

THE SOCIETY FOR THE STUDY OF GAMBLING NEWSLETTER

Number 20, May 1992

Mark Griffiths	Editorial: The thin line between chance and skill in gambling	3-4
F.T. Dixon	The Financing of Horse Racing in the U.K. (1)	5-7
Christopher Haines	The Financing of Horse Racing in the U.K. (2)	8-9
Elisardo Becona	The prevalence of pathological gambling in Galicia (Spain)	10-18
Sue Fisher	The pull of the fruit machine: A sociological typology of young players	19-33

Editor: Dr. Mark Griffiths, Psychology  
Department, Polytechnic South West, Drake  
Circus, Plymouth,  
PL4 8AA  
Tel (0752) 233152

The Society for the Study of Gambling wishes to thank the Bingo Association of Great Britain for assistance in the production of the Newsletter. The Society retains, however, complete editorial control over its contents.

## THE SOCIETY FOR THE STUDY OF GAMBLING

### Chairman

R. Ian Brown  
Cardiff Law School  
University of Glasgow  
GLASGOW  
G12 8RT

Tel: (041) 339 48855

### Honorary Treasurer

Alan Willis  
122 Clapham North Side  
London SW4  
Tel: (071) 228 4107

### Honorary Secretary

Sue Fisher  
Dept of Applied Social  
Science

Polytechnic South West  
Drake Circus  
Plymouth PL4 8AA  
Tel: (0503) 264505

### Executive Committee

John Beard  
Jack Dowie  
Bob Evans  
Mark Griffiths

The Society for the Study of Gambling was formed in 1977 to provide a forum for those concerned with research into gambling, to promote its scientific study especially as far as the psychological, social and economic aspects are concerned, and to inform the public about these matters.

The membership of the Society is drawn from a wide circle of people who have an interest in various aspects of gambling. They range from social workers and psychiatrists who deal with "compulsive gamblers" to members of the commercial gambling industry. It is a condition of the Society that there should be freedom of opinion and practice among its members, so that the Society does not take any particular stance in relation to gambling.

The Society holds regular meetings twice a year in London. Further details are available from the Honorary Secretary.

Papers are reproduced in the Newsletter as a record of the Society's meeting, and/or at the invitation of the editor, and are not subject to scrutiny by referees. Their appearance here is not intended as an alternative to publication in a learned journal. Any of the Standard reference systems is acceptable.

The Newsletter is circulated twice a year to members of the Society. The annual subscription to individual membership is £12.00, or a subscription to the Newsletter only is £7.00.

Cheques etc. should be made payable to The Society for the Study of Gambling, and sent to the Honorary Treasurer. Overseas subscribers should remit in sterling.

**Editorial: The thin line between chance and skill in  
gambling**

**Mark Griffiths**

Department of Psychology, Polytechnic South West

The contents of this issue of the Society for the Study of Gambling Newsletter reflect one of the best Society for the Study of Gambling meetings of recent years. The meeting took place on the 14th November 1991 and as well as speakers from Spain (Elisardo Becona), Holland (Willem Wagenaar) and the U.K. (Sue Fisher) it also included a lively panel discussion on "The Financing of Horse Racing in the U.K." with representatives from the Betting Offices Licensees Association Limited (BOLA), The Horse Racing Levy Board, The Racegoers Club and The Jockey Club.

All of the speakers were invited to submit their talks or papers to the Newsletter but only two of the four panel speakers involved in the debate on the financing of horse racing in the U.K. (F.T. Dixon of BOLA and Christopher Haines of The Jockey Club) took up the offer. The two missing contributions by Tristram Ricketts (Chief Executive of The Horse Race Levy Board) and Tony Fairbairn (President of The Racegoers Club) obviously means that the full range of opinions and viewpoints aired at the Society for the Study of Gambling meeting are not expressed here for the Society for the Study of Gambling Newsletter readership. Should these two organizations (or any other Newsletter reader) wish to submit their comments on this important issue I will be only too pleased to publish them in a future edition of the Newsletter.

Of the single speakers at the meeting, two of the three papers are presented here. Elisardo Becona's paper is a welcome contribution on the prevalence of pathological gambling in Spain, and Sue Fisher's contribution outlining a sociological typology of young fruit machine players received a lot of press coverage and is to be published in the Sociological Review. This Newsletter contains a slightly edited version of that paper. Finally, it is with great regret that we have no direct contribution from Professor Willem Wagenaar who presented an interesting talk on "The thin line between chance and skill" (in gambling). Wagenaar explained that for legal purposes, legislators in Holland passed different gambling laws depending on whether the gambling was a chance or skill determined activity. However, what are the dimensions of chance and skill in gambling activities? How can they be measured objectively? To answer these and other questions, Wagenaar presented a scoring sheet that he had developed (presented on the next page). The scoring sheet contains four dimensions of gambling activity: (1) The activity's presence or absence of a random generator, (2) The activity's attractiveness to the gambler, (3) The activity's individual differences and (4) The activity's pay off structure. Within the four dimensions were various diagnostic criteria. Depending on which way the gambling activity either matches or does not match the individual diagnostic criterion statements, the scoring sheet indicates whether the activity is mostly chance or skill determined. For instance, if you take the example of lottery gambling, Wagenaar's scoring sheet asks you whether lottery gambling has a random generator, has large prizes, is a risky option, has a theoretical/practical maximum etc. Scoring of Wagenaar's criteria indicate that lottery gambling is a chance determined activity. Basically, on Wagenaar's scoring sheet, the more "yes" answers on the left hand side indicate a chance determined activity whereas more "yes" answers on the right hand side indicate a skill determined activity.

Anyone who would like to know more about Wagenaar's work on chance and skill should either read his excellent book "Paradoxes of Gambling Behaviour" (1988,

published by Lawrence Erlbaum and Associates) or write to him at the following address:

Professor Willem A Wagenaar  
Psychology Department  
Leiden University  
PO Box 9555, 1300 RB Leiden,  
The Netherlands

Finally, I would just like to say that although the Newsletter tried to publish articles and papers that reflect the Society's meetings, we do accept unsolicited manuscripts and articles which we think would interest our readers. If you would like to submit something to the Newsletter write to me at the address on the contents page.

#### SCORING SHEET

##### **Diagnostic for chance**

###### Random Generator

1. Present, and no unequal probabilities

###### Attractivity for gamblers

2. Considerable chance or large prizes  
3. Risky option

###### Individual differences

4. No tournaments, recreation, or leagues

5. Bank, or theoretical/practical maximum

###### Pay off structure

6. Player's money

7. Neutral rule computable

8. Neutral and actual rule close

##### **Diagnostic for skill**

Not present, or no unequal probabilities

No considerable chance, or no large prizes  
No risky option

Tournaments, recreation, or leagues

No bank, no theoretical/practical maximum

Other's money

Neutral rule not computable

Neutral and actual rule far apart

## THE FINANCING OF HORSE RACING IN THE UK

F.T. Dixon

Betting Officer Licensees Association Limited

### Introduction

The subject of the financing of horseracing is one that over the past years has occupied the minds of the participants, the Home Office and Members of Parliament to an extent that some may say is unwarranted. Indeed many outsiders may conclude that racing having been granted a levy by Statute in 1961 should think itself lucky - keep its head down - and seek ways to use the system to the maximum advantage of all concerned - that is the racing industry, bookmakers and punter alike.

The relationship of horseracing to bookmaking is one of mutual benefit. The activities of bookmakers would be severely curtailed without horseracing, but the network of betting offices provides racing with a shop window whereby the great majority of followers who regard horseracing as a betting medium can participate. Without this off course interest horseracing as we know it today would not exist. Like all shop windows it also attracts people to come inside, that is to visit a local racecourse and become part of the colourful scene that surrounds horseracing or indeed any live event.

### Levy and the Bookmakers

The introduction of the levy was based on a recognition that the legalisation of off course betting shops required an acceptance that racing would not suffer as a result. It thus played its part in achieving what the government and the public wanted. The legitimisation of an activity that had been taking place on street corners- in pubs and back rooms ever since horses started to run against each other. Over the years the Treasury has benefitted to a considerable extent by duty charges raised on off course betting. In 1990/91 £480 million was contributed of which 70-75% came from betting in horseraces. In general, duty plus the levy is that price the public are prepared to pay for the privilege of betting away from the track, effectively the removal of the levy would cause racing to reduce to an extent that both the Treasury and bookmakers in financial terms and the public in entertainment terms would suffer. Arguments over the levy are not over the principles but over the size of the contribution.

The levy is not and never should be an imposed charge but one based on agreement. Thus it is required to be agreed on a year by year basis by the representatives of the bookmakers (The Bookmakers Committee) and the Levy Board under the terms of a scheme estimated to raise an agreed amount and then spent for the perceived needs of racing and its related activities. Regretfully, as in all cases, if agreement cannot be reached then an arbitrator (in this case the Home Secretary) has to act as a mediator. The Home Secretary has made it clear that this is a task he does not want and not unnaturally believes could be better resolved by the parties concerned.

What is the alternative to the levy? One proposition that has had an airing is the popularly styled 'market mechanism' where racing displays its area and the bookmaker in his role as retailer buys at an agreed price. He then sells it on to the punter packaged to taste. However this could lead to a shopping list situation where bookmakers would simply buy what they wanted and the rest of horseracing would be left to survive, if it could, by its own devices. Horseracing is a national sport whose venues are scattered across the country and whose followers are familiar with the names of the participants. Local

racecourses rely on the travelling players to entertain their public and this is reflected in the use of levy funds for the benefit of the sport as a whole. A market mechanism could lead to the big getting bigger and the small perhaps disappearing, thus changing the whole panorama and attractiveness of racing as it is today.

Bookmakers do, of course, provide other funds for racing through sponsorship - a commercial choice - and SIS who in 1991 will pay racing £7.5 million for the right to transmit live action into betting offices, increasing in future year. SIS was created through the initiative of bookmakers who recognised the opportunities that arose through a change in legislation. In total a sum in excess of £50 million benefits racing from the activities of bookmakers and their customers over the year. Levy schemes have been designed - and this is particularly true of the current shop based scheme - so that the payment to racing increases as turnover grows. It thus provides the incentive for all parties to maximise their income through providing the most attractive package on which customers (the ultimate creators of the turnover) will bet. By bookmakers this is done through the agreeableness of their premises and staff, the facilities they offer within the law, and by the variety of bets they can offer - forecasts, tricasts, and all other multi-choice combinations - that encourage the punters dream of retirement to a life of luxury. For racing this can be achieved by supplying the right material, well constructed and competitive races on the right day at the right time. More turnover equals more levy.

