

1992

# A SOCIOLOGICAL EXAMINATION OF JUVENILE FRUIT MACHINE GAMBLING IN A SEASIDE TOWN

FISHER, SUSAN ELIZABETH

<http://hdl.handle.net/10026.1/2116>

---

<http://dx.doi.org/10.24382/4196>

University of Plymouth

---

*All content in PEARL is protected by copyright law. Author manuscripts are made available in accordance with publisher policies. Please cite only the published version using the details provided on the item record or document. In the absence of an open licence (e.g. Creative Commons), permissions for further reuse of content should be sought from the publisher or author.*

A SOCIOLOGICAL EXAMINATION  
OF JUVENILE FRUIT MACHINE  
GAMBLING IN A SEASIDE TOWN

S. E. FISHER

Ph. D.

1992

**A SOCIOLOGICAL EXAMINATION OF JUVENILE FRUIT  
MACHINE GAMBLING IN A SEASIDE TOWN**

**SUSAN ELIZABETH FISHER B.Sc. (Hons)**

A thesis submitted to the Council for National Academic Awards in  
partial fulfilment of the requirements for the degree of Doctor of  
Philosophy.

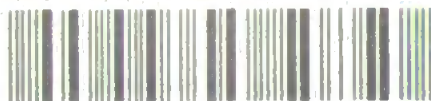
Polytechnic South West

Department of Applied Social Science.

April 1992

90 010 3900 8

TELEPEN



REFERENCE ONLY

24 11/92

UNIVERSITY OF PLYMOUTH  
LIBRARY SERVICES

Item  
No.

900 103900-8

Class  
No.

T 306.482 FIS

Contl  
No.

X702586 H46

## **DECLARATION**

I hereby declare that, whilst registered as a candidate for the degree of Doctor of Philosophy with the Council for national Academic Awards I have not been a registered candidate for another award of the Council for National Academic Awards, nor of a University.

The following programme of related studies, experience and publications has been undertaken:

- (i) **A schedule of reading** guided by the supervisors.
- (ii) **Attendance at various courses** including the SCPR in-depth interviewing course at City University (1989); the BSA Summer School (1989) and the Lancaster University Case Studies course, (1991).
- (iii) **Presentations to various conferences** as listed below:

**14.11.89**

Adolescent Fruit Machine Gambling. Paper to the Society for the Study of Gambling. London.

**16.8.90**

Juvenile Fruit Machine Gambling in the U.K.: The Present Evidence. Paper to the Eighth International Conference on Risk and Gambling. London.

**17.8.90**

Juvenile Gambling: The Pull of the Fruit Machine. Paper to the Eighth International Conference on Risk and Gambling. London.

## **Presentations to conferences (cont.)**

**21.9.90**

Juvenile Amusement Machine Use: A Research Workshop  
Presentation to the First Annual Conference of U.K.  
Forum on Young People and Gambling. London.

**16.5.91**

Defining Pathological Gambling in Children. Paper to the  
Second National Conference of the U.K. Forum on Young  
People and Gambling. Birmingham.

**14.11.91**

The Pull of the Fruit Machine: A Sociological Typology  
of Young Players. Presentation to the Society for the  
Study of Gambling. London University.

**29.11.91**

Fruit Machines:

1. Measuring pathological gambling in children.
2. The range of motivations to gamble on fruit machines  
relating to children. Presentation to Annual Conference of  
the Amusement Arcade Action Group. London: City of  
Westminster Council House.

**20.2.92**

A Sociological Perspective on Juvenile Fruit Machine  
Gambling. Presentation to the Conference on Juvenile  
Fruit Machine Gambling organised by Off The Record  
and The U.K. Forum on Young People and Gambling.  
Portsmouth.

## **(iv) Articles in Books**

**1992**

Juvenile Gambling: The Pull of the Fruit Machine in J.  
Cornelius, W.Eadington and J. Taber (eds) Gambling  
Behavior and Problem Gambling. Nevada: University of  
Nevada Press.

The Use of Slot Machines by Young People in the U.K.:  
The Present Evidence in J. Cornelius, W.Eadington and J.  
Taber (eds) Gambling Behavior and Problem Gambling.  
Nevada: University of Nevada Press.

**(v) Publications in refereed journals**

**1991**

Governmental Response to Juvenile Fruit Machine Gambling in the U.K: Where Do We Go From Here? Journal of Gambling Studies, 7, 3, 217-249.

**1992**

Measuring Pathological Gambling in Children: The Case of Fruit Machine Gambling in the U.K. Journal of Gambling Studies. In press.

The Pull of the Fruit Machine: A Sociological Typology of Young Players. The Sociological Review. In press.

**(vi) Publications in non-refereed journals**

**1989**

The Use of Fruit Machines by Children. Society for the Study of Gambling Newsletter, 16.

**1990**

Juvenile Fruit Machine Gambling: A Love-Hate Relationship. U.K. Forum on Young People and Gambling Newsletter, 1.

**1991**

Towards a Sociological Understanding of Fruit Machine Gambling Among Young People. Society for the Study of Gambling Newsletter, 18.

**1992**

Fruit Machine Gambling Addiction in Children. What Is It and How Do We Measure It? U.K. Forum on Young People and Gambling Newsletter, 5, pp 2-3.

**(vii) Appointments/service on national/international bodies**

**1991**

Secretary to the Society for the Study of Gambling

**1992**

Trustee of the national Council on Gambling

## ACKNOWLEDGEMENTS

I would like to thank the Economic and Social Research Council for funding this work through a Research Studentship Grant and Plymouth University for providing resources.

Particular gratitude goes to my first supervisor David Dunkerley who patiently guided, helped, encouraged and listened to me throughout the project. Many thanks also to Joan Chandler who acted as my second supervisor during the final year of the research and whose insightful comments were of great assistance. Thanks also to Henry Lesieur, Mark Dickerson, Clare Wallace, Otto Newman, Iain Levitt and reviewers of the Journal of Gambling Studies and The Sociological Review for their constructive criticisms of earlier drafts of different chapters of this thesis.

The school and the amusement arcade which provided the location for the research deserve much appreciation for their friendly cooperation. Particular gratitude goes to the children who played fruit machines, without whose friendliness, cooperation and willingness to talk to me constructively, this research would not have been possible. I learned a great deal from these children.

Finally, I would like to thank my husband Peter, for the unfailing encouragement, good humour and support which helped to make the experience of preparing this thesis such a happy one.



## **ABSTRACT**

Sue Fisher

### **A SOCIOLOGICAL EXAMINATION OF JUVENILE FRUIT MACHINE GAMBLING IN A SEASIDE TOWN**

This thesis has two main aims. The first is to develop a standard measure of addiction to gambling in children which could be used to estimate the extent of dependency among children aged 11 to 16 years. The second focusses upon patterns of usage and seeks to understand the various meanings which children attach to fruit machine gambling in an arcade.

The first aim has been achieved by adapting a measure used to diagnose addiction to gambling in adults for use with children. The resulting DSM-IV-J criteria were tested using a questionnaire survey on a sample of 467 schoolchildren aged between 11 and 16 years. Those children who were defined as "probable pathological" gamblers by the DSM-IV-J index were significantly more likely to be involved in behaviours hitherto associated with dependency, than were the control group. DSM-IV-J appears to be a major advance in the discrimination of pathological gambling in children.

This study disaffirms the popular, generic image of the typical young fruit machine "addict" as being a lone, adolescent male. "Probable pathological" gamblers were equally male or female, spread across the age range of eleven to sixteen years, and came from a range of social class and religious backgrounds. However, "probable pathological" gamblers were more likely than "social" gamblers to have started playing fruit machines when they were very young (at the age of eight years or younger) and to have parents who gambled.

The second aim has been investigated by ethnographic fieldwork and is presented in the form of a typology. Arcade Kings and their Apprentices, Machine Beaters, 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.

## CONTENTS

	<u>Page no.</u>
<u>INTRODUCTION</u>	1
<u>CHAPTER ONE - SOCIOLOGICAL THEORIES OF GAMBLING</u>	7
GAMBLING AS PLAY: THE MODEL OF CAILLOIS	7
DISCUSSION	19
GAMBLING AS 'ACTION': GOFFMAN	22
DISCUSSION	32
GAMBLING AS 'STRAIN': THE FUNCTIONAL STRUCTURAL ANALYSIS OF DEVEREUX	34
DISCUSSION	51
<u>CHAPTER TWO - SOCIOLOGICAL STUDIES ON ORIENTATIONS TO GAMBLE</u>	54
SOCIAL CLASS	54
GENDER	66
LIFECYCLE	72
PRE-ADULT GAMBLING	73
DISCUSSION	77
<u>CHAPTER THREE - JUVENILE FRUIT MACHINE GAMBLING IN THE U.K.</u>	81
INTRODUCTION	81
SOME DEMOGRAPHIC CONSIDERATIONS	87
INDICATIONS OF DEPENDENCY	93
THE SOCIAL CONTEXT OF THE ARCADE	112
CONCLUSIONS/RECOMMENDATIONS FOR FURTHER RESEARCH	114

	Page no.
<u>CHAPTER FOUR - METHODS AND METHODOLOGY FOR STUDY 'A'</u>	116
INTRODUCTION	116
MULTIPLE METHODOLOGIES	116
DEFINING AND MEASURING 'ADDICTION' TO GAMBLING IN CHILDREN	120
ADDICTION TO GAMBLING AND THE ROLE OF SOCIOLOGY	123
THE DEVELOPMENT OF DSM-IV INDEX TO DEFINE PATHOLOGICAL GAMBLING IN ADULTS	126
TESTING THE PROPOSED DSM-IV-J	130
 <u>CHAPTER FIVE - THE DSM-IV-J INDEX FOR DEFINING PATHOLOGICAL GAMBLING IN CHILDREN: FIELD TRIAL RESULTS</u>	 138
THE SAMPLE	138
GAMBLING GAMES PLAYED BY CHILDREN IN THE STUDY LOCATION	140
RESOURCES SPENT ON FRUIT MACHINE GAMBLING	141
UNSOCIAL/ILLEGAL BEHAVIOURS TO SUPPORT FRUIT MACHINE GAMBLING	147
DSM-IV-J: AN ITEM ANALYSIS	153
DISCUSSION	154

