**THE LEARNING THEORY EXPLANATION OF GAMBLING**

**Initiation**

In terms of the learning model, the start of gambling behaviour can be explained similarly to the start of smoking or any other addictive behaviour. Initially, the person may see others winning on slot machines or even on the lottery - vicarious reinforcement. Their expectations of the win may drive them to place their first bet, begin playing the lottery, or using slot machines. Once they have started, the excitement they experience is associated with the whole gambling process, reinforcing the positive feelings that gambling produces. This may be further reinforced by the occasional win, especially if there are early ‘successes’. The gambler becomes addicted to the behaviour as this process continues.

**Maintenance**

Operant conditioning - direct positive and negative reinforcement

The gambler continues the addictive behaviour because the rewards they receive, be they monetary (from winning) or physical (from the excitement of gambling) (positive reinforcement), are reliable and relatively easy to come by. Placing a bet provides the encouragement and reward to continue gambling.

Gambling can also be an escape for many, albeit a temporary one. This is negative reinforcement to the extent that it offers a distraction from aversive stimuli such as the anxieties of everyday life.

*Partial reinforcement*

Skinner demonstrated with rats that a continuous reinforcement schedule (rewarding every time) does not lead to the most persistent behaviour. Under this schedule, once the rewards stop, so does the desired behaviour (a process known as extinction). However, partial reinforcement does create the kind of persistent behaviour seen in gambling. It is in fact the infrequency of winning that maintains gambling behaviour. If gamblers were to win every time they bet, then the urge to gamble would not be as strong. It is enough to keep them going even when the rewards are hard to come by.

For example, imagine the situation where putting 10 pence into a fruit machine would result in a 10 pence win each time. This would soon become tedious. However, fruit machines only occasionally pay out but (and this is important) they will reward a player with a win at some point in the future. EG of partial reinforcement = fruit machine pays out in some way every tenth time.

*Variable reinforcement - variable ratio schedule*

This produces the most persistent learning. Variable ratio schedule is a type of partial reinforcement in which a behaviour is reinforced after an unpredictable period of time or responses. For example, if a slot machine pays out after an *average* of 25 wins, but this doesn’t mean with well occur on the 25th spin for everyone. For example it might be 18th spin or the 27th spin. This means it takes longer for the learning to be established but once it is, it is much more resistant to extinction.

Gamblers then are rewarded for their behaviour at fairly random intervals, and this means that they can go for a long time without winning and still have their urge to gamble undiminished. This explains why some people continue to gamble despite heavy losses, they have ‘learnt’ that they will not win with every gamble, but they will eventually win if they persist.

**Relapse**

Returning to gambling after a period of abstinence can be explained in terms the cue-reactivity (similar to with nicotine addiction). The material associated with gambling is all around us, particularly with the easy way which people can now play the National Lottery, and not just by the usual selection of six numbers, but also the multitude of scratch cards available.

Fruit machines are in many public places, and the internet is filled with on-line casinos and other opportunities to gamble. Gamblers attempting to give up the habit are surrounded by reminders of their addictive behaviour, and temptations to give in to the urge to gamble are everywhere. In terms of the cue-reactivity paradigm these reminders can be sufficient to generate the feelings associated with gambling, including the anticipation and the memory of the excitement associated with the behaviour, and a relapse may be the result. These stimuli act as secondary reinforcers. These cues saturate social and media environments and are difficult for the gambler to avoid. They offer continuous low level reminders of the pleasures of gambling and make relapse a fairly predictable outcome for many.