Prevalence rate measures in remote problematic gambling

REMOTE GAMBLING (The importance and complexity of the phenomenon demonstrate there is a need for more research and studies on the prevalence of problem gambling in Italy. The author debates research and analysis that, also at international level, seem to identify higher prevalence rate in remote gambling. He points out on one side insufficiency of available research and critical attention needed in the analysis and, on the other side, he wishes for their development in coordination at European level)

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Several researches on problem gambling seem to show a higher prevalence rate in remote gambling in comparison with overall gambling. The analysis carried out by the author considers and debates that conclusion adopting several arguments.

First of all the author points out that inadequacy of current research on <u>online gambling</u>, also at international level, is a generally shared opinion. He then analyses from different points of view representativeness limits of samples adopted in online gambling research, that are often formed by regular and frequent gamblers and do not proportionally represent occasional and infrequent gamblers. Afterwards he draws on an argument already introduced by Prof. Griffiths, generally reputed as a major expert in this matter, that recently exhorted to be cautious aiming to avoid a superficial interpretation of prevalence data showed by 2010 British Gambling Prevalence Survey, and that asked the question "what is an online gambler?", showing that most part of online gamblers are actually "also" online gamblers, i.e. they gamble both online and offline. With reference to the specific Italian context, the author re-proposes Griffiths's question also in a further meaning. Indeed he recalls that in Italy there is an extremely diffused gambling activity in the black market but also on online licensed market, managed in an illegal manner, in public premises through terminals and personal computers at disposal of the players. He recommends to pay attention to exclude such gamblers from population interviewed in research regarding online gambling, which obviously want to represent remote gambling as an activity performed alone or in a solitary context but not in public premises or among communities of gamblers.

The author then analyzes results of research performed by CIRMPA in 2010, that compares overall gambling and online gambling. He proposes new readings, more favourable to online gambling. He underlines that prevalence rate of "online" problem gamblers in the research is equal to 0.70% of the whole population that have access to online gambling, while corresponding prevalence rate of problem gamblers among population that have access to "overall" gambling is equal to 1.01%. He subsequently underlines that, on the basis of result showed by the abovementioned research, gamblers rate among adult population is equal to 56%, while only 1 internet user out of 14 gambles online, showing consequently how much easier is access to offline gambling in comparison with access to online gambling. The author explains that in online gambling potential player must submit to the nominative registration "initiatory" proceeding, that can discourage the majority, and it must transfer all personal data and a valid ID document (at least under Italian legal gambling system), and then it must make a deposit using a credit or payment card, or another accepted payment method.

To conclude his analysis the author highlights potential power of database owned by the Italian regulator A.A.M.S., which holds the nominative, analytic and complete gambling history of each single player. He recommends to exploit the value of such unique data base through the development of risk behaviour models and behaviour tracking tools.

To conclude, the author wants to demonstrate first the strong commitment requested to carry out scientifically

sound research, and secondly the need to reading sensitiveness of results, which can lend to mistakes and manipulations.

In light of the importance of the purpose that is consumer's health protection, the author wishes more research investments will be carried out in Italy and that, following EU action plan stated last June by European Commissioner responsible for Internal Market and Services Michel Barnier in his speech at the European Parliament, those practices will be developed in coordination at European level.

1. The overall state of research on online problem gambling

Problem gambling has been investigated with commitment and investment rather diverse in different Western Countries. Several Countries, including Italy, still do not have research that may be considered satisfactory, while some others have accumulated a significant base of experience. State of research regarding online problem gambling, instead, especially in relation to the young age of this industry, is a phase still backward even in Countries that have invested more on the extent of problem gambling[1].

Some research and studies carried out on online gambling, not only in Italy but also at the international level, seem to indicate a higher prevalence of problem gambling than in the overall gambling.

These results, however, raise some concerns among operators[2] and experts of remote gambling that, with difficulty, recognize such a dangerous situation in their direct experience, at least with regard to legal gambling system.

2. The problem of representativeness of the sample

Some international research, also referred to as an evidence by Italian research, observe prevalence rate of problem gamblers on the whole gamblers' population between 10% and 20% and more. These rates are very high if compared with the range, between 0.5% and 3%, of prevalence rate of problem gambling as it had been measured by many research carried out on overall gambling. In the latter case the rate is referred to the overall population, and not only to player's population, as in the previous case.