	<u>Page no.</u>
<u>CHAPTER SIX - THE SOCIAL CHARACTERISTICS OF YOUNG FRUIT MACHINE GAMBLERS</u>	158
INTRODUCTION	158
AGE	159
GENDER	162
SOCIAL CLASS	162
RELIGION	165
LOCATION OF PLAY	167
LOCATION OF RESIDENCE	168
WHO CHILDREN PLAY FRUIT MACHINES WITH	170
PARENTAL ATTITUDES AND GAMBLING BEHAVIOUR	173
DISCUSSION	176
 <u>CHAPTER SEVEN - METHODS AND METHODOLOGY FOR STUDY 'B'</u>	 179
THE ETHNOGRAPHY	179
GAINING ACCESS	184
FIELD WORK AND FIELD RELATIONS	185
THE PROCESS OF ANALYSIS	186
VALIDITY	188
RELIABILITY	191
POSTSCRIPT ON PUBLICITY	193

	<u>Page no.</u>
<u>CHAPTER EIGHT - THE PULL OF THE FRUIT MACHINE: A SOCIOLOGICAL TYPOLOGY OF YOUNG PLAYERS</u>	195
INTRODUCTION	195
FRUIT MACHINE GAMBLING IN AN ARCADE	196
FRUIT MACHINE GAMBLING SKILLS	198
THE ARCADE KINGS AND THEIR APPRENTICES	201
THE MACHINE BEATERS	206
THE RENT-A-SPACERS	210
THE ACTION SEEKERS	212
THE ESCAPE ARTISTS	214
DISCUSSION	216
 <u>CONCLUSIONS/RECOMMENDATIONS FOR FURTHER RESEARCH</u>	 219
 BIBLIOGRAPHY	 229
 APPENDIX	 243

## **LIST OF TABLES**

	<u>Page no.</u>
<u>CHAPTER ONE</u>	
TABLE 1.1 - CAILLOIS' CLASSIFICATION OF GAMES	13
<u>CHAPTER THREE</u>	
TABLE 3.1 - SUMMARY OF U.K. RESEARCH STUDIES ON JUVENILE AMUSEMENT MACHINE PLAYING	84 -85
TABLE 3.2 - SUMMARY OF U.K. STUDIES REPORTING FREQUENCY OF PLAY	98
TABLE 3.3 - SUMMARY OF U.K. STUDIES REPORTING UNSOCIAL/ILLEGAL BEHAVIOUR ASSOCIATED WITH AMUSEMENT MACHINE USE	104
<u>CHAPTER FIVE</u>	
TABLE 5.1 - AGE AND GENDER OF SAMPLE	138
TABLE 5.2 - GAMBLING GAMES PLAYED IN THE PAST YEAR: FREQUENCY OF PARTICIPATION	140
TABLE 5.3 - FREQUENCY OF PLAY: "SOCIAL" GAMBLERS COMPARED WITH "PROBABLE PATHOLOGICAL" GAMBLERS	142
TABLE 5.4 - AMOUNT OF TIME USUALLY SPENT IN AN ARCADE: "SOCIAL" GAMBLERS COMPARED WITH "PROBABLE PATHOLOGICAL" GAMBLERS	143
TABLE 5.5 - WEEKLY EXPENDITURE IN FRUIT MACHINES: "SOCIAL" GAMBLERS COMPARED WITH "PROBABLE PATHOLOGICAL" GAMBLERS	145
TABLE 5.6 - MAXIMUM AMOUNT OF MONEY SPENT ON FRUIT MACHINE GAMBLING IN ONE DAY: "SOCIAL" GAMBLERS COMPARED WITH "PROBABLE PATHOLOGICAL" GAMBLERS	146
TABLE 5.7 - BORROWED TO GAMBLE: "SOCIAL" GAMBLERS COMPARED WITH "PROBABLE PATHOLOGICAL" GAMBLERS	148

## LIST OF TABLES (CONT.)

	<u>Page no.</u>
TABLE 5.8 - SPENT SCHOOL DINNER/FARE MONEY TO GAMBLE: "SOCIAL" GAMBLERS COMPARED WITH "PROBABLE PATHOLOGICAL" GAMBLERS	149
TABLE 5.9 - SOLD POSSESSIONS TO GAMBLE "SOCIAL" GAMBLERS COMPARED WITH "PROBABLE PATHOLOGICAL" GAMBLERS	150
TABLE 5.10 - STOLE FROM THE FAMILY TO GAMBLE "SOCIAL" GAMBLERS COMPARED WITH "PROBABLE PATHOLOGICAL" GAMBLERS	151
TABLE 5.11 - STOLE FROM OUTSIDE THE FAMILY OR SHOPLIFTED TO GAMBLE: "SOCIAL" GAMBLERS COMPARED WITH "PROBABLE PATHOLOGICAL" GAMBLERS	152
TABLE 5.12 - ANALYSIS OF ITEMS IN DSM-IV-J FOR "SOCIAL" AND "PROBABLE PATHOLOGICAL" GAMBLERS (PERCENT "YES" RESPONSES)	154
 <u>CHAPTER 6</u>	
TABLE 6.1 - AGE (IN YEARS): "SOCIAL" GAMBLERS COMPARED WITH "PROBABLE PATHOLOGICAL" GAMBLERS	159
TABLE 6.2 - STARTING AGE FOR FRUIT MACHINE PLAYERS "SOCIAL" GAMBLERS COMPARED WITH "PROBABLE PATHOLOGICAL" GAMBLERS	161
TABLE 6.3 - GENDER: "SOCIAL" GAMBLERS COMPARED WITH "PROBABLE PATHOLOGICAL" GAMBLERS	162
TABLE 6.4 - PARTICIPATION IN FRUIT MACHINE GAMBLING BY SOCIAL CLASS	163
TABLE 6.5 - SOCIAL CLASS: "SOCIAL" GAMBLERS COMPARED WITH "PROBABLE PATHOLOGICAL" GAMBLERS	164

## LIST OF TABLES (CONT.)

	<u>Page no.</u>
TABLE 6.6 - RELIGIOUS AFFILIATION: "SOCIAL" GAMBLERS COMPARED WITH "PROBABLE PATHOLOGICAL" GAMBLERS	165
TABLE 6.7 - REGULAR CHURCH ATTENDANCE: "SOCIAL" GAMBLERS COMPARED WITH "PROBABLE PATHOLOGICAL" GAMBLERS	166
TABLE 6.8 - USUAL VENUES FOR AMUSEMENT MACHINE USE: "SOCIAL" GAMBLERS COMPARED WITH "PROBABLE PATHOLOGICAL" GAMBLERS	167
TABLE 6.9 - LIVING WITHIN WALKING DISTANCE OF AN ARCADE: REGULAR PLAYERS COMPARED WITH LESS FREQUENT PLAYERS	169
TABLE 6.10 - LIVING WITHIN WALKING DISTANCE OF AN ARCADE: "SOCIAL" GAMBLERS COMPARED WITH "PROBABLE PATHOLOGICAL" GAMBLERS	170
TABLE 6.11 - WHO CHILDREN ROUTINELY PLAYED FRUIT MACHINES WITH: 11 YEAR OLDS COMPARED WITH 12-16 YEAR OLDS	171
TABLE 6.12 - WHO CHILDREN ROUTINELY PLAYED FRUIT MACHINES WITH: "SOCIAL" GAMBLERS COMPARED WITH "PROBABLE PATHOLOGICAL" GAMBLERS	172
TABLE 6.13 - PARENTAL GAMBLING: "PROBABLE PATHOLOGICAL" GAMBLERS COMPARED WITH OTHER CHILDREN	175



## INTRODUCTION

The U.K is the only country in the western world which permits children to gamble on slot machines. The Gaming Act of 1968 prohibits young people under the age of eighteen years from all commercial gaming except on 'amusements with prizes' commonly known as 'fruit machines'. 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, eg. three "cherries". 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.

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. Amusement arcades are the preferred venue for young players, 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" .

In recent years sensational media coverage has fuelled a growing concern that some children become addicted to fruit machine gambling, and resort to delinquent behaviour to support their play. This has led to calls for a legal ban on fruit machine gambling for children,

culminating in two private members bills: the Gaming Machines Bill (1988), and the Amusements Machines (Protection of Children) Bill (1989). Both of these Bills sought to prohibit the use of gaming machines by under sixteens, but they both failed to get a second reading.

The U.K. government's rejection of legal reform is based on the findings of a Home Office study (Graham, 1988). This took the form of a questionnaire survey administered to a sample of 1,946 schoolchildren aged 10 to 16 years in England and Wales; and interviews with 4 groups of regular and 2 groups of occasional/non users. The Home Office study concluded that

“the scale of the problem does not appear to warrant legislation. Very few young people are at risk of becoming dependent upon amusement machines and no evidence is found of any association between the playing of amusement machines dependency and delinquency.” (Graham, 1988. p.iii).

In direct contrast to this finding, the vast majority other studies have reported that a minority of children appeared to be dependent on fruit machine gambling and became involved in a variety of unsocial or illegal activities to fund their play (Ashdown, 1987; Barham and Cornell, 1987; Huff and Collinson, 1987; NHTPC, 1989; Rands and Hooper, 1990; Children's Society, 1990).

The main bone of contention seems to be the extent of an acknowledged problem of addiction to gambling among young players. On the one hand members of the caring professions report that the problem is significant enough to warrant legislation; for instance a legal ban on

under- sixteens. On the other, representatives of the amusement machine industry claim that the size of the problem has been blown up out of all proportion and is the domain of parental supervision, rather than legal reform. Ironically, this (ongoing) debate has been conducted in the absence of any discussion on what comprises an “addiction” to gambling in children, and without a standard means of measurement. It is not surprising, therefore, that a range of findings exist which fit a range of viewpoints.

This research into fruit machine gambling by children and young people residing in a seaside resort comprises two complementary studies:

#### STUDY A: THE QUESTIONNAIRE SURVEY

The first objective of study ‘A’ was to develop a standard measure of addiction to gambling in children and to test it in the field. In the event, the measure proved to be effective and allowed an assessment of the extent of addiction to gambling among children in the study location. The questionnaire survey also provided a structural description of the children who were ‘addicted’ to gambling compared with those who were ‘social’ gamblers.

#### STUDY B: THE ETHNOGRAPHY

The objective of study ‘B’ was a sociological description of the social processes which underpin fruit machine gambling in the social context of an amusement arcade. Observations from the ‘change box’ of a seaside amusement arcade suggested that a complex and diverse range of meaning was associated with juvenile gambling which contradicted the ‘mindless’ ‘moronic’ image presumed by (non-playing) researchers and journalists.

