

## **PROBLEM GAMBLING ON TERMINALS**

**By Prime Table Games 2008**

### **Problem Gambling in General**

With all problem gambling research there are investigative difficulties, as research relies on willing respondents answering realistically. If certain profiles don't answer realistically, or self-exclude from research, then the real level of problem gambling will always be higher than the assessed level.

Most people dissipate all capital and income before coming close to acknowledging a gambling problem. A wealthy person may never dissipate enough funds to consider gambling a problem. A poor person, with effectively no disposable capital or income, may perceive that their overall situation is the problem, not gambling. Someone with intermediate funds, but a non-saving live-for-today attitude, will not have a concern about problem gambling. All these profiles may provide answers in research that are misleading.

In addition, there are many player profiles that will not be inclined to respond to research questions, particularly if written responses are required. These profiles, often disadvantaged, vulnerable hard to reach persons, may be more likely to include problem gamblers than the population at large.

Many problem gamblers are gamblers who had a life-changing event that steered them towards problem gambling. Examples of such events are: bereavement; retirement; separation or divorce; loss of employment/home and illness or depression. Many young people have not yet experienced an event of this type, therefore future problem gambling may be more prevalent than present as the number of young gamblers are proportionally on the increase.

The above examples show that certain profiles are more susceptible to problem gambling. As young persons are attracted to remote gambling, then we believe that this will be one of the key future areas of problem gambling. As there is inadequate age verification of players on machines in non-casino premises, there will also be a future increase in problem gambling related to these machines. As many gambling premises are located in areas of economic deprivation, there is a propensity to attract disadvantaged and vulnerable persons. Machines in these locations will contribute heavily towards problem gambling.

### **Machine Types**

The machines identified in the correspondence (on this site) between the UK Gambling Commission (UKGC) and the Government Department for Culture Media and Sport (DCMS) are B2, B3 and B3A machines. It's not certain that it is correct to identify all these machines as high-stake machines. B2 machines can accept maximum stakes up to £100, unlike B3 machines where the maximum stake is limited to £1.

An estimate of the number of B2 machines in the UK is around 27,000 compared to an estimate of 12,000 B3 machines. There are many more machines in betting shops than in casinos and it is a fact that betting shop machines can accept higher maximum stakes than many casino machines.

## **Machines in Betting Shops**

The betting shop operator has many advantages over the casino operator. The regulatory and compliance burden is lighter on betting shops and their employees. There is no size limitation on betting shops, as there is on new casinos. There is also no geographic restriction on betting shops, as there is on existing and proposed casinos. It is also worth noting that the customer-to-staff ratio in betting shops is higher than in casinos. The main commercial advantage that betting shop operators hold is the fact that they pay gambling tax at a flat rate of 15%, whereas the casino operator pays gambling tax from 15% up to 40%.

The vast majority of machines in betting shops are known as Fixed Odds Betting Terminals - also known as FOBTs or Terminals. Over 90% of the revenue from Terminals is from Roulette. Roulette is a casino table game but Roulette in any format is intellectually the same game.

The introduction of Terminals in betting shops was legally opposed by the then regulator. However, due to legal interpretation, and/or lack of adequate funding of the regulator, it was probable that the opposition would fail. At that time betting shops were not regulated, but if they had of been, then the introduction of Terminals wouldn't have been so easy. The subsequent gambling legislation could have altered the situation, but was designed by persons who welcomed and advocated technological advances in gambling, such as remote gambling.

So, betting shops are operating the casino game Roulette, employing relatively less staff than casinos, paying a lower tax rate than casinos and enjoying freedom from many of the legislative and regulatory restrictions on casinos.

## **Terminal Operational Aspects**

Terminals are often situated against walls. The staff can't therefore easily see the players. This means that under-age players and persons under influence of drugs or alcohol can easily play without being identified. With the increase in attacks on betting shop staff, there is minimal incentive for staff to leave the secure counter area to challenge a player.

Recent observation of a Terminal, showed that there was no physical Cash Out button and no touch screen Cash Out button on the game screen itself. In addition there was no Cash Out information on the game's Help screen. The only way to locate the Cash Out button was to go back to the Main Menu.

We believe that these factors are contrary to the "fair and open" gambling and "socially responsible" gambling objectives.

## **Terminal Fantasy Races**

Betting shop Terminals enable betting on Races such as Fantasy Races. Imagine 8 horses, each with an equal chance of winning. If a bet of £10 is placed on each horse and the payback on the winning horse is £70, (7 for 1) then the bookmaker has collected £80 and paid out £70 for a profit of £10 or 12.5%.

