

Pathological Gambling and Associated Patterns of Crime: Comparisons with Alcohol and Other Drug Addictions

R.I.F. Brown

Department of Psychology, University of Glasgow

The pattern of convictions for various categories of crime in the population of the United Kingdom was compared with the corresponding pattern in a sample of addictive gamblers drawn from Gamblers Anonymous in the U.K. A distinctive pattern of income-generating crime was found to be statistically associated with pathological gambling. This pattern was compared with other distinctive patterns associated with the intake of alcohol and with various other drugs and it was found to resemble most closely that of addiction to narcotic drugs.

The possible role of gambling as a contributory cause of crime is discussed in the light of what is known of the issues surrounding other addictions as causes of their distinctive patterns of crime.

Hypothesized causal connections between the performance of criminal acts and addictions to various drugs including alcohol have been widely investigated and discussed. Two widely held beliefs about drug use and drug addiction are not only that 1. the behavior of drug ingesters change under its influence but also that 2. driven by the craving for more, they commit crimes in order to obtain the money to pay for it. Patterns of crime statistically associated with the ingestion of soft drugs (mainly marijuana), hard drugs (mainly heroin), and alcohol and barbiturates have been identified and causal connections implied.

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In view of what is now accepted about the power and prevalence of gambling addictions and the way in which they feed on money, it would be strange indeed if there were no similar connection between gambling to excess and some forms of criminal behavior, probably different from those associated with alcoholism and other drug addictions.

Patterns of Crime Associated With Alcohol and Barbiturate Abuse and With Use of Marijuana

There are numerous studies demonstrating the statistical association of both acute alcohol intake and heavy use of barbiturates with crimes of violence, e.g. homicide, and of negligence, e.g. driving offences (Tinklenberg, 1973; Tinklenberg and Woodrow, 1974; Collins, J.J., 1982). Heavy alcohol use is also associated in American and British studies with a pattern of income generating crime such as breaking and entering and shoplifting (O'Donnell, Voss, Clayton, Slatin and Room, 1976; Roizen and Schneberk, 1978; Christian Economic and Social Research Foundation, 1976).

O'Donnell, Voss, Clayton, Slatin and Room, (1976) found that associated with both heavy alcohol use and with the use of marijuana was the same pattern of income generating crime, i.e. breaking and entering and shoplifting, but marijuana use was less likely than was alcohol use to be associated with aggression and crimes of violence. There is even evidence that when people change from alcohol to marijuana there is less delinquent behavior and less violence. (Blumer, 1967).

Patterns of Crime Associated With the Use and Abuse of Narcotic Drugs

In comparison with non-drug users, a higher proportion of heroin user non-drug arrests and convictions are for income-generating crimes such as robbery and other property crimes and a lower proportion of heroin user arrests are for violent crimes than those of non-drug users (Finestone, 1957; Barton, 1976) and patterns of self report of, as opposed to arrests for, income generating crime among narcotics addicts

show (McGlothlin, Anglin and Wilson, 1978) an even greater shift away from serious violent offenses toward minor theft including forgery, conning and shoplifting.

Although non-alcoholic drug addicts are probably more likely than the general population to commit all crimes, they are much more likely to commit crimes against property (McGlothlin, 1978) and their ratio of crimes of violence to crimes against property is different from that of alcohol addicts.

Crime Associated With Pathological Gambling

Peterson (1947) found that the factor most frequently present in embezzlement cases was gambling, and Kaapke (1977) takes for granted a direct causal relationship between compulsive gambling and personal crime. Custer and Custer (1980) found that 21% of their sample from Gamblers Anonymous in the USA and 46% of a sample of pathological gamblers treated by the Veterans Administration had been arrested specifically for one or more of a small group of crimes all emanating from attempts to obtain money for gambling. "Arrest for forgery, fraud, embezzlement or income tax evasion emanating from an attempt to obtain money for gambling" was subsequently included as one of the diagnostic criteria for Pathological Gambling in *DSM III* (American Psychiatric Association, 1980).