### Bookmaker Profits

Bookmakers profits have been criticised and there is a belief - mostly imagined - that there are vast reserves of money sloshing around in satchels or balance sheets that could and should be 'given' to racing. The reality of the situation is that an average bookmaker winds up with a net profit of 3% - figures that have been confirmed by the Monopolies and Mergers Commission Report of August 9189 when the merger of Mecca and William Hill was investigated.

Many bookmakers achieve much less than this for which they must sell the racing product to make it attractive to their customers - compete in the market with their fellow bookmakers and at the end of the day satisfy their shareholders, bank manager, wife and family.

### The Punter

Finally and most importantly to all concerned we come to the ultimate payer - the off course punter. It is his (or her) support in the long run that determines how much money comes into racing and whether a bookmaker's business survives. Tax him/her too highly and his/her mind turns to other pursuits and use of his/her leisure pound. This reduces turnover, reduces levy, reduces duty and finally closes the non-viable bookmakers shop. In addition the money paid by the punter as a surcharge or 'tax' affects the bookmakers business by taking out of the pot an element that would otherwise form part of his/her wager and on which the bookmaker could win or lose. In times of recession this reduction in turnover is aggravated to the expense of all parties, but perhaps most critically to the bookmaker whose overhead recovery is lost.

### Conclusion

The levy has over the last 16 years increased from £7.7 million in 1974/75 to an estimated £37.3 million in 1990/91. This represents an increase in percentage terms of 385%. During the same period hoseracing turnover has increased by only 215% and the R.P.I. by only 343%. This has been achieved

through negotiations between the Bookmakers Committee and the Levy Board and reflect, how schemes have been shaped to increase the levy. We are all in the business of selling our wares and the way ahead is to work together to make these wares more attractive to the ultimate buyer, to the benefit of all involved.

## THE FINANCING OF HORSERACING IN THE UK

Christopher Haines

Jockey Club (Chief Executive)

Most racing authorities are dependent on the money they get back from the off-course betting industry. Nearly all of it comes from pool betting, and the figures we are talking about can be several hundred million pounds a year.

In Britain things are different; we have bookmakers. Money is returned to racing through the Levy Scheme which was introduced in 1961 when off-course betting shops were legalised. It will provide a payment to racing this year of about 0.9% of turnover, around £35.5 million. It is sometimes suggested that this money was intended to compensate racing for the gate money lost to racecourses by people going to betting shops instead. This is not true, and I thought you might be interested to know how the peculiar phenomenon called the Levy came about.

The idea of the levy grew out of the realisation in the 1950s, once the post-war euphoria had worn off, that racing was in a bad way. The preferred solution was a Tote (in other words - pool betting) Monopoly, for which Lord Astor and his brother John, who was then a member of the Commons, periodically pressed in their respective Houses.

However, by 1956 they seem to have realised that a Tote Monopoly was a non-runner. They therefore switched to a levy as a second best and Lord Astor made an important speech in the House of Lords on 27th June 1956, setting out the case yet again for a Tote Monopoly, but recognising that a levy might have to be the new target. (I do not know where the idea of levy originated, but the Duke of Norfolk had referred to it as a possibility in a letter to The Times on 9th December 1955). By the time of Lord Astor's speech the Home Office had realised for some years that something must be done about street betting, using the recommendations of the Royal Commission of 1951 as a benchmark. However, the levy was a new idea, and its introduction may have slowed down the thinking which eventually led to the Betting and Gaming Act of 1960. But it did no more than delay a process which was already happening.

The Jockey Club's opinion was that if it could not have a Tote Monopoly, then it must get something out of the legislation of betting. Furthermore, once it had more or less abandoned hope of a Monopoly, it was positively in favour of legalising betting shops, because it could hardly expect to raise a levy on an activity which was illegal. The two ideas, of legal betting shops and a levy, were linked by the Senior Steward, Lord Willoughby de Broke, in his St. Leger dinner speech in September 1956.

The bookmakers were not in favour of betting shops, which they saw as the thin end of two wedges. First, if they were a failure, the way might be opened to a Tote Monopoly; secondly, legal betting would be much more easily taxable than illegal. However, they accepted that, like it or not, they were going to have to pay something towards the cost of racing.

The Betting and Gaming Bill went ahead before the details of the levy were finalised, but it seems that everyone understood that, if the levy did not come into being, the Bill would be blocked in its later stages by members of both Houses sympathetic to the Jockey Club. A Home Office committee (the Peppiatt Committee) took evidence as to the desirability of a levy and how much it should yield. Both sides - bookmakers and racing - were agreed that it was desirable, but the bookmakers thought £1 million was enough, whereas racing wanted £3 million. In the end Peppiatt thought £1 - £1.25 million would suffice in the first year.



The bookmakers had always hoped to administer the levy themselves, and were so disappointed by the Levy Board Bill that some of them contemplated refusing to cooperate with the new Board. However, they decided that the dangers of non cooperation outweighed the pain of accepting the arrangements, which came into force with the Betting Levy Act of 1961.

And that is what we have lived with ever since. As I said, this year racing will receive about £35.5 million from the off-course betting industry, which is depressingly little compared to other countries. France gets more than twice as much and Hong Kong gives to charity each year more than we receive. I accept that we are not comparing two similar systems, but you will understand the effects. Other countries are able to provide better prize money and better facilities for racegoers and horses. As the gap widens, so it becomes increasingly attractive for owners to race their horses abroad, or even to keep them abroad. British racing has still a great deal to offer. We provide a variety of courses and a standard of integrity which are second to none, but without the necessary financial backing, there is the real danger of a downward spiral in no ones interest.

This would not only be a tragedy for those professionally involved in the sport, but also for racegoers and off-course punters. Horseracing in Britain means a great deal more to the public than just another medium for gambling. That is certainly not the attitude elsewhere. If you ask a punter in some countries which horse he fancies in the 2.30 he, will say number 5. His thinking, imagination and even affection do not really encompass the animal itself. British racegoers and punters have a feeling for the horse and everything surrounding it which is not inherent amongst those gambling on horses in other countries.

This is clearly demonstrated by the attitude of the press. The French racing authority tend to hold their main promotional press conferences in London, because not only will they get far better coverage here, but people are actually interested in reading about it. The Prix de l'Arc de Triomphe held in Paris in early October is the culmination of Europe's racing year. A very large part of the crowd is British and Channel Four provides more coverage of it than any other television company. The Breeders' Cup series of races held in America recently attracted a great posse of British journalists, and the interest generated in this country was considerable.

I am not saying that the public's love of horseracing is such that everyone would flock to the races regardless of whether they could gamble or not. Some will, but racing and betting are inextricably joined. This is one of the main reasons why we cannot hold race meetings on a Sunday, because the Betting and Gaming Act precludes any form of cash betting on that day, and without the bookmakers insufficient people would come to make the meeting worthwhile. This is regardless of the problem of whether off-course betting offices should be open or not.

The racing and betting industries are interdependent. We need each other, and there is a great deal more cooperation between us than is sometimes evident from reports in the press. We are keen to make racing still more attractive and exciting for both racegoers and off-course punters, and we have several ideas on how this might be done. Hopefully, for our mutual benefit, we will soon be able to work with bookmakers to put these schemes into effect.

# THE PREVALENCE OF PATHOLOGICAL GAMBLING IN GALICIA (SPAIN).

Elisardo Becona

Department of Clinical Psychology and Psychobiology  
University of Santiago de Compostela

## Abstract

Spain is probably the country in Europe with most legalised gambling on slot machines, lotteries, pools, bingo and casinos. Since 1977, when gambling was legalized, the amount of money spent on gambling has increased each year. Expenditure on gambling in Spain is now more than 3 billion pesetas per year. In this paper the results are presented of a study of pathological gambling in Galicia in the northwest of Spain undertaken to ascertain the extent of this problem in the adult population.

The prevalence of pathological gambling in a random sample representative of the cities of Galicia was 1.73% utilising the DSM-III-R diagnostic criteria. The prevalence of other types of gamblers and the characteristics of those gamblers identified as pathological are reported.

## Introduction

In recent years the existence of gambling addiction has been recognised. Gambling addiction is defined as follows: "The individual is chronically and progressively unable to resist impulses to gamble. Gambling compromises, disrupts, or damages family, personal and vocational pursuits" (American Psychiatric Association, 1987).

Systematic studies of the prevalence of pathological gambling were begun in several populations in the mid-1970's. Since 1980, with the inclusion of pathological gambling in the American Psychiatric Association's DSM-III as a disorder of impulse control, the interest in this has increased sharply.

In the United States the prevalence of pathological gambling in adults has been reported as ranging from 0.77% in the study done for the Commission on the Review of the National Policy Toward Gambling (1976) to the 3.3% in the Culleton's study (1989). Systematic studies reported by Volberg (1990) and Volberg and Steadman (1989) in several states of United States showed prevalence rates between the 1.2% and 2.3% except for 0.1% in the state of Iowa. In addition to this 1% to 2% of pathological gamblers in the United States, there is another 2% to 3% who are problem gamblers. In Canada the prevalence of pathological gambling among adults is 1.2% and another 2.6% are problem gamblers (Ladoucer, 1990).

In 1977 gambling was legalized in Spain. It was justified as a way of offering entertainment for the millions of tourist who visit Spain each year. In a few years there was a considerable expansion in casinos, bingo, gambling saloons and slot machines in bars. The lotteries are very popular. The total turnover in bets in slot machines, primitive lottery, bonoloto, ONCE coupons, national lottery, bingo, casino, etc. represents in Spain an expenditure on gambling of more than 3 billion pesetas a year (the pound is equivalent to 200pts and the U.S. dollar to 100pts).

In Spain there has been no study of the prevalence of pathological gambling to date, but several surveys of the population (e.g. Centro de Investigaciones Sociológicas, 1989) and the clinical data indicate that this is an important problem in the population, especially in recent years due to the expansion in the provision of several gambling games.

The objective of present study is to determine the prevalence of pathological gambling in the cities of Galicia and the characteristics of those identified as pathological gamblers.

## **METHOD**

Galicia is a region in the northwest of Spain with a total population of about 3 million. Two thirds of these live in the rural areas. The population from which the sample for this study was drawn is all those over the age of 18 in the seven largest cities of Galicia: La Coruna, Ferrol, Santiago de Compostela, Lugo, Orense, Pontevedra and Vigo - a total of 666,647 adults.

