery real playing data

Gambling activities have had a great transformation over the past decade. Since the advent of the internet, gambling has diversified into many new forms which allowed people to engage in numerous different activities in an increasing multiplicity of settings. This transformation implicated new research approaches and methods to better understand these forms of gambling behavior. Despite the advances, the number of published research is still somewhat limited especially when taking into consideration that many of these studies relied on the same databases to characterize gambling behavior. In order to contribute to the enrichment of real data gambling behavior research, the present study is the first to analyze actual internet playing data from Portuguese players. The data was drawn from the Portuguese national lottery website and comprises one year of aggregated gambling activity.

Colombo, Stefania and Spadafora, Daniele

IGT

Roma, Italy

Responsible Gaming at Work Fostering Responsible Gaming: Education and Awareness Campaigns

As the world's leading end-to-end gaming company, IGT has received global recognition for its commitment to delivering responsible gaming education and awareness campaigns to its more than 12,000 employees around the world. The Company informs its employees about its commitment annually through its participation in global observances, the design and implementation of job specific online trainings for employees at all levels, the dissemination of various collateral materials, and by using internal social media strategies. The purpose of this discussion will be to educate session participants about the Company's best practices by providing examples of its engagement strategies used internally with its employees as well as their customers around the world.

Costes, Jean-Michel

*French Monitoring Center on Gambling
Paris, France*

Are responsible gambling strategies effective for all types of game?

This paper tries to assess the effectiveness of responsible strategies for different type of games in France. The share of revenues derived from problem gamblers is used as a good indicator of a responsible strategy.

Cousins, Bradley

*University of Ottawa
Ottawa, Canada*

Evaluating Gamgard, a tool guide responsible game design

Gamgard is an evidence-based tool used in the gaming industry to assess risks to vulnerable players under 'normal' playing conditions, developed and marketed by GamRes Inc. The main users of Gamgard are members of the World Lottery Association (WLA) mostly located in Canada, Scandinavia, Europe and Australasia. The evaluation summarized in this paper is partly in response to a commitment of the WLA to evaluate and improve responsible gambling (RG) services and a commitment by GamRes to meet the needs of Gamgard customers. In some respects this evaluation, which is guided by professional standards of practice for program evaluation and conducted by a seasoned program evaluation specialist, is relatively unique in the gaming industry.

In this third party study of Gamgard my OBJECTIVES were to examine outcome and process data useful in determining the merits of the tool and associated services and ways in which they may be improved. The DESIGN of the evaluation aligned with a logic model collaboratively developed by me and GamRes. I relied on several streams of data in the evaluation; within the principal stream I conducted confidential interviews with individual and team members of 11 Gamgard customer companies (gaming developers/operators) and 2 gaming regulation organizations.

Other data streams that I examined were: website documentation and manuals; Gamgard research and development documents; raw scores from authentic anonymized applications of the tool; anonymized reports from customer organizations that referenced Gamgard scores; and service provider reports detailing gaming risks to vulnerable populations. With some exceptions, FINDINGS confirmed that: Gamgard is quite successful in achieving its aims; inferences arising from Gamgard scores are valid and reliable; and Gamgard meets user needs to a high level of satisfaction. Finally, I identified a range of suggestions for improving the tool in ways that would benefit customers. I considered these suggestions from a feasibility standpoint, particularly in terms of the availability of research-based evidence justifying them. In CONCLUSION, I identified a range of issues for consideration by GamRes.

Crone Linding, Elisabeth and Mouridsen, Kim

*Danske Spil, Midway AI
Brøndby, Denmark*

Automated identification of possible problem behaviour in online gambling matching expert assessment

Gambling operators need efficient means of proactively identifying customers who are at risk of developing problem gambling behavior (PGB) or have already developed addiction. Currently, simple markers associated with addiction, such as time spent and total monetary loss, likely represent an overly simplistic approach which overlooks more complex signs of developing addiction.

Experts in neuroscience and gambling addiction have in partnership with Danske Spil, the Danish National Lottery, developed an algorithm which identifies PGB by mimicking human expert assessment

of online gaming trajectories. An experienced psychologist manually assessed 3-month gaming activity in 2,431 randomly selected customers and rated each trajectory as either 'no PGB' or 'possible PGB' with an intermediate 'Observe' group. We then used a machine learning approach to automatically relate observed trajectories to the expert assessment, i.e. the algorithm was trained to assess online patterns for possible PGB.

Since 2017, Danske Spil has applied the algorithm to the gambling data of all its online customers in real-time, along with 800 "care calls" to selected at-risk customers. Reactions have been positive. Testifying to the success of early identification, most customers identified by the algorithm are not yet at a stage where gambling represents an addiction but are often surprised to find how much time or money they have spent on gambling, or how precisely the data explains their behaviour.

We anticipate the algorithm may enable early detection of PGB and that the differentiated output may lead to an individualized approach to intervention from early detection to treatment referral.

D

Delfabbro, Paul
University of Adelaide
Adelaide, Australia

Addiction by Default? Analysis of EGM characteristics and their association with gambling behaviour

It is well-established that electronic gaming machines (EGMs) are the type of gambling most likely to be associated with problem gambling. All researchers generally agree that there are structural characteristics of EGMs that set them apart from other forms of gambling. EGMs encourage rapid and protracted gaming sessions in stimulus-rich and ergonomically optimised environments that can sometimes contribute to alterations in conscious experience (often referred to "the zone", Dow-Schull, 2012). It is also known that industry design and marketing work focuses specifically on maintaining behaviours that enhance profits. Although authors such as Dow-Schull provide compelling evidence as to the role of machine design in addictive behaviour affecting some problem gamblers, some important questions remain. What EGM features are most strongly implicated in problem gambling? Are these the same or different from the ones that attract EGM gamblers in general or do these differ? Why is it that 80-85% of regular EGM gamblers do not develop major problems with EGM gambling? In this talk, I draw upon the established literature and extensive card-tracking and objective machine data to reflect upon these questions. I examine whether the effect of EGM features is likely to be a matter of 'degree' rather than differentiated by gambler type and to what extent individual differences and co-morbidity must be taken into account in understanding addiction. These observations have important implications for regulation relating to machine design and whether addiction is necessarily 'by default'.

Derevensky, Jeffrey
McGill University
Montreal, Canada

Mobile gambling among adolescents: Is this a Problem?

With the rapid development of gambling technologies, underage mobile gambling has become a growing concern. The present study investigated the prevalence of adolescent mobile gambling, the relationship between mobile gambling and gambling problems as well as other forms of gambling, and the predictive effect of perceived risk of gambling-related harms, and parental and peer disapproval of gambling on adolescent mobile gambling frequency. Questionnaires from 6818 high school students aged 10 to 19 ($M = 14.90$, $SD = 1.77$) revealed that 11% of youth reported having engaged in mobile gambling.

Analyses revealed that mobile gambling (at least once a month) was associated with a higher risk of developing a gambling problem and increased engagement in multiple forms of gambling. A hierarchical logistic regression suggested that being male and perceiving higher parental disapproval of gambling is related to less past year mobile gambling. Perceived risk of harm associated with gambling and peer disapproval was not a significant predictor after controlling for other factors. The results suggest that underage mobile gambling may serve as a warning sign of adolescent problem gambling and the importance of including parents in prevention programs.

Dimova, Svetlana

*Centre du Jeu Excessif
Lausanne, Switzerland*

Excessive gambling prevention by operators in French-speaking Switzerland: Available data and stakeholders perceptions (PREJEOP)

Introduction

Depending on the jurisdiction, different prevention measures are implemented by gambling operators; these are based on a legal or voluntary basis. Measures include: (1) information for the players, (2) restriction on the general availability of the offer to play, (3) players' access to gambling venues, (4) parameters associated with the offer to play and (5) interventions for at-risk players. The international literature indicates that these measures remain insufficiently assessed. However, it appears that the most common measures are often not the most effective. Within the context of the revision of the Swiss law on gambling, a lack of data on current measures and the need for stakeholders to have empirically-based indicators are highlighted. A research project is introduced to (1) describe the preventive measures implemented by gambling operators in French-speaking Switzerland (2) assess the perception of these measures by different types of actors.

Method

The approach includes both an analysis of institutional and scientific documents describing the measures in force, and semi-structured interviews with three types of actors: operators, authorities for monitoring and external providers of prevention efforts.

Expected results

The different types of measures relating to the five categories will be identified and described. The available empirical data will be presented, as well as the measures for which there is still a lack of data. Regarding the perception of the measures by actors in the field, contrasting opinions are expected.

Preliminary discussion

The study is expected to formulate and discuss the relevant indicators for the follow-up of the prevention efforts implemented by the operators. This aspect is particularly important in a domain with multiple conflicts of interest.

Dixon, Melanie

*Université Laval
Québec, Canada*

How Do At-Risk Online Stock Traders Behave on the Stock Market?

With the advent of the Internet, financial markets have become increasingly accessible to the general population. In addition, online financial markets offer traders interesting incentives that may encourage excessive trading behaviors akin to gambling on the stock market. Though excessive online stock trading has begun to raise empirical interest in the field of clinical psychology as a form of gambling problem, literature on gambling behaviors as manifested specifically on the stock market remains scarce. The aim of this study was to explore trading behaviors and gambling habits in a sample of online stock traders who completed a telephone interview ($N = 100$). The sample was divided into three post hoc groups according to risk level for a gambling problem on the stock market as measured

by an adapted version of the Problem Gambling Severity Index (PGSI) for online stock trading (PGSI-Trading). Some key results will be presented and interpreted, namely that gambling-like behaviors (e.g., trading within a short-term timeframe, being motivated by making money quickly, experiencing strong emotions) were significantly higher in traders with higher PGSI-Trading scores as compared to traders with lower scores. Other gambling habits were not prevalent and did not differ significantly between groups. Future research aims to be discussed include studying gambling behaviors on the stock market on a larger scale and elaborating clinical assessment tools specifically designed for this subgroup of online stock traders.

Dodig Hundrić, Dora
University of Zagreb
Zagreb, Croatia

Youth gambling - comparison of high-school and university students

Studies continuously confirm a greater prevalence of problem gambling among young people, with this referring to both high school pupils (Derevensky & Gupta, 2000; Ricijas et al., 2016) and student population (Williams et al., 2006; Dodig et al., 2014). Expectedly, in countries with high gambling availability such as Croatia, these trends are even more visible. Therefore, it is not surprising that the largest share (12,3%) of young problem gamblers in Europe was measured in Croatia on a sample of high-school pupils (Calado, Alexandre & Griffiths, 2017).

The answer to the question whether similar results can be expected when it comes to university students was sought within the international research "Attitudes and stigma toward gambling in different social context – an international comparison", involving university students from Croatia, Israel, Canada and Australia. In this paper, the focus will be on the subsample of Croatian students (n=699, m=46,9%, f=51,8%) and on the results obtained with the Questionnaire of gambling activities and Problem Gambling Severity Index (Ferris & Wynne, 2001). These results will be compared to those from a Croatian national prevalence study involving high school students (n=2702, m=49,2%, f=50,8%) who completed the identical gambling activity questionnaire and Canadian Adolescent Gambling Inventory (Tremblay et al. 2010). The study revealed that high-school students, when compared to university students, are gambling more and they are developing gambling-related problems to a greater extent.

These findings will be interpreted in relation to possible significant influence of maturation and gambling as adolescence-limited behaviour, as well as in relation to the fact that students are a positively selected group of young people.

Donati, Maria Anna
University of Florence
Florence, Italy

Gambling prevention with adolescents: The effectiveness of a dual process perspective in targeted intervention

Among the factors which contribute to the development of negative consequences related to gambling in adolescence, the role of gambling-related cognitive distortions, i.e. a wide array of different kind of erroneous beliefs and irrational thoughts on gambling, has been highlighted. Following dual-process theories on cognitive functioning (e.g., Stanovich, 2004; Toplak et al., 2007), recently it has been verified a model in which mindware gap, i.e., susceptibility to the gambler's fallacy, and contaminated mindware, i.e., superstitious thinking, were the antecedents of gambling-related cognitive distortions. Based on this model, a universal preventive program aimed at acting on probabilistic reasoning and superstitious thinking resulted to be effective in reducing gambling-related cognitions (Donati et al., 2018). The aim of this study was to investigate the utility of this approach in decrementing erroneous beliefs about gambling and enhancing knowledge of randomness among at-risk adolescents.

Participants were 22 male adolescents (Mean Age = 15.84, SD=.79) attending the second level of a technical-industrial school in a suburban area in Florence (Italy) largely frequented by immigrants and people with low SES. A pre- and post-test design was conducted: Before the intervention, participants completed the revised form of the Gambling Related Cognitions Scale (Donati & Primi, in preparation), the Random Knowledge Events Test (REKT; Turner et al., 2006), and the Gambling Behavior Scale – For Adolescents (GBS-A; Primi et al., 2015), and they filled out again the GRCS-RA and the REKT after two weeks by the end of the intervention. The intervention consisted in two didactic activities conducted in classroom by a trainer and focused on reasoning about the correct meaning of gambling, randomness, probabilistic reasoning biases, superstitious thinking, and cognitive distortion, particularly the bias related to the belief in controlling and predicting random events.

Results showed that at the pre-test, 83% were past-year gamblers and the half of them showed at-risk or disordered gambling. A pairwise t-test attested a significant reduction of gambling-related cognitions ($t(11)=2.67$, $p=.022$, Cohen's $d=.77$) among the adolescents who attended both the units of the intervention from the pre-test ($M=34.50$, $SD=7.48$) to the post-test ($M=27.83$, $SD=10.47$), and also a significant improvement of random knowledge ($t(11)=-2.43$, $p=.033$, Cohen's $d=.70$, $M_{pre-test}=59.17$, $SD=5.34$, $M_{post-test}=62.67$, $SD=6.11$). Findings suggest that gambling-related distortions and understanding of randomness can be reduced with at-risk adolescent by using dual process theory as theoretical model.

Dragicevic, Simo

Playtech

London, United Kingdom

Raising Standards in Compliance: Can Artificial Intelligence help industry stay one step ahead of criminal spenders in online gambling?

The European Union's 4th Anti-Money Laundering (AML) directive increased the pressure on the online gambling industry to ensure the industry is not used as a vehicle for terrorism finance, money laundering, or for leisure spending from crime.

Up until now, the industry has addressed the identification of criminal activity in online gambling primarily by using knowledge-based systems focused on simple thresholds. However, criminals are astute at evading regulations and these traditional systems struggle to adapt well to new requirements to proactively monitor all of the activity of many millions of online customers, some of which will be related to criminal activity. In 2017, Kindred Group, City, University of London, and BetBuddy initiated a project aimed at exploring the potential of harnessing new technology to raise standards in compliance in online gambling.

This session will describe the results of Year 1 of the project, outlining key risk areas identified by industry stakeholders such as regulators and operators, the opportunities for the application of AI to improve ongoing monitoring, and results of early experimentation of new techniques to applied to the analysis of real-world online gambling data.

Duncan, Adele

Gordon Moody Association

Based Nationally, United Kingdom

Mixed model of care and gender differences

This session describes a new model of treatment for female problem gamblers which has been developed and piloted by the Gordon Moody Association (GMA), a UK based charity. GMA has been working in a residential environment with male problem gamblers for 45 years and has developed a unique treatment programme tailored to meet the specific needs of this client group.

The 12 week programme combines two short residential retreats, complemented by weekly 1-1 sessions. The residential element of the treatment offers an intense experience of therapy combined with peer support that is difficult to recreate in other environments. This innovative approach allows women to benefit from residential treatment whilst having the convenience of weekly out-patient style sessions to fit into their lives.

Three years in, it appears that the approach is seen by the women to be of value and is enabling them to engage with the service. As such we have begun a pilot using the same for men, as a way of offering a choice of treatment for those who are able to sustain employment but need a more intensive treatment approach.

By engaging with men in the same context we have noticed some stark differences between men and women in treatment which has enabled us to not only adapt what we are doing but study the gender differences in this client group.

E

Engebø, Jonny

*University of Bergen / Norwegian Gaming Authority
Førde, Norway*

What affects the gamblers view towards responsible gambling measures?

Measures for responsible gambling (RG) may prevent gambling problems and reduce harm. Some RG measures are set by authorities whilst others are available for gamblers to use themselves. This presentation concerns a study conducted in a general population assessing how RG measures are perceived by gamblers. The data were collected in 2013 and 2015, and samples were drawn from the Norwegian Population Registry. In total 9,129 gamblers participated. They were asked to indicate to what degree they believed ten RG measures would help them to control their gambling. Between 35 and 42 percent neither agreed nor disagreed with the statements. Among those with an opinion, most agreed. A multiple regression analysis identified eleven variables as significant predictors of a composite score of attitudes towards RG measures. High scores indicate positive attitudes. The following factors were associated with a positive attitude: Female, young age, playing random games only, being a moderate or problem gambler, reporting high impact from gambling advertisements as well as the personality traits agreeableness, openness and neuroticism. Playing low risk games only, amount of spending and the personality trait extraversion were inversely related to the attitudes towards the RG measures. The total explained variance was however only 7.2 percentage. Positivity to the RG measures can relate to needs for security, stability, or to reduce problems. Negative views can relate to a wish to play without obstacles, take risks or to thrust in self-control.