But do not ever forget that the prevalence rate measures the share of problem gamblers in the sample. It should not take it for granted that the sample is representative of all the gamblers. The acquisition of a representative sample in these studies is always difficult, sometimes dubious and in some cases neither demanded by the author.

For example, among the international research mentioned also in Italian studies to attest the prevalence rates measured, we observe:

- i) in the case of the research by Mc Bride and Derevensky carried out in 2008, which measured the prevalence of problem gamblers equal to 23%, the participants were recruited through a proposal of participation contained in an online newsletter sent by the information website of gambling *Casino City*[3];
- ii) in the case of the search by Williams and Woods carried out in 2007, which measured the prevalence of problem gambling equal to 20.1%, the participants were recruited through banners placed on the portals of access to sites of online casino games [4].

These research adopt selection methods designed intentionally to investigate specific clusters of gamblers with high prevalence of problem gambling presumably, with the aim of studying the antecedents and correlations. But not only the sample does not represents the total population (gamblers and not gamblers). The sample does not represents either the whole population of online gamblers, including the occasional ones.

These research should not be used as a reference in the prevalence of online problem gambling compared to the overall population or compared to all of the online gamblers, in order to avoid dangerously distorted conclusions. It would be like to take as a reference for *offline* problem gambling the prevalence measured by interviewing people coming out of a casino.

3. What is an online player?

Some articles by Prof. Mark Griffiths, belonging to Nottingham Trent University and known as one of the leading international experts in the field call into question, in a different way, the readings about the prevalence data of

the problem gambling in the online gaming industry.

In some articles, one of which was written with Heather Wardle, project director of the British Gambling Prevalence Survey of 2010[5], the two scholars ask the apparently strange question: "what is an online gambler?" They remark it is simplistic to answer as "anyone who gambled online", because the subject may have gambled online but he/she could have gambled also, and perhaps mainly, offline.

Griffiths noted that in the British Gambling Prevalence Survey 2010 the prevalence rate of 5% of problem gamblers compared to 0.5% of those who had never gambled online (that is non-online gamblers plus non-gamblers): "led to the conclusion that either gambling in an online medium is more "dangerous" and/or problem inducing for gamblers than land-based gambling, and/or vulnerable gamblers may be more susceptible to developing problems online because of factors such as 24/7 access and convenience". But he adds that "one of the main problems with this is that, typically, online gambler is also gamble offline.". Then, about the analysis carried out on the results of the British Gambling Prevalence Survey of 2010, he comments that "the highest prevalence rates of problem gambling were among mixed mode gamblers who gamble on different activities (4.3%), followed by mixed mode gamblers on the same activities (2.4%), those who only gambled offline (0.9%),and those who only gambled online (0%)", yes, zero-per-cent[6]. He concludes: "The most interesting statistic is arguably the fact that there wasn't a single case of problem or pathological gambling among those gamblers who only gambled online.".

In conclusion, Griffiths noted that the highest prevalence rate identified on online gamblers could be determined by the tendency of those who gamble in a lot of gambling activities to expand the scope of the gambling on new games, new forms and new modes of gambling available, such as online.

The sharp observation, based on the data of the Survey 2010, which the previous survey did not allow, shows that it is not sufficient to refer generically to the online gambler, even in research that have a satisfactory sample size and representativeness. It is appropriate:

- first, a taxonomy that identifies three types of gamblers: i) the online and offline gambler, who gambles on both media, ii) the gambler who only plays offline;
- further distinction, in particular about the type of gamblers both online and offline, that distinguishes, for example, online and offline gamblers who play a single game activity on both media, and those online and offline gamblers who play more and different game activities on both media.

4. The application to the specific Italian context

It can be presumed that in Italy, as in the UK, the majority of online gamblers are "also" online gamblers. This should make us cautious in considering a possible higher prevalence rate of "also" online gamblers in a matter of online gambling danger. The first *caveat* of every research is always the restraint from presuming the connection of causality and, most of all, the direction of causality between concomitant phenomena.