A random sample stratified by age and sex was obtained by picking streets at random and selecting every one hundredth house. The sample comprises 1,615 respondents, 721 men and 894 women, representing the proportion of these in the population. It has a sampling error of 2.48 to a 95.5% confidence level. The information was obtained by survey (structured questionnaire) and clinical interview. The interviewers were seven clinical psychologists trained for this study. Each of the seven interviewers interviewed the respondents in each city. The rate of refusal was 2.23%. The diagnosis of pathological gambling was made from the DSM-III-R criteria for pathological gambling. When a respondent had four or more of the symptoms they were considered a pathological gambler. If the subject had two or three symptoms they were considered problem gamblers.

## **RESULTS**

### **Prevalence**

The prevalence of pathological gambling in the cities of Galicia is 1.73% (28 pathological gamblers in the overall sample). The prevalence of problem gamblers is 1.60%. The data showed that an important group of people interviewed have excessive gamblers in the family. Out of all the households (husband/wife, son/daughter, father/mother) 2.10% had a member with excessive gambling (Table 1).

Another group related to pathological gamblers were the excessive social gamblers, 0.62% of the sample, gamblers who spent a great deal of money but had few symptoms of pathological gambling. Curiously, 0.99% of the sample were ex-excessive gamblers. There were no professional gamblers in the sample.

Of the overall sample, 56.10% were occasional gamblers and 31.70% did not gamble at all. Among those interviewed, 3.16% had relatives outside the immediate household with problems of excessive gambling. Finally 0.74% of the interviewees have had a member of the family with problems of excessive gambling in the past. Another 1.24% had relatives outside the immediate household with excessive gambling problems in the past.

There were significant differences in the prevalence in the cities of La Coruna and Vigo as opposed to the aggregation of the five other cities (see Table 2). The more important of these differences were:

1) In Vigo the percentage of pathological gamblers, problem gamblers and people with excessive gamblers in their households is double that of the corresponding gamblers in Galicia as a whole. Of the sample from Vigo 3.49% are pathological gamblers, 3.25% are problem gamblers and an additional 3.48% of the interviewees have an excessive gambler in the family. The sum total shows that 10.23% of all the interviewees in Vigo themselves had, or were closely related to someone else with, a gambling problem.

Table 1. Prevalence of Types of Gamblers

Type	%	N
Pathological gambler .....	1.73	28
Problem gambler .....	1.61	26
Excessive social gambler .....	0.62	10
Ex-excessive gambler .....	0.99	16
Additional households with an excessive gambler in the family .....	2.10	34
Interviewees with excessive gambler relatives outside the household .....	3.16	51
Interviewees with households with an ex-excessive gambler .....	0.74	12
Interviewees with relatives outside the household who are ex-excessive gamblers.....	1.24	20
Occasional gamblers .....	56.10	906
Non gamblers .....	31.70	512
Total	99.99	1615

Table 2. Distribution of Pathological and Problem Gamblers and of Interviewees with an Excessive Gambler in the Family Across the Cities of Galicia

CITY	PATHOLOGICAL GAMBLER	PROBLEM GAMBLER	HOUSEHOLD WITH EXCESSIVE GAMBLER	TOTAL
Percentages of Total Sample				
VIGO (n=430)	3.48	3.25	3.48	10.23
LA CORUNA (n=408)	1.96	1.22	1.47	4.65
ALL OTHER CITIES (n=777)	0.64	0.90	1.54	3.08
TOTAL (N=1615)	1.73	1.60	2.11	5.44

2) La Coruna had a level similar to that of Galicia overall. Of the sample, 1.96% were pathological gamblers; 1.22% were problem gamblers and an additional 1.47% of the interviewees had an excessive gambler in the family.

3) In the remaining cities grouped together the prevalence of pathological and problem gamblers was lower - at 0.64% and 0.90% respectively. An additional 1.54% of interviewees had excessive gamblers in the family, similar to the prevalence in the city of La Coruna.

4) The differences of the pathological gamblers and problem gamblers with the grouped occasional gamblers and no gamblers are significant (Chi-squared (2) = 14.05,  $p < 0.001$  and Chi-squared (2) = 10.96,  $p < 0.01$ ); with the household with excessive gambler the difference is not significant.

These results showed the differences between Vigo, with a high prevalence, La Coruna, with an intermediate prevalence and the other cities with a low prevalence.

### **Characteristics of Pathological Gamblers**

The following are the more important characteristics found among those interviewed and identified in this study as pathological gamblers in the cities of Galicia. Comparisons are made with the remainder of the total sample, i.e. with all except pathological gamblers (see Table 3):

Sex. Of those identified as pathological gamblers 67.85% are men and 32.14% women. The difference between the sex distribution of those identified as pathological gamblers and that of the remainder of the sample is significant (Chi-squared (1) = 5.29,  $p < 0.05$ ).

Age. The largest group of pathological gamblers is in the age group 18 to 30 (39.28%) followed by the age group 31-45 (28.57%), 46-64 (21.42% and 65 or more (10.71%). Although pathological gambling is spread over all age groups, it is predominant among the young. There is no significant difference between pathological gamblers and the remainder of the sample in the distribution across age groups.

Marital Status. The distribution of pathological gamblers with concentrations of 39.28% and 46.42% respectively in single and married categories is no different from the distribution for the remainder of the sample.

Education. Of those identified as pathological gamblers, 35.72% can read and write and 7.14% cannot; 21.43% have an elementary school education; 28.57% have a secondary school education and 3.57% have a university degree. The distribution of pathological gamblers across education levels is no different from that of the remainder of the sample.

Occupation. The occupational distribution of pathological gamblers is as follows: 32.14% blue collar workers; 17.87% housewives and students; 14.28% of middle professional status; 10.71% retired; 7.14% unemployed and, finally, 7.14% of higher professional status. Together, housewives, unemployed, retired and students constitute 53.57% of the sample of pathological gamblers. This distribution is not significantly different from that of the remainder of the sample.

Social Class. Of those identified as pathological gamblers, 53.57% are in the middle class followed by the working class (17.85%), lower middle class (14.28%) and upper middle class (3.57%). Nobody is in the highest class and 17.85% were unclassified. The distribution of pathological gamblers across social class is similar to that of the remainder of the sample.

Table 3. The Demographic Characteristics of Pathological Gamblers

Characteristics	Pathological gamblers		Remainder of the Sample		P
	'/. N	'/. N	'/. N	'/. N	
Sex					0.05
Male .....	67.86 19		44.23 702		
Female.....	32.14 9		55.76 885		
Age					
18-30 years .....	39.28 11		26.40 419		
31-45 years .....	28.57 8		29.11 462		
46-64 years .....	21.42 6		28.29 449		
65 or more years .....	10.71 3		16.19 257		
Marital status					
Single .....	39.28 11		24.76 393		
Married .....	46.42 13		63.26 1004		
Separate/divorced .....	7.14		9.07 144		
Cohabiting .....	3.57 1		1.13 18		
Widowed .....	3.57 1		9.13 145		
Educational Level					
No education .....	7.14 2		9.45 150		
Reading and writing	35.72 10		33.52 532		
Elementary school (1-8 yrs)	21.43 6		20.73 329		
Secondary school (9-12 yrs)	30.77 8		20.47 325		
University, 1st degree (diplome) (13-15 yrs) ...	3.57 1		7.75 123		
University, 2nd degree (graduate) (16 or more yrs)	3.57 1		8.06 128		
Profession					
High professional status ..	7.14 2		14.17 225		
Middle professional status	14.28 2		9.89 157		
Blue collar workers .....	32.14 9		18.08 287		
Housewives .....	17.86 5		29.80 473		
Students .....	17.87 5		10.52 167		
Retired .....	10.71 3		8.63 137		
Unemployed .....	7.14 2		5.98 95		
No response .....	0.00 0		1.13 18		
Social class					
High .....	0.00 0		0.56 9		
High-middle.....	3.57 1		7.37 117		
Middle-middle.....	53.57 15		57.27 909		
Lower-middle .....	14.28 4		16.76 266		
Low .....	17.85 5		5.16 82		

Income of gambler per month				
Nothing . . . . .	42.85	12	33.08	525
Less than 50,000 pts .....	3.57	1	14.99	238
51,000-100,000 pts.....	14.28	4	18.21	289
101,000-150,000 pts .....	14.28	4	10.77	171
151,000-200,000 pts .....	7.14	2	4.53	72
201,000-250,000 pts .....	3.57	1	2.39	38
251,000-300,000 pts .....	0.00	0	1.19	19
301,000 pts. or more .....	0.00	0	1.89	30
No response .....	14.28	4	12.91	205
Income of family of gambler per month				
Nothing . . . . .	0.00	0	0.31	5
Less than 50,000 pts .....	7.14	2	7.30	116
51,000-100,000 pts .....	10.71	3	23.81	378
101,000-150,000 pts .....	10.71	3	16.19	257
151,000-200,000 pt s .....	7.14	2	10.39	165
201,000-250,000 pts .....	3.57	1	6.23	99
251,000-300,000 pts .....	3.57	1	2.96	47
301,000 pts or more .....	28.57	8	6.74	107
No response .....	25.00	7	26.08	414
Money spent on gambling (per month)				
Less than 5,000 pts .....	10.71	3	92.43	1467
5,001-15,000 pts .....	25.00	7	6.11	97
15,001-25,000 pts .....	17.85	5	0.18	3
25,001-50,000 pts .....	21.42	6	0.75	12
50,001-100,000 pts .....	3.57	1	0.44	7
100,001-200,000 pts .....	10.71	3	0.06	1
200,001-300,000 pts .....	0.00	0	0.00	0
300,001-400,000 pts .....	3.57	1	0.00	0
400,001-500,000 pts .....	7.14	2	0.00	0
Participation in various forms of gambling				
None .....	0.00	0	33.01	524
One form .....	3.57	1	3.81	378
Two forms .....	17.86	5	16.13	256
Three forms .....	10.72	3	11.27	179
Four to eight.....	46.42	13	15.50	246
Nine to thirteen.....	10.71	3	0.44	17
Alcohol consumption per day				
Abstemious .....	21.43	6	57.21	908
1-100 cc .....	53.57	15	38.07	617
101-150 cc .....	10.71	3	2.52	40
More to 150 cc .....	14.29	4	1.82	29
Number of cigarettes per day				
None .....	25.00	7	64.39	1022
1-5 .....	3.57	1	5.10	81
6-15 .....	14.29	4	11.34	180
16-25 .....	39.28	11	12.16	193
More than 25 .....	17.86	5	6.99	111
Cups of coffee per day				
None .....	21.43	6	34.71	551
1-3 .....	53.57	15	49.77	790
More than 3 .....	25.00	7	15.50	246



Monthly Income of Pathological Gamblers. It is important to note that 42.85% of the pathological gamblers have no income of their own. This is due to the high number of students, housewives and unemployed which together amount to 50% of the pathological gamblers. The percentage of all other levels of income are similar to those of the remainder of the sample.