F

Finkel, Olga

*WH Partners
Ta'Xbiex, Malta*

New Malta Gaming Regulatory Framework

Following the remarkable growth of the gaming industry in Malta, the Malta Gaming Authority has published a White Paper proposing major reforms to the industry's existing legal framework with a view of ensuring that the rules which apply to gaming operators in Malta cater for the needs of the innovative and fast paced industry. Subject to parliamentary time and approval being allocated as anticipated, the proposed new Gaming Act, as well as any further regulations to be made under it, will come into force in the very near future, on or around 1 July 2018. This presentation will seek to outline the primary changes being proposed which we believe will have an impact on gaming operators and

their key suppliers alike. These include, inter alia, a more streamlined licensing procedure, a longer licence term, the so-called “limited duration” licence, the new licensable activities such as those of gaming software suppliers, and the new fiscal obligations. While the legislative overhaul is still underway, positive steps in the form of ad hoc regulations have already been introduced to regulate specific areas such as those relating to skill games with prizes, to exempt fantasy sports operators from requiring a gaming licence and to implement the new licence fee rules, all of which will be explored throughout the presentation. As the legal changes are bound to create confusion within the gaming industry, we aim to give a presentation which will equip the industry's stakeholders and professionals with the information they will need to adequately prepare themselves for the rules which are about to come into force.

Flack, Malcolm

*Charles Darwin University
Darwin, Australia*

Impulsivity and Problem Gambling: Do the Anticipated Outcomes about Excitement and Escape Really Matter?

Impulsivity is one of the individual level dispositional characteristics that have shown a robust association with problem gambling. However, the way in which impulsivity shapes gambling behaviour is less well understood. The current study examined the explanatory role of gambling outcome expectancies of escape and excitement to further explore the relationship between impulsivity and problem gambling.

A total of 491 community members completed an online questionnaire that assessed impulsivity, the anticipated emotion focused benefits from gambling (escape and excitement outcome expectancies), gambling frequency and problem gambling. Although escape and excitement outcome expectancies partially accounted for the relationship between impulsivity and problem gambling scores, escape moderated the relationship. Specifically, impulsivity was not related to problem gambling when less favourable views of the escape outcome expectancies were held. Conversely, the relationship between impulsivity and problem gambling strengthened when the views towards gambling as a form of escapism were more favourable. The findings indicate the perceived benefits of gambling to manage undesirable emotions play a significant role in determining the degree to which impulsivity influences problematic gambling.

Fogarty, Marisa

*Australian National University
Canberra, Australia*

Trajectories of social and economic factors in relation to problem gambling risk in Australia: A longitudinal analysis

Most research on gambling is based upon cross sectional survey data. In Australia, this means state/territory based gambling prevalence surveys which take a snapshot of gambling risk prevalence rates at a particular point in time. The paucity of large-scale Australian longitudinal gambling data means that there is a limited understanding of the trajectory of problem/moderate and low risk gamblers and the economic, social and health outcomes of those who gamble.

This paper attempts to address this using data from the Household, Income and Labour Dynamics in Australia (HILDA) Survey. This large Australian longitudinal household survey included gambling questions for the first time in 2015 (Wave 15). This paper explores a range of economic variables (household income, employment, qualification, financial hardship, risk and stress) and select social variables (life satisfaction, psychological distress, alcohol intake and smoking) from multiple HILDA waves in respect to problem gambling risk.

The findings suggest that those people in society that experience any level of gambling problem are also likely to be experiencing a range of other social and economic challenges over the course of many years. A multivariate analysis was also conducted which examined the range of social and economic measures across levels of problem gambling risk, controlling for education, relationship status, age, Indigenous status and state or territory of residence. The analysis suggests that gambling risk is exponentially associated with the probability of experiencing significant financial hardship, psychological distress, low levels of life satisfaction, consuming harmful levels of alcohol, smoking and the probability of taking above average financial risks.

Forrest, David

*University of Liverpool Management School
Liverpool, United Kingdom*

Gambling and problem Gambling among young adults: Insights from a longitudinal study

The ALSPAC longitudinal study has followed the lives of several thousand children born in the Bristol region in 1991-2. Gambling surveys were administered to the parents when the children were 6 and to the young people themselves when they were 17 and 20. Our analysis includes several key findings. (1) problem gamblers at 17 mostly self-recovered by 20. (2) there was high incidence of new problem gambling cases between 17 and 20. (3) national test scores in maths/ English were strong positive/negative predictors respectively of future gambling engagement and to some extent of problem gambling. (4) there was evidence of inter-generational transmission of problem gambling but only cross-gender (fathers to daughters, mothers to sons). (5) general indicators of tolerance of stigmatised behaviour in the their households during childhood (parental smoking, high body mass index, frequency of fried food) were statistical predictors of young adults having gambling problems.

Forsström, David

*Department of Public Health Sciences
Stockholm, Sweden*

Responsible gambling in practice: a case study of views and practices of Swedish oriented gambling companies

The Swedish gambling market is on the brink of a major change that will allow foreign-based companies to apply for a gambling license in Sweden. One key element in the proposed legislation is consumer protective measures. The Swedish gambling market is presently divided between licensed companies and non-Swedish based companies providing online gambling services, without permission (unlicensed in Sweden). How these companies view their responsibility for preventing gambling related harm and how prepared they are to face the new regulations are important questions regarding the new Swedish gambling market. Aims: To compare and analyze the views and practices regarding problem gambling and responsible gambling measures among licensed and unlicensed gambling companies attracting the Swedish online market. Design/Methods/Data: Eleven semi-structured interviews were carried out with responsible gambling managers that are members of one of two Swedish industry associations. Thematic analysis was used to analyze the interviews. Results: Non-licensed companies have implemented behavior tracking and monitoring of gamblers in a more extensive way than licensed companies. Both licensed and unlicensed companies conceptualize problem gambling in a similar way and rely on informed choice in how to prevent gamblers from developing problems, seemingly arguing that offering responsible gambling measures on their website is enough.

Conclusions: There are several similarities when it comes to the definitions of problem gambling and responsible gambling between the two fractions. The companies rely on informed choice as a way of providing responsible gambling measures. However, the licensed companies do not use bonuses and do not provide certain games.

G

Griffiths, Mark

Nottingham Trent University

Nottingham, United Kingdom

The psychology of esports and the buying of loot boxes in relation to gambling

Recently, the skill involved in playing and mastering video games has led to the professionalization of the activity in the form of 'esports' (electronic sports). The aim of the present paper is to review the main topics of psychological interest about esports and the buying of loot boxes including the similarities to gambling. Focusing on the similarities of the excessive time esports players and professional gamblers (i.e., poker players) can spend on playing which can be either practicing and/or competing, future research could focus on esports players' psychological vulnerability, as some studies have begun to investigate the difference between problematic and professional gambling. It is also argued that loot boxes are a form of gambling.

H

Hazar, Mina and Colhon, Adela

YMCA of Greater Toronto

Toronto, Canada

GAME-BLING: When gaming meets gambling

The GAME-BLING: When gaming meets gambling Game-bling presentation is a newly developed awareness tool which explores the impact of technology on the gambling market and the blurred lines between gaming and gambling: e-sports, skin betting, daily fantasy sports, social gaming, freemium games, gambling-like activities in video games, virtual reality, virtual currencies, etc. This presentation explores gambling advertisements in social media and freemium games and discusses underage gambling exposure and risks. It also suggests and discusses intervention approaches and implications for research, responsible gambling and policy making.

Heiskanen, Maria

Gambling Clinic

Helsinki, Finland

Dropping out and completing a problem gambling online and phone treatment program: a qualitative exploration on the discourses of change

Reasons behind completing successfully and dropping out a treatment program for problem gamblers are connected to various factors. Individual factors, such as age, gender or depression could be related to dropping out treatment, in addition to factors concerning the structures of the treatment. This study asks, what kinds of discourses people participating a treatment program for problem gamblers have, both those who have completed the whole program and those who have dropped out halfway. The data include answers customers have written in an online program. Two groups of customers are studied: those who have completed all eight sections of the program and have 0 points in NODS after 12 months (N = 43), and those who have dropped out after completing four sections of the eight-section program (N = 44).

The results concern the different ways people talk about gambling, their life situations and their problems. Found discourses include "chaos and impossibility", "sickness and outside force" and "solution oriented". These describe how the participants relate to their situation, what in their mind are the reasons for their situations and what kinds of solutions they see available. These results will aid in developing treatment programs for problem gamblers.

Hing, Nerilee
CQ University
Queensland, Australia

Effects of wagering advertisements and inducements on betting behaviour

Wagering advertisements and inducements are integrated into live and televised sports and racing events, and into social media, online advertising, direct emails, and mobile messaging. Widespread concerns exist about the effects of this marketing, but previous research is largely confined to qualitative and cross-sectional self-report studies. Funded by the Victorian Responsible Gambling Foundation, we applied several innovative methodologies to examine the effects of wagering marketing on betting behaviours among Australian adults, including: an ecological momentary assessment (EMA) study; experimental study; psychophysiological study; and interview study.

This presentation describes key aspects of the EMA study, which captured longitudinal data from baseline samples of 402 regular race bettors and 320 regular sports bettors. Participants completed a baseline survey and up to 15 short EMA surveys over three one-week periods. The surveys captured participants' betting-related responses to different types of wagering advertisements and inducements as they naturally occurred across traditional and digital media, to maximise ecological validity and minimise recall bias. Results will be presented on: 1) self-reported exposure to different types of advertisements and inducements; 2) the reported influence that advertisements and inducements had on the size, frequency, and riskiness of subsequent bets placed; and 3) longitudinal associations between exposure to advertisements and inducements and betting expenditure, both in aggregate and for individual types of advertisements/inducements. Aggregate exposure across all types of wagering advertisements and inducements was found to increase betting expenditure, while particular types were identified as most influential on betting behaviour. Results can inform policy and regulations for wagering advertising.

Hodgins, David
University of Calgary
Calgary, Canada

Effectiveness of an online self-management program for individuals who self-exclude from casinos

The rationale, details and outcomes for a theory-driven motivational online intervention will be presented in an oral session.

Background

Voluntary self-exclusion (VSE) programs vary in the type of information and support provided to participants. Enrollment in VSE programs, however, represents a "teachable moment." This investigation assesses the effectiveness of providing an evidence-based and theory-driven online motivational self-management program to enrollees, compared with the standard program where enrollees are required to attend a self-awareness educational workshop session at the end of their exclusion term.

Method

Individuals who applied to self-exclude (N = 200) were randomly assigned to the online self-management program or the in-person workshop. Participants were followed up at three, six, and twelve months. (77%). Measured outcomes were gambling frequency and expenditure, problem gambling scores, problem drinking scores, type of goal set for gambling behaviour, quality of life, and treatment-seeking. In addition, they were administered a satisfaction survey in order to evaluate the strengths and weaknesses of the online program.

Results & Conclusions

Participants in both groups had high levels of gambling problems at baseline and reported decreased problem gambling and problem drinking and increased quality of life over the follow-up period. Over

time, participants in both groups appeared to shift their gambling goals from reduced gambling toward abstinence. Gamblers were less likely to concurrently seek formal treatment during the exclusion period if they completed their assigned VSE program. Participants in the online condition were more likely to seek treatment than participants in the face-to-face condition. Outcomes from the online program and satisfaction survey will be discussed and recommendations will be provided.

Holland, Jenny
GambleAware
London, United Kingdom

Collaborative Innovation Identifying good practice and inspiring change

Initiated by the UK's Industry Group for Responsible Gambling, this research represented a pioneering collaboration between the UK gambling industry, key stakeholders, independent social researchers, industry experts and innovators. Its aim was to not only understand the current landscape of Responsible Gambling (RG) within the industry, but to build on the wealth of research conducted to date regarding best practice RG activities.

Initially focusing on general social messaging, product messaging and player messaging, working groups from all sectors of the British gambling industry sought out best practice, reviewed and developed it, and created new ideas. The researchers focused on three new areas in their conclusions, (i) enabling informed choice (ii) improving self awareness and (iii) creating supporting environments.

With a wealth of new ideas and some strong messages for industry about the cultural challenges it needs to address to be effective in delivering social responsibility, this research is now the basis of a significant trial and evaluation phase with the expectation that successful interventions will be universally adopted across the industry.

Hubert, Pedro and Bento, Bruno
IAJ - Instituto Apoio Jogador
Lisbon, Portugal

The impact of therapeutic contract and CBT treatment in gambling disorder: A pilot study

Gambling disorder is a public health problem, and research concerning treatment efficacy is scarce in Portugal. The Portuguese Gambler Support Institute (IAJ) developed an individual intervention protocol and Therapeutical Contract, based on CBT techniques, for problem gamblers (PG) and the goal is to define the profile of PG that seeks professional help and to evaluate the efficacy of this protocol trying to prepare a structure to a future treatment program for Portuguese PG. The 71 participants were voluntary recruited on the IAJ and fulfil an evaluation protocol (Sociodemographic and Gambling Behavior Questionnaire (Hubert, 2014); SOGS (Lesieur & Blume, 1987); Therapeutic Goals/Guidelines Contract (Hubert, 2014 before the CBT intervention (moment 1) and at least at the end of 14-16 sessions (moment 2).

The total PG in treatment were aged 36,01 years (Male= 61; female= 10 with 15 or more years education (64,8%), employed (78,9%), had marital relationship (73,2%), gambling mostly online with laptop in various places (64,8%).

The sample was divided in two distinct clinical groups, 1-abstinents from gambling 3 or more months (N=48) and 2- relapsed in gambling less than 3 months (N=23).

Both groups (abstinent- 67,6% vs relapsed- 32,4%) gave high scores in fulfilling CT guidelines as a reason for their (un)success in abstinence, after treatment, and statistical differences were found

concerning “good relationship with psychologist” ($t(68)=-3,122;p=,003^{**}$), “emotional management skills” ($t(58)=-2,735;p=,008^{**}$), “importance of self-help groups in maintenance” ($t(51)=-3,747;p=,000$). Research concerning drop out, adherent/rejection to treatment factors, motivation, capacities assessment, long term abstinence.

J

Jonsson, Jakob

University of Stockholm

Stockholm, Sweden

Contracting high consumers at a gambling company with feedback on losses results in reduced gambling and increased use of RG-tools

The efforts worldwide in preventing gambling problems is still in an early phase. Many responsible gambling (RG) measures aims at giving the player tools to keep on playing in a non-problematic way. Some gambling companies have taking it one step further and started to contact players at risk.

This presentation share the experiences from an ongoing project where the state owned Norwegian gambling company Norsk Tipping contacts high consumers among the customers. The intervention is inspired by motivational interviewing, gives feedback on consumption and aims at motivating the customers for action regarding sustainable gambling and using responsible gambling tools.

Method: RCT, $n= 3 \times 1\,005$ (statistical triplets) in three conditions: contact by telephone, letter and controls. The results shows a clear effect for contact by telephone verses letter and control on reducing gambling behavior and increased use of RG-tools over a three month period after the intervention. The letter intervention reduces their gambling more than the controls. Moving the customers readiness to change to action during the phone call also shows a clear effect. The implications for RG and the care of the customer for the gambling companies will be discussed.

K

Kainulainen, Tuomo

University of Eastern Finland

Joensuu, Finland

IQ and Gambling Behaviour: An Analysis of Horse Race Betting Participation and Expenditure Using Individual-Level Data

The recent phenomenon on analysing account-based gambling data has increased the understanding how players behave. To better explain the reasons for such behaviour, we need new data sources and more comprehensive data sets of player characteristics. This study investigates how intelligence is associated with gambling participation and expenditure using a unique data set from Finland. The data include 1) one year period individual-level betting data from a monopoly horse race betting operator (betting participation, expenditure on betting), 2) individual-level background information on the Finnish adult population from Statistics Finland (e.g. personal income, education, socio-economic status), and 3) information on intelligence test (IQ) results based on a multiple choice test which is administered to conscripts by the Finnish Defence Forces (test scores for the mathematical, visuospatial and verbal measures of IQ). The IQ test is taken by the majority of the Finnish male population in each age cohort. Our empirical model tests for how betting participation and the level of expenditure on betting is related to intelligence. Our preliminary results suggest that a high IQ is positively associated with betting participation and the expenditure on betting. However, inspecting the three measures of IQ separately suggests that the mathematical IQ is the main driver of the positive relation between gambling and intelligence. In contrast, the visuospatial and verbal IQ are negatively associated with gambling participation and expenditure.

Killick, Elizabeth A.