The most detailed and analytic systematic quantitative investigation into the links between gambling problems and certain patterns of crime has been that of Lesieur (1984). He distinguishes three stages in the gambler's perception of his illegal activities: 1. Ideologically and/or situationally justifiable actions (e.g. running an illegal book, selling soft drugs, minor fraud or forgery to obtain a bank loan); 2. partially justifiable actions that are also excused by the threats the gambler was under (e.g. "borrowing" money unknown to the employer with the intention of paying it back when the expected win comes (embezzlement), acting as a tipster for burglars who split the takings with him, but telling himself that *he* is not the thief; and 3. wholly unjustifiable acts that are excused as based solely on the gambler's threatened state or need (e.g. systematic fraud, armed robbery).

In his sample of 50 compulsive gamblers interviewed in depth, all

were or had been involved in illegal acts which they felt were to some degree justified. Seventeen (34%) justified illegal acts to themselves and others as temporarily necessary to obtain money. Of that 17, five (10%) went on to criminal acts which they could not justify to themselves other than as acts of despair by someone who had nothing to lose; they came to see themselves as thieves and criminals, a self image accompanied with guilt and anxiety. Of that five, two (4%) repeated the offences and appeared to begin careers as criminals.

Although five (10%) of Lesieur's sample had engaged in juvenile law breaking and confidence trickery early in their careers or even prior to gambling, his interpretation of his data is clearly in support of the thesis that compulsive gambling drives gamblers to crime because, as he sees it, the direction of causality is clearly from gambling to crime in the majority (90%) of cases.

Lesieur listed the reported frequency of the various efforts of his sample of fifty gamblers to obtain finances. If some of the categories on that list which can only be defined as crimes within the boundaries of certain North American states are excluded (e.g. Shylock loan, book-making and other gambling entrepreneurship, pool, golf and bowling hustling, card and dice cheating and swindling suckers), and the remainder classified in broad categories of crime, a pattern of offences among gamblers in Lesieur's sample emerges as set out in Table 1.

Table 1
Patterns of Kinds of Crime Self-Reported by Compulsive Gamblers
in an American Sample

Category of Crime	% of Total Offenses
Violence to the Person	0.0
Against Property With Violence (e.g. armed robbery)	2.1
Against Property Without Violence (e.g. burglary, theft, embezzlement, fencing)	38.7
Fraud and Forgery	56.0
Others (e.g. selling drugs, pimping)	3.5

N offenses = 142

(adapted from Lesieur (1984))

This is a pattern of reported offences (not convictions) which is heavily skewed towards crimes against property without violence, especially towards fraud and forgery, and is consonant with Lesieur's analysis of gamblers' reports which suggest that they do not commit crimes of violence except under extreme pressure but rather specialize in income-producing crimes.

Present Study

The main aim of Lesieur's study appears to have been to trace the deviant careers of pathological gamblers and it was only as a side issue or a byproduct that he collected evidence about a pattern of crime. He began by inquiring only about a specific list of crimes previously reported as being associated with gambling and added others to his inquiry list as he went along so that not all subjects in his study were asked about the full variety of crime within a broad general pattern or even all about the same crimes.

The present study set out, using an exhaustive list of crimes from the beginning, to find if there is any distinctive pattern of crime associated with pathological gambling such as the one enshrined in the diagnostic checklist for pathological gambling, or as appeared to emerge in Lesieur's ethnographic study.

METHOD

This study compared the incidence of various categories of criminal convictions in the United Kingdom with the self-reported incidence of the same types of criminal convictions in a sample of addictive gamblers attending Gamblers Anonymous in the same country, thus ascertaining if there are any statistically significant differences in the patterns (but not the total incidences) of convicted crimes in the sample of gamblers as compared with the general population.

The widest possible spectrum of crimes was chosen for grounds of the comparison, ranging from crimes of great to moderate seriousness normally dealt with in the High Courts and Sheriff Courts of Scotland or in the Crown Courts or Magistrates Courts of England and Wales, but excluding petty offences such as might be dealt with in Burgh Courts or Police Courts and almost all motor-

ing offences. Since the study covered both Scotland, which has its own separate and distinctive legal system and classifies the figures for convictions in its own way, and England and Wales, it was desirable that the categories of crime included in the investigation should be capable of being treated as comparable without doing violence to the national differences. The crimes thus chosen for investigation were grouped for investigation as summarized in Table 2.