Monthly Income of the Family Unit of Pathological Gamblers. It is important to note that 28.57% of the pathological gamblers have an income of the family unit which is superior (at 301,000 pesetas). This is a significant difference between the incomes of the family unit of those identified as pathological gamblers and those of the remainder of the sample (Chi-squared (8) = 22.41,  $p < 0.01$ ).

Number of Forms of Gambling Participated In. In the study 13 forms of gambling were considered. The distribution of numbers of forms of gambling games participated in by the pathological gamblers differs most importantly from that of the remainder of the sample. The percentage of pathological gamblers who participate in four to eight forms of gambling is 46.42%. The percentages participating in one, two or three forms of gambling are, respectively, 3.57%, 17.86%, and 10.71%. Another 10.71% participate in none to thirteen forms of gambling. There is a significant difference between the sample of pathological gamblers and the non-pathological gamblers in the distribution of the numbers of forms of gambling participated in (Chi-squared (5) = 86.16,  $p < 0.0001$ ).

Forms of Gambling Most Participated In. The form of gambling most participated in by pathological gamblers is slot machines (78.57%). This was followed by the ONCE coupon (the coupon of the National Organisation of Spanish Blind people (O.N.C.E.)) and the primitive lottery, each participated in by 57.14% of the pathological gamblers. Bingo, cuponazo and bonoloto were all participated in by 46.43% of the sample of pathological gamblers and 42.85% took part in cards and national lottery followed by 32.14% each in football pools and video games. Finally 10.71% play primijuego and 3.57% play horse pools. There is a significant difference between the pathological gamblers and the non-pathological gamblers in the patterns of participation in forms of gambling (Chi-squared (13) = 117.57,  $p < .0001$ ) (see Table 4).

Predominant Daily Gambling. For 50% of pathological gamblers the predominant daily gambling is on the slot machines. This is followed by the ONCE coupon with 25% of daily pathological gambling, video machines with 21.42%, and finally cards played for money and bingo with 14.28% each. Four young subjects (two 18 year olds and two 24 year olds) (14.28%) bet the same money daily on slot machines as on video machines.

Form of Gambling with the Greatest Expenditure a Month. The form of gambling upon which pathological gamblers spend the greatest amount of money per month is the slot machines (42.85%), followed by video machines (21.42%), bingo (21.42%), national lottery (10.71%), cards (10.71%), ONCE coupons (3.57%), primitive lottery (3.57%) and casinos (3.57%).

Expenditure on Gambling per Month. Expenditure on gambling among pathological gamblers per month ranges from 10.71% of the sample who spend less than 5,000 pesetas to 3.57% who spend between 400,000 and 500,000 pesetas, 25% who spend from 5,001 to 15,000 pesetas, 17% who spend between 15,001 and 25,000 pesetas, 21.42% who spend between 25,001 and 50,000 pesetas, 3.57% who spend between 50,001 and 100,000 pesetas, 10.71% who spend between 100,001 and 200,000 pesetas and 3.57% who spend between 200,001 and 300,000 pesetas. Other variables analysed previously (e.g. expenditure on gambling and income of family, age, sex, etc.) may have important effects on those figures. In this



Table 4. Predominant Daily Gambling in Pathological Gamblers

Gambling	N	%
Slot machines .....	14 (1)	50.00
Coupon of the National Organisation of Spanish Blind People (O.N.C.E.) .....	7	25.00
Video machines .....	6 (1)	21.42
Cards .....	4	14.28
Bingo .....	1	3.57

(1) In four subjects the predominant daily forms of gambling were slot machines video machines equally.

Table 5. DSM-III-R Symptoms in Pathological Gamblers

Symptoms	N	%
* Frequent preoccupation with gambling or obtaining money to gamble .....	23	82.14
* Often gambles larger amounts of money or over a longer period than intended .....	26	92.85
* Need to increase the size or frequency of bets to achieve the desired excitement .....	18	69.23
* Restlessness or irritability if unable to gamble .....	16	57.14
* Repeatedly loses money gambling and returns another day to win back losses ('chasing') .....	28	100.00
* Repeated efforts to cut down or stop gambling .....	12	46.15
* Often gambles when expected to fulfil social, educational or occupational obligations .....	4	14.28
* Has given up some important social, occupational or recreational activity in order to gamble .....	1	3.57
* Continues to gamble despite inability to pay mounting debts or despite other significant social, occupational or legal problems that the individual knows to be exacerbated by gambling .....	3	10.71

variable there is a significant difference between the pattern of expenditure of the pathological gamblers and that of the remainder of the sample (Chi-squared (6) = 615,83,  $p < .0001$ ).

Alcohol Consumption. Of pathological gamblers 78.57% drink daily and 82.14% drink at the weekend. On workdays 21.43% are abstemious, 53.57% drink moderately (1-100 cc), 10.71% drink excessively (101-150 cc) and 14.29% may be bordering on alcoholism (i.e. drink more than 150 cc). In the remainder of the sample 2.52% are drinking excessively and 1.82% may be bordering on alcoholism.

Similarly at the weekends 17.86% of pathological gamblers are abstemious; 50% are moderate drinkers; 17.86% are excessive drinkers and 14.29% may be bordering on alcoholism. In the remainder of the sample at the weekends 3.78% are excessive drinkers and 2.04% may be bordering on alcoholism.

It is clear that on working days at weekends the pathological gamblers drink more than the remainder of the sample. The difference is significant for the work day (Chi-squared (3) = 35.73,  $p < 0.0001$ ) and for the weekend (Chi-squared (3) = 26.06,  $p < 0.001$ ).

Number of Cigarettes Smoked. Of pathological gamblers, 75% smoke cigarettes; 3.57% smoke 1-5 cigarettes daily, 14.29% smoke 6-15, 39.28% smoke 16-25 and 17.86% smoke 26 or more per day. It is important to note that among the pathological gamblers 57.14% smoke more than 15 cigarettes a day, since in the remainder of the sample there is only 19.15%. The difference is significant (Chi-squared (4) = 27.58,  $p < 0.0001$ ).

Number of Cups of Coffee. Among pathological gamblers 21.43% do not drink coffee, 53.57% drink 1-3 cups a day and 25% 4 or more cups per day.

Illegal Drugs. Two pathological gamblers smoke marijuana daily and one other once in the week.

#### Pattern of Symptoms in the Gambling Addiction

The DSM-IIIIR diagnostic criteria for pathological gambling were used in the study (Table 5). The Symptoms "Repeatedly loses money gambling and returns another day to win back losses ('Chasing')" is present in all the pathological gamblers and another two symptoms are present in most: "Often gambles larger amounts of money or over a longer period than intended" (92.85%) and "Frequent preoccupation with gambling or obtaining money to gamble" (82.14%). Another three important symptoms are: "needs to increase the size or frequency of bets to achieve the desired excitement" (69.23%), "Restlessness or irritability if unable to gamble" (57.14%) and "Repeated efforts to cut down or stop gambling" (46.15%). Other symptoms are less frequent: "Often gambles when expected to fulfil social, educational or occupational obligations" (14.28%), "Continues to gamble despite mounting loss (or debts)" (10.71%) and "Has given up some important social, occupational or recreational activity in order to gamble" (3.57%).

#### Other Types of Gamblers

In the present study several other types of gamblers were considered along with the pathological gamblers: i.e. problem gamblers, excessive social gamblers and ex-excessive gamblers. The following is a synthesis of the characteristics of these groups.

Among the other types of gamblers there are clear differences in the amount of money spent on gambling and in their involvement in gambling. The problem

gamblers and the excessive social gamblers have a similar pattern of participation in forms of gambling to the pathological gamblers. The ex-excessive gamblers do not gamble or have control of their gambling and 37% of them do not gamble. Many of them have recognized that they have had important problems with gambling which has led to giving up gambling.

The predominant form of gambling among the problem gamblers is slot machines followed by bingo. Among the excessive social gamblers is the risk that problem gamblers may develop into pathological gamblers. Apart from that there are no differences between the problem gamblers and the excessive social gamblers, who have a great involvement in gambling but are not dependent as evaluated by the DSM-IIIR. The involvement in gambling of the excessive gamblers is low.

In the sample identified as problem gamblers there are three men for every one woman and in the sample identified as excessive social gamblers the ratio is similar. The sample identified as ex-excessive gamblers is mostly men (87%). There are differences in alcohol, tobacco and coffee consumption between the groups. The consumption of tobacco in the samples of pathological, problem, and excessive social gamblers is similar. In alcohol consumption there is excessive consumption in the samples of pathological and excessive social gamblers but not in the problem and ex-excessive gamblers. The groups of pathological, problem and excessive social gamblers have greater consumptions than that of the total sample (at four or more cups of coffee per day). In the ex-excessive gamblers, coffee consumption is less than in the remainder of the sample.

## DISCUSSION

The results of the present study show that the prevalence of pathological gambling in a representative sample of the adult population in Galicia (Spain) is 1.73%. This result is similar to those obtained in other countries (e.g. Volberg, 1990).

Among the symptoms of the DSM-IIIR for pathological gambling, three are common in almost all pathological gamblers: "Repeatedly loses money gambling and returns another day to win back losses ('chasing')" (100%), "Often gambles larger amounts of money or over a longer period of time than had been intended" (92.85%), and "Frequent preoccupation with gambling or obtaining money to gamble" (92.85%). Three other symptoms are an important part of the syndrome of pathological gambling in Galicia: "Needs to increase the size of frequency of bets to achieve the desired excitement" (69.23%), "Restlessness or irritability if unable to gamble" (57.14%), and "Repeated efforts to cut down or stop gambling" (46.15%). The other symptoms have less relevance in Galicia. This indicates that gambling in general and pathological gambling in particular is influenced by social and cultural variables (Brown, 1988).