Nottingham Trent University

Nottingham, United Kingdom

In-play sports betting: a scoping study

Technology has changed the nature of gambling practices over the last decade and is continuing to do so. The online sports betting industry has become a rapidly growing sector of the global economy, with online sports betting contributing 37% of the annual online gambling market in Europe. There has been an integration of social and technological processes that have enabled the cultural saliency of contemporary online betting. One of the more newly introduced forms of online sports betting is in-play sports betting behaviour (the betting on events within a sporting event such as football, cricket, etc.). In-play sports betting features (such as 'cash out') are increasing in popularity amongst online gambling operators. A scoping study was carried out examining the evolution of this new form of gambling practice which included both a systematic literature review and the examination of 338 online gambling websites that offered sports betting. The present study identified a comprehensive list of what in-play betting features are currently being offered on online gambling websites as well as other information concerning in-play sports betting. A total of 16 academic papers and two 'grey literature' reports were identified in the systematic review. Out of 338 online gambling websites that were visited, 26% of these offered at least one in-play betting feature. Results from the systematic review suggest that in-play sports betting has the potential to be more harmful than other ways of gambling (e.g., fixed odds betting) because of the inherent structural characteristics.

The popularity of online gambling has markedly increased over the past decade, and it has been predicted that it will continue to grow in the coming years (Gray et al., 2012).

Sports betting via the use of online platforms has already grown in popularity as a form of gambling.

Kim, Hyoun

University of Calgary

Calgary, Canada

From the Slots to the Bottle: A Mixed-Method Study of Addiction Substitution among Recovered Gamblers

According to clinical lore, when people recover from one addictive behavior they may be at risk for developing a secondary addiction (i.e., engage in addiction substitution). For example, people who have recovered from their gambling may then substitute their gambling to alcohol. Unfortunately, little is known as to the process of addiction substitution, let alone who engages in addiction substitution.

The presentation will provide results of a mixed-method (qualitative and quantitative) study exploring the process of addiction substitution in a sample of gamblers who recovered and (i) engaged in addiction substitution, (ii) engaged in concurrent recovery (i.e., recovered from a co-morbid addictive disorder) and (iii) did not engage in substitution or concurrent recovery.

The diagnosis of gambling and subsequent recovery was made using diagnostic clinical interviews. Further, differences on psychological differences (e.g., impulsivity, emotional dysregulation, mental health, familial risk) were assessed. Preliminary results suggest that gamblers who substitute tend to switch to what may be considered "lesser known" addictive behaviors (e.g., internet). Further, people who report engaging in addiction substitution tend to do so to "pass the time."

In regards to concurrent recovery, people reported that it was easier to give up a secondary addiction (alcohol, nicotine) as these substances were functionally linked to their gambling. Lastly, qualitative differences between gamblers who engage in addiction substitution and those who do not will be discussed. Understanding the process of addiction substitution and who is at risk may have important, clinical and research implications.

Klevan, Trude

University of South-Eastern Norway

Drammen, Norway

“It never really ends” - A qualitative study of everyday life and living conditions in families of problem gamblers

Background: Problem gambling may have severe effects on economics, working life, and social relations of not only the gambler, but also his or her family members. However, research addressing the experiences of problem gambling from a familial perspective is scarce and in particular, how it may affect these families' life situation regarding living conditions and possible needs for support from the health-and welfare services. This study was initiated by the Norwegian Directorate of Health. The aim of the study was to explore how families of problem gamblers describe and experience their everyday life and living conditions and what they experience as useful help.

Method: The study had a qualitative design. Individual interviews were conducted with 12 family members of problem gamblers, consisting of nine partners / ex-partners and three children of problem gamblers (age above 16). Data were analyzed using a deductive content analysis, based upon well-established living condition categories.

Results and implications: Problem gambling has severe effects on family relations, finances, and physical and -mental health of family members. The consequences seem particularly severe for the children in the families, as financial difficulties and disturbed family relations affect both their current living conditions and their future possibilities.

Despite these severe consequences, professional support was rarely offered to the family as a whole, but was mainly targeting the one with a gambling problem. This study calls for a more family- and socially contextual oriented approach in the support and treatment of families of persons with a gambling problem.

Konietzny, Jlrka

Luleå University of Technology

Luleå, Sweden

Toward a Fuller Understanding of Drivers of Online Gambling Intention

Online gambling is increasingly growing both in size (number of casinos) (Casino City, 2018) and numbers (turnover) (e.g. Amsel, 2018; Gaming Innovation Group, 2018; NetEnt, 2018). Effective regulation and marketing requires a better understanding of what drives online gambling intention. This study investigates the drivers of online gambling within the framework of the UTAUT 2. The various constructs in the UTAUT 2 lend themselves well to being investigated within an online gambling context. Therefore, (1) Performance Expectancy (Venkatesh, Thong, & Xu, 2012) assesses the utilitarian value of online gambling; (2) Effort Expectancy gauges the expected ease of use of online gambling websites; (3) Facilitating Conditions capture whether customers have the means to use gambling websites (Venkatesh et al., 2012); (4) Social Norms (Moore & Ohtsuka, 1999) condition the extent to which customers are impacted by how significant others look at online gambling; and (5) the Habit construct (Venkatesh et al., 2012) accounts for how accustomed customers are with using gambling websites. In addition, this research proposes two additional constructs to UTAUT 2 that can potentially better explain betting intentions. These are: (1) Anticipated Enjoyment (amended after van der Heijden, 2004) which considers the hedonic motivations for gambling online, and (2) in response to increasing concerns about fairness (Ahmed & Megaw, 2016; UKGC, 2017), the multidimensional construct Perceived Fairness (inspired by Chiu, Lin, Sun, & Hsu, 2009) is also incorporated. Data are collected from active online gambling customers from an online gambling firm. The proposed model is tested using PLS-SEM.

Kontto, Jukka

*National Institute for Health and Welfare
Helsinki, Finland*

What are we missing? - The profile of non-respondents in the Finnish Gambling 2015

Population-based gambling surveys produce important information for social and health care professionals, service developers and policy makers. However, low response rates are an increasing problem in population surveys and non-participation may cause biased findings. Therefore, the aim of this study was to define the profile of non-respondents in the Finnish Gambling 2015 survey.

The population-based Finnish Gambling 2015 survey was conducted using computer-assisted telephone interviews. It was described to the potential participants as a survey 'about gambling and opinions on gambling'. The response rate was 62%. The study sample (N=6946) including individuals aged 18–74 was linked to administrative register data to obtain information about the socio-demographics of both participants and non-participants. Multiple logistic regression was used to analyse the association between non-participation and gender, age, marital status, education, socio-economic status, net income and residential area.

The preliminary analysis showed that the proportion of non-respondents was higher among women, younger age groups, low education groups, low net income groups, residents in urban areas and unemployed men, while non-participation was lower among married.

Low income, low education and unemployment were associated with lower response rate which may cause bias while studying gambling behaviour of socio-economically vulnerable individuals. Future research implementing more sophisticated methods for controlling bias caused by non-participation, such as multiple imputation, would offer useful information about the impact of non-participation to the results related to gambling participation and gambling problems.

L

Leduc, Carole

*French Online Gaming Regulatory Authority
Paris, France*

Prevention initiatives from a regulator to foster informed choice of players

Freedom of choice or limited possibilities? France chose both approaches when it comes to problem gambling and consumer protection. The liberalization of the online gambling market in 2010 for sports betting, horse betting and poker supported freedom of choice, when the prohibition of online casino games limited possibilities.

Within this legislative framework, ARJEL has been making efforts to find the right balance between freedom and necessary limits. As regards prevention of problem gambling, the focus is put on empowering players through informed choice, which appears to be the best compromise between freedom and restriction.

Three prevention initiatives, which have been recently launched by ARJEL in the view of such empowerment, can be presented:

- The website "EVALUJEU", which offers players and their entourage a self-assessment tool of problem gambling as well as responsible gambling advice adapted to their profile;
- The digital awareness campaign "Betting should stay fun", which will be broadcasted on social media during the 2018 FIFA World Cup, and which aims to sports bettors between 18 and 30 years-old;

- A current assessment project of the efficiency of mandatory warning messages online operators are required to display on their websites, based on individual player interviews and focus groups.

For each of these initiatives, the rationale of the action, the implementation process and the results, including feedback from players, can be presented. Return of experience of a regulator on fostering informed choice of the consumer and setting up prevention actions can therefore be provided.

Lee, Bonnie
University of Lethbridge
Lethbridge, Canada

Five Reasons to Focus on Couples in Gambling Disorder

Couple dynamics as a source of strain related to severe gambling and alcohol use disorders lends a new focus to addiction research and treatment. Based on empirical and clinical evidence, there are compelling reasons for directing our attention to couple issues. Among them are (1) the commonly overlooked phenomenon of joint addictive behaviours between partners; (2) a high level of adverse childhood experiences among couple dyads; (3) couple partners as both perpetrators and victims of intimate partner violence; (4) high degree of situational and family instability; and (5) the reciprocal transmission of emotional and existential distress through mutually reinforcing communication postures. Evidence of an effective strategy of treating the couple unit jointly to break the addiction and trauma cycles through Congruence Couple Therapy will be presented.

Lienard, Stephanie
Private practise / Addiction treatment center
Lille, France

Problem gambling, craving and hypnosis

In a 1st part, the participants should be interested in a brief presentation of the French gambling landscape. I will try to provide an overview of the legal, economic and social organization of gambling in the country so far. In France, it is obvious now that the regulators have taken, at last, the topic in consideration. Since the opening of the market to the competition in 2010, significant progress has been made specially in the health care system.

In a second part, I will speak about the interest of Ericksonian hypnosis to regulate craving in the treatment of pathological gamblers in outpatient clinic. I will present the results of a qualitative study (3 cases) that I conducted from my own practice in an addiction treatment center.

Lind, Kalle
University of Tampere
Tampere, Finland

Exploring problem gambling and support preferences among Finnish prisoners

Problem gambling has various adverse consequences, including criminal behavior. As a criminogenic factor, problem gambling can lead to, for example, property crime and attempts to cover gambling losses. Earlier international studies conclude that the prevalence of problem gambling is considerably higher among the adult correctional population compared to the general population. At the same time, problem gambling among prisoners is still widely understudied and rather poorly understood in different criminal justice systems. Shame, fear of stigma, and lack of awareness of available support all reduce help-seeking among both general and correctional populations. Left undetected and without proper treatment, problem gambling may lead to reoffending.

In Finland, prisoners have the same access to the health care system as everyone else, and this means that the adequate availability of support for problem gambling should be granted for prisoners as well.

Problem gambling interventions and clear policies reduce incidence or re-occurrence of problematic gambling and can eventually decrease the burden of criminal justice systems. Developing tailored support practices requires basic knowledge about the special needs and characteristics of the local prison population.

The presentation will outline the context and procedures of performing a brief survey for the selected adult correctional population in two Finnish prisons. The two prisons selected for the survey characterize two different types of penitentiaries: open institution and closed prison. The purpose of the survey was to explore the prevalence of problem gambling among Finnish prisoners by gender, the relation between potential problem gambling and demographics, substance use and different crime-related factors, and support preferences for problem gambling among those prisoners who want help. Based on the results of the survey, prison workers will be trained to screen, assess, and provide support to prisoners who are in need of treatment.

Little, Alan

Kalff Katz & Franssen

Amsterdam, The Netherlands

Data Protection: A consideration of the initial impact of GDPR on gambling operators and regulators

Data protection and privacy have been thrust into the public's consciousness in 2018, on the back of scandals around the use of data (e.g. Facebook) and regulatory measures (e.g. GDPR). Without data, the gambling industry would look extremely different, indeed it is hardly imaginable as to the form it would take. Data is a necessary input for offering gambling services but is equally necessary for reaching operational ends and satisfying sector specific regulatory objectives.

Through seeking to protect a person's data, are other regulatory practices and objectives endangered, and commercial operations threatened? Or is the GDPR requiring gambling regulators and operators to recalibrate how data is collected and processed, rather than causing existing uses to grind to a halt? Is GDPR posing difficulties for national gambling regulatory authorities in ways which are perhaps less prevalent in the regulation of other sectors?

GDPR applies uniformly, cutting across the diversity which characterises EU Member States' gambling markets, as reflected by their preferences for monopolies, open licensing regimes and finer regulatory details. Are some national regulatory models more susceptible to possible (unintended) consequences under GDPR, given that some could be intrinsically more "data intensive" than others? Or is the impact of GDPR likely to be indiscriminate in this regard, with challenges arising regardless of the regulatory model and underlying requirements?

This contribution seeks to answer these questions, at least in an initial sense, with consideration being given to both operators and regulators, across different regulatory models.

Liu, Day-Yang

National Taiwan University of Science and Technology

Taipei, Taiwan

The System Dynamic Analysis of the key Successful factors on Retailers of Taiwan Sports Lottery

A strategic management approach is applied to sports lottery sales on retailers in terms of factors in the subjective dimension of internal environment, objective dimension of internal environment, and external environment. The research methodology is System Dynamics Analysis with its merits of more macro-oriented and structural context.

Livesley, Tim

*Responsible Gambling Strategy Board
Birmingham, United Kingdom*

Responsible Gambling Strategy Board - overview of research programme

We will soon publish a new research programme setting out our advice on the priorities for research in Great Britain. GambleAware will be responsible for commissioning much of this programme, but we will also be exploring new routes to fund some of this research.

We have re-packaged the programme into six core themes. This reflects the need to fill priority gaps in the evidence base and help deliver the National Responsible Gambling Strategy - the overall aim of which is to reduce gambling-related harms. We will deliver the programme across the next three years.

A thematic approach is being taken so we can be more ambitious in our research and commission larger programmes of work, encourage involvement of new researchers and diversify approaches to commissioning, including consortiums and collaborations.

The six core themes are:

- Measuring gambling-related harms – we need to develop a way to comprehensively understand and measure the harms caused by gambling.
- Understanding patterns of play – to explore how gambling behaviour, and indicators of harmful play, vary across different environments, products and game characteristics.
- How individual's gambling changes over time – to see what triggers harmful play and recovery.
- Industry-based interventions – to build a better understanding of what player protection activities actually work in practice.
- Education – to determine what role this can play in harm prevention for different population groups.
- Treatment – to understand what works – for whom - and what gaps in provision need to be filled.

Louski, Roland

*Loterie Nationale
Bruxelles, Belgium*

The recent evolution of the Belgian gambling landscape

Belgium gambling market has been one of the first that adopted the licensing model.

Almost a decade ago, the gambling commission started to licence gambling operators in order to put an end to the illegal gambling. So far it is time to look at the past and see if the objective has been reached. On the other hand, the market has evolved and recent regulatory legislative put forward tend to correct the excesses.

Are they coming too late or is it 5 before midnight?

Lucchini, Fabio

*FeDerSerD (Italian Federation of Workers of the Addiction Departments and Services)
Milan, Italy*

Social costs of Gambling in Italy

Gambling and its related problems have become a significant public health issue, that affects not just problem gamblers but also entails social costs. In recent years the Italian public gaming industry has been expanding rapidly, collecting 96.1 billion euros in 2016, of which 10.5 billion went to the Italian government as fiscal revenues.

National epidemiological studies suggest that 4.3% in the general population are at moderate risk of problem gambling and 1.3% are problem gamblers (Colasante et al., 2013). Another estimate of the prevalence highlights that 2.43% in the Italian adult population are probable problem gamblers and 1.54% are problem gamblers (Barbaranelli, 2015). Taking into consideration the above, in Italy grassroots movements and local administrators are demanding new legislative initiatives and projects, pushing the Italian government to reorganize national gambling regulations: there are demands to modify gambling venue planning, to review current taxation levels, to have ethical advertising, and to provide more therapies for problem gambling. While recognizing that evidence about social costs of gambling is scarce and the methodology for their calculation has been a subject to strong criticism, the aim of this work is to estimate the social costs of gambling in Italy.

The notion of social costs (Walker & Barnett, 2007) refers to an overall loss of social welfare and psychophysical well-being, and it can be distinguished in direct personal costs (e.g., reduction in quality of life, health problems, suicide, broken families, etc.) and indirect societal costs (e.g., productivity loss, unemployment subsidies, welfare costs, addiction-related crimes, etc.).

Lupu, Ramona

CIRAE Cluj, SCUC Cluj

Cluj Napoca, Romania

Student and Parental Concerns about Adolescent Gambling and other High Risk Behaviours in Romania

Introduction Children and adolescents are at risk of developing problem and/or pathological gambling when experiencing games of luck in early ages. The key aim of the study is to measure knowledge and attitudes toward gambling and other high risk activities among high school students and their parents. This can contribute to a better understanding of how to best reach students and their parents in prevention initiatives. **Method** Participants High school students aged 14 to 19 years of age and their parents are considered for the present study. Agreement for access to students and their parents in each high school from Cluj County were obtained. For each of the students we tried to get both parental responses to the instruments created.

The target population included 450 students and at least one of their parents. The participants were balanced for age/grade level and gender. **Measures** The survey for students consists of a questionnaire with 38 items (items of this questionnaire were taken from Teacher's Manual: Youth Gambling Awareness and Prevention Program, Level II, „Hooked City" – International Centre for Youth Gambling Problems and High-Risk Behaviours, 2004 – translated and adapted in Romanian language). Items include questions referring to misconceptions, illusion of control, attitudes and cognitive errors. The same 38 item questionnaire was adapted for parents. Both parents and student's answered questions that assess the attitudes they have toward gambling in comparison to other risky behaviours, parental involvement in gambling with their children, and attitudes/awareness regarding youth education and prevention for gambling and other risky behaviours.

In addition, participants were also required to complete a section with demographic information. **Procedure** Participants were contacted or directly either through email. The entire survey took approximately 45 minutes and participants were assigned for tombola (three movie tickets and three restaurant coupons).