However Fantasy Races do not operate this way. There is a random number generator that determines the winning outcome, just as in the imaginary situation above. But on Terminals, the horses are priced at different odds. If each horse had an equal chance of winning, then a player betting on horses that paid 9 for 1 or more (if 8 horses) would be a long-term winning player. Therefore we believe that races are fixed so that the lower-odds horses are more likely to win!

The Terminal Fantasy Race software has two functions. Firstly, it randomly allocates a winning bias towards lower-odds horses. Secondly, it selects the winner. To understand how much of a fantasy this truly is, imagine a machine displaying 8 different numbers, then think of an option to bet on which number the machine would select as the winner and then imagine being given different odds on each number. Then imagine that the machine is being programmed to ensure that a lower-odds winner was more likely than a higher-odds winner. Intellectually this is exactly the same game content as a Fantasy Race, but just with different graphics.

It is understood that it's deceptive to allow artificially created near-miss situations in machines. It should be understood that it's deceptive to artificially create outcome bias and then select the winning outcome. Gambling on Fantasy Races is not "fair and open" gambling and is not "socially responsible" gambling.

### **Hold Percentage in General**

Hold percentage is a concept that is used in casino table games. For example, a player betting the numbers at Roulette is betting at a house advantage of 2.7%. This is a constant percentage and is known as the theoretical house advantage. A player placing a total of £1,000 in wagers will in theory lose £27. Each individual player outcome will of course vary, but over many players and over a long period of time the actual amount lost will become very close to the theoretical amount of 2.7% of total amount wagered.

Historically casinos have not had a viable method of calculating the total amount wagered. The hold percentage method provides an alternative measurement. The drop is the amount of cash used at the table to buy chips to play. The win is the total of cash paid in, minus chips lost to players and cashed in at the cash desk. The hold is the win divided by the drop as a percentage. If the casino loses then there is a negative win divided by drop for a negative hold percentage.

A couple of extreme illustrations help to explain the concept. A player buys in for £1,000, makes one £10 bet on a Roulette number, loses, quits playing and cashes in the remaining £990. Another player buys in for £1,000 makes multiple £10 bets over multiple spins at Roulette, loses every bet and loses the total £1,000. The hold percentage the casino has experienced over the first player is 1%, but the hold percentage the casino has experienced over the second player is 100%.

It is understood that a game with a higher house advantage is more likely to have a higher hold percentage. But, as can easily be seen from the above illustration, hold percentage is also a measure of player behaviour. If there are two formats for playing one game, with the same house advantage in each format, but a very significant difference in hold percentage from one format to another format, then an explanation is required. The format with the higher hold percentage could be attributable to the format being more addictive and hence more prone to problem gambling.

The collated table game hold percentage for all games in all casinos is published annually by UKGC. For 2007/08 the figure was 14.8%. Under the Freedom of Information Act annual hold percentages on a game by game basis are available. The hold percentage for Roulette was 14.6% and the hold percentage for Electronic Roulette was 14.3%.

With the same house advantage on Roulette and Electronic Roulette, the hold percentages should be similar. So there is no hold percentage evidence to suggest that Electronic Roulette in casinos is more addictive to casino players than actual Roulette.

### **Terminal Hold Percentage**

Because 90% of Terminal revenue is from Roulette the exercise of comparing Terminal hold percentage with casino Electronic Roulette hold percentage should be informative.

There are reasons that Terminal hold percentage will be higher than Electronic Roulette hold percentage. Firstly, the 10% of Terminal play other than Roulette is probably at a composite house advantage higher than Roulette. Secondly, Roulette may be played whereby the house advantage on the 1 to 1 (2 for 1) payoff is 2.7%. (This is unlike Roulette in casinos where the house advantage on these payoffs is 1.35%) Thirdly, there may be an option to double a win. There is nothing specifically wrong with this option to double a win, but it does feature an increase in volatility and a trade-up of the player total wager. Both these features may be attractive to players, but also may be especially attractive to problem gamblers.

As guidance on what hold percentage is too high, gaming regulators in Nevada will generally not approve a new table game if the hold percentage in the field trial is over 25%. It is certain that there is a differential in hold percentage between Terminals and Electronic Roulette. It is likely that Terminal hold percentage is significantly higher than Electronic Roulette and could easily be as high as 25%.

***Terminal hold percentage information has never been published. As a priority - the DCMS and UKGC should make publicly available Terminal hold percentage information.***

### **Terminal Three Card Poker**

At least one Terminal supplier is providing Terminal Three Card Poker to at least one betting shop operator. Three Card Poker was approved as a casino table game by DCMS and GBGB. Again the Terminal game is intellectually the same game as the casino game.