The most important demographic characteristic of these pathological gamblers are: Two men for every woman, predominantly young (39.28% between 18 and 30), married (46.42%) or single (39.28%), with a low level of education (35.72% have not completed elementary school but can read and write) but this pattern is not different from the rest of the sample, 25% blue collar and 25% housewives, 17.85% students and white collar professionals (14.28% middle and 7.14% high). There are no significant social class differences from the general population with social class predominantly middle-middle and with a distribution by social class similar to the remainder of the population. There is a predominance of no income among the pathological gamblers (42.85%) but more high incomes in their family units than in the remainder of the sample. In summary, the above results showed that the pathological gamblers have a homogenous distribution in all the population with the exception that

they are more numerous among men than women, in the younger age groups and that they spent more money on gambling compared to the remainder of the sample. These results are concordant with others obtained in the United States and in Canada (e.g. Ladoucer, 1990; Volberg and Steadman, 1988).

These results confirm the addictive power of the slot machines and the problems that they cause in a group of people that gamble systematically on slot machines (Echeburua, in press).

But gambling considered by society as "good", "social" or "charitable" contributes in an important manner to the problem of pathological gambling as it occurs in this study through the coupon of the National Organisation of Spanish Blind people (O.N.C.E.). This organisation is very important economically with interests in business, the mass media and banks. Similarly the National Lotteries, as the paradigmatic and original lottery controlled directly by the government, contributes significantly to problems of gambling addiction in the population.

Similarly the different amounts spent on gambling by the pathological gamblers is another important finding. This demonstrates that the pathological gambler develops his problem at one point in time and endures it for months, years or even one or more decades until that problem reaches the final phase (Lesieur and Rosenthal, 1991) when he then asks for help. Studies of pathological gamblers in treatment (e.g. Gonzalez, Mercade, Aymani and Pastor, 1990) show that the modal age at which they ask for help is about forty. These results also explain why that, while the problem of pathological gambling is a significant one in the population, most pathological gamblers pass by unprovided for by the people around them and by the mental health professionals (e.g. Lesieur, Blume and Zoppa, 1986) because both of these groups have the idea that the pathological gambler must necessarily be a "spender". This is incorrect because: a) many pathological gamblers have no money to spend; b) spending vast quantities of money and pathological gambling are not synonymous and c) because of this, many pathological gamblers suffer the effects of their problem but do not look for help until a long time after the beginning of the problem. However there is evidence emerging in recent years (e.g. Hermkens and Eok, 1990) that gamblers are now looking for help at a much earlier age.

Excessive consumption of alcohol, tobacco and coffee are more common among pathological gamblers than in the remainder of the sample. The patterns of alcohol consumption found here are consistent with other studies which analysed the relation between excessive consumption of alcohol and pathological gambling (Ciarrocchi and Richardson, 1989; Lesieur, 1984; McCormick, Russo, Ramirez and Taber, 1984; Ramirez, McCormick, Russo and Taber, 1983). The percentages of people with obvious problems of alcohol abuse and with some signs of alcoholism in this sample (259) is similar to those reported in other studies.

## REFERENCES

- American Psychiatric Association (1980). Diagnostic and statistical manual of mental disorders, (3rd edition). Washington, D.C.: American Psychiatric Association.
- American Psychiatric Association (1987). Diagnostic and statistical manual of mental disorders, (revised 3rd edition). Washington, D.C.: American Psychiatric Association.
- Brown, R.I.F. (1988). Reversal theory and subjective experience in the explanation of addiction and relapse. In M.J. Apter, J.H. Kerr, and M.P. Cowles (Eds.), Progress in reversal theory (pp. 191-211). Amsterdam: North Holland Elsevier Science Publishers.
- Centro de Investigaciones Sociologicas (1989). Datos de opinion: Loteria, otros juegos de azar. Revista Espanola de Investigaciones Sociologicas, 45, 29-1-312.
- Ciarrocchi, J.M. and Richardson, J. (1989). Profile of compulsive gamblers in treatment. Update and comparison. Journal of Gambling Behavior, 5, 53-65.
- Commission on the Review of the National Policy toward Gambling (1975). Gambling in America. Washington, DC: Government Printing Office.
- Culleton, R.P. (1989). The prevalence rates of pathological gambling: A look at methods. Journal of Gambling Behavior, 5, 22-41.
- Echebura, E. (in press). Psicopatologia, variables de personalidad y vulnerabilidad al juego patologico. Psicothema.
- Gonzalez, A., Mercde, P.V., Aymami, N. and Pastor, C. (1990). Variables de personalidad y juego patologico. Revista de Psiquiatria de la Facultad de Medicina de Barcelona, 17, 203-209.
- Hermkens, P. and Kok, I. (1990). Gambling in the Netherlands: Developments, participation and compulsive gambling. Journal of Gambling Studies, 6, 223-240.
- Ladoucer, R. (1990). Prevalence estimates of pathological gamblers in Quebec, Canada. Paper submitted for publication.
- Lesieur, H.R. (1984). The chase. Career of the compulsive gambler. Cambridge, Mass.: Schenkman Books.
- Lesieur, H.R., Blume, S.N. and Zoppa, R.M. (1986). Alcoholism, drug abuse, and gambling. Alcoholism: Clinical and Experimental Research, 10, 33-38.
- Lesieur, H.R. and Rosenthal, R.J. (1991). Pathological gambling: A review of the literature. Journal of Gambling Studies, 7, 5-39.
- McCormick, R.A., Russo, A.M., Ramirez, L.F. and Taber, J.I. (1984). Affective disorders among pathological gamblers in treatment. American Journal of Psychiatry, 141, 215-218.
- Ramirez, L.F., McCormick, R.A., Russo, A.M. and Taber, J.L. (1983). Patterns of substance abuse in pathological gamblers undergoing treatment. Addictive Behaviors, 88, 425-428.

- Volberg, R.A. (1990). Estimating the Prevalence of Pathological gambling in the United States. Paper presented at the Eighth International Conference on Gambling and Risk Taking, London, August 1990.
- Volberg, R.A. and Steadman, H.J. (1988). Refining prevalence estimates of pathological gambling. American Journal of Psychiatry, 145, 502-505/
- Volberg, B.A. and Steadman, H.J. (1989). Prevalence estimates of pathological gambling in New Jersey and Maryland. American Journal of Psychiatry, 146, 1616-1619.

# THE PULL OF THE FRUIT MACHINE: A SOCIOLOGICAL TYPOLOGY OF YOUNG PLAYERS

Sue Fisher

Department of Applied Social Studies, Polytechnic South West

## Abstract

This paper seeks to provide a sociological explanation for why children and young people gamble on fruit machines. The explanation is based upon the findings of an ethnographic study and is presented in the form of a typology. Arcade Kings and their Apprentices, Machine Heaters, Escape Artists, Action Seekers and Rent-a-Spacers comprise a classification which includes "addicts" as well as "social gamblers". The typology reveals the multi-dimensional nature of fruit machine gambling as a leisure pursuit. It thus provides a theoretical contribution to the sociology of gambling as well as an "ethnographic road map" for researchers and counsellors in the field.

## Introduction

In apparent contradiction to international gaming law, slot machine gambling is legally available to children in the U.K., in the form of "fruit machines". With the exception of premises where a voluntary code restricting access to under-sixteens is effectively enforced, fruit machines are played by children in amusement arcades, cafes, fish and chip shops and (albeit illegally) pubs (Graham, 1988).

Amusement arcades are the preferred venue for young players (Graham, 1988; National Housing and Town Planning Council (NHTPC) 1988; Centre for Leisure Research (CLR), 1990). Indeed, amusement arcades in the U.K. provide an important leisure environment for school age and unemployed youngsters. The attractions of the arcade for these groups have been described as "comfort and warmth", "low profile supervision" and an "exciting environment" where children can "hang around" or "meet up with friends" (CLR, 1990, p.73).

Surprisingly little has been written from a sociological perspective about the pleasures and satisfactions that fruit machine gambling affords young people; previous studies have tended to dwell on the "dark side". This emphasis on what has been called the "social problems approach" (Newman, 1975) has tended to cloud rather than illuminate a full understanding of juvenile fruit machine gambling in U.K. society. Indeed, neglect by researchers of the compelling social rewards in most gambling forms, has tended to limit the understanding of both "social" and "problem" gambling to either psychological or economic explanations (Newman, 1972; Frey, 1984; Rosecrance, 1986).

It is possible that a past emphasis on "pathological" or "addicted" gambling, has "frightened off" would be sociological contributors on the grounds that gambling is the domain of psychology and/or psychiatry. Yet gambling is an activity undertaken "socially" by the majority of people in society, and even "addiction" is couched in social processes. Thus sociologists can seek to explain why different social groups are attracted to different gambling forms; the dynamics of a gambling session as a social event; gender differences in gambling; the social processes that accompany the transition from "social gambler" to "addict"; how some people, and not others, come to be labelled as "addicts"; and so on. The opportunities seem endless.

In sociological circles, terms such as "addict", "compulsive gambler" or "pathological gamblers" are treated with great suspicion. Throughout this paper the words "addict" and "addiction" will be used for the simple reason that these were the terms used by the players themselves. For a conceptual

discussion of "addiction" to gambling see Herman, (1976). A full account of the sociology of gambling can be found in a full version of this paper in an upcoming Sociological Review.

## METHODS

Data for this study were developed during a period of observation as part-time, unpaid, cashier in the "change box" of a seaside arcade, on an ad hoc basis from July 1989 to September 1990. The task of cashier involved changing the customers money into denominations required by the machines and responding to contingencies via a "buzzer" located in the "change box" (one "buzz" for a problem with a machine, two for an auto-bingo prize, three for a relief cashier and a continuous "buzz" for "trouble"). The arcade manager and staff were fully aware of the researcher status.

The "change box" comprised a wooden cubicle with a small, arched hatch at the front through which money could be exchanged. It was made of perspex from the counter up and was centrally placed in the arcade to afford a clear view of all the machines and the activities of the players.

Working in the arcade provided, not only an ideal opportunity for unobtrusive observation, but also for the development of interaction with the arcade clientele which was not based on an unnatural intrusion into the social processes of their play. Furthermore, while falling short of true "insider" status, the job of cashier afforded the researcher a prolonged immersion in the sub-culture of young fruit machine players, a knowledge of the argot and a longitudinal perspective of arcade culture and the playing behaviours of different players.

In addition the job of cashier allowed sufficient time to minimise the reactive response to the researcher role. Regular players, who were aware of the research interest, became accustomed to seeing the researcher in a bona fide arcade role (giving out the change). After a while curiosity in the researcher role waned, and a willingness to share their enthusiasm, or lack of it, for fruit machine gambling, to an attentive audience prevailed. This was extended in several instances to an invitation to accompany players on their round of play for a demonstration of their fruit machine playing skills.