In the Italian case, however, there is a specificity that, compared to the English case, could also make significant in another sense the question posed by Griffiths. In Italy, in fact, more than a third of the turnover on remote gambling licenses takes place, despite of the existence of a ban, in public premises, through terminals or simple PCs, varying in number and quantity, so as to make those public premises in real gambling halls. Moreover, in Italy, it is unfortunately still widespread the range of illegal gambling sites, especially of casino games, both on PCs or terminals in public premises similar to the former ones but "more illegal".

Online gambling is clearly understood by researchers and by those who read research as an individual gambling activity, carried out alone and not in public premises or in gamblers' community.

It is therefore desirable that the research carried out in Italy pay attention to avoid the acquisition as remote gamblers of subjects that, while performing the gambling by terminal connected to the Internet, are involved in the context of a public premise, under conditions that are clearly not related to the remote gambling and still must be recognized and distinguished from remote gambling as generally intended.

5. Research carried out by CIRMPA in 2010

The CIRMPA, in 2010, carried out a dual research on problem gambling, applied to the field of gamblers in general (called "overall") and those "online", which seems to show a higher danger in the online gambling compared to

the "overall" gambling.

Now, apart from the opportunity of a close examination that reveals "what is an online gambler" – if he/she only gambles online or he/she gambles "also" online, and if the online gambling in the research is really done alone and not in public premises – the data produced by the research can be examined under some aspects which reduce, and perhaps reabsorb, the charge of danger that seems should be assigned to online gambling.

The dual research applies respectively to:

- a sample of 2,000 people who represent the adult population between the ages of 18 and 70 years old, that have gambled at least once in the last 12 months (regardless of *medium*, online or offline); this research is aimed to measure the prevalence of problem gamblers in general, defined "overall";
- a sample of 1,000 people, made up of persons who gambled online at least once in the last 3 months; this research is aimed to measure the rate of problem gamblers among the "online" ones.

The research for "online" gamblers seems to have excluded from the scope of observation the subjects who did not gamble in the last 3 months but that have gambled at least once in the previous 9 months. It is noted that the adoption of the online gamblers perimeter in the last 12 months may be about 2 times greater than the perimeter of the online gamblers in the last 3 months, and it will make more homogeneous the comparison between the two research. It will be rare the presence of problem gamblers among those who gambled in the last 12 months, but not in the last 3. Consequently, the rate of problem gamblers on the population of online gamblers may need to be reduced by a factor equal to 2, in order to homogenize the comparison.

Projecting the results of the "overall" research sample on population that it intends to represent[7]:

- the rate of problem gamblers on the adult population (18-70 years old), interpreted as subjects that have potentially access to gambling, is equal to 1.01%;
- the rate of problem gamblers on the adult population who have gambled at least once in the last 12 months is equal to 1.71%.

Similarly, projecting the results of the "online" research sample on the population that it intends to represent:

- the rate of problem gamblers on the population of Italian adults (18-74 years old) Internet users with access at least weekly in the last 3 months, is equal to 0.70%;
- the rate of problem gamblers on the population of adult Internet users ,who have gambled at least once in the last 3 months, is equal to 9.7%; if it was referred to the gamblers who gambled at least once in the last 12 months the rate would have been probably halved, and therefore would be equal to about 4.9%.

At this point, it is interesting to note that the "overall" gamblers are equal to 56% of the total adult population which, obviously all have potential access to gambling. More than 1 person out of 2 gambles. Why? Because access to "overall" gambling is undoubtedly easy, without barriers, and gambling is available in many and different activities and forms.

Certainly a large part, perhaps the vast majority, of the total 26 million "overall" gamblers is occasional or exceptional, maybe they buy a scratch card once in a while, or bet on the Superenalotto in particular situation, when everyone is talking about because of high levels reached by the prize, enticed by the spread of the levels reached by potential winnings in the evening TV news.

The population of Internet users, with access to the Internet at least weekly in the last 3 months, is certainly skilled to be able to access to the gambling. According to the above research, only 7.2% of those who potentially have access actually gamble online in the last 3 months. Only 1 out of 14 Internet users play online[8].