Quantitative descriptions of the patterns of crime among the total population were collected for the comparison from the published Criminal Statistics for Scotland and Criminal Statistics for England and Wales. Crime figures were sampled for comparison from the general population over a period of five years so that the comparison was not distorted by a peculiar unrepresentative national pattern of convictions for any single year.

Figures for convictions in Scotland were collected for a five year period from *Criminal Statistics Scotland* (Scottish Home and Health Department, 1970-74) and listed as summarized in Table 2 to produce a total for each category and that total was in turn expressed as a percentage of the grand total. A set of percentages for each category listed was thus obtained to describe in quantitative terms the pattern of criminal convictions in Scotland for comparison with equivalent figures for the addictive gamblers of Scotland. Corresponding and equivalent figures were also collected from *Criminal Statistics, England and Wales* (Home Office, 1970-74). Only figures for males were included. Various small adjustments and combinations were made for convenience of classification and to make them compatible with the figures from Scotland and the figures thus collected for England and Wales were treated in the same way as the Scottish figures to produce a pattern of criminal conviction expressed as a set of percentages for each category as summarized in Table 2 for comparison with the English addictive gamblers.

Through the National Committee of Gamblers Anonymous, U.K. a questionnaire was distributed to a population of addicted gamblers who had come for help. This questionnaire listed the crimes and asked the respondents to list beside each item: 1. The number of times they had committed the crime; 2. The number of times they had been detected; and 3. the number of times they had been convicted of the crime. Elaborate and careful precautions were taken to ensure absolute anonymity for the extremely sensitive respondents. On the advice of the National Committee of Gamblers Anonymous, no demographic details on age, sex, occupation or marital status were collected to ensure that all questionnaire returns would remain unidentifiable in the eyes of the cooperating population. Each questionnaire was sealed by the respondent in an envelope which was in turn put in another envelope and publicly sealed by the secretary of the group. No respondent put a name on either a questionnaire or an envelope.

Quantitative description of the pattern of crime among gamblers was drawn from the answers to the questionnaire described above from two samples of gambling addicts, one of 30 from Scotland and one of 77 from the South East of England. The Scottish sample was drawn from a wide area of lowland Scot-

Table 2
Summary of Groups of Crimes as Listed for Investigation

Class I: Crimes against the person

Violence against the person (including, e.g., murder, assault, intimidation, cruelty to a child)

Sexual offenses (including, e.g., buggery or sodomy, incest, rape, indecent assault on a female)

Class II: Crimes against property with violence

(including, e.g., burglary or housebreaking, robbery with violence, assault with intent to rob)

Class III: Against property without violence

Theft and handling stolen goods (including, e.g., theft from the person of another, theft in a dwelling, theft by an employee, or embezzlement, theft from a motor vehicle, shoplifting, reset or handling stolen goods)

Fraud and forgery (including, e.g., frauds by company directors, false accounting, fraudulently obtaining property by deception, fraudulently obtaining pecuniary advantage by deception, conspiring to defraud, dishonestly defacing or concealing a document (forgery), dishonestly procuring the execution of a document (uttering))

Class IV: Malicious injuries to property and criminal damages

(including, e.g. arson or fire raising, criminal damage to property endangering life)

Class V: Crimes against the state and public order

(including, e.g. high treason, riot, perjury)

Class VI: Miscellaneous offenses

(including, e.g. blackmail, libel and slander)

land, and, although secretaries did not return precise figures as to the numbers present in each group, it is estimated from normal attendance figures that approximately 35% of those approached returned questionnaires. The English sample was drawn entirely from London and the South East and it is estimated to be equally representative of Gamblers Anonymous in that area.

Figures for total convictions in the sample of addictive gamblers for each group of crimes were produced separately for Scotland and for England and Wales and expressed as percentages of the total for each national sample for comparison with those from the crime figures for the general population obtained earlier.

Within the Scottish sample of 30 gambling addicts, 23 or 77% reported themselves as having committed an offence of the categories investigated in the study and 12 or 40% reported themselves as having been convicted. Within the English sample of 77 gambling addicts, 63 or 82% reported themselves as having committed and 39 or 51% as having been convicted of such offences. Numbers of convictions reported by single individuals ranged widely — from a single conviction to a maximum of 44 in the Scottish sample and to a maximum of 331 by one individual in the English sample.