Results

We present the results from both adolescents and their parents, some difficulties encountered and modifications made from the initial study plan. **Discussions** We expected more implication from the students compared with their parents and that attitudes towards gambling to be disturbed by the significance itself of the word 'game' in Romanian; we also expect that children's knowledge and parents' knowledge as well to be false.

Lupu, Viorel

*Luliu Hatieganu University of Medicine and Pharmacy Cluj Napoca
Cluj Napoca, Romania*

Pharmacological Treatment of Pathological Gambling with Oxcarbazepine (Trileptal)

Pathological gambling is characterized by persistent and recurrent gambling and is associated with impaired functioning, reduced quality of life, and high rates of bankruptcy, divorce, and criminal activity. The problem usually begins during adolescence or early adulthood with males tending to start at an earlier age.

Several medications have been studied as treatments for pathological gambling and the range of medication classes--opioid antagonists, serotonin reuptake inhibitors (SRIs), mood stabilizers--that have been tested reflects the different ways pathological gambling is categorized. Because no medication currently is approved by the Food and Drug Administration for treating pathological gambling, patients should be informed of off-label use of medications for pathological gambling, as well as the empirical basis for considering medication as a treatment.

The treatment methods currently available in Romania for pathological gambling include: Selective serotonin reuptake inhibitors (Fluvoxamine, Clomipramine, Prozac); Mood stabilizers (Carbamazepine); Individual and group cognitive and behavioural therapy (including rational emotive and behavioural therapy); counselling the gambler and his/her family; family therapy. This paper presents personal observations about cognitive-behavioural intervention associated with Oxcarbazepine-type medication which proved efficient in pathological gambling, in 30 clients, as gambling abstinence was maintained even at one year after therapy initiation, in 66% of cases. Oxcarbazepine is structurally a derivative of carbamazepine, adding an extra oxygen atom to the benzyl carboxamide group. This difference helps reduce the impact on the liver of metabolizing the drug, and also prevents the serious forms of anaemia occasionally associated with carbamazepine. Aside from this reduction in side effects, it is thought to have the same mechanism as carbamazepine - sodium channel inhibition - and is generally used to treat partial seizures in epileptic children and adults.

M

Magnusson, Kristoffer

*Karolinska institutet
Stockholm, Sweden*

Methodological issue in analysing gambling net losses as a treatment outcome

This paper argues that gambling researchers have not paid enough attention to the challenges in analysing gambling net losses as a treatment outcome, and presents a statistical model that is flexible enough to handle these types of data.

Marchica, Loredana

*McGill University
Montreal, Canada*

A comparative analysis of Canadian University policies towards alcohol, drugs and gambling use

Objectives. Emerging adulthood remains a critical period in the participation of risky behaviours, including alcohol and substance use as well as gambling. College students are at greatest risk for participation in these risky behaviours because they are continuously exposed to multiple, drinking, substance use and gambling environments without the support and guidance often present at home.

Previous public policy studies have suggested that college and university policies might help decrease a variety of risky behaviours (e.g. alcohol, substance use and gambling) amongst students. Although some studies have compared gambling-related policies to alcohol and substance use related policies in the United States, this has not yet been done in Canada. Thus, the current study constitutes the first Canadian comparison of college gambling policies to alcohol and substance use policies. Methods. Data was collected from 96 English and French colleges/universities across Canada, adapting Shaffer et al.'s (2005) 15-item measure assessing the prevalence of gambling, alcohol and substance use related policies.

Results. Analyses revealed significantly more schools had either an alcohol or substance use related policy (90% and 83%), compared to schools with a gambling-related policy (32%). Conclusions. The scarce prevalence of college gambling-related policies suggests that Canadian colleges and universities underestimate the risks associated with heavy participation in gambling activities. While alcohol and substance use policies remain essential, gambling policies can have a significant influence on college student participatory behaviours. The present research suggests greater awareness and need for college and university administrators to develop appropriate gambling-related policies and programs.

Matilainen, Riitta

*University of Helsinki
Helsinki, Finland*

Doing research on (historical) illegal gambling: Methodological questions

The presentation focuses on the methodological questions concerning doing research on illegal gambling in Helsinki in the 1950s-1990s. The phenomenon has not been studied so far but there are traces of it in various sources and literature. By illegal gambling is meant taking part in private, self-organized and unregulated higher-risk gambling which was not organized by three Finnish gambling monopolies and which offered more edge, more risk and higher stakes. Privately organized card rings existed and illegal gambling dens (sometimes equipped with roulette wheels and pool tables) were found in major cities for those who knew to look for them until the early 1990s when regulation was tightened and Finland's first casino was opened in downtown Helsinki. This alternative gambling scene was highly gendered and a male prerogative as well as largely invisible to outsiders. Heavy alcohol consumption, prostitution and threat of violence stamped the scene which can be seen as an active form of resistance to prevailing (gambling) norms.

To fully perceive the illegal gambling and people who took part in it, organized it and the police force that controlled it is important to understand that gambling in Finland was both legalised and tamed quite early and exceptionally successfully in an international comparison. Gambling defined good citizenship and the state actively promoted it in many ways making the gambling an every citizen's duty. Public, organised and regulated gambling was part of the process where gambling became socially, culturally and also geographically accessible to women, people of different classes, rural population and also to different age groups. So there were many legal possibilities to gamble.

The questions addressed in the presentation are as follows: How to do research on such a hidden phenomenon? What kind of sources are needed in order to compose both a diverse and reliable picture of illegal gambling (contemporary newspaper reporting, oral history data, interviews with both gamblers and organizers of illegal gambling, and police reports)? Can oral history sources be trusted? How can the concept of intersectionality help to highlight the classed and gendered nature of illegal gambling? What can the study of historical illegal gambling offer to researchers studying today's illegal gambling?

The presentation is based on a project funded by the Finnish Foundation for Alcohol Studies.

Matthing, Carl-Fredrik

Svenska Spel

Visby, Sweden

Training sports clubs in responsible gambling

We have a target web based responsible gambling training for our sponsored federations, hockey, football, handball, basketball and indoor bandy. The education focuses on gaming responsibility and match fixing. About 500 persons have been trained so far and approximately 2,500 people have received information. The study aims at mapping the occurrence of games and problem gambling as well as attitudes and habits regarding games among leaders, young people and elite athletes in selected sports in Sweden. The study is a survey of the existence of games, problem gambling and attitudes to games among athletes and leaders in elite athletes and students at Nationally Qualified Sports Education (NIU) at high school. The survey was conducted with a web survey that was answered by 3,471 individuals divided into 1438 athletes, 401 leaders and 1638 NIU students. Problem gambling was measured with the Problem Gambling Severity Index (PGSI). The results show that gambling about money is almost twice as common for boys as NIU girls, and 36% of the under 18-year-olds have played money over the past 12 months. Many students spend money at school time (36%) and of those who have a problem playing, 25% have played often or always during school hours. The study also shows that in the student group with problem gambling it is 44% who also have a risky alcohol consumption.

In the elite sports, the incidence of problem gambling is 11% in men and 1% in women.

Overall, there are indications that in the elite sports there is a higher incidence of problem gambling in the male sports than in the women sports.

McGowan, Richard

Boston College

Chestnut Hills, USA

The New Pot of Gold: Sports Betting, US State Governments, Rationales and Revenue

With the recent (May, 2018) US Supreme Court ruling, that legalizes sports betting, there is a renewed interest on what are the relevant issues that state legislatures will face as they determine whether or not a state should enter the sports gambling market.

Numerous stakeholders exist in the controversy of sports betting: governments (state and federal), big four sports leagues, and consumers. Each of these stakeholders endures political, economic and social consequences that develop as a result of future sports betting legislation. The purpose of this presentation will be to outline both sides of this contentious issue, in regards to not only its effects on stakeholders, but the regulatory issues that states face as they decide to enter the sports gambling market in fulfilling three goals:

- 1.) To raise revenue. We will estimate using the most conservative form of sports gambling what states could reasonably hope to raise.
- 2.) To eliminate the black market by establishing tax rates on sports gambling that will entice sports gamblers to spurn illegal sports book.
- 3.) To control consumption by addressing the compulsive gambling problems associated with sports gambling.

Mercier, Jonathan
Université Laval
Québec, Canada

Is Overestimation of One's Skills in Sports Betting Associated with Problematic Behaviours?

After video lottery terminals, sports betting is the second type of gambling activity most associated with gambling problems (Williams et al., 2012). Thus, sports bettors' cognitions are probably related to problematic gambling. However, there currently exists no instrument that is specifically adapted for the assessment of sports bettors' cognitions. This study was designed to develop and validate the Index of At-Risk Cognitions — Sports Lotteries (IRC-SL) and verify its associations with (a) annual amount of money spent in sports lotteries, (b) monthly gambling frequency during betting season, (c) monthly hours dedicated to bet preparation, and (d) gambling problem severity. Participants are sport lottery bettors (N = 272) that are mainly men (86.5 %) in their twenties (M = 26.7 years old), and from a university community (88.3 %). Exploratory factor analyses indicate that the instrument's structure is constituted of two factors, with strong internal consistency ($\alpha > .85$) and good convergent validity. The IRC-SL total score is mildly associated with bet preparation and gambling problem severity. The « superstitious beliefs » factor is mildly associated with gambling problem severity while the « skills » factor is associated with all four variables. The « skills » items account for most of the associations. Also, time dedicated to bet preparation is moderately associated with amount spent, gambling frequency and gambling problem severity. Associations between at-risk cognitions, sports lotteries' behavior and gambling severity are discussed. Future research should assess the contribution of behaviors related to the development of sport betting skills on gambling severity.

Moldovan, Ana Maria
Color Mind Clinic
Bucharest, Romania

Case Management and Integrated Treatment Program for Gambling Addiction

In order to ensure coherence, consistence and continuity of services, we introduce Case management as core element of our Integrated Treatment Program for Gambling Addiction.

Mills, Devin (lead presenter) and Nower, Lia
Rutgers University
New Brunswick, USA

Daily Fantasy Sports, Social Casino Games, and Ethnic Differences in Gambling Behaviours: Results from a State wide Prevalence Study

A number of studies have explored demographic characteristics of gamblers and problem gamblers. However, a majority of those studies focus broadly on differences by age, gender, socio-economic status, education, employment and marital status rather than by individual sub-groups. The proliferation of gambling opportunities, particularly interactive gambling, suggests that successful prevention and treatment strategies need to target differences in etiology and motivation within sub-populations of gamblers. Little is known, for example, about the cultural or cognitive underpinnings of game selection, particularly among ethnic minorities. Understanding key differences in the motivations and factors that underlie development of gambling problems in specific subgroups is vital in developing targeted strategies to reduce harm and to identify and treat problem gamblers in under-identified sub-groups.

The current study uses a large, representative sample (N=3634) to explore ethnic differences in two subgroups: daily fantasy sports (DFS) players and social casino gamers (SCG). Overall, about 299 participants reported playing DFS and 775, playing SCGs, in the prior year. All but seven DFS players also gambled, and more than 62% of DFS players met criteria for high risk problem gambling. Both DFS and SCG players were likely to be non-white, young, high-frequency gamblers who played more types

of gambling activities than other gamblers. However, DFS players were overwhelmingly male and also seven times more likely to report suicidal thoughts. In contrast, slightly more SCGs were female; they were also likely to gamble online and to report issues with drugs/alcohol. Implications of these findings for prevention, research, policy and practice will be discussed.

Morvannou, Adèle
Concordia University
Montréal, Canada

Identifying help-seeking behaviours among women gamblers: a cross-sectional population survey from Quebec, Canada

Compared to men, women spend a greater portion of their income on gambling and seem to experience a faster progression into problem gambling. While detrimental negative consequences such as bankruptcy and suicide were associated to unhealthy gambling habits among women, very little is known about their inclination to seek help.

This study aims to identify help-seeking behaviours among women gamblers. The sample consisted of women gamblers (n=4074) who participated to one of the two repeated cross-sectional gambling survey, that was conducted in the general population aged 18 years and over in Québec, Canada (ENHJEU-QUÉBEC, 2009, 2012). Of the survey sample, a subsample of women gamblers (n=90) was selected in order to participate to a follow-up study on gambling services awareness (e.g., health professionals, helpline, website and treatment centers), service use, level of satisfaction, and perceived efficiency of these services.

The findings of this study, which inform on the help seeking experiences of women gamblers, will support stakeholders and key actors in offering services that take into consideration the specific needs of women.

N

Nower, Lia (lead presenter) and Mills, Devin
Rutgers University
New Brunswick, USA

Time-of-Day and Online Gambling: Results from an Empirical Study

Internationally, some jurisdictions have chosen to regulate access to gambling opportunities based on time-of-day, rejecting 24-hour access in favor of shut-down in the early morning hours.

In the area of online gambling, however, there are no such restrictions, as betting sites are typically always open. New Jersey was the third state in the U.S. to legalize online gambling and the only state to require detailed, play-by-play statistical analyses of play patterns over time. This presentation will detail the findings of statistical analyses of more than 70,000 players by time-of-day across online gaming sites in New Jersey; the analyses was conducted by gender, age, and use of responsible gaming features.

The study found that, compared to men, women made more bets of lower denominations. Men as well as those who are younger age played for shorter periods of time but bet more than women or those who were older. Using responsible gambling features was correlated with reductions in intensity and expenditure by time-of-day. Across all groups except those in the highest age bracket, the intensity of play increased steadily from 9 am through midnight, and sharply declined in the period between 3 and 6 a.m. Notably, a significant proportion of players gambled during normal business hours, and the proportion of gamblers increased steadily between 9 a.m. and 6 p.m. Implications of these findings and the significance of time-of-day analyses for expansion of interactive opportunities will be discussed.

Erroneous Gambling-Related Beliefs Scale (EGRBS-19): Developing a cross-cultural measure of EGRBs with a sample of bicultural Australian gamblers

The paper aims to discuss the development and validation of the Erroneous Gambling-Related Beliefs Scale (EGRBS-19). Gambling disorder accompanies erroneous gambling-related beliefs such as the illusion of control, the gambler's fallacy, beliefs in superstition, and beliefs in a supernatural entity that bestows a power to foresee or control the outcome of random events. Although erroneous gambling-related beliefs can be defined as an attempt to regain the imaginary control when the primary control was lost (Rothbaum et al., 1986), cultural differences are noted that Chinese culture emphasises the beliefs in the cyclical change in luck (Papineau, 2005). It could also be argued that illusion of control (Langer, 1975) focuses the illusion of primary control, that is, overestimating one's ability to control the outcomes of random events by acquiring knowledge, expertise, or skills through practice. In contrast, Asian cultures tend to emphasise the ability to foresee future events via beliefs in supernatural beings or karma; human interactions believed to produce gambling wins (Ohtsuka & Ohtsuka, 2010). Vietnamese Australian gamblers' views on luck and winning: Universal versus culture-specific schemas. *Asian Journal of Gambling Issues and Public Health*, 1, 34-46, <https://doi.org/10.1186/BF03342117>).

Earlier versions of the Erroneous Gambling-Related Beliefs Scale (EGRBS) were found to be a reliable predictor of problem gambling (e.g., Moore & Ohtsuka, 1997; Ginakis & Ohtsuka, 2005). Taking into account cultural perspectives on erroneous gambling-related beliefs, a draft EGRBS was written with 23 statements on gambling-related beliefs derived from four groups of erroneous gambling-related beliefs (Illusion Primary Control, Illusion of Secondary Control, The Gambler's fallacy, and Beliefs in Cyclical Luck) (see Ohtsuka & Ejova, 2014 for classification scheme). A total of 143 bicultural/bilingual Australian gamblers (78 men, 65 women) aged 18 years or older ($M = 35.39$, $SD = 10.01$), who identified themselves with both the Australian culture and their culture of origin, were asked to indicate the extent of agreement on each statement in EGRBS using a 5-point Likert-type scale (ranging from 0 = Strongly Disagree to 5 = Strongly agree). After removing four items of marginal value from reliability analysis using Cronbach's alpha, the 19-item EGRBS has been analysed for identifying underlying dimensions.

An exploratory factor analysis (Maximum likelihood extraction method, Promax- oblique rotation) extracted three-factor underlying dimension structure consisting of Illusion of Primary Control (knowledge, skill, belief in the "system," positive emotion, and practice), Illusion of Secondary Control (rituals, a higher power, lucky charm, and equanimity), and Beliefs in Luck (belief in one's own luck, beliefs in sensing one's own luck, beliefs in luck as personified innate individual characteristics). These three dimensions accounted for 63.8 % of the total covariance in the data set. Notwithstanding further validation with larger samples, EGRBS-19 provides a measure of erroneous gambling-related beliefs for recreational gamblers from culturally diverse backgrounds, which improves prediction of gambling frequency and gambling disorder.