## **Theoretical framework**

Choosing a theoretical framework for the research was initially problematic. The studies were concerned with *gambling*, *adolescence*, a *leisure activity* and a pursuit with the potential for *addiction*. And an examination of the pathologizing fruit machine gambling among children might usefully inform the body of literature on *patriarchy*. Furthermore, fruit machine gambling among young people provides an archetypical example of the growing adolescent participation in *consumer culture*.

Preliminary examination of these literatures revealed the potential of each perspective. Theories of adolescence pointed to the disjuncture between childhood and adulthood in modern western societies. The literature on leisure emphasised the quest for excitement as a major component of youth leisure. Theories of patriarchy and consumer culture stressed the dominant societal perceptions of young people and the exploitation of their search for identity.

On first impressions, the sociology of gambling seems unpromising. Some of the major contributions stem from the 1940's, 1950's and 1960's, are framed in the functionalist mode, and are couched in moribund terminology. Nevertheless, despite these drawbacks, fruitful and illuminating themes emerge. Gambling is a highly specialised activity and the sociology of gambling, provides the richest insights into the research data on fruit machine gambling among children and young people. Thus while the research draws on a variety of perspectives, it is largely informed by, and aims to contribute to, the sociology of gambling.

Chapters 1 to 3 provide an overview of the sociology of gambling which is increasingly focussed on juvenile fruit machine gambling. Chapter 1 examines three major works on gambling which seek to explain gambling as play, gambling as 'action' and gambling in relation to the socio-economic system. Chapter 2 reviews those studies which place gambling under the microscope and concentrate on the differentials in gambling behaviour and the ways in which different social groups are attracted to different gambling forms. Chapter 3 examines previous research on juvenile fruit machine gambling in the U.K. The Home Office study is critically assessed both on its own merit and in the light of research undertaken before and since.

Chapter 4 discusses the methods and methodology used in study 'A' to develop a standard measure of addiction to gambling in children. Sociologists tend to be suspicious, if not downright hostile, to terms such as 'addiction' or 'pathology'. Yet in the study of gambling, concepts such as these are unavoidable. Chapter 4 addresses some of the main contentions head on. In particular, the concept of addiction to gambling in children is discussed and the contribution sociology can validly make to the study of such an addiction. The measure itself is presented and the methods used in the validating field trial are outlined.

Chapters 5 and 6 present the findings of study 'A'. Chapter 5 demonstrates that the measure, DSM-IV-J, effectively discriminated between those children defined as "probable pathological" gamblers and the control group of "social" gamblers on all behaviours hitherto related to gambling dependency in children. Chapter 6 compares some of the

demographic and social characteristics of the children defined as “probable pathological” gamblers with those of the “social” gamblers.

Chapter 7 discusses the methods and methodology used in study ‘B’ to discover how children and young people orient to fruit machine gambling in an amusement arcade. The role of overt insider as a cashier in the “change box” is discussed, together with the in-depth interviews undertaken. Particular emphasis is placed upon ethical issues as well as the problematics of validity and reliability in ethnographic research. A ‘postscript on publicity’ highlights some of the methodological concerns associated with researching socially sensitive and media-attractive topics.

Chapter 8 presents the results of the ethnographic study in the form of a typology comprising Arcade kings and their Apprentices, Machine Beaters, Rent-a-Spacers, Action Seekers and Escape Artists. Each of the types describe a dominating, but not mutually exclusive, orientation to fruit machine gambling by children and young people.

## CHAPTER ONE: SOCIOLOGICAL THEORIES OF GAMBLING

Sociological theories of gambling fall into three main categories. The first discusses gambling in relation to the structure of the socio-economic system and emerges predominately from the functionalist tradition. A Marxist interpretation is also subsumed within this category, although no definitive Marxist statement on gambling exists. The second category stems from Goffman's analysis of action in relation to gambling behaviour and the third deduces gambling as a form of play. These three categories are by no means mutually exclusive and strands of each may be seen in the writings of the major analysts.

The sociological theories of gambling which are discussed below, stem from the late 1940's to the late 1960's. Consequently they sometimes express modes of thought, or are couched in terminology which would be considered problematic in the light of today's sociology. In the interest of clearly uncovering the major themes of the authors, the theories are reproduced faithfully from the originals prior to conceptual and critical analysis which is found at the end of each section.

### **GAMBLING AS PLAY: THE MODEL OF ROGER CAILLOIS**

Inspired by Huizinga's theory of play (1950) which sought not only to define play but to clarify its role in the development of civilisation (Caillois, 1962, p.3), Caillois attempts a typology of play from which the games peculiar to a culture can be classified and its various cultural themes better understood. Thus Caillois seeks to establish not only a sociology of games but a sociology derived from games (Downes, 1976). By means of this dual analysis the nature of gambling games and

their relationship to modern societies is rendered sociologically understandable.

Teasing out and embellishing Huizinga's original definition, Caillois defines play in a summary way, as an activity which, in terms of its formal qualities is essentially:

- "1. Free: in which playing is not obligatory; if it were it would at once lose its attractive and joyous quality as diversion;
2. Separate: circumscribed within limits of space and time, defined and fixed in advance;
3. Uncertain: the course of which cannot be determined, nor the result attained beforehand, and some latitude for innovations being left to the players' initiative;
4. Unproductive: creating neither goods, nor wealth, nor new elements of any kind; and, except for the exchange of property among the players, ending in a situation identical to that prevailing at the beginning of the game;
5. Governed by rules: under conventions that suspend ordinary laws, and for the moment establish new legislation, which alone counts;
6. Make believe: accompanied by a special awareness of a second reality or of a free unreality, as against real life.' (Caillois, 1962, pp.9-10)

Caillois then proposes a division of the games people play into four main rubrics according to whether the role of competition, chance, simulation or vertigo is dominant. These he calls *agon*, *alea*, *mimicry* or *vertigo*, respectively, using terms borrowed from ancient and modern language which most nearly impart the essence of the forms he is attempting to portray. (For example, *alea* is the Latin name for the



game of dice, *ilinx* is the Greek term for whirlpool). Thus using Caillois's classification:

"One plays football, billiards or chess (agon); roulette or a lottery (alea); pirate, Nero, or Hamlet (mimicry); or one produces in oneself, by rapid whirling or falling movement, a state of dizziness and disorder (ilinx)." (Caillois, 1962, p.12)

## **Agon**

A whole host of games, physical or cerebral, may be classified as agonistic, the common denominator being

"... a question of rivalry which hinges on a single quality (speed, endurance, strength, memory, skill, ingenuity etc.) exercised, within defined limits and without outside assistance, in such a way that the winner appears to be better than the loser in a certain category of exploits." (Caillois, 1962, p.14).

Caillois notes that the search for equality of chances is essential to this rivalry and every effort is made to ensure that adversaries meet under ideal conditions. Hence the division of football teams into leagues, the handicapping of golfers and the award of a pawn (or other chess piece) to the weaker player in a chess match. Even where imbalances are inevitable as when the wind or sun favours one side and hinders another, they are minimised by the drawing of lots at the beginning and the alternating of the favoured position thereafter. Such notions of fair play ensure that the superiority of the winner is beyond dispute.

## **Alea**

In contrast to games based on competition, games of chance are:

"... games that are based on a decision independent of the player, an outcome over which he has no control, and in which

winning is the result of fate rather than triumphing over an adversary." (Caillois, 1962 p.17).

In perfect examples of *alea* such as dice, lotteries, roulette or heads and tails, far from attempting to negate the intrusion of chance, it is the very capriciousness of chance which is courted. And where rivalry is seen in such games it is only insofar as the winner has been more favoured by "luck" than the loser. Thus, in contrast to *agon*, *alea* supposes in the player an attitude of non-reliance upon himself, a negation of hard work, training, application and experience in favour of an idle (albeit full of tension) observation of the revelation of destiny.

### **Mimicry**

In the context of play mimicry serves not to deceive but temporarily to shed the persona of the actor in order to experience the demeanour of a preferred other. Thus:

"At a carnival the masquerader does not try to make one believe that he is really a marquis, toreador or Indian, but rather tries to inspire fear and take advantage of the surrounding license, a result of the fact that the mask disguises the conventional self and liberates the true personality." (Caillois, 1962 p.21).

Caillois argues that *mimicry* with its associated use of imagination, interpretation and movement has "hardly any relationship" with *alea*, which requires "immobility and the thrill of expectation" from the player, but it does not exclude *agon*. In the case of the latter it is not the competitors in, say, a football match who mimic but the spectators who identify with them. (However, in dissociating *mimicry* from *alea*, Caillois neglects the importance of the social context in gambling motivations . Other writers have observed individuals "fancy milling" at

glamorous gambling venues, or temporarily adopting the demeanour of a sub group of punters in the segregated context of a working class bar (Goffman, 1969; Zola, 1963). This suggests that *mimicry* of the "identification" variety appears to be a prime motivator.

## **Ilinx**

Games in Caillouis's final category of ilinx are concerned with the gratuitous pursuit of vertigo. In all cases :

“they consist of an attempt to momentarily destroy the stability of perception and inflict a kind of voluptuous panic on an otherwise lucid mind” (Caillouis, 1962, p.23)

This sense of vertigo is commonly provoked by physical activities such as swinging, tobogganning or dancing; or in a more extreme form on funfair rides which produce in the individual a familiar ambivalence:

“The contraptions turn people pale and dizzy to the point of nausea. They shriek with fright, gasp for breath, and have the terrifying expression of visceral fear and shrinking as if to escape a horrible attack. Moreover the majority of them, before even recovering, are already hastening to the ticket booth in order to buy the right to again experience the same pleasurable torture.” (Caillouis, 1962, p.26)

Caillouis also describes a 'moral' category of vertigo which is linked to a (normally repressed) desire for disorder and destruction. This psychological form of vertigo is manifest in crude forms of personality expression, manifest for example in “the intoxication that is experienced in military barracks - for example, in noisily banging garbage cans” (Caillouis, 1962, p.24). Both kinds of vertigo clearly involve the temporary negation of self control.

### From turbulence to rules

Games which are assigned to these four categories are then placed upon a continuum according to the extent to which they epitomise “spontaneous manifestations of the play instinct” at one end (*paidia*); or are bound by “arbitrary, imperative and purposely tedious conventions” at the other (*ludus*) (Caillois, 1962, p.13). As the root of the term *paidia* suggests, early childhood games are subsumed into this category (Caillois cites the example of a child laughing at his rattle), while games of calculation and contrivance such as crosswords, and bridge and chess puzzles, exemplify *ludus*. Caillois notes that

“Ludus in itself seems incomplete, a kind of makeshift device intended to allay boredom. One becomes resigned to it while awaiting something preferable such as the arrival of partners that makes possible the substitution of a contest for this solitary pleasure.”(Caillois, 1962, p.3).