The comparison of self reported convictions in one group with officially recorded convictions in another group entails the obvious hazard that the self reporting group will over report some convictions perhaps, e.g. to gain status, or under report other convictions perhaps, e.g. to avoid losing status. It should be noted that it is not self reported crime but self reported *convictions* that are being compared with the official reports of convictions. Although self reports of *offences* committed can notoriously be expected to differ from official reports of *convictions*, nothing is known about the needs or tendencies of a specialized group such as compulsive gamblers to either over or under report their own *convictions* in situations similar to that of this investigation. The possibility of such distortions must be acknowledged, although no informed judgement can be made of either their likelihood or their importance.

RESULTS

For each category of offence a total was found of all convictions either reported, in the case of the gamblers, or recorded, in the case of the general population, regardless of how many individuals may have been convicted of more than one offence or of how many times an individual may have been reconvicted of the same offence. The number of convictions in each category of crime was then expressed as a percentage of the total number of convictions reported or recorded over all categories to obtain a pattern of distribution of convictions among the various categories of crime considered.

The results of comparisons made using the Chi-Squared Test between the patterns of convictions reported by the gamblers and the patterns recorded for the general population are set out in the tables below. Categories of crime were collapsed as necessary to meet the assumptions of the Chi-Squared Test (i.e. that there are no percentages of less than five in each cell of the table) and all significant differences were corrected for the use of Chi-Squared with percentages.

The pattern of convictions for gambling addicts was compared with the pattern for the general population for Scotland using the broad classes of crime as set out in Table 3 below and the difference between the pattern of crimes for which gamblers were convicted and the pattern of convictions for the general population was significant beyond the 0.05 level.

Since the big discrepancy between the two crime patterns is in the class Property Without Violence, a further breakdown of crimes within that class is given in Table 4 below. The difference between the patterns of crime for addictive gamblers and that for the general population was once again significant beyond the 0.001 level.

The pattern of convictions for gambling addicts from the South East of England was compared with the pattern for the general population for England and Wales as a whole using the broad classes of crime common in English criminal statistics and set out in Table 5 below. The difference was significant beyond the 0.001 level. Since the greatest differences in incidence of convictions were again in Class III, Property With-

Table 3
Scotland: Percentages of Total Convictions by Classes of Crime
for Gamblers and for the Total Population

Description of Class of Crime	Percentages of Total Convictions	
	Total Population	Gamblers
Violence to the person	6.13	3.00
Property with violence	27.50	13.40
Property without violence	58.73	82.47
Criminal damage, etc.	6.61	1.03

N reported convictions (gamblers) = 97
 N recorded convictions (total population) = 30,070
 Degrees of freedom = 3 Chi-squared = 8.93 $p < 0.05$

out Violence, a further breakdown of the respective patterns within that category is provided below in Table 6. The difference between the patterns for the two populations was significant beyond the 0.01 level.

DISCUSSION

Statistical Pattern of Convictions Associated With Gambling

Patterns of *offences committed* derived from Lesieur's (1984) U.S. data coincide broadly with the British data presented in this paper describing patterns of *convictions*. Both suggest that the pattern of crime associated with compulsive gambling is an income generating one of crimes against property without violence and that the gambler's crimes par excellence are fraud, forgery, embezzlement and petty theft. Violence is only threatened by the gambler as part of a more desperate property crime such as armed robbery and is rare even then in comparison with the rate for the rest of the people of the U.K. It is possible that the violence which does occur among gamblers is associated with the alcoholism compo-

Table 4
Scotland: Comparison of Patterns of Crimes Against Property Without Violence: Percentages of Total Convictions for Crimes Against Property Without Violence for Gamblers and for the Total Population

Description of Class of Crime	Percentages of Total Convictions	
	Total Population	Gamblers
Theft	83.70	26.25
Embezzlement	1.40	30.00
Fraud	9.60	23.75
Reset, bankruptcy, etc.	5.30	20.00

N reported convictions (gamblers) = 80

N recorded convictions (total population) = 17,720

Degrees of freedom = 3

Chi-squared = 455.15

$p < 0.001$

ment in dual alcohol and gambling addictions. Further investigations into violence among gamblers could usefully record associations between it and other possible causes, especially other addictions.