The future need for harm minimisation and gambling counselling for the Arabic-speaking in Sydney, Australia: An exploration of Socio-Economic Indexes for Areas (SEIFA) from Australian Census 2016

The aim of this paper is to identify the need of problem gambling counselling and harm minimisation provision for the Arab Australian community, the fastest growing culturally and linguistically diverse (CALD) communities in Australia according to Census 2016 (Mazbouh-Moussa & Ohtsuka, The 2016 Census data and Arab Australian community, NAGS conference paper, 2017). The 2016 Socio-Economic Indexes for Areas (SEIFA), released in March 2018, includes several composite measures of income, occupational and educational opportunities, house ownership, or rent compiled at the level of

ABS-defined statistical areas within local government areas. According to Census 2016, the Arabic language is the second most frequently spoken Language Other Than English (LOTE)¹ in Australia, one of the most culturally diverse countries with a large population of first-generation immigrants (Mazbouh-Moussa & Ohtsuka, *Asian Journal of Gambling Issues and Public Health*, 7, 1-17, 2017). Greater Sydney Area has the largest numbers of Arabic speakers in particular Inner South West Sydney (e.g., Canterbury-Bankstown, Cumberland, Liverpool, Fairfield, and Blacktown) where the cultural presence and the contribution of Arab Australians to enriching the Australian culture is undeniable. However, the Arab Australian community, Muslims and non-Muslims alike, has been often misunderstood, maligned, and subjected to scrutiny (Mazbouh-Moussa & Ohtsuka, *Asian Journal of Gambling Issues and Public Health*, 7, 1-17, 2017). In this paper, we extend our previous analysis (Mazbouh-Moussa & Ohtsuka, *The 2016 Census data and Arab Australian community*, NAGS conference paper, 2017) on geographical distribution of English communication skills among Arabic speakers to include 2016 Index of Relative Socioeconomic Advantage and Disadvantage (IRSAD). Drawing on Berry's acculturation strategy theory and Ting-Toomey's Ethnic Identity Sensitivity and Cultural Identity Sensitivity (CIS) theory, we argue that the need for facilitating integration into the Australian way of life for new Arab migrants, while encouraging them to maintain their culture of origin, would be beneficial. Since the exposure to gambling as a leisure option would likely increase as acculturation to Australia (as CIS increases), we predict that the need for harm minimisation and gambling counselling will further increase in the Inner South West Sydney as well as Outer South West Sydney, where new migrants will likely settle due to the relative housing affordability. Implications of the theory-driven Census data analysis to other CALD communities will also be discussed.

¹ The largest LOTE at home is Putonghua or Mandarin Chinese.

P

Papineau, Elisabeth

*Institut national de Santé publique du Québec
Montréal, Canada*

Advances in Quebec public health & gambling studies: naming harms, measuring impacts, targeting environments

This session will offer an overview of the advances in thinking and research in the field of gambling.

We will present the perspective of harmful gambling, developed simultaneously in Quebec and internationally. Recent research done in this perspective will then serve as case examples on how this represents a relevant shift for research and prevention. Quebec recent studies cover these topics : the prejudices of online gambling; the development of a harmful gambling index (IJP); the marketing of lotteries in relation to social inequalities; and the geolocation of the gambling offer. Conducted with innovative methods, they highlights gambling impacts on population's quality of life and health, and reveals their collective and environmental dimensions. Participants will benefit from insightful reflections and research data for better prevention initiative and the creation of more favorable environments.

Parke, Jonathan

*Sophro Ltd
Newark, United Kingdom*

Got Game? Taking stock of 50 years of research in product-related risk and looking ahead beyond 2020

By understanding how the structural characteristics of gambling games can influence gambling behaviour, stakeholders can be better equipped to promote and evaluate responsible gambling and harm-minimization strategies. In this presentation, I will review some of the key evidence and theory

regarding the structural characteristics of gambling games and their potential associations with problematic play.

The review will include the theory and evidence concerning different groups of structural characteristics including parameters relating to winning and losing, payment, game speed, and the payment process. While considerable evidence gaps impede progress in player protection, there are areas where work can start immediately, and these will be discussed.

Peano, Valérie

EGLA

Rome, Italy

What current framework against match fixing? The Italian case

The contribution will first start its focus on the legal situation of sports betting offer and regulation in Italy, focusing on the main public and private stakeholders (such as the Finance Ministry, the Sports Ministry, the legal and licensed sports betting operators, the sports federations and leagues, the law enforcement and investigation units, the National Olympic Committee).

It will then examine how is match-fixing and manipulation dealt with under the national Criminal laws and Code.

It will also briefly state how is match-fixing and manipulation dealt with under the respective Disciplinary Rules (Football and other sporting disciplines if available). The contribution will conclude examining the current national integrity strategies and possible improvements, in light of the European Convention on Manipulation of Sports and the UNCAC Resolution on tackling corruption in sport.

Pengelly, Megan

GamCare

London, United Kingdom

Young People and Problem Gambling - Education Programme Evaluation

Problem Gambling has been repeatedly shown to disproportionately affect young people, making them an at-risk group. Despite this and significant shifts in the visibility and accessibility of gambling products in recent years, no statutory programme exists to educate young people on the potential risks of gambling, or how to think critically when engaging in it. An independent evaluation of the first year of GamCare's Youth Outreach Programme assesses the need for and impact of interactive outreach sessions centred around problem gambling for 11-19 year olds and the professionals working with them. The programme is one of very few in the UK, and its findings make the case for more widespread education in this topic. The first year of the programme has seen workshops delivered to 2,500 young people in group settings (e.g. school lessons) and 750 professionals trained to identify and work with young people affected by a gambling issue of their own or someone close to them. Key aims were to define gambling issues, raise awareness of risk factors, signs and symptoms and signpost to appropriate resources. The evaluation used surveys to ascertain changes in awareness, knowledge and confidence in engaging with the issue.

Focus groups and follow-up interviews helped ascertain the mid to long-term impact of the sessions and content. The findings suggest that there is an underrepresentation of this issue in educational settings, both for young people and professionals. Further, the results show that educational initiatives can bring about significant behavioural and attitudinal shifts amongst both cohorts.

Percy, Chris
BetBuddy / Playtech
London, United Kingdom

Merging game design features and player behaviour risk markers: What can we Learn?

Regulators are increasingly demanding operators do more to proactively protect customers who may be at risk of harm, with frameworks that include identifying risk markers in both game design and player behaviour. The bodies of research and commercial development for game design and player behaviour have largely evolved separately and in parallel – with examples such as ASTERIG and Gamguard in the former, and Playscan and BetBuddy in the latter. This session will explore how we can enrich both game design and player behaviour based risk analyses by combining them, such that game risk is understood within the context of the specific player participating in it and player risk considers their history of playing different games. With different players having different motivations to play, different areas of risk and different patterns of play, significant gains can be expected from such an approach. Specific examples and emerging findings will be shared from a new project, partnering with one of the world's leading online gaming content providers, that leverages the current game design methodologies and structural game characteristics alongside online player data. The assessment of game risk and player behaviour in tandem could lead to opportunities to develop more intelligent marketing strategies that promote the right game to the right player, potentially optimising gaming revenue whilst ensuring risk is minimised.

Pietilä, Eija
EHYT - Finnish Association for Substance Abuse Prevention
Helsinki, Finland

Target at-risk gambling - preventing gambling harm

At-risk gamblers are the most important target group for prevention of gambling harm. But do social and health care workers recognize them? What are the signs? When should we intervene?

If we define at-risk gamblers only through negative consequences or gambling harm that they have experienced we miss a very important group of gamblers when it comes to preventing gambling harm. We do not see those who gamble a lot. They may not experience any negative consequences but they are all the same at-risk of experiencing gambling harm. Consumption is a critical factor also in gambling. Prevention must be aimed to at-risk gamblers.

Risk is something that has not yet happened and may not happen. Definitions of at-risk are usually based on PGSI, SOGS or similar instruments. Our definition of at-risk gambling is gambling very often or heavily on time or money, possibly experiencing some negative consequences on social life, economics or health. So even they who get 0 points on SOGS may be at-risk gamblers.

We can make an intervention by two simple questions (2Q) on one's gambling consumption.

- What type of games do you gamble?
- How often do you gamble?

It is important to have sensitive approach. Ask neutral questions of one's behaviour. It is easier to answer when one does not judge one's behaviour being reprehensible. And it is possible to give normative feedback based on general gambling behaviour. We would like to share our experiences of pilot in this 2Q-method.

Poltarowicz, Mark

IGT

Moncton, Canada

RG Technology for Video Lottery Players - Making RG Fun (?)

Evolution of the interface design from the standpoint of ease of use, player privacy, social acceptance and avoiding stigmatization

The Responsible Gaming technology for Video Lottery players offered by IGT consist of two sets of features. One feature set is about allowing players to self-impose limits on their playing activity and track their progress against those limits in real time. These are monetary and time limits for play session, day, week and month and a Day Stop button.

The other group of features which is equally or even more important than the limits is the educational component. Here players can learn, as part of an on-screen tutorial, how games operate, complete a self-assessment survey, view their play history and obtain their personal spending prediction from the system.

In the process of the development and several implementations of this and similar solutions both the gaming operators and the suppliers of RG technology have been facing several challenges.

One such challenge is that the RG technology can itself add to the stigmatization of gambling. Using a proper nomenclature, iconography and the positioning of RG among other gaming products and applications on the gaming machine is critical from this point of view.

A different challenge is to find a balance between the user friendliness of the RG interface and the perceptions that the presentation of RG features can create with the public. Another important aspect of the RG technology is the privacy of the player when they are using RG features.

The way that all these aspects have been addressed by IGT will be discussed in the presentation.

Potenza, Marc N.

Yale University, School of Medicine

New Haven, USA

Considering co-occurring disorders in gambling disorder: Implications for prevention, treatment and responsible gambling

Multiple studies of clinical and community sampled have found frequent co-occurrence between gambling disorder and multiple psychiatric disorders. Although psychotic disorders like schizophrenia and schizoaffective disorder demonstrate elevated odds of co-occurrence with gambling disorder, relatively little is known regarding the clinical characteristics of this dually diagnosed population. In this presentation, we will describe recent findings related to how gambling frequency and/or gambling problems impulsivity, polysubstance use, and chasing behaviors among individuals with schizophrenia and schizoaffective disorder. Implications for treatment and the promotion of responsible gambling among this population will be discussed. Additionally, how problem gambling features relate to the treatment of other dually diagnosed populations will be considered, including the association with poorer treatment outcomes. Finally, how co-occurring disorders may be used to guide treatment selection will be discussed.

Prever, Fulvia
SUN(N)COOP & ALEA
Milan, Italy

Never too old, never old enough... Gambling-related problems among older adults: risk factors and experimental treatment with Focus on Women

Population ageing driven by increasing longevity and low fertility rates is a global phenomenon. In this scenario, gambling participation among older adults appears to be on the increase in recent decades. Due to this rise, problem gambling in this demographic is becoming an important public health concern.

However, we think that there is an absence of understanding of older adult gambling, of agespecific vulnerabilities and risk markers. The purpose of our presentation is to link clinical, social and educational levels as it may be fundamental to develop effective treatments for this population.

After a brief literature review in order to identify risk factors and specific behavioral markers to predict gambling-related problems, our presentation provides suggestions for developing preventive programs and effective treatments for older people, as a cooperation with Milan

Social Service points out: finding new indicators, building family and social support, using money control as an instrument to avoid financial collapse.

In this context, a specific and empirical focus on a clinical intervention related to elderly women topics in "Gioco di donne"*, an Italian experimental gender group, is presented and discussed. The attention is motivated by the strong connection age/women/gambling, and by relevance of this first and unique group experience in Europe, which is also at the origin of the innovative project of the book "Gambling Disorders in Women. An International Female Perspective on Treatment and research" (eds. H. Bowden-Jones & F. Prever, Routledge, 2017).

* "Women Game", gender group, Hazard & Women project, SUN(N)COOP

Exploring experiences of violence amongst women with gambling disorder

Background: The extant literature on the link between gambling and experiences of violence is limited. An important shortfall of existing studies is the narrow capacity in which violence is assessed, failing to incorporate participants' rich histories of experience. The present study (funded by the European Association for the Study of Gambling) aimed at exploring the histories of violence experiences among treatment-seeking female gamblers in-depth.

Methods: Data were collected using semi-structured interviews with six women from a treatment group in Milan, and analyzed by applying an interpretative phenomenological analysis approach. **Results:** The interviews provide insights into the diverse gambling histories, experiences of physical, emotional and sexual violence in various contexts and (self-perceived) connections between the two. One of the main themes that was identified regarding the connection of experiences of violence and gambling was "Gambling as a rebellion against one's own rationality in face of suffering."

Conclusion: The results of this study expand prior findings indicating that a large part of women with gambling disorder have a history of violence victimization by exploring the connections between these experiences with their gambling history. Understanding the relationship between disordered gambling and various types of violence victimization is crucial to inform specific treatment approaches.

Raento, Pauliina

University of Tampere

Tampere, Finland

Regulatory Change and Cultural Peculiarity in Finland

Finland's three gambling monopoly operators merged into one state-owned entity in 2017. A particular challenge to the process came from its smallest constituent, the tote company Fintoto, and its owner, the national Trotting and Horse Breeding Association. Behind the challenge were interdependencies between betting revenue, Finnish racing, and the equine industry – and related cultural, structural, and identity-political peculiarities.

The presentation addresses the fusion from the perspective of producers, consumers, and benefactors of racing and betting. The exchanges between 'horse people' and state regulators, the decision to participate in the merger, and concerns about impact are traced from Finland's leading equine newspaper, in 2015-2017. These data are triangulated with documents produced by state and equine organizations, material from other media sources, and ethnography.

The qualitative assessment shows how cultural peculiarity, history, and regional identity politics challenge national regulatory processes and cause internal divisions among affected groups. The discussion shows why communication is a critical success factor in regulatory transitions and impact management, and how general trends in society may intervene. The findings stress the importance of understanding culture, history, and geographical scale in the study and management of regulatory change. The investigation shows the value of systematic documentation and long-term qualitative view in assessing impact.

Raisamo, Susanna

National Institute for Health and Welfare

Helsinki, Finland

Is slot machine density highest in socioeconomically disadvantaged areas in Finland?

Due to decentralized gambling system in Finland, slot machines are widely available in almost any venue such as in supermarkets, kiosks, gas stations, restaurants and cafes. The total number of slot machines illustrates well the widespread availability: there are about 18,500 slot machines installed in public places. In Finland as in many other jurisdictions, a large proportion of gambling harm and problem gambling is derived from slot machine gambling. Internationally, it has been demonstrated that socioeconomic disadvantaged is associated with higher slot machine density. Despite the widespread availability of slot machines, this is an issue which has not been previously researched in the Finnish context.

In our study, we analyzed the density of slot machines by three socioeconomic indicators; the unemployment rate, the proportion of low income population, and the proportion of high-educated population. The data originated from the Finnish gambling operator, Veikkaus Oy.

The results indicated that the numbers of slot machines per 1,000 people was highest in the socioeconomically most disadvantaged areas. Results in more detail will be presented at the conference with a call for critical discussions on whether the location and density of slot machines in Finland should be regulated and based more clearly on public health considerations rather than fiscal motives.

Ricijas, Neven
University of Zagreb
Zagreb, Croatia

Competencies for youth problem gambling psychosocial interventions - mental health professionals perspective

Studies have shown that mental health service providers' perceptions of problems and knowledge of resources are among the largest determinants of service provision and referral (Temcheff, Derevensky, St-Pierre, Gupta, Martin, 2014). Within a very liberal gambling market, youth gambling in Croatia is increasing, with high prevalence of young people who manifest severe gambling related psychosocial consequences (Ricijas, Dodig Hundric, Huic, Kranzelic, 2016). Therefore, competencies to provide adequate interventions in the area of both prevention and treatment are essential for mental health professionals. The aim of this study is to explore how often do mental health professionals encounter with adolescents' gambling related problems, how confident they feel about their competencies to provide adequate interventions and what are the differences with regards to their sector of employment.

This presentation refers to an ongoing study (January to March 2018) in which youth mental health professionals from different public sector participate: (1) educational system, (2) social welfare, (3) justice, (4) health and (5) non-governmental system. All of these professionals are providing different interventions for youth and their risk/problem behaviour, therefore their perspective is crucial for the development of comprehensive and efficient interventions.

Results will be interpreted in terms of assessing professionals' needs for further training and guidelines for improving interventions on all levels of intervention spectrum.

Rigbye, Jane
GambleAware
London, United Kingdom

Evaluation of youth gambling education initiatives

GambleAware commissioned and evaluated two projects to find out if young people could be successfully educated about gambling and the harms it can cause. In England, Demos wrote some lessons for the school curriculum; teachers in four schools tried them out with 14-year-old pupils. The pupils completed a questionnaire before they had the lessons, and again one year later. Demos compared the pupils' reported knowledge, skills, attitudes and behaviour before and after the lessons; it also compared them with the responses of pupils in four other schools who did not receive the lessons. Fast Forward, a youth organisation, created gambling education activities and trained professionals who worked with young people in Scotland, (such as teachers and youth workers) in using these activities with young people. Those professionals found the training useful, and some of them used the activities with young people successfully. We don't know if this changed the young people's behaviour, but it probably increased knowledge, developed skills and altered attitudes in relation to gambling. This evaluation recommends that GambleAware considers commissioning additional education activities to reach more young people. Young people who might be especially at risk could also be focused on. Parents could be targeted, and helped to address gambling with their children. Working with those who are concerned with other risky behaviours (such as bullying, knife crime, etc.) might be more effective in developing the relevant generic skills and appropriate attitudes which are widely applicable (such as identifying risky situations, delaying gratification, and understanding the media). This could help young people to avoid harm that can result from many different activities, products and situations. Since some children start gambling young, primary school interventions which focus on classroom behaviour could be effective.