As summarized by the table below, in online gambling the rate of problem gamblers vs. total gamblers is higher than in overall gambling. On the contrary, the rate of problem gamblers vs. total population that have potential access to gambling is lower than in overall gambling.

prevalence of problem gamblers	overall gambling	online gambling
vs. total population that have potentially access to	1.01%	0.70%
gambling		
vs. the population of gamblers	1.71%	4.90%

The "overall" gambling " is easy to access: at every street corner there is a possibility to gamble, buying a ticket of Superenalotto or a scratch card. The casual or exceptional gambling is very frequent. The population of the Internet that have potentially access to the gambling, the Internet users, have not such an easy condition of access to the gambling. The online gambling does not enable the impulse access.

The rate of problem gamblers on total "overall" gamblers is lower because the "overall" gamblers are more than half of the total adult population and the majority is made up of millions of occasional or exceptional gamblers who buy a Superenalotto ticket or a scratch card, or even a New Year's Eve lottery ticket once every 12 months.

The online gambling is different. Consent to the online gambling is necessarily a meditated act. This is related to the procedure required to be enabled to gamble. It is complex and even threatening one, given the amount of personal information required, the obligation of the transmission of ID document (at least on Italian legal sites) and the need for payment with credit / payment card, with its expectable worry. Even for an expert Internet user, the first time is not easy. This operational difficulty is combined with a corresponding perceived risk for access psychologically felt as irrevocable, at least in the sense that gambler must deliver his/her data to the gambling operator, and that also explains the great success of the casino games offered by sites of institutional operators which, by definition, give a "guarantee". The situation is not too different for illegal sites, where the higher perceived risk is not offset by a procedure only slightly slimmer.

In conclusion, the offline gambling does not have a barrier to entry and the gamblers' base is very extensive if we include in it, as research generally do, even those who bought a New Year's Eve lottery ticket once a year. If, in computation, we remove these "gamblers" who represent the vast majority and that probably do not feel and do not agree to be defined as such, the relationship between the prevalence compared to the population of the "real" gamblers could even be reversed in favor of online gambling [9].

The online gambling is provided by a filter to the access, which leads only 1 out of 14 Internet users to register, despite the daily netsurfing and the repeated reminder and boost of advertising campaigns of Internet gambling sites[10]. This filter is a preventive tool for gambler protection. At the same time, especially in the Italian model, in which all the identification and all gambling data of the gambler are held by the AAMS, it may constitute, even if is not yet enough, a powerful tool to control the gambling behaviour and to prevent and intervene on excessive gambling.

6. Development opportunities for analysis and intervention

Gambling is inevitably "dangerous" and therefore must be provided with protection systems. Italian online gambling model offers significant protection and defense towards problem behaviour, as a powerful vehicle equipped with security systems and control: it is nominative, the gambler is registered and all its gambling activity is tracked. This gives tools to the responsible operators in order to protect their customers.

In addition Italy has a unique opportunity. The gambler's registration is subject, after transmission of personal data and tax code, to the validation by the AAMS, which has created a real database of gambling players and their accounts. Likewise, deposits and withdrawals from the gambling account as well as any gambling transaction are subject to real-time transmission to the AAMS and its validation. The AAMS knows, in full detail, in real-time, the amount of money paid and available on the accounts of each gambler, identified by the tax code, as well as the amounts gambled and the winnings. It knows in detail the history and the gambling behaviour of each gambler.

The database provided by the AAMS is much more interesting than that provided by each single operator. The AAMS knows transactions deriving from the gambling not only among different games, but also among all different gambling sites and licensees. Only activity on illegal sites is not tracked on the AAMS's database. This database is a powerful tool for high-risk behavior identification. Its enhancement passes through the development of gambler behavior models, which can enable prediction of the situations at risk. The grids of analysis adopted by the methods for epidemiological research, the 10 diagnostic criteria of the DSM-IV and the 9 items of PGSI, and the research results itself provide a fundamental basis for the development of problem gambling models to track gambling history of the gambler, to control behavior and to identify situation at risk. Moreover, it is possible the integration between the two different tools and their results.

Conclusions

The importance and complexity of the phenomenon demonstrate there is a need of more research and studies on the prevalence of problem gambling in Italy. It must be promoted the development in Italy of practices for

investigation, measurement and analysis of problem gambling, to be carried out systematically , as it occurs in the UK.