In comparing the pattern of crime evinced by addicted gamblers with patterns associated with other addictions it appears to be closest to that of narcotics addicts. Both patterns generate considerable income with a minimum of violence offered or executed, possibly because both groups are under constant extreme financial pressure. The gambler's pattern is most different from the pattern of crime associated with alcoholism and acute alcohol intoxication.

Although the data set out above appears to indicate that the *pattern* of crimes committed by addicted gamblers is statistically different from that committed by the population at large and may bear some resemblance to that for narcotics addicts, it is important to note that: 1. It tells us *nothing* about the total number of crimes committed by addicted gamblers as compared with the number of crimes committed by the general population at large; and 2. that, without additional evidence, it tells us nothing about the direction of causality between gambling and crime.

Table 5 .
England: Percentages of Total Convictions by Classes of Crime
for Gamblers and for the Total Population

Description of Class of Crime	Percentages of Total Convictions	
	Total Population	Gamblers
Violence to the person	17.80	0.97
Property with violence	18.41	3.65
Theft	43.51	64.80
Fraud	8.62	29.49
Criminal Damages	9.66	0.56
Others	2.00	0.53

N reported convictions (gamblers) = 929

N recorded convictions (total population) = 118,368

Degrees of freedom = 5

Chi-squared = 50.09

$p < 0.001$

There is a sub-population of heavy gamblers who are criminals first and heavy gamblers secondly. They also occasionally seek help from organizations such as Gamblers Anonymous. Some indication of the proportion of pathological gamblers seeking help who are criminals first and gamblers second is suggested by Custer and Custer (1980) who report that only between 5% and 7% of the samples of gamblers they studied in Gamblers Anonymous and of those seeking help for gambling problems at the Veterans Administration would have been excluded from the diagnosis of pathological gamblers on the ground that they met the criteria for Anti-Social Personality Disorder.

The Question of Causal Links Between Crime and Addictions

Questions have been extensively debated of whether causal links have been established, or of how they ever could be established, between various addictions and crimes. If there are direct causal links, they appear to be rare and the mechanisms through which they are mediated

Table 6
England: Comparison of Patterns of Crimes Against Property Without Violence: Percentages of Total Convictions for Crimes Against Property Without Violence for Gamblers and for the Total Population

Description of Class of Crime	Percentages of Total Convictions	
	Total Population	Gamblers
Theft	29.30	32.56
Embezzlement	12.58	22.37
Shoplifting	23.47	6.39
Handling stolen goods	18.18	7.42
Fraud bankruptcy and forgery	16.47	31.26

N reported convictions (gamblers) = 876

N recorded convictions (total population) = 62,257

Degrees of freedom = 4

Chi-squared = 15.78

$p < 0.01$

are obscure. If the links are indirect and the addiction plays a part as one of several factors, then the identity of the other factors, their weights relative to the effect of the addiction or to acute effects of ingesting alcohol or another drug are unknown and indeterminate and the mechanisms through which they exercise their influences are all equally obscure. If there are common causes of both crimes and addictions, they have not yet been identified with any degree of certainty.

The issues surrounding the links between crime and addiction to drugs have recently been reviewed again by McBride and McCoy (1982) and by Clayton and Tuchfield (1982). McGlothlin (1978) concludes that, although there is some evidence that use of barbiturates and amphetamines may lead to reduced impulse control, the overall contribution to crime is quite small relative to alcohol use, a conclusion supported by Tuchfield, Clayton, and Logan (1982). McGlothlin (1978) also concludes that although there is a statistical association between soft drug use and crime, there is no evidence that soft drug addiction commonly leads to crime in general, although it may do so for some individuals. He concludes that, although criminality generally precedes addiction to narcotic drugs, there is fairly strong evidence that narcotic addiction causes an increase in the amount of income generating crime for those individuals using this means of acquiring heroin, but a considerably lesser increase in crimes of violence.