Data were also obtained from ten in-depth interviews with young fruit machine players and four group interviews with children at secondary school in two seaside towns where fruit machines in arcades were freely available to young people. The age range of children and young people interviewed was 11 to 20 years. Studying fruit machine gamblers in the gambling scene allowed the cross-checking of the interview data with direct observation (Browns, 1989).

## FRUIT MACHINE GAMBLING

Most machines have the same basic design consisting of three reels each adorned with successive, brightly coloured, pictures of fruit, once money has been inserted, the reels spin on a random ratio schedule and cash prizes are paid when they come to rest showing a winning sequence, e.g. three "cherries", (Griffiths, 1990a, p.34). The current maximum stake is 20 pence which is gambled for a maximum jackpot of £2.40 in cash, or £4.80 in tokens for further play.

The electronic fruit machine is visually exciting, with brightly lit displays in vivid primary colours, which are continually changing. Aurally too, the machines are seductive, programmed to interact with players via a plethora of electronic melodies and the loud clatter of coins paid into a metal tray.



"A guy who goes there every day, he says trying to go to sleep you can hear the music of the machines in your ears. He'd start humming the music during the day, to one of the machines (laughs) and you can't get it out of your head!"

In an arcade where fifty or so fruit machines are located in a room, where daylight has been replaced by neon or strobe lighting and "pop" music is continually played, reality is suspended and the play form ofilinx (vertigo) is induced.

In addition a variety of "play features" add the potential for problem solving by providing a range of consequential decisions for the player to make, which greatly enhance the experience of play. For example, many machines have a "nudge" button which, when lit, can be pressed to change the position of any one of the reels to give a further chance to achieve a winning sequence, after automatic play is over. Similarly a "hold" button can be pressed to retain the favourable position of a reel before automatic play begins. Some fruit machines have a "gamble" button which if pressed at the appropriate time in response to flashing graphics, may successfully gamble winnings against various odds, e.g. "double or quits".

Other features are designed to deliberately sophisticate play, for example, instead of the machine automatically paying out on a winning sequence, the amount won is commonly stored in a digitally displayed bank. A decision must then be made whether to collect via the "collect" button immediately or to "bank" winnings to "collect" later (or use for further play once the original stake is spent).

#### **FRUIT MACHINE PLAYING SKILLS**

Fruit machine playing skills, or the lack of them are inextricably interwoven with the various motivations to gamble. The major skills are outlined below.

#### **Choosing which machine to play**

Fruit machines in the U.K. are preset to pay out a specified percentage of the money they take (usually between 70% and 80%) so, in the long run, the machine cannot lose. However, knowledge of how much money has already been fed into a particular machine, and how much it has paid out, can inform whether or not it is worth playing. Players who are "sussed" will move from machine to machine according to their assessment of "how the machines are playing".

"You win on one machine and you move off. You just keep on playing what you keep in your head - what you see about you. Like, you see two old grannies on one machine and they put £10 in, and they haven't won nothin', you are bound to say to yourself, right, that's going to do somethin' in a minute. So you go there".

"If you want to look around, like you can see a bloke there (points to a player on the far side of the arcade) whose got, like, a fiver in and you know that if you go up with a pound you're going to win three or four quid. That's the thing".

The watchful and informed player can similarly capitalise on less experienced players' knowledge of the play features. The following interaction between a player, the arcade "engineer" and the researcher during a period of observation in the arcade provides an example.

Engineer: If you get someone who doesn't know how to play it ...

Player: They maybe take fifty pence when they could have had £4 like.

Researcher: Someone like me?

Player: Yeah! (They) take forty pence instead of four pound. Say one gamble is four quid, they take, like, forty pence and then (to engineer) - you see it don't you? - and then you go over with one pound and win four.

### **"Knowing the reels"**

The skill which sets the serious player apart from the others, and which is most respected amongst peers, is "knowing the reels". "Knowing the reels" means that the sequence of fruit symbols on each of the reels of a particular fruit machine has been memorised so that the play features may be exploited to produce a winning sequence. For example, if two melons and one grape are showing, and "nudges" are available, the player who "knows the reels" can work out how many "nudges" are required to replace the grape with a third melon and achieve a winning sequence.

"Like, on the machine, if you, like, get ten nudges, like, you sort out what you've got without actually seeing the fruit. Like the melon is a jackpot or someink (sic), like, nothin' in sight and I've got two melons, and you know where the other one is, like, and you count it away. Like with a grape it's, nine away, ...if a melon's on the line it's ten to the grape, like, and fings (sic) like that".

Bearing in mind, that there are twenty symbols on each reel and that the reel sequences vary, not only with different types of machines, but also with different models of the same machine, "knowing the reels" is a considerable feat of patience, memory and perseverance which only a small proportion of players achieve, or are interested in achieving.

### **"Gambling"**

Another technique used to alter the odds in favour of the player is skillfull use of the "gamble" feature. The "gamble" feature appears with a winning sequence, seemingly on a random basis. A range of outcomes from "lose" to a "ten-to-one" win flashes on the display. The skill lies in pressing the "gamble" button so that when the options are highlighted in turn, a winning option is selected. On the face of it success depends on sleight of eye and hand, but in fact success depends upon knowledge of the idiosyncratic behaviour of individual machines:

"Some machine, like "Line Up" down the..... arcade, you just press the gamble button, keep your thumb on it, press down and he go right up to the top, see. There's other ones that you listen to the noise. 'Cos its got like double or lose, you know - you could never look at what's written up - you'd never do it, you've just got to listen to the different noises".

"There's one there, you can count to five. As soon as you get there, you just kind of hit it. If you get it and count to five and then hit it again, you'll get it (the jackpot) - keep doing that".

Whether memorising the reel sequences and expert use of the play features makes fruit machine play more skillful or merely creates the illusion of skill has been the subject of debate among psychologists (Griffiths, 1990a; Walker, 1990). However, it seems unlikely that players would persistently spend so much time, effort and money on the enterprise if it did not increase the odds

in their favour. Furthermore, experimental evidence suggests that regular players make their money last longer than irregular players (Griffith, 1990). In either case, the potential for ego-enhancement is available.

### THE TYPOLOGY

The typology comprises of five categories: Arcade Kings and their Apprentices, Machine Beaters, Rent-a-Spacers, Action Seekers and Escape Artists. Each type describes the primary orientation to arcade fruit machine gambling of different groups of individuals. In the case of two of the types "Action seekers" and "Escape artiste", the primary orientation to gamble coincided with previously reported motivations of female "pathological" gamblers (Lesieur, 1990). In the interest of establishing a coherent sociological perspective, the original names have been used here. The types emerged naturalistically, that is they were informed by, rather than informed, the field work.

#### THE ARCADE KINGS AND THEIR APPRENTICES

The kings are the most highly regarded among all regular fruit machine players, particularly by younger children. They are invariably males, in their late teens or early twenties, who have mastered fruit machine playing skills to an extent which far outweighs most other players.

On the face of it the kings operate as individuals, playing in different arcades, at different times, each with his own group of followers, or "apprentices". But, in reality, they form a coherent, self-supporting social group, with a shared sense of quasi-professional status, who play the fruit machines independently only to maximise winnings.

"We keep ourselves to ourselves because, if you go round in a crowd, you want to play that one, but he's playing it and he won't come off until he's won, and it's no good going on it after one or my friends been on it, 'cos there wouldn't be no money left to win".

At the end of independent fruit machine gambling sessions, the kings share their winnings or losses in a way that demonstrates considerable commitment to other group members and implicit trust.

Respondent: Sometimes we go over, say there's two of us and we say, 'Right, whatever we win we go 'alves at the end of the day'. So my mate, say, I might win a tenner - he might win thirty quid (pounds) like".

Researcher: That's in different arcades?

Respondent: Oh yeah, oh there's a lot of trust and fings like that.

Absolute trust regarding money is vital for the maintenance of group cohesion. Failure in this regard leads to the ultimate sanction of exclusion from the group.

Researcher: Has anyone ever let you down?

Respondent: No, never let me down, no, say one lets you down, all the rest of them won't go with him.

The Kings serve both their prestigious status within arcade culture, and their group cohesion, by sharing with one another newly acquired skills. This is vital because fruit machines are rotated from site to site so that skills

(particularly memorising reels) learned on one machine, soon become redundant. Furthermore, skills are acquired on a trial and error basis during play and are therefore expensive to come by. Thus Kings may visit arcades in pairs in "training days".

"I might go down there learning the reels, my mate knows them already, so if I had any problems, I'd like, call him over".

This expertise is also available to other players in the arcade, usually in return for ten percent of the winnings but sometimes for the praise and gratitude of unskilled players.

"There's always someone there I know whose a non-player and you can shout over, like. People, like, that on that line over there (points to two players on far side of arcade) might have ten nudges and they haven't got a clue what they got and they shout to me to work the thing... so I go, like, 'ten', 'nine' whatever'.

For the Arcade Kings time and money invested in "knowing the reels" provides a significant dividend in the form of ego enhancement.

"I'm quite good. I expect some of the kids would say it's bigheaded saying that, but I'm pretty chuffed at the way I've learned it like, you know, Cos it's quite hard. I mean if I said to you - put a machine in front of you and said, like, 'Give you two weeks to learn the reels', you probably wouldn't be able to do it. I'd say I learn a machine's reels in about six weeks".

### **The Apprentices**

Each of the kings attract their own band of followers; boys aged around nine to eleven years of age, who the Kings call "slaves". These boys adopt apprenticeship roles, studying intently their King's every move, eager to learn the skills, and openly acknowledging his authority over them in the arcade. In return for this training, and the odd financial reward, the Apprentices provide various services. These include moving the King's cigarettes from the ashtray on top of one machine to another as he moves around the arcade, and fetching him food or drink from a nearby cafe, or change from the Change Box.

The Arcade Kings demonstrate a paternalistic attitude to the Apprentices as long as they show a genuine interest in learning fruit machine playing skills:

"I'd like to see them get pretty good actually because you can earn some quite good money, mind you, you can lose it as well".

"Every time I win the jackpot, if there's someone there I give 'em a token each or someink (sic). But some of'em hang around just for that, like,

but you get to know them, like, and they get pushed aside".

### **Non-skill status winning strategies**

In addition to phenomenal playing skills, a number of other social processes contribute to the status of the Arcade Kings. The first is the maintenance, in the midst of vociferous displays of emotion by the majority of young players, an air of patient indifference to winning or losing. In this respect the apprentices perform a further less explicit service, that of ego support. While the Kings show no emotion in tense situations of play, their Apprentices provide spontaneous exclamations of praise for a win, and rationalise the

King's losses by, for example, castigating the machine. Thus the Apprentices provide a vicarious defence mechanism in Goffman's sense of the term. This helps the King to maintain his own emotional stability, which, in turn, helps to sustain and maintain his status role within the group.