Robinson, Janine
Responsible Gambling Council Canada
Toronto, Canada

Win/Win: Self-Exclusion, Breaches and Reinstatement Leading Practices for Operators and Players

This presentation seeks to offer insights into the real world value of SE for both customers and operators: the win/win of RG. It will unpack some of the complexities that both experience using the programs. This session integrates practice evidence with research conducted by the Responsible Gambling Council, including Best Practices in Self-Exclusion Reinstatement and Renewal and offers insights into leading practices for operators and regulators.

Self-exclusion (SE) programs are a fundamental component of any online or land-based responsible gambling (RG) program. SE is typically a key regulatory requirement, and is critical to receiving RG accreditation. Its real-life value to customers and employees can be overlooked when using only a regulatory lens to assess its impact. These programs can and do improve the lives of people using them, but are not without their challenges for both customers and gaming staff. This session offers practical suggestions to common implementation challenges.

For customers using the SE programs, enrolling is often emotionally complicated: undertaken with some combination of desperation, ambivalence and relief. Many breach their agreement and we understand from clinical experience what drives those behaviours. For operators, though, customers who (sometimes repeatedly) breach their self-exclusion agreements are perplexing at best and worrisome at worst. Some operators have clear protocols for responding to these customers, but when the focus on the compliance factors defines these responses, gaming staff and customers are both left feeling dissatisfied during a breach interaction.

On the other end of the self-exclusion spectrum is reinstatement. Fewer operators still have a robust and supportive protocol for customers reinstating at the end of a self-exclusion period. This session also will review key elements of an animated online tutorial used by thousands of Ontario Lottery and Gaming customers annually as a prerequisite to reinstatement. The impacts of this tutorial on customers and staff offer further insights into win/win practices.

Romild, Ulla
Public Health Agency of Sweden
Östersund, Sweden

Changes in gambling and gambling problems in Sweden from 2008 to 2015

The Swedish Longitudinal Gambling Study (Swelogs) is one of the world's largest national studies on gambling and health based on a random sample of 15,000 drawn from the register on the total population in Sweden. The epidemiological track comprised 4 waves of data collection between 2008 and 2014 where telephone interviews were used as primary measurement method. Around 8,000 individuals responded at baseline and they were all contacted in each of the following waves. Around 3,000 persons participated in all waves of data collection. The changes over time are also compared to the results from a new sample drawn in 2015 when around 9,000 persons participated. Calibration weights based on register data at Statistics Sweden were used and updated for each wave. All prevalence and incidence measures are calculated with these weights.

The general trend in Sweden, as in many western countries is a reduced participation in gambling, measured as any past year gambling, while the amounts of money played for and the prevalence of gambling problems remains about the same. We use our data to describe the general changes but also to study individual changes over time where we have used multi-level analysis and structural equation modelling in our analysis of the longitudinal data set. Our results confirm mutual connections between gambling problems on one hand and impaired mental health and risky alcohol-consumption,

respectively, on the other hand over time within and between the measurement time points. We have also found significant correlations between major life events and problem gambling over time, where the life events may precede or follow from problem gambling.

Roukka, Tomi

*National Institute for Health and Welfare, University of Turku
Turku, Finland*

Tax incidence of gambling: Evidence from the Finnish gambling market

The objective of this article is two-fold. First, it is studied how different demographic and socio-economic factors contribute to individual's gambling behaviour. More precisely, both decision margins are considered; the decision whether an individual participates in gambling activity at all, and if she decides to participate, how much does she spend on gambling. Different socio-economic factors might affect very differently on these margins concerning consumption of certain goods, as gambling. There might exist some forms of a stigma or other fixed cost, as transportation costs, which create a sort of disutility when participating gambling activity. Thus, many consumers make an optimal decision of zero gambling expenditures. To account this feature of the gambling expenditure data, specific estimation methods are needed. Thus, the first part of the analysis incorporates widely recognized empirical methods for censored data. Second, because certain demographic and socio-economic factors are presumably correlated with gambling expenditures and gambling expenditures are known to be highly concentrated in Finland, there must exist some kind of redistributive effect due to the earmarking system of the gambling revenues. Consequently, the second and main objective of this paper is to study (income) distributional effects of gambling in Finland. The data used in this study is a combination of population survey by National Institute for Health and Welfare and registry data from Statistics Finland. This kind of an analysis has important policy and economic implications regarding gambling; it is a crucial aspect whether certain features increase expected gambling expenditures because of the effect on participation or whether those affect the expenditures conditional on participation. In addition, knowledge about the income redistributive effects of gambling as a part of the tax system is important for the sake of public finance.

S

Saccoccio, Jesse

*IGT
USA*

Bring Responsible Gaming to Retail

IGT's Interactive Player Account Management platform, IGT Command, along with its iLottery solution and features provides a registration and associated player card to access account features at the retail lottery terminal. These terminal player session features include account top-up, purchase utilizing the attached wallet, redemption of winnings to the player account, access favorite wagers for quick check out of common purchases, and most importantly responsible gaming features. The IGT Command suite has several responsible gaming controls: Self-exclusion, Player blacklisting, Deposit limits, Time limits, Loss limits; and Wager limits.

Through the combination of: IGT Command; IGT's Open Retail terminal software; and IGT's iLottery mobile application, a player can utilize the virtual version of the player card. This virtual player card experience provides convenience to both the player, and the lottery operator by providing a comprehensive solution for tracked player activity at retail. When these solutions are combined an operator will be fully equipped to analyze player behavior at retail for trends, apply responsible gaming controls to these sessions.

Additional benefits of a fully digitized solution are winnings can automatically be applied to the player account, removal of paper bet slips and a physical player card with the mobile application digital play slip and virtual player card, presenting a greener solution that will reduce consumables.

Salonen, Anne

*National Institute for Health and Welfare
Helsinki, Finland*

Gambling expenditure in Finland - who contributes the most to the profits of the gambling industry?

Finland has one of the highest rates of gambling expenditure in the EU. Most of the Finnish gambling revenue generated goes to good purposes. Gambling can also cause harm. It is important to know how much of government gaming revenue is generated by certain groups of individuals.

To investigate gambling expenditure and its relationship with socio-demographics, health-related correlates and past-year gambling behaviour.

Cross-sectional population survey was conducted in 2015. Participants aged 15–74 years were randomly selected. For this study, past-year gamblers were selected (n = 3671). Expenditure shares, means of weekly gambling expenditure (WGE, €) and monthly gambling expenditure as a percentage of net income (MGE/NI, %) were calculated.

Our estimate of total gambling expenditure in Finland in 2015 was 1 487 million euros (men 75 %; women 25 %). 5.2% of the gamblers accounted for 50% of the total gambling expenditure. Education (except upper secondary education for women) and net income were associated with MGE/NI, especially among males. Furthermore, age in categories 15–17 years, 55–64 years, 65–74 years and marital status emerged as significant correlates for men. Perceived health and mental health problems emerged as significant correlates for men. All gambling behaviour correlates were associated with MGE/NI: gambling frequency, gambling severity in all categories (except SOGS=2 for women) and online gambling.

People with higher monthly gambling expenditure relative to net income, and men in particular, are more likely to be socio-economically vulnerable individuals. Gamblers with lower income levels have a significant expenditure share.

Sanchez Bello, César A.

*Sección Juego Patológico (APAL)
Pampatar, Isla de Margarita, Venezuela*

Venezuelan Socio-Economic crisis and its impact on gambling

In the last years, gambling have ended up being accessible to the whole Venezuelan population, without distinguishing age, sex or socioeconomic condition, growing to alarming levels Venezuela actually experiments significant social and political changes, which produce an economic stagnation and social problems associated with anomia and disintegration, such as violence, criminality, corruption, unemployment, poverty, shortages, hyperinflation, misery and migration, as well as an emergent subculture of gambling. Gambling such as “animal's lottery” proliferate in Venezuela, offering an alternative income source, becoming quite a popular fever in a country where uncertainty is the daily routine and personal finances are at the mercy of political turmoil. In addition, they turn into a mechanism of avoidance or denial to face an increasingly intolerable reality.

Betting and gambling phenomenon is the result of psychological, neurobiological, sociocultural, economic, judicial, criminal and even political factors interaction. Together, they create a complex and challenging problem. In order to understand and tackle the problem correctly, one must consider all of these factors involved. This paper analyzes the seriousness of the Venezuelan situation, and its impact on gambling, children and adolescents, as well as, Risk Factors and co-responsibility involved. Conclusions and recommendations.

Scheibenbogen, Oliver and Andorfer, Ute
Anton Proksch Institut
Wien, Austria

**Who gambles how often and how much?
Myths and the reality in Austrian Gamblers after National Regulation**

A real data analysis of a gambling provider in Austria is unique. On an international level there are hardly any studies that are based on measurement data directly from the installed slot machines, mostly questionnaire data are used in epidemiological studies. Due to the amendment of the Austrian gambling law in 2010 a new age of regulation started. Since then every gambler needs a registered customer card to start gambling and each gambling activity is digital tracked and collected by the gambling providers and sent to the governmental department for financial affairs. Therefore we have the opportunity to analyze a large sample of valid and objective data. Within this talk we will present first results of this epidemiological survey, refute diverse myths and discuss some relevant outcomes for responsible gambling.

Schiavella, Mauro
B-ASC Bicocca Applied Statistics Center - University of Milano - Bicocca
Milan, Italy

Validity and reliability of the Italian gambling Functional Assessment-Revised

Problem gambling is a growing phenomenon in Italy, and there is increasing interest in studying the reasons for gambling in the Italian community. The Gambling Functional Assessment-Revised (GFA-R) was developed to assess two contingencies maintaining gambling behaviour: positive reinforcement and escape. The study hypothesized that the GFA-R could be translated and adopted in the Italian context. The main purpose of this study was to test the factor structure of the Italian version of the GFA-R by means of confirmatory factor analysis, its internal consistency and validity, in a sample of 667 Italian-speaking adults, recruited at universities, banks, offices, industries, markets, public parks and shops in five regions: Piemonte, Veneto, Lazio, Calabria and Puglia.

The study found that the scale was internally consistent, and results showed that the original two-factor model fitted the data well. It also found moderate correlations between the GFA-R-I and both SOGS scores and GRCS scores. These results will allow Italian psychologists, educators and policymakers to identify specific contingencies maintaining gambling behaviour (positive reinforcement vs. escape) in the Italian community, detecting people more at risk of developing disordered gambling, with significant improvements in terms of prevention and clinical intervention.

Selin, Jani
National Institute for Health and Welfare
Helsinki, Finland

“The law itself doesn’t change things’. The local prevention of gambling-related harms after the Act on organizing alcohol, tobacco, drugs and gambling prevention

The implementation of the Act on organizing alcohol, tobacco, drugs and gambling prevention in three regions in Finland with different ways of organizing prevention, is analysed with a focus on gambling prevention. The Act introduced gambling prevention as a new element in the prevention conducted in the municipalities. On the basis of qualitative interview data we compare different views on the implementation of the Act from a bottom-up perspective. It is presumed that local ways of organizing prevention and other local facilitators and barriers condition the implementation process. The data consist of thematic individual and group interviews of persons whose work is related to alcohol, tobacco, drugs and gambling prevention. The principles of framework analysis were employed in the analysis of the data. The results show that the interviewees considered the Act to have had little impact, because the prevention was so well organized before the Act took effect. In addition, the

forthcoming health and social services reform was considered to have disturbed the development of prevention in many ways. The results also indicate that lack of resources in the gambling prevention is compensated by active and wide networks. In addition, the normalcy of gambling in Finland is seen as a challenge to gambling prevention. Finally, the results indicate that the alcohol, tobacco, drugs and gambling prevention is in many ways defined in relation to treatment and not as equally important field on its own.

Sevigny, Serge

*Universite Laval
Quebec, Canada*

The game of Kinzo: gamblers reported perceptions, paths and behaviours

A few years back (2011-15), a new gambling offer, named Kinzo, became available in Canada. The objective of this communication is to describe the game, and gamblers reported characteristics, gambling behaviours, perceptions, and trajectories, in order to estimate how damaging Kinzo could be for the gamblers. Overall, trained research assistants interviewed 256 Kinzo gamblers (74% females). Participants' age varied from 31 to 70, and they had played Kinzo for a mean of 23 months before the interview. Players spent a mean of 39\$ (Canadian) per session, and played once a week for approximately two hours of play. The great majority (96%) drank two or less alcoholic beverages during their typical gambling session (63% did not drink). Based on the Canadian Problem Gambling Index (CPGI) adapted for Kinzo, 4.3% of the sample reached the moderate risk level, and 0.8% reached the excessive gambling level. Those who were older, and those who played other games than Kinzo within the site, were more likely to score higher on the CPGI, and to report higher gambling expenses and frequencies. The socialization feature of Kinzo seemed important for the majority of gamblers (78% did not play alone). Importantly, gamblers overall expenses within the site did not change due to the new game offer. We will present other findings on gamblers trajectories, and perceived negative consequences of Kinzo. The discussion will focus on the literature related to gambling availability, and on the promotion of responsible gambling policies or prevention practices regarding Kinzo gambling.

Siu Lam, Carlos

*Macao Polytechnic Institute
Macao, China*

Casino Anti-money Laundering Rules and Procedures in Macao

No abstract available

Spångberg, Jessika

*Public Health Agency of Sweden
Östersund, Sweden*

The value of coordination at national level regarding prevention of gambling problems

Since 1999, the Public Health Agency of Sweden has been assigned the task of counteracting gambling problems and their social consequences in Sweden. From 2016, the assignment from the government includes promoting national coordination of preventive initiatives. The national coordination goal is to make preventing initiatives more effective and to enable better conditions to reach out to target groups.

Several agencies are included; the National Board of Health and Welfare, the Swedish Agency for Health Technology Assessment and Assessment of Social Services, the Swedish Prison and Probation Service, the Swedish National Agency for Education, the Swedish Consumer Agency, the Swedish Enforcement Authority, and the Swedish Gambling Authority. Additionally, the member and employer's organization, the Swedish Association of Local Authorities and Regions, is included in the coordination.

The aims were to 1) identify possible fields of cooperation through exchange of information, 2) to coordinate knowledge support supporting effective and knowledge-based work at national, regional and local level, and 3) to contribute to monitoring of factors relevant for the gambling problems.

The benefits of national coordination regarding prevention of gambling problems are several. When agencies and other relevant organizations meet and coordinate their work in common, it promotes the possibility to take advantage of each other's knowledge as well as it endorses dissemination of knowledge. It also promotes cooperation for questions in common and collective action to be taken.

The presentation will present the structure for the national coordination in Sweden and will elaborate on the values and possibilities of the initiative.

Spapens, Toine

Tilburg University

Tilburg, The Netherlands

Illegal online sports betting machines in The Netherlands

Online gaming machines (OGMs), usually just a laptop, tablet or even a smartphone equipped with special software, are a relatively new hybrid between old-style electronic gaming machines (EGMs) and online gambling. In the Netherlands and in neighbouring countries such as Belgium and Germany, sports betting on OGMs mainly takes place in bars and eating establishments where most customers stem from ethnic Turkish immigrant communities. The Dutch Gaming Authority is worried about this type of illegal gambling and in 2015 commissioned an academic study of the problem. This paper presents the results. The outcomes show that crime groups and persons with serious criminal backgrounds are involved in this type of illegal gambling. However, legitimate companies supply the gambling software and betting content. For enforcement agencies, this type of illegal gambling is difficult to curb: OGMs are cheap and easily replaced when seized, and if the authorities close one venue another will open nearby.

Stohäker, Tanja

University of Hohenheim

Stuttgart-Hohenheim, Germany

The Relationship between Exclusions from Gambling Arcades and Accessibility: Evidence from a newly introduced exclusion program in Hesse, Germany

An exclusion system for gambling arcades has been introduced recently in the state of Hesse. The aim of this paper is to identify significant predictors that are useful in explaining the variation of exclusions between different Hessian communities. As self-exclusion systems reduce availability for the group of vulnerable players, this analysis provides evidence for the assumption that the two groups - pathological gamblers and vulnerable players - seem to have little overlap concerning sociodemographic characteristics. The accessibility variables, on the other hand, turn out to be significantly associated with the number of exclusions. In the empirical analysis we are able to distinguish between regional accessibility and spatial clustering. The results show that the regional accessibility effect is more pronounced than the clustering effect of EGMs, i.e. the effect of an additional single-licensed arcade on the number of exclusions is stronger than the increase in the number of license at one location.

Stuhrenberg, Hillevi

Betsson Group

Ta'X Biex, Malta

Prevention: gender and culture considerations?

A snapshot of Betsson customers' uptake of RG tools in various countries whilst examining gender differences, cultural differences and other potential factors that potentially could explain any variations found. It is likely that there will be more questions than answers which will hopefully fuel a fruitful discussion.