This accounts for the susceptibility of games such as the yo-yo, hula hoops and Rubik's cubes to the whims of fashion; such games only persist in so far as aficionados transform them into *agon*.

Figure 1, reproduced from the original, illustrates by example Caillois schema for the classification of games.

	AGON	ALEA	MIMCRY	ILINX
	(Competition)	(Chance)	(Simulation)	(Vertigo)
<b>PAIDIA</b>	Racing,	Counting-out	Children's	Children
	Wrestling,	rhymes	initiations,	"whirling",
Tumult	Athletics,	Heads or tails	Games of	Horse riding
Agitation	(unregulated)		illusion	Swinging
Immoderate			Tag, Masks,	
laughter	Boxing,		Disguises	
	Billiards,	Betting,		
	Fencing,	Roulette		
Kite-flying	Checkers,			
Solitaire	Football, Chess	Lotteries		Funfairs,
Patience			Theatre	Skiing,
Crossword	Contests,		Spectacles in	Mountain
puzzles	Sports in		general	climbing,
	general			Tightrope
				walking

## LUDUS

N.B. In each vertical column games are classified in such an order that the *paidia* element is constantly decreasing while the *ludus* element is ever increasing (Caillois, 1962, p. 36).

Having established his model, Caillois uses it to show how from the study of play and games, no less than from the study of economic, political and other institutions, the basic themes and patterns of culture can be deduced. Of the possible combinations of game type, only two

are seen as truly compatible: the *agon-alea* pairing of competition and chance and the *mimicry-ilinx* pairing of simulation and vertigo. Moreover these are seen not only in games but in the cultures which play them:

“Some primitive societies which I prefer to call "Dionysian", be they Australian, American, or African, are societies ruled by masks and possession, ie. by mimicry and ilinx. Conversely the Assyrians, Chinese, or Romans are orderly societies, with offices, careers, codes and ready reckoners, with fixed hierarchical privileges in which agon and alea ie. merit and hereditary, seem to be the chief complementary elements in the game of living. In contrast to primitive societies these are "rational".” (Caillois, 1962, p.87).

Furthermore Caillois posits a reciprocal relationship between a society and the games it likes to play, the games sometimes reflecting and sometimes contradicting (but always confirming) the social values of the society in question:

“These preferred and widely diffused games reflect, on the one hand, the tendencies tastes and ways of thought that are prevalent, while, at the same time, in educating and training the players in their very virtues or eccentricities, they subtly confirm them in their habits and preferences.” (Caillois, 1962, pp. 82-83.)

Caillois perceives evidence for this reciprocal relationship in the Anglo Saxon sport of golf. In this case he correlates the attitude of fair play (cheating would render the game pointless) to that of the tax payer to the treasury and the citizen to the state. A contrasting example, which Caillois finds instructive for a less rational society, is provided by the Argentine game of truco. This is a card game akin to poker and manilla in which partners are required to convey to each other the cards they

possess, without enlightening the opposition. This is achieved through symbolic pouts and grimaces and barely perceptible gestures, or by means of elaborate codified description, decipherable by the partner but meaningless to other players. Once more a reciprocal relationship is perceived between game and culture:

“Such rare components in a game so prevalent as to be almost a national past-time may excite, sustain, or reflect habits of mind that help give ordinary life, and possibly public affairs too, their basic character - the recourse to ingenious illusions, a sharpened sense of solidarity among colleagues, a tendency towards deception, half in jest and half serious, admitted and welcomed as such for purposes of revenge, and finally a fluency in which it is difficult to find the key word, so that a corresponding aptitude must be acquired.”(Caillois, 1962, p.84)

As a sociology derived from games, Caillois' model is evolutionary rather than revolutionary in its explanation of social change. As nations “civilise”, the games which assist in socialising their members are subtly undermined and transformed until both games and culture approximate the western capitalist model. *Mimicry* and *vertigo* lose their traditional dominance and are relegated to sublimated modern forms, while *agon* and *alea* attain eminence:

“The transition to civilisation as such implies the gradual elimination of the primacy of *ilinx* and *mimicry* in combination, and the substitution and predominance of the *agon-alea* pairing of competition and chance.” (Caillois, 1962, p.97)

While Caillois' theory of the place of play and games in culture is, on the face of it, somewhat reductionist and ethnocentric in its presentation, his analysis of the persistence of gambling in Euro-American society which stems from it is challenging.

## GAMBLING IN CAPITALIST SOCIETIES

An understanding of Caillois' sociology of gambling demands further elaboration of his typology of games and, in particular, the competition-chance relationship of *agon* and *alea*. On first consideration, *agon* and *alea* are supremely contradictory. In *agon* there is a dependence upon individual skill, strength, or memory to establish the superiority of one player over another; years of training, patience and practice may have been invested in the endeavour. By contrast, *alea* signifies the relinquishing of personal effort in favour of destiny; all the player risks is his stake. In this respect *alea* "seems an insolent and sovereign insult to merit" (Caillois, 1962, p.17).

Yet, paradoxically, *agon* in its pure form approximates *alea*. The processes of handicapping, seeding and league tables, which have been developed to equalise competitors, even the odds attributable to natural ability and endeavour sufficiently to make the competition amenable to betting. This accounts for widespread betting on horse racing, football pools and the like.

Of course many games combine both *agon* and *alea* in varying proportions. In games such as backgammon, dominoes and poker, qualities of experience, logical thought and psychological acumen augment the hands dealt to each player; thus in these games, as in life itself, luck and merit coexist. But in games, unlike real life, the part played by luck in the fortune of the players is known in advance and evenly applied to all:



"The role of merit or chance is clear and indisputable. It is also implied that all must play with exactly the same possibility of proving their superiority, or on another scale, exactly the same chance of winning" (Caillois, 1962, p.19).

To Caillois, the contradictory and complementary nature of *agon* and *alea* are seen not only in games but also in modern 'rational' society, about which he is profoundly pessimistic. Just as in a card game the winner's superiority is based upon the cards dealt and the skill employed in playing them, likewise, in the very heart of society aspiring to meritocracy, an aleatory element pervades:

"...chance, opportunity and the aptitude to profit from them, play a constant and important role in society. The intrusions of physical and social advantages of heredity (honors, wealth, beauty, or refinement) upon triumphs of the will, patience, competence, and work (the prerogatives of merit) are complex and innumerable." (Caillois, 1962, p.113).

Consequently, Caillois concludes that despite persistent efforts of political reformers to devise more equitable forms of competition and thus even the odds:

"Each man is conditioned by his environment. He may perhaps ameliorate conditions through merit, but he cannot transcend them. He is unable to change his station in life." (Caillois, 1962, p.114)

Furthermore, Caillois attributes to the majority of members of this socially static society an incrementally depressing realism as to their own personal inferiority:

"... many people do not count on receiving much on personal merit alone. They are well aware that others are abler, more skilful, stronger, more intelligent, more hard working, more ambitious, healthier, have a better memory, and are more

pleasing or are more persuasive than they are.” (Caillois, 1962, p.114)

Despite what here seems to be a confusion of agonistic and aleatory, qualities, the principal tenet of Caillois's sociology of gambling is clear. Denied by their birthright (assigned to them by the capriciousness of *alea*) the rewards of society to which they aspire, the “lower ranks” of society recourse to a form of competition that will be kinder to them; they seek respite in games of chance.

“...where even the least endowed, stupidest and most handicapped, the unskilled and the indolent may be equal to the most resourceful and perspicacious as a result of the miraculous blindness of a new kind of justice.” (Caillois, 1962, p.114)

## **PATHOLOGICAL GAMBLING**

Caillois implies two routes of progression from gambling as play to pathological gambling. The first occurs as a result of the corruption of play by teleological illusion. The player ceases to view chance as a purely neutral, mechanical phenomenon, devoid of heart or memory, and is governed by superstition. Participation in gambling encroaches beyond the usual strict limits of time and place prescribed by the formal qualities of play. It infiltrates into daily life, which is subordinated to its needs as much as possible.

“What used to be pleasure becomes an obsession. What was an escape becomes an obligation, and what was a pastime is now a passion, compulsion, a source of anxiety.” (Caillois, 1962, p.44)

The second route to pathological gambling is via a growing preoccupation with *ludus*. In such a case, the player becomes so

involved with mastery of the recurrent obstacles and techniques of the game, that beating the game itself becomes a lonely obsession:

“It (LUDUS) remains transient and diffuse, or else it risks turning into an obsession for the isolated fanatic who would dedicate himself to it absolutely and in his addiction would increasingly withdraw from society.” (Caillois, 1962, p.32)

Notwithstanding the dysfunctional impact of a minority of pathological gamblers, Caillois's sociology of gambling is unequivocally functional for society. By providing an alternative, if illusory, avenue to financial reward, the lowly are encouraged

“to be more tolerant of a mediocre status that they have no practical means of ever improving” (Caillois, 1962, p.115).

And in addition to the seductive image of sudden wealth purchased with each lottery ticket, or even the fascination of acquiring a little money for no effort, gambling is implicitly attributed with a cathartic role in “rational” society. For to gamble is temporarily to renounce societal values of thrift, patience and endeavour (*agon*), in favour of the idle recklessness of destiny (*alea*); and yet this very act of rejection of the tenets of capitalism contribute to its maintenance.

## DISCUSSION

The enduring strength of Caillois' work lies in his definition and classification of games. But alas the bold simplicity which lends such power to his classification tends towards reductionism when used as a tool to explain the evolution of societies and the persistence of gambling in modern societies.

With regard to the latter, Caillois is unduly preoccupied with the economic motivation of “lower class” gamblers. In Caillois' formulation, the economic system is an unfair game stacked against the “lower ranks” of society. Fully aware of this and of their own alleged inferiority in terms of birth, talent and personal charm, the “lower classes” seek respite in an alternative form of economic activity, where their personal shortcomings are not taken into account.

Plausible though this explanation may at first seem, it is riddled with flaws and inconsistencies. Firstly sociological studies in other substantive areas have shown that individuals do not assess their social standing objectively (how can they?) or with purely economic criteria. Rather they employ various devices of self perception which maintain and enhance their sense of self and their relative importance in the socio-economic system. This has been observed in the “professionalisation” of occupations and a self definition of social class which varies from so-called ‘objective’ criteria (Parry and Parry, 1976; Roberts et al, 1977).