The issues in the possible links between alcoholism, acute alcohol intake and violent crime have recently been painstakingly and exhaustively explored in Collins (1982) who found no compelling evidence to support any of the possible accounts of the intervening variables or the mediating links between drinking and violent crime. In particular the "disinhibition hypothesis" that the ingestion of alcohol reduces the control of the subject over anti-social impulses has been criticized and rejected (Pernanen, 1976 and 1982). Much less attention has been paid to possible links between alcohol consumption and other income generating crime (Roizen and Schneberk, 1977).

Estimating the Direction and Strength of Any Causal Links Between Compulsive Gambling and Crime

The results reported in this paper could conceivably be used to support the hypothesis, not that gambling may lead to crime, but rather that crime may lead to gambling. The parallel would then be with the

evidence from some more recent American studies of the connection between drug abuse and crime. These show that most drug addicts who were arrested for crimes in the 1970's had been convicted *before* the onset of addictive drug use. Greenberg and Adler (1974) found that most studies prior to 1950 had reported that criminal behavior was minimal prior to addiction but in contrast most studies after 1950 showed criminality prior to addiction. One of the reasons for this change is likely to be the criminalization of soft and narcotic drugs which puts the supply and distribution of them largely in the hands of the criminal population and so put that population particularly at risk from them in much the same way that the drink production, distribution and catering industries are particularly vulnerable to alcoholism (Plant, 1979).

Some evidence that crime is unlikely to cause gambling comes, first, from the fact that gambling has been legal in the U.K. since 1966, making it unnecessary for any criminal population to be involved in the provision of the service to the same extent as in the majority of American states where it was, until comparatively recently, illegal, and second from a study by Carey (1967) which showed that the average age of first imprisonment for gamblers in the U.K. was above 30 at a time when it was at 22 for the general population. This suggests strongly that when addictive gamblers do turn to crime they do not do so in their adolescence and youth, as is typical of the general population, but rather only *after* their gambling addiction has taken time to develop to a certain intensity over several years.

This pattern in which the crime follows the gambling and ceases when the gambling addiction stops is well known to those with clinical experience with addictive gamblers. In more than five hundred hours spent with gamblers, their spouses and their families over some 18 years it has also been the author's experience that, almost invariably, once the gambling behavior is changed, no further convictions ensue. This is supported by parallel evidence that, following treatment, drug addicts show a considerable reduction in crime (Nash, 1976; Newman, Bashkow and Cates, 1973). Studies of drug addiction careers show that during periods of non-use the rate of crimes committed drops dramatically compared to the rate in periods of daily use (McGlothlin, Anglin and Wilson, 1978).

The relationship between compulsive gambling and crime appears to be much more like that between the use of expensive hard drugs and crime than that between alcohol intake and crime. The main difference between the gambling-related and the drug-related patterns appears to

be a reduced likelihood that crime causes gambling in comparison to the likelihood that crime causes drug addiction by exposing the (largely criminal) suppliers of the service to greater risk of becoming addicted.

The data from this paper, in common with other similar data about patterns of crime associated with other addictions could not give us, in itself alone, direct evidence of a connection between gambling and certain types of crime. Rather it shows that when a person is a compulsive gambler, the pattern of their criminal activities, if they have any at all, will tend to be markedly different from that of the general population although bearing close resemblances to those who suffer other addictions, notably to hard drugs. This in itself may be seen as strong indirect or circumstantial evidence for a connection between gambling and crime, but cannot rule out the possibility that there may be common causes of both gambling and crime, e.g. in economic deprivation.

It is clearly not possible at this stage to delineate any mechanisms of causation with the standard of detail currently being striven for in the explanation of the link between alcohol and crimes of violence. However the kind of explanation of the link between gambling and crime suggested in the ethnographic studies by Lesieur (1984) of deviant careers accounts best for what little is known. This kind of explanation would support the hypothesis that gambling is a contributory cause of at least some criminal activities for at least some individuals, and that these criminal activities are likely to be produced by a combination of:

1. increasingly large losses
2. exhaustion of other options or strategies for obtaining more money with which to continue to gamble
3. progressive conceptual or moral slippage from ideologically or situationally justifiable illegal actions through partially justifiable illegal actions excused by the threats the gamblers are under to wholly unjustifiable illegal actions
4. opportunity
5. continuing expectations that more gambling will eventually result in a big enough series of wins to enable the gamblers to repay their debts, go straight and enhance their life style to the desired degree, through the only way they know, further gambling.

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