Sulkunen, Pekka

University of Helsinki

Helsinki, Finland

Setting Limits. Gambling, Science and Public Policy

Commercial gambling has developed into a mass consumption industry on a global scale. It is a significant source of profits but also a way of collecting money from players to public budgets and beneficiaries, mostly civil society organizations that produce services in sports, culture, social work and health care. Part of the money comes from vulnerable populations that are themselves in need of help.

This presentation summarizes an international collectively authored book on policies that will minimize the individual and collective harms. The book develops a public interest framework to gambling policy, reviews the history of modern gambling, maps out the growing burden of harm from the activity, and examines the factors that have an impact on that burden. Accessible scientific evidence is applied to evaluate the effectiveness of regulation. Excessive spending can be reduced, but this affects the total amount of money collected by the game operators. Game features, venue characteristics, and spending limits can be and are regulated, but not always in the public interest. Instead, "responsible gambling" policies often serve the money collecting aims.

The main obstacle to successful regulation lies in the epidemiological facts presented in this book. Preventing harm is not possible without limiting the overall volume of the activity, because problem users bring in the largest share of the money to the trade.

Treatment and support services for problem gamblers are important but cannot solve the problem. Priority should be given to their accessibility rather than the comparative efficiency of different treatment methods.

Sundqvist, Kristina

Stockholm University

Stockholm, Sweden

The age of onset for problem gambling and psychiatric comorbidity among women and men

Background: The co-occurrence of psychiatric comorbidity is high among problem gamblers. Substance use disorders, but also mood disorders and personality disorders has been linked to problem gambling. However, the temporal sequencing of problem gambling and comorbid disorders in the population, as well as gender differences, is little studied.

Aim: This study aims at sorting out the temporal sequencing between age of onset (AOO) of problem gambling and co-morbid disorders (anxiety-, mood- and alcohol use disorders) for men and women respectively, in a representative sample of problem gamblers in Sweden.

Methods: Data from the In-Depth track (N=1588) of The Swedish Longitudinal Gambling Study (Swelogs) was used. Swelogs consists of a cohort with a stratified sample representative of the adult Swedish population and the in-depth track is a case-control study nested in the Swelogs cohort.

Results: preliminary results show that for all comorbid conditions, in about 1/3 of the cases, the negative consequences of gambling came first, whereas in about 2/3 of the cases the comorbid conditions came first. When comparing women to men, a larger proportion of the women seemed to debut with their gambling problems after the onset of the psychiatric conditions.

Discussion: The results in this study is in line with the theory that women, to a larger extent than men, gamble to cope with negative emotions.

Sveen, Tanja
Norsk Tipping AS
Hamar, Norway

Follow-up conversations with at-risk customers

The responsible gambling approach by gambling operators has traditionally focused on supporting the customers informed choice by offering information and different tools for increased control over the gambling. However, at risk and problem gamblers may not be fully able to utilize these resources. Interviews with problem gamblers have shown that they think that more targeted interventions could have helped them at an earlier point. Based on this insight, the Norwegian state-owned gambling operator Norsk Tipping contacts at-risk customers by phone for a follow-up conversation. The conversations are developed based on knowledge from brief interventions, feedback, the behavioural change model and motivational interviewing. More than 2 000 conversations have been carried out over the last two years. Some key findings are that the customers are positive towards these calls, the majority of the customers clearly underestimate how much money they have spent, and the majority of the customers agree on actions that will restrict their future gambling. The presentation will cover the development of the conversation concept (goals and content), statistics from the conversations (a standardized log-in-form is filled out for every conversation), results from customer surveys which are sent to the customers after the conversations and summarize experiences and key learning points that are highly relevant for gambling operators.

Targeting RG-actions by using Machine Learning - increased relevance and effects?

Machine learning is one the rise, and is already widely applied across different industries. IBMs Doctor Watson and the Netflix recommendation system for movies are two examples among many. Within the gambling industry, machine learning has been used for the detection of at-risk and problem gamblers.

But there might be other areas for appliance as well: Can machine learning lead to increased relevance and effects for different RG-actions offered by gambling operators?

In this case-study we wanted to examine if machine learning could increase relevance and effects for at-risk follow-up conversations at the Norwegian, state-owned gambling operator Norsk Tipping. A dataset of 1 400 customers with conversations were used to create models, and the problem was set up as a binary classification task. The target to be predicted was effect from conversations, measured as a change in spending comparing 12 weeks before with 12 weeks after the conversation. Different target variable operationalizations (wagers, net loss and theoretical loss as well as different thresholds) were investigated. The dataset was split into training and hold-out/test sets, and cross validation was used during model building. The tool DataRobot was used, a tool that runs the dataset through hundreds of possible algorithms, pre-processing steps, transformations and tuning parameters, and identifies which algorithms build the best models.

The results show that several of the target variable operationalizations and adhering models would lead to a substantial improvement in selecting customers who are likely to respond to the conversations with a reduction in their spending.

This case-study was performed as a project term paper at the Master of Management Programme Analytics for strategy at the Norwegian Business School BI, under the guidance for professor Espen Andersen and associate professors Alessandra Luzzi and John Chandler Jonsson.

T

Takiguchi, Naoko
Otani University
Kyoto, Japan

Strengths and limitations of the psycho-educational program for gamblers in a Japanese prison: a preliminary work

Currently only a few correction facilities in Japan provide gambling specific programs. However, these prison programs offer unique experiences both for incarcerated gamblers and therapists. Even though the educational program for gamblers is optional, the participants attend all the sessions in the closed environment which allows no gambling opportunity.

The speaker developed a 10-week CBT oriented program designed for inmates who had been incarcerated in a detention center and has delivered the program since 2010. The program consists of a group therapy and individual assignments and is administered by the prison education staff, a Buddhist priest, and the speaker.

Inmate-candidates, already pre-screened for problem gambling, are solicited for voluntary participation in this program. The participants are required to observe two rules to stay in the program; true to oneself and keep confidentiality. As their goal, they can choose either abstinence or controlled gambling. Guests from the outside are allowed to attend group sessions, including psychiatrists, financial counselors, and peer counselors, etc. The program presents to the inmates, whose life is greatly restricted, a safe and unique space in which they are encouraged and praised for discussing their gambling related experiences, their honest thoughts and, feelings, as well as their craving for gambling. The program also enables the prison staff to gain participants' trust.

This presentation is based on the preliminary work and is intended to describe the participants' demographic profile and procedure of the program. It also discusses its strengths and limitations based on the participants' program evaluation.

Temcheff, Caroline E.
McGill University
Montreal, Canada

Variations in severity of gambling disorder symptomatology across sexual identity among college student-athletes

Aim: To identify whether differences are present among college student-athlete men and women in terms of severity of gambling disorder symptomatology across sexual identity status.

Design: Self-administered and anonymous survey. Setting: National Collegiate Athletic Association (NCAA) member colleges in the United States. Participants: Stratified random sample of 19,299 NCAA college student-athletes ranging from freshman to graduate student. Measures: Past 12-month problem gambling was measured by the diagnostic criteria for gambling disorder as established by the DSM-5.

Results: Gay/lesbian and bisexual student-athletes endorsed a higher number of gambling disorder symptomatology when compared to heterosexual student-athletes. Negative binomial and Poisson regression models conducted by gender suggest that gay and bisexual men had a disordered gambling score 3.42 times higher than heterosexual college student-athlete men. Gay and bisexual women had a disordered gambling score 2.57 times higher than their heterosexual counterparts. Academic year was associated with an increase in gambling disorder symptomatology among both men and women. Race/ethnicity was not a significant predictor among men, but was significant among women, with non-white women having higher gambling disorder symptomatology than white women.

Conclusions: Findings suggest that sexual minority college student-athletes are at an elevated risk of having more symptoms related to disordered gambling when compared to heterosexual student-athletes.

Thompson, William

University Nevada

Las Vegas Nevada, USA

Two Disasters and the Future of Las Vegas Gaming: Shootings at the Mandalay and the Fall of Steve Wynn

The past year has seen two major disasters strike the Las Vegas casino industry. This paper examines America's worst shooting at the Mandalay property on October 1, 2017, and the unexpected demise of Steve Wynn as the major personality in the world wide casino industry following charges of sexual harassment. A history of disasters including the relationship to the MGM fire of 1980, and the spectacular rise of Steve Wynn's role in Las Vegas is presented. How will recent events affect the Strip and other casino venue including those in the U.S. and well as other jurisdictions including Macau.

Torstensson, Judith

Svenska Spel

Visby, Sweden

Experiences from proactive responsible gambling communication

Targeted communication is an important element of a strategy for responsible gambling. If the communication is well designed and rightly delivered – it can influence gambling behaviour and reduce problem gambling. Svenska Spel is well experienced with providing such communication, but also committed to continuous improvement.

Predicting problem gambling

The identification of potential problem gamblers is the basis of proactive responsible gambling. Playscan is a responsible gambling product, since 2007, operated by Svenska Spel, that gives individualized feedback on gambling behaviour. The purpose of the communication is to motivate players to take action regarding responsible gambling. This presentation will show how Playscan calculates risk prediction, its accuracy, and how the gambling operator can work proactively with the information provided.

Contacting high risk players by telephone

Throughout 2017, Svenska Spel contacted 150 high-risk players, identified by Playscan, by telephone.

The intervention used motivational interviewing-technique, focused on mirroring the player's behaviour, trying to motivate reflection on their gambling expenditure.

The intervention has been well received. This presentation will show results and experiences for the future.

Contacting players in casinos

Since 2010, the casino staff interacting with players are carrying out proactive conversations with special target groups, identified as at-risk groups by the Public Health Agency. One group includes players aged 20-24, who make 15 or more visits in three months. Another includes older players who visit the casino at least 20 times per month.

This presentation will present practical experience on how to successfully communicate with players; from player resource information to education about responsible gambling.

Tremblay, Joël

Université du Québec à Trois-Rivières

Québec, Canada

Efficacy of a randomized controlled trial of Integrative Couple Treatment for Pathological Gambling: 9 month follow-up

Despite the many consequences of gambling on quality of couple relationship, most therapies for problem gambling favour an individual approach.

In a study aiming to evaluate the efficacy of the Integrative Couple Treatment for Pathological Gambling (ICT-PG), couples who were entering specialized treatment for the addiction of one member who was a pathological gambler were randomly assigned to individual or ICT-PG. Method. Eighty couples were recruited and randomized between ICT-PG (n = 44 couples) and individual treatment (n = 36 couples). The results concern follow-up at 3 and 9 month post-admission. Linear Mixed and GEE models for repeated measures were applied to take account the dependency of observations using SAS 9.4.

Results

Globally, participants in both modalities improved over time. On many indices of gambling severity, the participants in ICT-PG showed a better improvement at follow-ups: better reduction in gambling addiction, capacity of control and erroneous cognitions. The couple modality is also associated with a better couple functioning observed on different variables at both follow-ups: Marital satisfaction, mutual support, communication and negotiation abilities. Discussion. The results illustrate the necessity to offer a better diversity of treatment modalities to gamblers and their partner. Further research should help understand how to improve this type of intervention by responding to questions like: What is the optimal number of couple sessions? Can we have a combination of couple and individual sessions?

Tuncay, Mete

Glücksfall-Zentrum für Spielerschutz e.V.

Heusenstamm, Germany

Cultural competence in advising people with immigration history regarding gambling problems - connections and conclusions for psychosocial and therapeutic practice

Pathological gambling is disproportionately represented among migrants in Germany, especially from oriental cultures (from BzGA, 2017). The utilization of psychosocial and therapeutic support by these target groups only insufficiently reflects the increased prevalence. Even when bound, these groups are confronted with frontiers regarding language as well as culture. In the therapeutic and psychosocial work with these target groups, it is therefore indispensable to know about and combine different and culturally coined concepts of identity, diseases and recovery in a complex range of topics with high danger of stigmatisation for the help-seeking. In addition to the stress-psychological characteristics of migration and integration, the lecture presents epidemiological findings, examples and suggestions for successful access, connection and therapy to those target groups. The participants are invited to contribute their practical experience.

Turner, Nigel

*Centre for Addiction and Mental Health
Toronto, Ontario*

Developing an on online treatment program for problem gambling

While the past decades have seen a dramatic increase in the availability of gambling, gambling treatment services are being underutilized. This may be due in part to a number of barriers to accessing service such as lack of daycare, shift work, long distance travel, mobility and sensory disabilities, and stigma that make it difficult for some people to attend treatment. An online treatment service might mitigate these barriers by meeting the needs of individuals in the context in which they live. Therefore, we are conducting a multi-stage exploration of the implementation of an online problem gambling treatment program. This included an exploration of the advantages and challenges that are associated with addressing problem gambling using Internet based resources. This paper will include the result of a literature review, focus groups session, and key informant interviews that were used to define possible approaches for delivering an on line treatment service.

U

Ulrich, Václav and Řehola, Jan

*Faculty of Law of Charles University
Prague, Czech Republic*

Regulation of cross border gambling

Because of persisting individual approach of the states to the gambling regulation, it is obvious that this kind of the regulation is still characteristic by high level of fragmentation. The differences between the national legal frameworks cause several conflict situations in regulation of the online gambling market. The internet environment permits to operators of the online gambling to offer their services to the unlimited number of consumers all around the world. Due this fact the conflicts between national legal frameworks that regulate the online gambling market are more and more frequent. In this point of view it seems to be essential to focus on the application of the national regulation of the particular state to the subjects (operators and consumers) settled outside of its territory.

Above mentioned topic is object of the project realized by the Mr. Jan Řehola and Mr. Vaclav Ulrich at the Faculty of Law of Charles University in Prague since 2016 with financial support and as part of the Grant Agency of Charles University. During the two years of the intensive research both authors analysed the national legal frameworks, their application by the respective authorities or the development of the general principles of the regulation of the online gambling market by the jurisprudence of the Court of Justice of the European Union. The main aim of the above mentioned project is, to define, with regard to the fragmentation of the national legal frameworks, the theoretical basis that may help to find the solution of the conflicts of the national frameworks and may be applied to the everyday practice of the national regulators.

Both authors would like to present during the 12th European Conference on Gambling Studies and Policy Issues the concrete results of their research and analysis, more precisely the common objectives of the concrete national regulations and also how the jurisprudence of the Court of Justice of the European Union contributes to the creation of the general rules, that are or should be common for the modern national legal framework that will lead to the effective regulation of online gambling. These results will be presented with respect to the cross border application of the law to the operators established in the foreign countries because of fact, that this aspect of the regulation is essential for the effective protection of the players from the illegal offer of the online gambling.

Van der Maas, Mark

*Centre for Addiction and Mental Health
Toronto, Canada*

Rational actors, irrational actions: Contradictions of the Ontario Lottery Corporation's responsible gaming policy and the prevention of problem gambling

In 2012 the Ontario Lottery and Gaming Corporation (OLG) announced its modernization plan for gambling provision in Ontario, Canada. This paper discusses how several features of the modernization plan contradict the harm prevention strategies laid out by the OLG in its responsible gaming policy. The increased use of digital/electronic forms of gambling, the ratio of promotional vs. harm prevention messages, and the privatization of gambling opportunities are discussed. It will then show the construction of the gambling participant as an economic rational actor allows definitions of responsible gambling to centre on encouraging rational behaviours on the part of the individual rather than on the gambling provider where the use of proven public health strategies may present a threat to profitability. Finally, solutions are offered for the contradictions between the policies and actions of the OLG focusing on harm prevention strategies that have proven use ful in other gambling jurisdictions and in Ontario with other potentially harmful actions and substances.

Vaughan Williams, Leighton

*Nottingham Trent University
Nottingham, United Kingdom*

How should gambling machines be taxed?

Despite there being a well-established literature on the taxation of gambling in general, there has been relatively little focus on the taxation of gambling (or 'slot') machines per se. This gap in the literature is particularly pertinent given recent changes to the way that these machines are taxed in the UK. In this paper we examine, against the backdrop of the development of the gross profits system of taxation of betting, the optimal approach to gambling machine taxation. In doing so, we model the decisions taken by firms in this market and use subsequent indicative empirical evidence, to assess the best way to tax gambling machines in terms of achieving the twin objectives of efficiency and revenue sustainability. We draw implications for other jurisdictions from the UK experience.

Vinberg, Maria

*Kaolinska Institutet / Center for Psychiatry Research & Education
Stockholm, Sweden*

Gambling and problem gambling in the world of sports in Sweden

Gambling and problem gambling in the world of sports in Sweden The present study investigates the prevalence of gambling and problem gambling as well as attitudes regarding gambling in the world of sports in Sweden.

The study is a total survey of athletes and leaders in four different sports in their respective premiere leagues, and sport students in six different sports at National approved Sport education programs. The selection of sport is for elite athletes and leaders: Football, Ice Hockey, Floorball and Basketball. For sport students, Golf and Cross Country Skiing were added to the four studied sports.

The surveys consist of demographic questions and questions about gambling and attitudes to gambling, as well as about alcohol consumption. Data was collected anonymously via a web link. The surveys contain answers from 1438 athletes, 401 leaders and 1638 sport students.