The second process which contributes to the status of the Kings is their expenditure of huge amounts of money relative to the other (mainly younger) patrons of the arcade. For while fruit machine gambling is generally considered to be petty gambling, repeated playing by young people results in the gambling of huge amounts of money relative to income, so that peers are impressed by consequential risk taking (Fisher, 1991).

Thirdly, various strategies are employed which enhance the effect of high expenditure and draw attention to cash winnings, such as the accumulation of money in a digital money bank and the staged indifference to large amounts of cash:

"All the money, like, we would store up, just leave it there. If we won tokens we would take the tokens out and play them, just pile up the cash. Say you got £10 (of ten pence pieces) in there, you would put the tokens in your pocket and say to one of the little kids 'Oh, pick that up'. They'd pick it up for you, put it in their pockets - you don't know how much is there - they'd walk along like this (adopts a staggering gait) pockets drooping down with 10 p's".

The fourth strategy is the playing of several machines at once, usually those with an 'auto start' button.

"If, in fact, you want to play all four at once, you want to put a pound inside, that's ten goes, press the auto start button and it plays on its own".

Putting a pound in each of the four machines instigates 'a sequence of forty wagers, four of which will be played simultaneously. The sight and sound of a line of electronic machines apparently spitting out cash in unison, while the player stands idly by in a state of apparent disinterest, greatly entertains the entire clientele of arcade. However this strategy is not employed solely for show; on occasions timely multiple play is claimed to be profitable:

"The thing is, if you get in there (the arcade) in the mornings, when nobody else has played 'em, they've got a memory in the computer bit that tells 'em to pay out a jackpot in a certain amount of time, as soon as its turned on. What we used to do, get down there early in the morning, go round playing them all and win all the jackpots'.

The Kings do not perceive themselves as "addicts" and those interviewed scored outside the range for "probable pathological gambler" on the DSH-IV-J index (Fisher, 1992). Indeed their status is based on the achievement and maintenance of rationality and self-control:

"We don't go mad, like, we usually have a tanner each, like. We might go down and blow the lot plus another tanner each, like. But that's what happens on a Saturday like. But we wouldn't stay down there trying to win it back. That's pointless 'cos once you're forty quid down you've got no chance. So you leave it 'til next week - you go down with a tenner - you might only spend a fiver of that and end up walking out with fifty, like, you know".

In gambling parlance they demonstrate "good gamesmanship": they play the technical game well, they manage their money well and they manage their emotions well (Browns, 1989, p.9.).

The primary orientation to fruit machine gambling of the Arcade kings is a positive gain in character in Goffman's sense of the word, resulting from the timely production of phenomenal playing skills in the public arena of an arcade; and the self control to carry off win or loss with circumspection.

### THE MACHINE BEATERS

The Machine Beaters may also be highly skilled players who "know the reels" but their primary orientation towards fruit machine gambling, and the perception of them by other regular players is the antithesis to that of the Kings. The Machine Beaters play alone. Their abiding concern is interaction with the machine and opportunities for technical decision making which are on offer as long as their money holds out:

Researcher: Why do you play?

Respondent: Enjoyment, involvement (thinks) it's weird really - trying to beat the machine I suppose.

Beating the machine is an asocial motive for fruit machine gambling. In direct contrast to the Kings, the Machine Beaters resent the presence of other players as an intrusion into their private man-machine interaction.

Respondent: I just play on me own. I hate being watched as well.

Researcher: Do you?

Respondent: Yeah, I can't stand that, someone breathing down your neck.

The Machine Beaters may attempt the same entrepreneurial approach to employing their skills as the Kings, but they are unable to sustain the self discipline to rationalise their play, invariably chasing the losses in an attempt to beat the machine. As one of the Kings put it:

"He aint got the patience to stand there for half an hour and play it and not win nothin'. The thing is to move onto another machine and try and win tokens and a bit of money and then go back to that one. Then you start raking in the money".

This lack of patience is frequently evidenced in displays of frustration, such as cursing or kicking the machine.

"You do get a bit of a temper up over a stupid couple of pounds".

In Browne's sense of the term, the Machine Beaters do not display "good gamesmanship". While they may play the technical game well, poor emotion management leads to poor money management in the form of chasing losses and "problem" gambling results.

The parents of one teenage Machine Beater bought two fruit machines and sited them in his bedroom in the hope of his spending less money in the arcade. This was partly successful because his primary orientation was to beat the machine so that the fruit machines in his bedroom were intrinsically attractive to him.

Researcher: Do you play your fruit machines much at home?

Respondent: Yeah, every night. And before I go to work, I have an hour on them.

Researcher: Really? Do you enjoy that?

Respondent: Yeah, its just as good even though you know its your own and you can't win anything. Its still nice to play them, that's why I got them.

Researcher: What's good about it?

Respondent: It just is. It's just trying to beat it and that. It's like a little challenge - you've got to get different fings (sic) to win more money.

A determination to beat the game requires enormous resources of time and money for a teenager. One Machine Beater completed only three months of the first year of his college course, the rest of the time was spent in the arcade. During this time he spent £800 in savings together with the weekly income derived from a part-time job.

Researcher: How much would you spend in a typical session?

Respondent: When I was at college, aged sixteen, £10 a day.

Researcher: How long would £10 last you?

Respondent: Depends if you win or lose. If you lost it would probably be half to one-and-a-half hours, but you can just keep going.

In addition to missing college classes or truanting from school, a preoccupation with beating the machine may lead to other unsocial/illegal behaviours such as the spending of school dinner money, the selling of possessions or theft:

"I used to save it (school dinner money) and not eat any dinner.

Then at the end of the week I had about £4 and I'd go down and have a good time in the arcades. I never used to have any dinner, I was always hungry".

"I sold my rail card once. There was only about three months left on it and I'd rather gamble. It was worth about seven quid (pounds), so sold it to this kid".

"I know this chap. He stole £100 off his parents and he spent the whole lot in the arcade".

In direct contrast to the ego enhancement experienced by the Kings, the inevitable losses suffered by the Machine Beaters leads to self deprecation and remorse. But this is rarely sufficient to halt their gambling, and very soon they are "on the tilt" again (Browns, 1989):

"well you do regret it, when you've lost you regret it - walking home, you think 'Christ how did I do it?'. The next day you feel your head's buzzing and you go down to the bank and get a fiver and you're off again".

The possibility of "knowing the reels" and learning the idiosyncratic behaviour of the play features provides the perception (be it real or illusory) that the rules of play are ultimately knowable, and once mastered may be put to advantage. As in the case of Scott's "addicted" horse players, the Machine Beaters' growing preoccupation with the recurrent obstacles and

techniques of the game eventually leads to an obsession with beating as opposed to playing the game.

### **RENT-A-SPACERS**

Rent-a-Spacers gamble on fruit machines primarily to gain access to the arcade venue, the cultural space where they meet and socialise with their friends:

"Its a meeting place as well. You know, you phone up a friend and say 'where shall we meet?' and they usually say 'in the arcade'. If you go in there Friday night - because there's a lot of people that go out on a Friday night - everyone will be stood around in the arcade not spending money, just watching other people play".

However, playing the machines is eventually obligatory and regarded as an acceptable entry requirement to the chosen milieu:

"If you don't spend any money and the manager actually sees you not spending money, he'll chuck you out. I s'pose it's fair enough because if we're all crowded round there, then people can't play the machines. Most people when they say 'Right, you either spend money or get out', people usually spend money".

Rent-a-Spacers are predominantly teenage females who have no machine playing skills and little or no interest in acquiring them. Their primary interest lies in the exploration of their gender role within the peer group. In this respect their preferred role of "spectator", interacts with male preferred role of "player", to facilitate the social processes involved:

Female respondent: If you look around at all the boys and girls in an arcade, the boys will all be playing, while the girls will all be standing around watching, being 'girlie' and giggle and things like that.

Researcher: Are they there to get to know the boys?

Female respondent: In some ways, yes. I mean, if you like a boy and you think "Oh, I'll follow him tonight", and you know where he'll be, you would go into an arcade and stand and watch him play his game.

Researcher

(to male respondent): Is that good from the boy's point of view?

Male Respondent: (Enthusiastically) Yeah: You try to impress them, start to do flashy things.

Thus while the orientation of Rent-a-Spacers to gamble on fruit machines is primarily contextual and extrinsic to the gamble per se, fruit machine playing is the lynch pin upon which the complex social processes of gender exploration and status recognition depend.

Such behaviour is, of course, heightened during adolescence, which has been defined as:

"...sociologically, a regulated (period) in which youngsters are inducted through a series of status passages that mark the transition from childhood to adulthood". (Panelas, 1983, p.62).

In western societies the negotiation of these status passages is largely supervised by social institutions such as school, family and workplace. In



response to such continuous surveillance, young people spend their relatively large amount of leisure time attempting to build an autonomous social and cultural space. In such a space, young people may freely

"meet peers, relieve boredom, act on their emerging sexual identities and institute cultural practices that build peers into a stable, if temporary form of social organization". (Panelas, 1983, p.62).

Historically a variety of private sector premises have fulfilled this social function including, in the U.K. coffee bars and pool halls. Existing research suggests that amusement arcades similarly provide a cultural space for young people to 'hang out' and meet their friends (Graham, 1988; CLR, 1990). Most arcades are designed specifically to attract young people and are environmentally antipathic to most adults. Indeed, adults who frequent them are looked down upon by young people:

"a lack of respect bordering on contempt is often shown to adult patrons by their younger counterparts". (Graham, 1988, p.24).

Data from the present study demonstrates that this sort of behaviour successfully reinforces a claim to the arcade as a cultural space for young people. Adults who were not accompanied by small children seemed ill at ease and invariably appeared embarrassed when asking for change from the Change Box.

### **THE ACTION SEEKER**

The Action Seeker is primarily motivated to gamble on fruit machines by "excitement, thrill, and tension, in short the adrenalin is flowing" (Lesieur, 1990, p.11). The "action" intrinsic to all gambling forms is particularly marked in fruit machine gambling because the span of play is so short. Consequently, the affective states of thrill, excitement and tension which accompany the cycle of wagering, anticipation and outcome are recharged every few seconds.

"Its some sort of, not challenge, but (thinks) not knowing what's going to happen next - suspense - that's the word I was looking for. 'Cos you put your money in and you don't know what's going to happen, but you'll find out any second now".