Secondly, Caillois' account suggests an extraordinary degree of acquiescence on the part of underprivileged groups in society in the face of clearly perceived inequality. In relation to this Caillois pays no due to the individual-as-actor and his/her potential for critical analysis, combining in opposition groups, negotiation of rights and even revolution in response to institutionalised inequality. All of these have numerous historical precedents.

Thirdly, Caillois does not convey the vital diverseness of different gambling forms so that the wealth of meaning arising out of subcultures

specific to games such as bingo, horse racing, slot machines and poker, are completely disregarded. Rather, the motivation to gamble is generically defined as economic and applied to all games of chance and all gamblers. Thus highly complex and group specific data and phenomena are reduced to a simplified, mundane, caricature of reality.

Finally, while concentrating on the propensity of the unfortunate to play games of chance, Caillois omits their counterparts, the privileged. But once again the criticism is ultimately that of reductionism as, indeed, no account is given of gambling among other groups such as the middle class, women, life-cycle groups and different racial groups residing in the same location.

However, any balanced criticism of Caillois' contribution to the sociology of gambling must place this element of his work in the context of what he was attempting to achieve. This was, first and foremost, the formulation of play and games as a "culture clue" to assist the understanding of the basic themes of a culture. Without doubt, the abiding strength of Caillois' contribution to the sociology of gambling lies in his methodologically rewarding typology of play. It is clear that each gambling experience may intensify the sense of *agon*, *alea*, *mimicry* or *vertigo* and that these concepts may sensitise the researcher to possible orientations to gamble.

The concepts of *agon*, *alea*, *mimicry* and *vertigo* were used as heuristic tools in the ethnographic element of this research. For example, competition between players; the desire to adopt the persona of a preferred other (adults) and the sense of heady excitement that accompanies wagering (enhanced by a surreal environment), all

characterised fruit machine gambling among young people in an amusement arcade.

### **GAMBLING AS ACTION: GOFFMAN**

In his essay entitled “Where the action is” (1969), Goffman attempts a systematic analysis of the concept *action* where this is used to describe situations which contrast with those in which there is “no action” (Goffman, 1969, p.107). His resolution reveals a dilemma: action in modern western society, is beloved of the masses, but hard to come by. One unfailing source is provided by gambling which Goffman calls “the prototype of action”; consequently an exposition of *action* simultaneously achieves an explanation of why people gamble. Like Caillois, Goffman begins with the notion of a game and by analysing outwards renders gambling understandable within a macro-societal framework.

Two small boys toss a coin found in their path to decide which one will keep it. As in all games of chance and contests, the play is *problematic* in the sense that it is “not yet determined but about to be” (Goffman, 1969, p.110). The *span of play* is divided into four phases: *Squaring off*, in which the boys make the wager (decide to toss for the coin); *determination*, in which the game is in play (the coin is tossed in the air); *disclosure*, in which the outcome is revealed (the process of which possesses a special ‘suspensefulness’ of its own), and *settlement*, where the winner takes the reward. Periods between plays are called *pauses* and the total period of playing is called a *session* (comprising a number of plays).

These four phases of play are found in contests requiring special skills or knowledge, as well as in games of pure chance. But Goffman makes a vital distinction between the two which corresponds to Caillois' comparison of *agon* and *alea* .

“...in the former (games of chance), once the determination is in play, the participants can do nothing but passively await the outcome; in the latter (contests) it is just this period that requires intensive and sustained exercising of relevant capacities” (Goffman, 1969, p.111, words in brackets supplied).

Clearly individuals make wagers and take chances, unconsciously or otherwise, in the course of their daily lives. They marry, choose between one job or another and may be caught up in a sequence of events that calls for numerous vital decisions to be made (requiring a high rate of bet making). But in everyday life the span of play is usually prolonged and the whole process may take years even from *squaring off* to *settlement*. This is precisely what sets contests and games of chance apart:

“The distinctive property of games and contests is that once the bet has been made, outcome is determined and payoff awarded all in the same breath of experience. A single sharp focus of awareness is sustained at high pitch during the full span of play.” (Goffman, 1969, p.113).

The ultimate payoff of tossing a coin has two dimensions: the objective value of the prize (measured in money terms) and a subjective value which is what its winning allows, or losing disallows, the tosser later on to do:

“This is the gamble's consequentiality, namely, the capacity of a payoff to flow beyond the bounds of the occasion in which it is

delivered and to influence objectively the later life of the better." (Goffman, 1969, p.116).

It is the *consequentiality* element of chance taking which directs Goffman's analysis outwards from circumscribed gambles to wider arenas of living.

In modern Western society leisure activities are likely to be *problematic* in that they present individuals with selection, but they are unlikely to be *consequential*. Work time activities are likely to be consequential, but given the routine work procedures of the modern division of labour, are unlikely to be *problematic*. Thus both work and leisure are frequently *uneventful*:

"... either nothing important happens or nothing important happens that is unexpected and unprepared for." (Goffman, 1969 p.119)

Activities which are both *problematic* and *consequential*, Goffman terms *fateful*, or *eventful*.

Goffman points out that the human condition is primordially *fateful* in that individuals and their actions are unceasingly susceptible to unforeseen contingencies. These may be due to the "adventitious linking" of events, the vulnerability of the flesh, or even socially situated:

"Just as the individual brings his body into every occasion of his activity and also the possibility of the fortuitous linking of an already consequential event to one that would otherwise be innocuous, so he brings himself as the upholder of conduct standards like physical adeptness, honesty, alertness, piety and neatness. The record of an individual's maintenance of these standards provides a basis others use for imputing a personal



makeup to him. Later they employ this characterization in determining how to treat him - this is consequential." (Goffman, 1969, p.122).

Not surprisingly, individuals generally take pains to avoid fatefulness by engaging in what Goffman terms *copings*. For example they adopt an incremental attitude towards long term goals (eg. saving, 'working their way up the career ladder'); they purchase life insurance and take pains to uphold social proprieties. Nevertheless roles are undertaken in both leisure and working time in which *fatefulness* is knowingly embraced. These may be assumed by financial speculators, steeplejacks, test pilots or policemen, stand up comics, mountain climbers or burglars. However, Goffman suggests that these roles are subtly transformed by the actors' perception of them as risky and their subsequent obligation to go through with them. They thus become what he terms practical gambles (and thus, marginally, not the sort of activity he is attempting to define as *action*).

*Fateful* activity necessarily engenders certain affective states such as apprehension, excitement, disappointment and remorse, and individuals adopt various devices for easing them. For example, fishermen are susceptible to ritualistic superstition (such as casting a coin into the sea with the net), soldiers may express a belief in predestination and gamblers may 'write off' their stake in advance of the outcome. Similarly some gamblers employ a defensive strategy when they apply a 'scientific' approach to their task:

"A person who coolly resorts to a game theory matrix when faced with a vital decision is reducing a painful risk to a calculated one. His frame of mind brings peace of mind. Like a competent surgeon, he can feel that he is doing all that anyone is

capable of doing, and hence can await the outcome without anguish or recrimination" (Goffman, 1969, p.132).

Any such strategy which is used to ameliorate an affective response associated with *fatefulness* Goffman terms a *defence*.

### **Action defined**

Summarising the analysis thus far; it is part of the human condition that individuals are perpetually faced with events that are *problematic* and *consequential*, ie. *fateful*. In everyday life people take care to avoid or minimise the fatefulness of their moments (*coping*) and to minimise the psychologically painful states associated with it (*defence*). Even individuals who commit themselves to occupational roles which amount to *practical gambles*, develop procedures to minimise the physical and psychic danger involved.

Of course, *fatefulness* cannot be entirely eliminated, but even if it could Goffman suggests that ambivalence would persist about the blandness of a life free from the unexpected and inconsequential. Indeed, some individuals actively seek events that are:

"consequential, problematic, and undertaken for what is felt to be their own sake." (Goffman, 1969, p.136, emphasis supplied)

It is specifically this type of event which finally comprises Goffman's definition of action, set apart as it is from all other fateful action by the stress on voluntarism:

"No extraneous factors compel him to face fate in the first place; no extraneous ends provide expedient reasons for his continued participation. His activity is defined as an end in itself, sought out, embraced and utterly his own."(Goffman, 1969, p.136)

The degree of action - its vividness and seriousness - is determined by the measure of *fatefulness* involved:

“the greater the fatefulness, the more serious the action”  
(Goffman, 1969, p.198).

And action seems more pronounced in situations where the four phases of play are completed in the same stretch of experience as in contests and games of chance so that:

“the individual releases himself to the passing moment, wagering his future state on what transpires precariously in the seconds to come. At such moments a special affective state is likely to be aroused, emerging transformed into excitement”  
(Goffman, 1969, p.137).

Serious action seeking such as this clearly approximates Caillois' description of moral vertigo. A description of *action* for lower-class Boston Italians provides a graphic example:

“for the action-seeker, life is episodic. The rhythm of life is dominated by the adventurous episode, in which heights of activity and feeling are reached through exciting and sometimes riotous behaviour. The goal is action, an opportunity for thrills, and for the chance to face and overcome a challenge. It may be sought in a card game, a fight, a sexual interlude, a drinking bout, a gambling session, or in a fast and furious exchange of wisecracks and insults. Whatever the episode, the action-seeker pursues it with a vengeance, and lives the rest of his life in quiet- and often sullen- preparation for this climax, in which he is usually said to be ‘killing time’”. (Gans, 1962 in Goffman, 1969, p.160).

The term *action* which originated in gambling argot has long since been diffused in its usage. Hence *action* of varying degrees is to be found in

commercialised spectator sports; non-spectator risky sports; commercialised places of action such as casinos, pool halls and even amusement arcades

“where the cost of the play and the value of the prize generate a mildly fateful context for displaying competence.” (Goffman, p.146).

In addition *action* is experienced in arenas for Veblenian conspicuous consumption which Goffman terms “fancy milling”. Here, for a fat fee, individuals can purchase a temporary leap in social mobility and with it a ‘flavour of the action’, if not themselves directly, then vicariously, by rubbing shoulders with those who do. A visit to an up-market casino thus provides an ideal venue for *action*, combining as it does games which are inherently fateful together with the paraphernalia and personnel for “fancy milling”.

In an analysis which runs remarkably parallel to that of Caillois, Goffman describes how other people can become “fields of action” particularly where handicapping succeeds in approximating competition to chance

“... with the added bite that one person's success must be balanced by the other persons' failure” (Goffman, 1969, p.156).