The main result indicates a high proportion of problem gambling [athletes (11 %), leaders (6 %) and sport students (12 %)] among males. These proportions are much higher compared to the general male population in the same age groups. However, Basketball had distinctly lower proportion of problem gambling. Among female survey participants, the proportion of problem gambling is not elevated compared to the general female population in the same age groups. In addition, between 21 % and 32 % of the survey participants answered that they know someone they think has or have had a gambling problem.

The results from the study indicates a high proportion of problem gambling in the world of sports that has to be taken seriously.

Volberg, Rachel

University of Massachusetts

Amherst, USA

Monitoring gambling impacts in Massachusetts: taking stock in 2018

This presentation focuses on the social and economic impacts identified in the initial phase of Social and Economic Impacts of Gambling in Massachusetts (SEIGMA) study, associated with the construction and first two years of operation of the slot parlor in Plainville, MA.

A new instrument for measuring gambling participation

This paper presents the results of a study to develop a reliable and valid measure of self-reported gambling participation.

W

Walker, Douglas

College of Charleston

Charleston, SC, USA

Ideas from Behavioural Economics for Responsible Gambling

Behavioral economics has received increased attention and credibility in the economics discipline with Richard Thaler's winning of the 2017 Nobel Prize. Researchers' understanding of disordered gambling and responsible gambling have thus far been based on a psychological perspective, yet behavioral economics offers a variety of concepts that may help to better understand gambling, problem gambling, and responsible gambling.

This paper examines how key concepts from behavioral economics can be applied to the study of gambling behavior.

These concepts include: mental accounting, the house money effect, nudges, the endowment effect, and prospect theory.

The paper is aimed at the general gambling research field, with the goal of generating additional interest by economists to study gambling, and for psychologists to consider an economic perspective on gambling behaviors.

Wall, Hakan

*Karolinska Institutet
Stockholm, Sweden*

Gambling patterns, gambling involvement and levels of problem gambling (PG as measured by PGSI)

No abstract available

Wang, Changbin

*Macao Polytechnic Institute
Macao, China*

The Licenses of the Gaming Industry in Macao: Overview and Improvement

The entities such as gaming corporations, gaming promoters and gaming machine suppliers, as well as certain levels of individuals such as the shareholders with 5% or above of the corporation capital, directors and key employees have been required to obtain a license or to pass the suitability check in order to enter into the gaming industry in Macao since 2001. Compared to the corresponding regulations in other countries, much needs to be improved in the rules and practices of Macao's gaming licensing, especially in the following aspects. First, individuals such as the middle-rank managers and representatives of a gaming promoter should be included in the system of the suitability check. Second, clear and specific standards should be integrated in the laws. Third, substantial investigations, rather than just paper check, should be introduced into the process of the suitability check. It has been universally proved that licensing is one of the effective tools to build a good image of gaming industry. Accordingly, Macao must pay more attention to it and work hard to strengthen the licensing system. This paper will review the licensing system of the gaming industry in Macao, undertake a comparative study with the other jurisdictions such as the United States and provide suggestions.

Wardle, Heather

*London School of Hygiene and Tropical Medicine
London, United Kingdom*

Rites of passage? The changing role of gambling in the lives of children and young people in Great Britain

The role of gambling in the lives of children and young people in Great Britain is, from a policy and regulatory perspective at least, ambiguous. It has a strong historical heritage, with gambling being a part of many people's childhood. However, there is equally strong historical and current concern about the impact gambling has upon children. This paper will trace how perceptions of youth gambling and youth gambling behaviour have changed, using historical sources and contemporary data. Trends in modern gambling behaviour among those aged 11-15 will show how some forms of gambling are no longer as attractive or accessible as they once were but others remain part of the fabric of some children's lives. These themes will be explored in the context of broader social changes among the most recent generation of youth – the so-called I-generation – and in the context of other changes in patterns of health, risk and leisure behaviours. Finally, in the context of changing regulation in Great Britain, this paper will argue that the conditions have been created for a generational experiment around youth gambling, the outcome of which is uncertain.

Weum, Ine
Akan Kompetansesenter
Oslo, Norway

A new Norwegian online course about gambling problems

We want to present a brand new online course about gambling problems. The course is currently being developed, in a collaboration with three parties, The Norwegian Gaming and foundation authority, Korus-Øst Center for Addiction issues, and Akan The workplace advisory centre for issues relating to alcohol, drugs and addictive gambling and gaming,

The goal is to lower the threshold in terms of receiving information and knowledge. The course will be made available through the three parties` communication channels. An emphasis will be added on the understanding of the problem and which guidelines and politics the Norwegian government is leading. A significant part of the course will consist of advice and guidance in a work life setting. What can an employer do if an employee has a problem that affects work performance? The target audience will primarily be leaders, HR, HSE, safety representatives and occupational health services.

We want to show a teaser, translated to English, where we hope to facilitate a discussion with the audience.

Wood, Richard
gamRes Limited
Montreal, Canada

Optimising responsible gambling strategy in Canada: National benchmarking using the Positive Play Scale (PPS)

The Positive Play Scale (PPS) was developed in 2016/17 to measure the degree of responsible play evident in player populations.

The aim of the present study, was to:

- Validate the PPS using a nationally representative sample of players
- Develop cut-off scores to define high/medium/low levels of positive play
- Identify benchmark data for positive play in Canada

The PPS was administered online to a national sample of 7,980 players. Participation was restricted to player who had gambled at least once in the last year. We also ensured that 80% of the sample had played during the last month. The sample was stratified to be nationally representative according to sex, age and regional location. Several additional scales were included to examine convergent validity (e.g., personality, disordered gambling, impulsivity, gambling beliefs, motivations to play, financial focus/satisfaction).

Results confirmed the PPS had a four-factor structure— honesty and control, pre-commitment, personal responsibility and gambling literacy. Cut-off scores were established as thresholds for positive play. Consequently, the PPS can be used to objectively assess the efficacy of RG strategies, pinpoint specific areas for future focus, and gauge the utility of new RG initiatives. It is also possible to use PPS scores for different player segments (e.g., sex, age, games played) to tailor RG strategy to the needs of specific players. We discuss ways RG programs can use the PPS to optimise resources by targeting specific beliefs and behaviors that require attention among a player-base.

Y

York, Larrie
University of Malta
Msida, Malta

What makes a loyal customer? Perspectives from management and senior executives of online gambling firms

Online gambling offers several perspectives on the subject of loyalty (or lack thereof) and its drivers. This research has sought to determine:

1. How do management and senior executives of online betting firms define a loyal customer?
2. How do these companies interpret and address customer churn and lapsed customers?

Qualitative research in the form of depth interviews were conducted with 15 managers and senior executives. This indicated that the most common loyalty indicator considered is that of engagement. If a customer is found to be engaging with a brand and not necessarily making deposits, then they would still consider that customer as active and retains the status of 'loyal'. The second most common yardstick for the assessment of loyalty was perceived to be the making of deposits on the part of the player. A further issue considered by managers, that is recognised by some as a legacy measure, was the length of time a customer exhibited an absence of activity. This is similar to engagement but usually tied to either login or deposit.

The research also looked at the broadly accepted definition of customer loyalty in the literature provided by Oliver (1997, p392). This definition of loyalty was compared against the feedback of the participants in the study and in almost every case, management's definition of loyalty was inclusive of at least one of the elements in Oliver's definition, namely that of: commitment; undertaking a financial transaction; and ability to stave off variety seeking or switching behaviour.

Z

Zerbetto, Riccardo
Associazione ORTHOS
Siena, Italy

ORTHOS intensive residential treatment for pathological gamblers: Outcomes after 10 years of the experimental project

In the field of treatment for pathological gambling only ambulatory psychotherapy or counseling is generally offered. Long term therapeutic communities and psychiatric institutions usually do not offer adequate therapeutic opportunity, especially for clients who need to keep the contact with their work, family and social milieu. From these considerations a three weeks intensive residential treatment called ORTHOS, sponsored by the Regione Toscana, has been developed under the initiative of Riccardo Zerbetto, psychiatrist and psychotherapist. Thirty eight treatment programs has been completed during 10 years involving 340 serious gamblers in a residential facility close to Siena. Research on outcomes have been carried out among Clients who completed the Preogram using both the Global Assessment of Functioning (APA, 2000) and the SOGS self-report questionnaire (South Oaks Gambling Screen). The findings of the present study confirm the efficacy of ORTHOS treatment in terms of improved quality of life reduction and decrease of gambling symptoms, with over 85% of the sample in which the symptoms manifested no longer clinical relevance (scores below 5 in SOGS). The PRIB (Programma Residenziale Intensivo Breve) has been accredited by the Tuscan region and it has recently been included as innovative approach into the Guidelines of the Ministry of Health for the Treatment of pathological gamblers. Training initiatives have also been scheduled in order to disseminate this method.

Seminars

Focal Research

Halifax, Canada

Using Technology to Detect, Reduce, and Prevent Gambling Risk & Harm (Panel Discussion and Q & A)

From Possibility to Best Practice: An International Collaborative Perspective on Integrating Risk Detection Algorithms as a Practical RG Tool for Gambling Operators

Panel:

- Tracy Schrans (President Focal Research, Co-Investigator) **Project Overview**
- Tracy Damestani (Chief Executive Officer UK National Casino Forum) **Regulatory Issues**
- Richard Noble (Chief Operating Officer Aspers) **Management Issues**
- Junior Toleafoa (Host Responsibility Auckland Sky City Casino N2) **Using the models**
- Tony Azouri (Host Responsibility Christchurch Casino) **Customer action on the floor**
- Tony Schellinck (CEO Focal Research; Principal Investigator) **Key learnings & Next Steps**

Holland Casino

*Marieke de Graaf, Charles de Leau, Janny Wierda
Hoofddorp, Netherlands*

Online Predictors for Responsible Gaming in The Netherlands

Online gambling provides easy accessibility and potential global access to highly sophisticated and potentially addictive electronic games. Many argue that online gambling due to its hidden character,¹ easy accessibility (including vulnerable groups such as minors) and limitless transaction options is potentially more dangerous than its land-based counterpart.² To understand the dangers, but also the potential of this relatively new phenomenon in terms of new preventive methods, it is important to consider the possible ways people can be nudged in an online environment compared to the land based games.

¹ Only 10% of the gambling population seeks professional help. Less than 1% of the addicted gamblers in the Netherlands uses the AGOG (Assissa, 2014; Shaffer & Martin, 2011).

² See Griffiths & Barnes (2008) & Griffiths et al. (2009)

While still illegal in the Netherlands, other countries have successfully legalized online gambling. This had led to a number of interesting publications on this topic in the past few years. It would be very interesting to see whether their findings also hold for gambling within the current Dutch gambling climate. Also, there is currently limited research on the use of serious games for preventing gambling addiction (described in more detail below). Next, the fact that Holland Casino has a lot of experience with preventing gambling addiction on land based, creates an interesting context for the online research as opposed to current research, which is mostly done on data from operators that focus on the online market only.

Research questions

1. **Literature review:** What are the current possibilities and criteria used to identify and help at risk, excessive, problem and addicted online gamblers?
2. **Descriptive study:** What are the characteristics of the gambling behaviour in online casinos derived from legal online gambling data?
 - a. How much time and money does the average player spend on a gambling website, and how is this amount distributed over the population?
 - b. What games are most played by players, in terms of time and money?
 - c. At what time of day do players gamble, and when do they deposit their money?
 - d. How does the amount of time and money that is spent online compare to existing studies based on the self-report of gamblers?

3. **What variables** that are derived from the database correlate with the excessive gambling behaviour, and knowing this, what theoretical framework forms the best explanation for excessive gambling?
4. **Intervention study:** What is the effect of interventions in the form of informative pop-ups, personalized feedback, and serious games on gambling behaviour?
5. **Ethics/review/theoretical study:** Which form of governance is required when taking into account the ways online providers can steer their customer's behaviour, the impact of interventions on (illegal) gambling behaviour, the privacy and financial issues and other aspects that relate to the gambling policy?

Presentation

In our presentation, we will focus on the literature review that already has been done as well as the possibilities that we see using interventions (4), because these are the two topics that can be discussed without having actual data. We will discuss the first empirically validated models introduced in Braverman and Shaffer (2010), with four behavioural descriptors that remained important in the follow-up studies (next to gender and age). Next, we will name a few new indicators presented by Dragicevic, Tsogas and Kudic (2011) and Braverman et al., Adami et al. (2013), Auer and Griffiths (2014), and later researchers to see how this topic evolved.

Many of the more socially responsible gambling companies around the world have started to use responsible gambling tools to help their clientele (Auer & Griffiths, 2015). It would be interesting to evaluate these tools based on their effect on the online behaviour of the gamblers, as well as testing new interventions. A new tool to inform the players of the risks is introduced in the form of a serious game. Naturally, online operators already have games installed on their websites. The (free) tutorials that one can play form an excellent platform to in which informative and preventive elements can be combined with a fun experience. It would also be very interesting whether the behaviour on these games correlates with the excessive behaviour in later games. Based on the overview of the amount of time and money spent on online gambling and the previous explanations regarding problem gambling, recommendations can be made about how to prevent problem gambling effectively.

Netherlands Gaming Authority

*Jolijn Fanoy, Rein Halbersma, Anet Meijer, Wessel Oomens
The Hague, Netherlands*

Dual licensing and supervision of slot machines in the Netherlands

Presenters: Annet Meijer and Jolijn Fanoy

In the Netherlands, the Betting and Gaming Act from 1964 largely determined the current structure of gambling markets. The policy was to channel consumers to a limited number of licensed operators. This led to state-owned monopolies for lotteries, sports betting and casinos, a private monopoly for horse race betting, a limited number of privately owned charity lotteries, and a large number of private slot machines operators.

Pending legislation proposes an online market without an a priori limit on the number of operators. Furthermore, the government plans to phase out state ownership, and introduced legislation to privatizing and expanding the number of casinos. The current policy is not to limit market entry per se, but to license and supervise operators on gambling related consumer risks, such as addiction, consumer protection and crime. Recent court cases have led the Netherlands Gaming Authority (NGA) to introduce a licensing regime for charity lotteries based on this policy.

In this talk, we discuss a guidance paper that is being drafted on how gambling markets should be regulated and supervised, based on the characteristics and consumer risks of the various forms of gambling. The guidance paper consists of an economic framework, analyzing entry conditions, technological characteristics of local and remote gambling, the integrity of operators and their games,

the risks for gambling addictions and the risk of the market behavior of operators such as advertising. We show the general analysis framework can be applied to several relevant examples.

Getting gambling operators to cooperate with mental health care providers

Presenters: Annet Meijer and Jolijn Fanoy

The Netherlands Gaming Authority (NGA) licenses and supervises gambling operators. The licensing requirements mandate a comprehensive responsible gambling policy, including proper personnel training in recognizing problematic gambling behavior. Gambling operators are also required to refer customers with problematic gambling behavior to a network of mental healthcare providers.

The NGA also has a formally defined coordinating role to stimulate cooperation between gambling operators and other stakeholders, such as municipalities and other governmental organizations, the gambling research community and mental healthcare providers. However, the NGA does not have a legal mandate to enforce mental healthcare providers to cooperate with gambling operators. The NGA therefore has to rely on the good will and voluntary cooperation between both industries.

Recently, the NGA has issued a guidance paper explaining how it will implement its coordinating role with respect to responsible gambling policy. The main activities are to organize periodic informational meetings between the various stakeholders, and to develop and exchange knowledge about best practices in recognizing and preventing problematic gambling behavior.

In this talk, we discuss the guidance paper and how we are coordinating and stimulating gambling operators to cooperate with mental healthcare providers. We discuss several examples and our recent experiences such as organization of stakeholder meetings, and the development of curriculum standards for personnel training in slot machine arcade halls. We also briefly discuss the preparations for a treatment and research funds (paid for by a tax on gambling revenues) for gambling addiction prevention.

What is a game of chance?

Presenter: Wessel Oomens

The traditional landscape of games of chance such as lotteries, betting, slots and casinos has increasingly become intertwined with complex financial products as well as digital games with elements of chance.

The Netherlands Gaming Authority (NGA) has recently issued a guidance paper outlining a five-step decision process in order to determine whether a game classifies as gambling and falls under its jurisdiction, and based on that assessment, how to treat those games:

- **Threshold:** is the number of providers, players and the amount money involved considerable enough to warrant spending resources in assessing the game?
- **Overlap:** is there potential overlap with other rules and regulations, in particular those governing financial products?
- **Prize:** does the game award its winners with prizes of economic value?
- **Predominant influence:** do the game's elements of chance have a predominant influence relative to players' skills in determining the game's outcome?
- **Substitutes:** for games that do not meet the prize and predominance criteria, are there potentially similar harms to the public (such as the risk for addiction and crime) as gambling, and does this warrant further policy or legislative measures?

In this talk, we discuss the guidance paper and share our experiences in applying it to several examples such as financial products and social games. We discuss the particular case of loot boxes in more detail. We will explain our recently published assessments of ten digital games with loot boxes, and outline the NGA's approach to possible future market interventions and policy measures.

How should gambling markets be regulated and supervised>

Presenter: Rein Halbersma

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