Ideally, such practice should be adopted and applied with a coordinated approach at European level, through exchange and comparison of experience and results. In this sense, the closing speech of the European Commissioner responsible for the Internal Market and Services Michel Barnier at the Symposium on June 27th 2012 on the regulation of gambling and betting activity in Europe is quite comforting. Barnier announced the "transition to action" by the Commission with a plan that, among its pillars, has the protection of consumers and minors and, in this regard, states that "so far, there have been insufficient studies to reach conclusions regarding the size and seriousness of the problem".

Bibliography

Barbaranelli, C., (2011), Il gioco, fattori di protezione e di rischio: panorama sugli studi italiani ed internazionali e focus sulla ricerca condotta dal CIRMPA (Sapienza Università di Roma), LexGiochi

Barnier, M., (2012), Online Gambling and Betting in Europe: from confrontation to action, European Parliament Conference – How to regulate Gambling and Betting in Europe

EGBA, (2012), Manifesto for a Sustainable EU Policy for Online Gambling, EGBA

Griffiths, M. D., (2011), What is an online gambler? Some surprising findings from the latest British Gambling Prevalence Survey, drmarkgriffiths WorldPress.com site www.drmarkgriffiths.worldpress.com

Griffiths, M. D., (2011), Who and what is an online casino gambler?, iGB Affiliate

LaBrie, R.A., LaPlante D.A., Nelson, S.E., Schumann, A., Shaffer, H.J., (2007), Assessing the Playing Field: A Prospective Longitudinal Study of Internet Sports Gambling Behavior, Journal of Gambling Studies

McBride, J., Derevensky, J., (2008), Internet Gambling Behavior in Sample of Online Gamblers, International Journal of Mental Health Addiction

Politecnico di Milano – Dipartimento di Ingegneria Gestionale, (2012), Osservatorio Gioco Online – Il Gioco Online in Italia: aumenta l'offerta, si trasforma la domanda

The Gambling Commission, (2011), British Prevalence Gambling Survey 2010, National center for Social Research

Wardle, E. H., Griffiths, M. D., (2011), Defining the "online gambler": the British perspective, World Online Gambling Law Report

Wardle, H., Moody, A., Griffiths, M.D., Orford, J. & and Volberg, R. (2011), Defining the online gambler and patterns of behavior integration: Evidence from the British Gambling Prevalence Survey 2010, International Gambling Studies

Williams, R. J. & Wood, R. T., (2007) Internet gambling: A Comprehensive Review and Synthesis of the Literature. Report prepared for the Ontario Problem Gambling Research center, Guelph, Ontario, Canada

Williams, R. J. & Wood, R. T., (2007), Problem Gambling on the Internet: Implications for Internet Gambling Policy in North America, New Media & Society

[1] Problem gambling is measured by various methods. The *British Gambling Prevalence Survey*, for example, adopted in 1999 both the method DSM-IV and the SOGS. In the subsequent editions of 2007 and 2010 it replaced the method SOGS, called into question for the unacceptably number of false positive, with the method PGSI. The method DSM-IV has its origin as a medical instrument for the diagnosis of pathological gambling, while the methods SOGS and PGSI arise for research purposes. The DSM-IV analyzes the subject through 10 criteria. In clinical analysis, the pathological gambling is diagnosed in the case in which the subject is positive compared to at least 5 criteria out of 10, while the subject is diagnosed problem gambler if he/she is positive compared to at least 3 criteria out of 10. So the problem gambling identifies subjects who manifest problems, but is different from pathological gambling, which regards a more limited number of individuals. For example, the *Survey* of 2010 identified, with the method DSM-IV a rate of problem gamblers equal to 0.9%, while the rate of gamblers that were positive compared to 5 or more criteria were equal to 0.3%. The data have an indicative value, in relation to the

statistical uncertainty, considering that 0.3% corresponds to only 23 individuals. In any case, the diagnosis of pathological gambling is reserved to the clinical investigation.