Women are cited as fields of play for courtship and sexual action; even society itself may become a ‘field of action’ for delinquent groups. Interestingly, Goffman depicts all situations of *action* as predominantly male domains and claiming that

“ ... indeed, action in our Western culture seems to belong to the cult of masculinity” (Goffman, p.156).

## Character

The propensity of (predominately) males to pursue gratuitous *fatefulness* in one form or another has been held by some writers to be integral to the development and demonstration of manliness (Goffman cites Finestone, 1951; Thrasher 1963; Gans, 1962). In his explanation of why people seek action, Goffman begins where this proposition ends by claiming that

“manliness is a complex of qualities better called character” (Goffman, 1969, p.160).

When engaging in chancy activity, whether bull fighting, boxing, or gambling, certain talents or skills are required such as timing, balance, stamina and a knowledge of the odds. These primary properties may be created by training, but during the action itself they may be heightened to produce excellence; or collapse rendering the individual unsure and incapable. The capacity each individual has for the maintenance of primary capacities during *action*, Goffman terms *character*.

Various forms of *character* preside over the management of *fateful* events. Goffman cites courage (which may be physical, financial, social or spiritual); gameness; integrity; gallantry and composure, none of which are seen as mutually exclusive:

“A wireless operator who politely declines to leave his sinking ship and goes down while coolly improvising repairs on the transmitter, gamely driving himself even though his hands are burned, combines in his deed almost all that society can ask of anyone.” (Goffman, 1969, p.163).

Thus *character* as well as primary properties contribute to the reputation an individual acquires. Both are therefore consequential, but the former more so in that it is always judged morally and usually in extremes (weak or strong). Furthermore there is a belief in Western societies that *character* can be dramatically acquired or lost on a single showing:

“to display or express character, weak or strong, is to generate character: the self, in brief, can be voluntarily subject to recreation.” (Goffman, 1969, p.179).

In seeking *action* then, the individual is seeking something which is sufficiently highly prized in Western society to be acceptable posthumously: a gain in *character*; an approval from society, or at least from his/her peer group, of his/her essential self. A boxer may lose a fight but through courage and gameness gain *character*. The same reasoning is applied to gambling. The gambler may suffer grave financial loss but by the timely display of courage and composure a significant gain in *character* may ensue:

“Thus among professional gamblers, there is respect for a quality called ‘gamble’, namely, a willingness to submit to the rules of the game while chancing a major portion of one’s current capital - presumably with the grace to carry off the win or loss circumspectly.” (Goffman, 1969 p.164)

The pursuit of *character* through *fateful* activities is seen as functional for society, the function being simultaneously to solve the problems of morale and continuity. As far as morale is concerned:

“individuals must come to all their little situations with some enthusiasm and concern, for it is largely through such moments that social life occurs, and if a fresh effort were not put into

them then society would surely suffer.” (Goffman, 1969, p.180).

The spur to enthusiasm, concern and renewed effort is the possibility of positively affecting reputation.

As far as continuity is concerned, the aspect of *character* which Goffman terms composure has a vital role to play, (although Goffman restricts his analysis to males). To accomplish successfully personal goals or maintain societal norms, the individual must remain in physical, emotional and moral command of himself, even under the most trying of circumstances:

“If society is to make use of the individual, he must be intelligent enough to appreciate the serious chances he is taking and yet not become disorganized or demoralised by this appreciation. Only then will he bring to moments of society's activity the stability and continuity they require if social stability is to be maintained.” (Goffman, 1969 p.197).

Societal encouragement for such self control arises once more in the form of a moral payment which imputes a strong or weak *character* according to performance, and thus offers the possibility of positively affecting reputation.

Opportunities for truly heroic conduct are no longer institutionalised in modern society (duelling, for example, proved too wasteful of key personnel), and *practical gambles* occupational or otherwise are undertaken by but a small minority. For most people *action* has been “all but arranged out of everyday life”. And yet even prudent individuals need to exhibit to themselves and to others the stirring qualities of their essential selves, or they risk losing

“connexion with some of the values of society, some of the very values that portray the person as he should be.” (Goffman, 1969 p.198).

Consequently they recourse to commercialised *action*

“wherein the appearance of fatefulness is generated in a controlled fashion in an area of life calculated to insulate its consequences from the rest of living.” (Goffman, 1969, p.199).

One important source of commercialised *action* is gambling.

## DISCUSSION

Goffman's elegant exposition of the quest for character through gambling has done much to dispel the myth of a simplistic economic motivation to gamble. He has shown that for some males at least, a gambling session provides an oasis of drama in the persistent uneventfulness of daily life. In living out this self-sought drama, gamblers gain an opportunity to demonstrate approved qualities of manliness such as courage, composure, integrity, dignity, and even gallantry, which is increasingly scarce in their routinised world. This thesis is borne out by all major qualitative studies of male gambling (Zola, 1963; Herman, 1967, 1976; Scott, 1968; Newman, 1972; Campbell, 1976; Saunders and Turner, 1987).

However the evident power of Goffman's psycho-sociological theory in explaining the gambling behaviour of males, falls short when considered as an explanation of gambling behaviour in general. In particular, the motivation of females to gamble is disregarded or implicitly dismissed as atypical. According to Goffman, females do not seek *fateful* activities; the search for action is a peculiarly male phenomenon:



“...action in our western culture seems to belong to the cult of masculinity - in spite of lady bullfighters, female aerialists and a preponderance of females in the slot machine pits at casinos.”  
(Goffman, 1969, p.156)

It is not clear whether Goffman sees this state of affairs as culturally determined or whether he views male and female ‘biogrammars’ as superceding cultural influences. In either case his analysis begs the question: Why are females content with uneventful lives while males are not?

In a brief footnote Goffman does suggest that, in some societies, the cultural values of masculinity and femininity may be rooted in biological aspects of gender. Accordingly the display of female counterparts of approved qualities of manliness, such as restraint, modesty and sexual purity is antipathic to the pursuit of action.

Certainly the sparse research on female gambling reveals that females dominate gambling games such as slot machines, bingo and raffles, where on the face of it *action* is minimal (Campbell, 1976; Kallick-Kaufmann, 1979; Dixey, 1987a). Furthermore they also play the horses in a particularly restrained manner compared to their male counterparts (Herman, 1967).

Assuming a cultural determination of this state of affairs, two explanations pertain. The first is that females are socialised into thinking that the pursuit of gratuitous *action* is inappropriate to their gender. The second is that *action* is essentially a relativistic concept, and as such its

precise meaning varies with the subjective experience of the individual. Since women have historically undertaken mundane occupational and familial roles, it may be that a less *fateful* experience suffices to alleviate the uneventfulness of daily life. Campbell's (1976) study of elderly female slot machine players clearly supports this hypothesis.

The relativistic quality of action is implied by Goffman himself with respect to the diversity of gambling games, and in such a way that its power is undiluted. Indeed the power of Goffman's analysis lies in the range of its relevance from gambling in 'big time' casinos and racing tracks, to that in amusement arcades:

"On the arcade strips of urban settlements and summer resorts, scenes are available for hire where the customer can be the star performer in gambles enlivened by being very slightly consequential. Here a person currently without social connexions can insert coins in skill machines to demonstrate to the other machines that he has socially approved qualities of character." (Goffman, 1969, p.206 )

Goffman's concepts of *action* , *character*, *defence* and *copings* were used as heuristic tools for the ethnographic element of this research. For example, the quest for excitement, enhanced by precocious participation in a marginalised activity and the opportunity for a gain in reputation by the timely and public reproduction of phenomenal playing skills, were both evident in the orientations of young fruit machine players.

### **GAMBLING AS STRAIN: THE FUNCTIONAL STRUCTURAL ANALYSIS OF DEVEREUX**

It seems almost incredible that at the time of writing the most comprehensive and challenging sociological treatise on gambling remains a largely unpublished work completed by Devereux in 1949. As

a postgraduate student of Talcott Parsons, Devereux clearly anticipated the pivotal role performed by gambling in offering respite from unattainable societal goals, which was developed somewhat differently by Caillois. He similarly anticipated and accounted for the ego enhancement which may be derived from the thrill-seeking motivation of gambling, which was later so elegantly expounded by Goffman. But these are only two of the many sociological, psychological and philosophical aspects of gambling in American society which Devereux sought to explain, and which remain relevant for the study of gambling today.

Taking as his basic framework the voluntaristic theory of social action developed by Talcott Parsons, Devereux based his analysis on the actor, the situation, the ends or goal of the action and the normative patterns the actor takes into account in his/her orientation. The resultant rich insights into gambling which are the fruit of this approach have since earned Devereux the accolade that

“rarely has the strength of the method been better exemplified”  
(Downes et al,1976 p.19).

Devereux's thesis is that gambling persists in society because it is functional both for the dominant socio-economic system and for the personality equilibria of individuals who encounter strain and conflict conforming to it. Even the disapproval of gambling by American society is seen as functional to the maintenance of the dominant order.

## **“RESIDUAL PURITANISM” AND GAMBLING BEHAVIOUR**

Devereux takes the Parsonian view that through the process of socialisation the normative rules of a culture are internalised and eventually become deeply held as convictions. He suggests that an entrenched disapproval of gambling in American society has evolved in this way, which has important consequences for gambling behaviour.

To maintain the capitalist economic system in its main features, Devereux considers the following motivations by individual members must be brought into play:

“...a strong emphasis on strictly "economic" goals, a predominately "scientific" orientation toward the empirical world of cause and effect and toward technical problems generally, a strong emphasis on economic rationality, an important element of individual competitiveness, an accent on thrift, an expanding system of consumer wants, and a strong accent on diligence and work disciplines.” (Devereux, 1949, p.887).

At the structural level Devereux considers the following to be minimum requirements:

“...A separation of the whole institutional sphere of economic activity from entangling non-economic contexts, an ordering of activities and relationships within the economic sphere primarily on the basis of economic considerations, open channels of vertical mobility or an ideology that states that careers are open to talent, the gearing of the broader social structure to the imperious schedules and demands of the economic system, and the establishment in the broader culture of permissive attitudes toward the whole area of economic activities” (Devereux, 1949, p. 891).