For young gamblers an extra dimension of "action" is experienced through precocious participation in a societally marginalised leisure activity. Erickson (1968), and the Rapaports (1975), suggest that adolescent leisure choices reflect the quest for excitement and independence that may accompany transition to adulthood. Both male and female respondents in the present study said that fruit machine gambling allowed temporary transition from the subjective experience of childhood to that of adulthood.

"Yeah, you go down the arcade and you fink 'Right, I'm out of that (being treated like a child), let's go and have a gamble. It makes you feel older'.

"It makes you feel hard".

Thus Graham's (1988) finding that fruit machine players appeared to be older than their age, more assured and more self-confident than non-players is likely to be a manifestation of the play form of mimicry. For adolescent Action Seekers, the excitement of fruit machine gambling is further enhanced by the opportunity to temporarily adopt the demeanour of preferred others: adults.

## **The arcade as an arena for 'action'**

Young Action Seekers also employ cultural space of the arcade as a segregated context for experimenting with other marginal components of adult leisure. Freedom of parental, and other, institutional, surveillance allows the experimentation of cigarettes, soft drugs and alcohol, while excluding the adults themselves:

"You're going behind your Mum and Dad's back".

"Sometimes we go shares in a bottle of cider, and drink it down there"

"There are no parents there and its dark and smoky. Its the Gang's Turf - you can say 'Fuck off' and smoke".

Graham (1988) reported that the deviant activities said to characterise some arcades (see Huxley and Carroll, 1991) provide a specific attraction to young Action Seekers, who were:

..aware of the presence of vague undercurrents of illegal and even dangerous activities in and around arcades. And it is this atmosphere of potential danger, combined with 'the forbidden' which constitutes a powerful attraction for some: 'You feel like something is going to happen, like somebody is going to eat you up' and 'Its fun; you always think it won't happen to me being attacked down there'. (Graham, 1988, p.28).

## **ESCAPE ARTISTS**

Escape Artists gamble primarily as a means of escape from overwhelming problems (Lesieur, 1990). Children who gamble on fruit machines to escape problems may be male or female; they are usually depressed and may be socially isolated.

Documentary evidence from youth work case studies overwhelmingly points to a feeling of powerlessness and lack of control as the common denominator in such children. In one case a sixteen year old boy was being relentlessly pushed in his school career by his father who was a "self made man" from a poor background. In another case a girl of fourteen was persuaded to have an abortion by her parents and felt remorse that she did not stop what was happening to her. In a third case a fourteen year old boy was rejected by his parents, he felt that social services did not listen to what he wanted to do with his life and experienced difficulty in making friends. In each of these cases, once the primary problem had been addressed, the gambling problem ceased.

Griffiths (1991a) reported two cases of "addicted" fruit machine players for who, the home environment itself produced a feeling of alienation and powerlessness. In one case, a twelve year old boy lived with his divorced mother and two half Sisters aged seventeen and eighteen. The house was "totally feminine" and the mother and sisters entertained male friends on a regular basis. In the second case a seventeen year old boy lived with his father and stepmother, who were exceptionally houseproud:

"On visiting the home one was almost afraid to walk on the carpet (the pile was so deep), afraid to put a cup of tea on the table (it was so highly polished) etc". (Griffiths, 1991a, p.465).

In both cases the children moved house and in both cases the gambling problem ceased.

The attraction of fruit machine gambling for Escape Artists lies in both the game and the venue. Firstly, the machine provides a source of non-human interaction and has accordingly been described as an "electronic friend" (Griffiths, 1991b). Secondly, interaction with the machine is totally absorbing so that problems are temporarily forgotten. Thirdly, some players have expressed a temporary feeling of control when playing, particularly when the machine pays out:

"It gives you some kind of power".

In addition, the arcade aids the escape from reality. Firstly it provides a surreal environment. Secondly, it provides an opportunity for being among people without the need for intimate social interaction.

## **DISCUSSION**

This study has presented a sociological typology of young fruit machine players. While all gamble on fruit machines, their primary orientation for so doing varies according to their typological category. Thus the Kings, who invest so much time, money and enthusiasm in the maintenance of their status, contrast with the Rent-a-Spacers for whom gambling is an obligation to stay in the scene, and the Machine Beaters with their lonely preoccupation with beating the game.

This study finds that existing sociological explanation, of why people gamble are heuristically useful for sensitising the researcher to possible motivations. The problems arise with generalisation. None of the explanations, alone, is sufficient to explain why people gamble, simply because primary orientations differ. An examination of juvenile fruit machine gambling in a seaside arcade provides an illustration of the diversity of primary orientations which are intrinsic to gambling.

The Kings were primarily motivated by the opportunity for ego-enhancement. Machine Beaters were preoccupied with solving the technical problems presented by the fruit machine. Rent-a-Spacers were motivated by the opportunity for gender exploration presented by the arcade environment. Action Seekers sought opportunities for action, provided by the gamble and enhanced by the precocity of their involvement. Escape Artists sought temporary escape from the problems which overwhelmed them. As with other groups of gamblers, young fruit machine players were not primarily motivated by the hope of winning money. Rather, the aim of winning money was an extrinsic end, which unified all players and provided a rational justification for their involvement.

The types describe the dominating motivation to gamble. However, they are by no means mutually exclusive, and elements of each type were perceived in the orientation of all young fruit machine players. The search for excitement; the 'buzz' experienced by a win in front of 'the gang', on the gang's turf'; the wish to outwit the machine and temporarily escape from reality, were all present in varying degrees.

Any explanation of why a specific social group gambles must take account of it's role in society and the constraints on leisure imposed on it (Dixey, 1989). In the small seaside resort which provided the location for this study, leisure facilities for local youth were sparse. Amusement arcades, alone, provided a warm environment where young people could meet their friends seven days of the week, throughout the year.

Within the social group the individual's orientation to gamble is similarly constrained: by age, gender, social circumstances and the social relations

which govern his/her life. Moreover, many of these constraints change over time. In the case of children, major changes pertaining to family group (e.g. growth of family, divorce of parents); schooling and friendships, as well as awareness of developing sexuality are the norm. Thus, for example, an Apprentice may progress to become a King, or not, according to the varying life chances of the individual.

By emphasising the multi-dimensional nature of fruit machine gambling among young people, the typology reveals a rich subculture surrounding their play. It also points to some of the social processes surrounding "addiction". While only the Machine Beaters and the Escape Artists are "problem" gamblers, the boundary lines between them and the other types of "social" gamblers are fluid and dependent upon "normal" social processes and contingencies. The Kings, who exemplify good gamesmanship are separated crucially from the "addiction" of the Machine Beaters by the maintenance of self control. The Escape Artists demonstrate that self control in gambling may be recklessly abandoned as a narcotic to subjectively unbearable social situations. Furthermore children who start out as Rent-a-Spacers or Action Seekers may find that prolonged exposure to gambling brings about a crucial change in their orientation as the following exchange between the researcher and a self-defined "addict" reveals:

Researcher: Before you get addicted - when you first go (to an arcade) - why do you go then?

Respondent: Well, maybe your mates are addicted to 'em and they say. I'll meet you in the arcade' or someink. And they spend all night in the arcade and then you gradually get addicted to them.

Children and young people now account for about one in four of all new members of Gamblers Anonymous in the U.K. (Moody, 1990). If fruit machine gambling remains legally available to children, the Caring Services will require an informed understanding of why they play on which to base effective counselling programmes. The typology is thus intended as an "ethnographic road map" (Rosecrance, 1986) not only for future researchers but for counsellors in the field.

## REFERENCES

- Browns, B.R. (1989). Going on the tilt: Frequent poker players and control. Journal of Gambling Behavior, 5, 1, 3-21.
- Centre for Leisure Research (1990). Playing the machines: A study of leisure behaviour. Edinburgh: Author.
- Dixey, R. (1987). Its a great feeling when you win: women and bingo. Journal of Leisure Studies, 6, 2, 199-214.
- Erickson, E.H. (1968). Identity, youth and crisis. New York: Norton.
- Fisher, S. (1991). Juvenile gambling: the pull of the fruit machine. In Eadington, W., Cornelius, J. and Taber, J. (Ede.) Gambling Behaviour and Problem Gambling. Nevada: Institute for the study of Gambling and Commercial Gaming.
- Fisher, S. (1992). Measuring pathological gambling in children: The case of the fruit machines in the U.K. Journal of Gambling Studies, 8, in press.
- Frey, J.M. (1984). Gambling: A sociological review. Annals of the American Academy of Political and Social Sciences, 274, 107-121.

- Graham, J. (1988). Amusement machines, dependency and delinquency. Home Office Research Study 101. London: H.M.S.O.
- Griffiths, M.D. (1990a). The cognitive psychology of gambling. Journal of Gambling Studies, 6, 1, 31-42.
- Griffiths, M.D. (1990b). The role of cognitive bias and skill in fruit machine playing. In S.E.G. Lea, P. Watley and B. Young (Eds.) Applied Economic Psychology in the 1990's. Exeter: Washington Singer Press.
- Griffiths, M.D. (1991a). Fruit machine addiction: two brief case studies. British Journal of Addiction, 86, 465.
- Griffiths, M.D. (1991b). Adolescent fruit machine use: A review of current issues and trends. U.K. Forum on Young People and Gambling Newsletter, 4, 2-3.
- Herman, R.D. (1976). Gamblers and gambling. US and Canada. Lexington Books.
- Huxley, J. & Carroll, D. (1991). A survey of fruit machine gambling in adolescents. London: The Children's Society.
- Lesieur, H.R. (1990 November). Female pathological gamblers and crime. Paper presented at the Meeting of the American Society of Criminology Reno, Nevada.
- Moody, G. (1990). Quit compulsive gambling. Northampton: Thorsons.
- National Housing and Town Planning Council (1988). The use of arcades and gambling machines: A national survey. London: Author.
- Newman, O. (1972). Gambling hazard and reward. University of London, The Athlone Press.
- Newman, O. (1975). The ideology of social problems: Gambling a case study. Canadian Review of Sociology and Anthropology, 12, 540-550.
- Panelas, T. (1983). Adolescents and video games: Consumption of leisure and the social construction of the peer group. Youth and Society, 15, 1, 51-65.
- Rapaport, R. & Rapaport, R. (1975). Leisure and the family lifecycle. London: Routledge.
- Rosecrance, J. (1986). Why regular gamblers don't quit: A sociological perspective. Sociological Perspectives, 29, 3, 357-378.
- Walker, M. (1990 August). Irrational thinking exhibited by slot machine and video card game players. Paper presented to the Eighth International Conference on Risk and Gambling. London.