- [2] For example, the EGBA in the "Manifesto for a sustainable EU policy for online gambling" in March 2012, states that the traceability and transparency of the activities on the Internet allows a better understanding of the behavior of the gambler and the research shows a modest rate of excessive online gamblers ("highly involved"). It recalls in particular the research carried out by La Brie, La Plante and others in 2007, based on the analysis of the gambling activity, during 8 consecutive months, of the population made up of 42,647 gamblers registered in February 2005 on the site bwin.com.
- [3] It is noted that in this research, carried out in Canada in 2007 using the DSM-IV, 42% of people polled said they gambled on the Internet for real money. It is interesting to note that, according to research carried out by CIRMPA in Italy in 2010, only 7.1% of Internet users gamble online for real money at least weekly in the last 3 months, i.e. 7 times less than the gamblers in Canadian research. It seems evident that this difference can not be attributed to the different context. It is an indirect evidence that the sample of Canadian research is not nor it wants to be representative of the population in general, nor of the whole online gamblers.
- [4] The curators of the research explain that the selection method was chosen because otherwise, selecting participants through *random digit dialing* contact, you would identify a very low numbers of online gamblers on thousands of individuals contacted. Research adopted the CPGI method of inquiry, of which the above mentioned PGSI is a simplification.
- [5] This is the third edition of the *Survey*, carried out in 2010, the results of which were published in 2011 and probably it represents the most authoritative product and scientifically qualified on the subject carried out in Europe.
- [6] It should be noted that 5% of the population interviewed in the research were online gambling but only 0.1%, equal to 9 individuals, had gambled online only. Therefore, this specific data of the problem gambling prevalence is not statistically significant, but it remains indicative.
- [7] This research adopts two methodologies for the measurement of problem gambling: the so-called SOGS and PGSI. It chooses to classify as problem the gambler who is positive compared to both criteria. It should be noted that the degree of agreement between the two measures is moderate, with a coefficient of k, equal to 0.51 (1 = total agreement, 0 = no correlation). Moreover, even in the *British Gambling Prevalence Survey* of 2010, the k coefficient indicates a moderate degree of agreement between the two methods used, the DSM-IV and PGSI, a reminder that all the instruments we have, are valid, but far from perfect .
- [8] According to the calculations of the Polytechnic of Milan, published in March 2012, carried out on behalf of the AAMS and based on the data acquired by the system of AAMS itself through the real-time connection with the systems of the licensees, 10.6% out of 24.5 million adult Internet users had a gambling account (on an Italian license) in December 2011, while the "unique gamblers" in the month of December were equal to 3.2% of total adult Internet users. In the author's opinion, these rate would increases in a very limited way including the gambling on illegal sites, because it can be assumed that most part of gamblers on illegal sites opened a gambling account on at least one legal site. The data seems therefore consistent with those of CIRMPA research, which was carried out in 2010, before the introduction of casino games and poker cash.
- [9] To better understand how the choice of the gamblers' perimeter influences prevalence, it is interesting to note that in the *British Gambling Prevalence Surveys* carried out in 2007 it was excluded from the cluster of *online* gamblers who had gambled online only National Lottery and related games, that in the UK are gambled a lot online (unlike the Italian case where a very few people play online lotteries) and those are presumably not problem gamblers. Gamblers who had bought tickets for the National Lottery or gambled online the National Lottery were instead included in subsequent research carried out in 2010. The percentage of online gamblers was 6% in the search of 2007 and 7% in 2010 excluding gamblers from the National Lottery and becomes 14% including them. The exclusion from the cluster of these gamblers raises the problem gambling prevalence. To be specific in the Survey of 2010 the problem gambling prevalence measured with the DMS-IV method among online gamblers including National Lottery was equal to 3%, while excluding the gamblers who gambled only the online National Lottery this amounts to 5.3%. By analogy, it must be assumed that in the CIRMPA research and more in general in research on Italian gamblers, the presence of millions of occasional "offline" gamblers of National Lottery and Lotteries necessarily lowers the prevalence of problem gamblers among the "overall" players. Should these types of gamblers be excluded in calculation of prevalence of "offline" problem gambling, the rate would raise. Different

alternative choices may be legitimate and reasonable, but you should be aware of it in results analysis, which is a very sensitive issue, and make aware who the reader or listener.

[10] The *media* and television necessarily occupy a central role in the marketing of remote gaming operators, that do not have the physical channel to communicate with the gambler. Perhaps, for this reason, in the general perception, online gaming is considered the holder of a share of the total gambling business much higher than that actually it is. In Italy, in 2011, with reference to legal gambling, online gambling amounts to only 4% of the total gambling expenditure (on the basis of the A.A.M.S. data).

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