However, Terminal Three Card Poker payoffs to players are lower than casino Three Card Poker payoffs to players. There are two modes of play. One mode, the proposition bet Pair Plus, has house advantages of 2.7% in the casino, but 4.6% on the Terminal. The other mode, the competition against dealer bets Ante and Play, has house advantages of 2.0% in the casino, but 4.3% on the Terminal. These are relative increases in house advantage of 70% on the Pair Plus mode and 115% on the Ante and Play mode. This is close to a 100% composite increase. (There are potentially two wagers in the Ante and Play mode so the composite is weighted rather than an averaged).

Recent observation of Terminal Three Card Poker was that the minimum stake was £2.50. This is typical of a minimum stake for the game in smaller provincial casinos. Recent observation was that the pace of Terminal Three Card Poker was at least three times faster than manually dealt casino Three Card Poker.

### **Terminal Three Card Poker Probability of Ruin**

There is a concept in gambling known as probability of ruin. Effectively the concept relates to the chance of a player going broke at a particular game. Without going into complex formula, a comparison of probability of ruin between casino Three Card Poker and Terminal Three Card Poker is informative. Assume a minimum stake player at both games. Terminal Three Card Poker is three times faster and Terminal Three Card Poker house advantage is double. Therefore Terminal Three Card Poker has a six times greater impact on the player bankroll than casino Three Card Poker.

This sounds bad enough, but it is actually worse. The profile of the Terminal player is that, on average, their bankroll is lower than the casino player bankroll. If the Terminal player bankroll is half that of the casino player, then the Terminal Three Card Poker player is facing a twelve times greater impact on bankroll than the casino Three Card Poker player. So the probability of ruin for the Terminal Three Card Poker player could easily be twelve times greater than for the casino Three Card Poker player.

In the hold percentage text there was the illustration of the player losing £1,000 without a win, so giving a 100% hold percentage. This player achieved ruin without win. This is very abnormal, as virtually every player will have wins during a play session. But many Terminal players, despite multiple wins, will still achieve ruin on many occasions.

### **Terminal Three Card Poker Minimum Stake**

The minimum stake of £2.50 for a machine game is very high. The following information is from Nevada gaming regulators for June 2008 relating to slot and video machines.

<i>Total number</i>	<i>170,020</i>
<i>With \$5 minimum</i>	<i>2,109</i>
<i>With minimum over \$5</i>	<i>635</i>

Over 98% of slot and video machines in Nevada have lower minimum stakes than Terminal Three Card Poker.

### **Terminal Three Card Poker Summary**

So, betting shops operate a casino game, Three Card Poker, at a similar minimum stake to many casinos, operating the game around three times faster than casinos, with lower staffing levels than casinos, lower tax rates than casinos, more freedom from legislation and regulation than casinos, attracting players with lower bankrolls than casinos and with house advantages of around 100% higher than casinos.

### **Three Card Poker is a Proprietary Game**

The UKGC Regulations related to non-remote casino table games identify Three Card Poker as being a proprietary game owned by Prime Table Games. Regulations are written for each table game, with a specific process to introduce new games. However, for games on machines and for remote games, UKGC and DCMS do not require any such regulations or process to introduce new games. As long as correct technical standards are being applied then the exact game content is not subject to control.

Prime Table Games has not granted permission to any Terminal manufacturer, supplier or operator to use Three Card Poker on Terminals. The Terminal Three Card Poker player is not informed that Three Card Poker is an invented game and is not informed that the game inventor has not granted permission to operate the game.

Prime Table Games conducted a player survey of attitudes to remote gambling in 2006. When asked the question –

***"Should internet casinos get permission from the inventors of games before using their games?"***

The responses were:

***Yes 83%    Don't know 11%    No 6%***

If the same question was asked substituting Terminal for internet, there is no reason to think that the response would be any different.

It is neither "fair and open" gambling nor "socially responsible" gambling to use an invented game without permission of the inventor, to operate the game without informing players of this fact and increase the house advantage over the players by around 100%.

### **Summary**

Previous research has already shown a high correlation between Terminals and problem gambling. Betting shops are often in areas of economic deprivation and have a propensity to attract disadvantaged and vulnerable persons.

Betting shop staff can not be expected to be totally effective in preventing underage or under-the-influence play of Terminals. Terminal minimum and maximum stakes are both far too high for non-casino gambling. Terminal design discourages players from cashing out. Terminal content is, at least in part, deceptive. Terminal player experience is primarily negative with high hold percentage and high probability of ruin. Recent gambling legislation should have discontinued use of Terminals. There should not be any need for further research or international panels of "experts". Terminals should be Terminated.

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