These imperatives of capitalism were provided in American society by the powerful religious motivations of Puritanism, classically described by Weber. Of these the mainspring was the doctrine of predestination with its mysterious and unknowable division of mankind into the elect and the damned. Since eternal grace was irrevocably awarded to the chosen from the first moment of creation, and unamenable to human intervention, the consequence for the believer must have been one of "unprecedented inner loneliness". One response to this was the acknowledgement of hard work, ascetic consumption and the consequent accumulation of private wealth as a sign of election. (Not as a means of attaining it, since none was available, but as the most appropriate means of developing and maintaining the necessary confidence in oneself as one of the chosen few.)

Since individuals could not rely on the intercession of priests or others of their fellow men for their salvation they were answerable via their consciences to God alone. This gave rise to elements of individualism, impersonality and even mutual distrust into social relationships making it possible to treat other persons as means to personal ends. Meanwhile the shift of religious motivations from other worldly to this worldly, and the stress on reason as man's unique God-given gift, gave an important impetus to the development of science and technology.

Devereux claims that as Puritanism lost its hold, its ideal values which so closely resembled the psychological motives needed for capitalism were simply absorbed into western culture, regardless of any specific theological justification:

“They were simply taken for granted as the ways in which right-thinking and decent Americans ought to feel about certain things; for example people ought to be thrifty and rational, and ought not to be superstitious or lazy. The rights of private property, the moral duty to work and to strive for economic gains, and even such specialized values as the belief in free enterprise with its implication of non-interference by the state with the affairs of business, came to be taken by most Americans as a kind of higher Natural Law.” (Devereux, 1949, p.894)

The most fundamental structural change engendered by this “residual Puritanism” was the development of a class system theoretically open to competing individuals, with economic success and social prestige firmly rooted in talent and endeavour.

While this synthesis of the ethical, economic and religious tenets of Puritanism have become the core culture of American society, Devereux argues that it has been modified and rejected, or accepted in differing degrees, by succeeding generations. Its impact also varies geographically among different types of community, and different types of social groups and classes. The “core culture” is most nearly intact in where Protestantism survives as the dominant religion of the community. Thus one of the many hypotheses generated by this structural functional analysis is a negative correlation between Protestantism and the propensity to gamble.

### GAMBLING AS A SOCIETAL SCAPEGOAT

According to Devereux, counter mores such as gambling are not manifestations of groups who are necessarily antagonistic, or even indifferent to the dominant ethical system, rather they are pursued by true ambivalents who:

“function not so much to set up an alternative and desired positive state of affairs, as to set up permissive channels of protest against, and escape from the disciplines, controls and frustrating circumstances of the dominant system.” (Devereux, 1949, p.767).

Devereux cites several examples of sources of conflict which create strain for members of American (and European) capitalist society. Firstly, the demands for thrift, rationality and hard work conflict with the pleasure-seeking component of ‘human nature’. Secondly, there is unequal access to channels of mobility so that talent and endeavour do not necessarily reap their just reward. Thirdly, some of the ideal values required for the maintenance of capitalism conflict with one another such as thrift and the requirement for consumption, and the functionally necessary virtues of prudence and adherence to rules, and the willingness to undertake risks.

Devereux claims that Western culture attempts to solve these contradictions and dilemmas by:

“... throwing up a mythology in which these discrepancies are naively denied, or somewhat more subtly rationalized and explained away”. In this mythology dramatic use is made of “exceptions” to prove the “rule” of equality of opportunity, careers open to talent, and reward according to achievement. Frustrated individuals are then invited to blame themselves and not the system” (Devereux, 1949, p.904).

Unsuccessful conformists are appeased with comfortable notions of respectability and the expression of righteous indignation against culturally designated scapegoats. One such scapegoat is gambling.

## THE FUNCTIONS OF THE SOCIETAL DISAPPROVAL OF GAMBLING

Devereux suggests that arguments commonly cited against gambling perform an essential function in maintaining the ethical integrity of the social system. For example, the gambler is charged with too much economic motivation and yet such motivations are witnessed daily in the commercial world.

“... in the professional gamblers apparent "greed" he (the businessman) may easily recognise a kind of cartoon version of many of his own motivations, and he may then project a part of his own guilt upon this vulnerable and permissive object in the familiar form of righteous indignation” (Devereux, 1949, p.916, brackets supplied).

Similarly it is argued that gambling violates values of thrift and orderly rational budgeting, and that the gamblers winnings are unearned and likely to be spent on hedonistic consumption. Yet hedonistic consumption patterns are commonplace in today's secular society and Devereux suggests that it is the ambivalence with which it is viewed which is projected in the form of guilt onto the gambler who

“symbolises our ‘sin’ at a safe distance” (Devereux, 1949, p.919).

The affective states engendered by gambling and the sensation seeking motives of gamblers are deplored as the antithesis of sober rationality and proper self discipline. The emotions which are aroused are assumed to be related to the reckless and improper assumption of risk as an end in itself. Here the anti-gambling literature is at great pains to distinguish between legitimate and illegitimate speculation.



**“Legitimate speculation is defined as speculation that is necessary and performs essential functions in the economy, such as promoting innovation, absorbing risks, keeping price mechanisms in sensitive adjustment to changing circumstances, and generally orienting the economy to future and uncertain conditions” (Devereux, 1949, p.927).**

**Even when the consequences of “legitimate” speculation prove to unbeneficial , the blame is shifted from the businessman to the gambler who must somehow have infiltrated the system:**

**“... the good consequences of speculation are reserved to the ‘businessmen’ who are therefore good men; and the bad consequences are attributed to the ‘gamblers’, who are bad men, as everybody knows” (Devereux, 1949, p.929).**

**Devereux argues that by means of illusions such as these, the segregated context of gambling provides a scapegoat whereby the guilt and tension due to the socio-economic system may be conveniently off-loaded.**

## **FUNCTIONS OF GAMBLING FOR THE INDIVIDUAL PERSONALITY**

**Participation in gambling by individuals similarly helps to maintain the existing order of things. Horse racing, lotteries. poker and other games of chance provide institutionalised psychological solutions which enable the individual to “shield his own ego” from the strains and contradictions inherent in capitalism. First and foremost, gambling is a recreational activity and as such it is the antithesis of work and therefore hedonistically attractive. In such a recreational pursuit an individual may:**

“... ‘escape’ temporarily, ‘blow off’ some steam, relax, have some fun, ‘ground’ excess energies and affects, and ‘recreate his own personality’” (Devereux, 1949, p.953).

In this way society is served not only by the refreshment of its labour force, but in the profanity of such moments its sacred values find cathartic confirmation:

“the incentives of the pleasure principle are enlisted in the support of sacred values, and sacred values may serve to regulate, rationalize and give meaning to hedonistic pursuits” (Devereux, 1949, p.953)

But gambling is an atypical recreational pursuit in that in America, as in Europe, it has historically been earmarked as not only unethical but explicitly illegal. Thus, until relatively recently, it has taken an underground form. For Devereux it follows that gambling provides not merely a form of temporary release from the economic frustrations and constraints of capitalism, but a symbolic (and therapeutic) protest against them.

But, of course, other psychological solutions exist for the restoration of the “warped” personality which are socially laudable, or which at least escape the attention of the legislators, such as sport and the “arts”. Thus the question which begs is: why despite societal disapproval, does gambling popularly persist in modern society? In seeking to answer this question, Devereux charts the complex set of emotions, some generic, some specific to certain forms, which attract individuals to games of chance. In so doing he draws attention to the manifest complexity of the human psyche and the crass oversimplification of commonly held myths as to why people “have a gamble”.

## **Economic motivations**

The most common explanation is that gambling offers the “chance of easy money”:

“... a “short-cut”, by ethically dubious means which bypass the orthodox frameworks of productive work and economic discipline to the dominant cultural goal of wealth.” (Devereux, 1949, p.957)

But Devereux claims that economic motivations are more complex than the pursuit of unearned wealth alone. In particular, gambling offers respite from, or a protest against “the tyranny of the budget”. While the game is in progress, the individual can temporarily shed the constraining motivations of frugality and rationality and release him/herself to the “pleasure principle”. Furthermore, since winnings are so gloriously undeserved, they offer the opportunity of reckless consumption with no need for reference to budgetary considerations. (Hence some relief is experienced even when no winnings are forthcoming, from the fantasy enjoyed prior to the result). Of course, it is essential that this break from standard motivations is temporary, that stakes are confined to limits permitted by the “recreational budget” and that “proper” orientations remain unchallenged. When these requirements are met then:

“... the relief afforded by petty gambling may function to maintain the dominant personality organization by revitalizing hopes and aspiration and by ‘draining off’ symbolically some of the frustrating tensions that revolve around the budget.” (Devereux, 1949, p.961)

### **The protest against ethics**

Since socialization of individuals is “always powerful and frustrating and incomplete”, Devereux claims that ethics and the social moral conscience inevitably become “inhibiting and punishing agents” (Devereux, 1949, p.965). In this respect the virtue of chance to the gambler lies in the rude gesture of defiance against the relentless ethics of effort and reward and of rationality, (virtues which are further enhanced by social sanctions). However the petty gambler is ambivalent not only about the ‘proper’ ethics of real life, but also the disdain for them evident in games of chance. This stimulates a sense of guilt which is only thinly disguised by bravado and rationalisations. Indeed, Devereux goes further and asserts that the inevitable losses incurred by the gambler represent a kind of self punishment “designed to appease the gnawing sense of guilt” (Devereux, 1949, p.967). Thus Devereux explains one aspect of the dynamic of gambling in terms of the sequence of ambivalence to societal ethics, guilt and atonement.

The ambivalence of gamblers to the rational ethic of cause and effect is revealed in the inconsistency of their practical orientation to it. On the one hand they may take pains to develop systems, and other “pseudo rational” means to increase the chance of winning; on the other they commonly resort to superstitious practices to achieve the same. Furthermore these two approaches are not mutually exclusive, but may be practised by the same individual. In part, Devereux’s formulation clearly anticipates that of Goffman. Recourse to superstition represents not only a rebellion against rationality, but a means of *defence* in Goffman’s sense of the word, against the emotional stress engendered by the gamble. Either way it is functional to the restoration of personality equilibrium.

### **Thrill seeking motivations**

Since gamblers frequently say that they “play for fun” or because they get a “kick” from it, Devereux suggests that the affective experience should be examined as an end in itself. The thrill derives from the accumulation and resolution of tension of each play, and is greatly enhanced by the element of risk to the individual which centres around the stake.

“To the flesh and blood gambler the situation is full of promise but it is also full of mystery and danger and meaning. And, as a corollary, it is also fraught with strain; the conflicting valences and ambivalences of hope vs fear, risk vs security, power vs helplessness and faith vs doubt are playing complicated melodies within his consciousness” (Devereux, 1949, p.695).

The gambler is strongly attracted to the thrill this state of tension imparts and yet he/she finds it subjectively intolerable, and seeks ways of easing it. Such strategies, which Devereux terms “accommodation devices” (Goffman’s *defences*) include: recourse to superstition; the self-deluding perception of each play as a unit and not part of a sequence; the mental writing off of the stake; and the repression of emotions so as to “deaden feeling” about the event.

Of these the last is particularly important since Devereux's analysis of the role of self discipline in the face of barely tolerable tension is remarkably similar to the later exposition of *character*, which is the cornerstone of Goffman's explanation of why people gamble. In capitalist societies there is a major stress upon risk avoidance, prudence and conservatism and yet the opposite values are required for technical and economic progress

“Hence the admiration and honor with which society regards daredevils, fools and brave free souls. Not every little man can

prove himself under fire, or go over Niagara Falls in a barrel, or make a killing on the cotton exchange. But within the segregated microcosm of the bookroom or the penny-ante game, the timid petty gambler may symbolically pit himself against these heroic standards, savor the deviant satisfaction of the counter mores, gain thereby the perverse admiration of his peers, and experience a much needed sense of ego enhancement" (Devereux, 1949, p.970-970a).

In this way the deviant values centering around the willingness to take a risk are kept alive, and deflected at times when they might prove dysfunctional to the individual and society into a safe and segregated context.

### **Competitive and aggressive motivations**

Devereux highlights competition as a major focus of cultural ambivalence: it is essential to the dominant economic system and integral to the success of individuals within it, and yet it is counter to western religious traditions. This contradiction presents the individual with a perilous line to tread. Within the recreational setting of gambling a subtle change is wrought in the perception of competition and aggression. Here it is all in "fun", "part of the game" and "quickly forgotten". In addition to heightening the thrill of the gamble, the sublimated expression of aggression and competition function to repair and restore the frustrated personality and thus vicariously to sustain capitalism. In the case of aggression:

"It seems possible that the 'mock aggressions' displayed in the gaming situation are in fact permissive expression for very real aggressive motives, conveniently displaced from their 'proper' objects. At least part of the enormous reservoirs of 'free floating aggressions' generated by social frustrations may thus be 'grounded' more or less harmlessly to society" (Devereux, 1949, p.974).

### **Problem solving motivations**

Gambling problems commonly display some of the features of puzzles in that they are “small, tricky and, objectively, not very important” (Devereux, 1949, p.976). However, superimposed on these are two additional features which make the gambling problem unique: contingency and an extrinsic end; money.

Devereux suggest that the brevity of the span of play of a typical gamble affords those who are unable or unwilling to sustain the long term intellectual disciplines required for success in specialised labour markets, “a symbolic tilt” at this objective. Accordingly:

“... problems of this sort may prove attractive to persons with strong success drives and low frustration tolerancies, providing that they are willing or adequately motivated to sustain the secondary tensions involved.” (Devereux, 1949, p.976)

### **Teleological motives**

Once more anticipating Goffman, Devereux draws attention to the fatefulness of everyday life which, with every chance happening, demonstrates the helplessness of mankind in understanding and controlling his/her universe. The question which begs an answer is:

“... why does this kind of thing happen in a morally ordered universe, and more particularly, why does it happen to me?” (Devereux, 1949, p.978)

Various cultures have attempted to answer these essentially teleological questions in a variety of ways through religions, superstitions and magic. Such systems provide frameworks of meaning through which the

position of the individual with respect to chance can be subjectively understood.

At the moment of determination, gamblers address the mystery of chance head on: each throw of a die, or play on a fruit machine, symbolically posing the question "Am I lucky?" Consequently gamblers frequently dismiss the adequacy of the impersonal and objective laws of probability in favour of more esoteric meanings. (Hence the promoters of a lottery are not at all surprised that Mrs. Jones has won it - why not? But Mrs. Jones is likely to attribute some moral significance to her astounding good fortune, and transcendental systems of reference such as "the will of God" are brought into play). Consequently, Devereux argues that gambling is teleologically not merely non-religious, but a form of counter religion, which in many of its attitudes and problems is very closely related to orthodox religion "as sacred and profane aspects of the same thing" (Devereux, 1949, p.980).

Furthermore, Devereux argues that the testing of personal luck is such a powerful motivator that its importance to the individual frequently transcends that of the stake; the question "Am I lucky?" acquiring almost cosmic significance:

"... the answer seems somehow to promise a solution to the whole problem of his personal relationship to the supernatural powers that govern the universe" (Devereux, 1949, p.981).

Of course a unitary answer is never sufficient to quell the restless curiosity of the questioner so that the testing process must be forever repeated and the gambler remain unsure.



### **Extrinsic or contextual motivations**

Varying as it does from casino to race track to amusement arcade, the context of gambling necessarily shapes the total experience the gambler derives from his/her activity. Consequently each form of gambling warrants sociological analysis in its concrete setting.

Firstly all wagers concern events which vary in importance to the gambler. In some cases the interest in the event may outweigh the “artificial interest” created by the bet, relegating it to a secondary supporting role. (Hence the “loyalty bet”, where the gambler backs his home team, his horse, and so on.)

Secondly, contexts of gambling are essentially social and this may generate a variety of contextual motivations. For example. in some social settings, social betting, like social drinking may be:

“... virtually mandatory; the individual thus situated must gamble to prove that he is "one of the boys", that he is not afraid, that he is properly emancipated from external controls, that he is not stingy and so on.” (Devereux, 1949, p.984).

Devereux claims that these extrinsic motivations serve the important function of rationalising the gamble, allaying the associated guilt, and on occasions, of disguising the extent of its attraction for the individual. They also help to explain differentials in gambling behaviour and ways in which different forms of gambling are suited to a wide spectrum of life styles.

### **HABITUAL GAMBLERS AND THE SOCIAL STRUCTURE**

Habitual gamblers are defined by Devereux as:

“... gamblers who play with sufficient frequency and for sufficient stakes so that gambling becomes one of the major focal centers in individual life organisation.” (Devereux, 1949, p.800).

Like petty gambling, gambling is more habitual the greater the departure from the economic and ethical norms of residual puritanism: family, occupational and community ties; regular employment and income; a satisfactory career structure and some visible relationship between effort and reward.

Thus Devereux notes that excessive gambling occurs most frequently among less stable groups in society (particularly at the lower and higher extremes of the class system) characterised by ‘extra’ problems of insecurity, anxiety and guilt. In these cases the thrill-seeking aspect of gambling functions not only as an escape from the tedium of risk avoidance but as “a cover or narcotic to anxiety”. Why an already insecure person should seek to alleviate his/her anxiety by exposing himself to the tensions of gambling is explained by the recreational nature of the activity:

“... the insecurities of gambling are less ‘real’ because of the recreational attitude; they are miniature, involve less explicit involvement, and are covered by the affectivity of the thrill which in this setting is institutionally defined as ‘fun’. By projecting his real life problems into this ‘make-believe’ context, the gambler may solve them with great boldness, and at the same time, because of the localized intensity of his involvement, forget for the while what his real problems really are.” (Devereux, 1949, p.971)

But the majority of participants are petty gamblers, who play within carefully segregated and rationalised recreational contexts. The

sociological virtue of this is that it provides a possible psychological solution to the strains and conflict imposed by the dominant socio-economic system, thus restoring the standard personality system required for its perpetuation. It is only when gambling goes beyond the bounds of carefully segregated and rationalised contexts that its dysfunctional potential is revealed:

“When gambling breaks out of these limited and accommodated nexes, the precarious ethical equilibrium of the personality may be shattered and the result from a sociological viewpoint may thus be dysfunctional.” (Devereux, 1949, p.988).

## DISCUSSION

Societal attitudes and legal sanctions regarding gambling have increasingly relaxed over the forty years or so which have elapsed since Devereux wrote his thesis. Nevertheless, negative societal attitudes towards gambling still prevail in Western societies, and the Protestant condemnation is as clear as ever.

As a rigorous example of the application of structural functionalist theory, Devereux's thesis is open to much of the criticism which pertains to structural functionalism itself. Firstly, Devereux's explanation of the persistence of gambling in western society is teleological in that it reverses the cause-effect relationship between gambling and society.

Secondly, the Parsonian view that the problem of social order is solved by value consensus so that the ideal values of Puritanism “were simply taken for granted as the ways in which right thinking and decent Americans ought to feel about certain things” is problematical. Indeed

some critics have argued that, in a society characterised by the competition for unequal rewards, stability exists precisely because of a lack of commitment to the value of achievement by those at the lower end of the stratification system (Mann, 1973). If this is so then the pivotal "safety valve" explanation of gambling is severely flawed.

Thirdly, Devereux's thesis is deterministic in that the needs and behaviour of gamblers are portrayed as established and shaped by society. By this means society is reified to become the social agent, whereas in reality only human beings act (Walsh, 1972).

Fourthly, Parsonian theory disregards domination and coercion in the socio-economic system so that the norms and values of the existing order are accepted uncritically as given. Thus the cleavages and ambivalences which Devereux describes with respect to the social system are not merely sources of strain which in value terms all members accept and to which they seek to adapt. Rather they are sources of true conflict inherent in the fabric of society.

Finally the main thesis of Devereux's structuralist functionalist sociology of gambling is primarily a method of examination as opposed to a testable hypothesis. The beneficial effects of gambling upon society which Devereux claims, are ultimately impossible to establish. Clearly society would not cease to function should gambling cease (although it might change), and the final balance of functions and dysfunctions are probably empirically unknowable.

The breadth of Devereux's contribution to the sociology of gambling is enormous. Firstly, his thesis remains the most thorough and systematic

attempt to explain gambling with respect to the social structure. Secondly, and most importantly for this study, Devereux's theoretical work, alone, acknowledges the great complexity of gambling behaviour. His exposition of a range of motivations to gamble, has sensitised subsequent research to the variation in meaning afforded to gambling by different social groups, playing a variety of gambling games, in different social contexts.

Devereux's economic, problem solving, thrill-seeking, competitive and contextual motivations all informed the ethnographic element of this study. By emphasising the multi-faceted nature of gambling orientations, Devereux's work acted as catalyst to the notion that even within a discrete social group, playing the same gambling game, orientations to gamble may vary. Many of his 'motivations' to gamble were observed in the present study in the orientations of young fruit machine players in an amusement arcade. His notions on the relationship between Protestantism and social class and gambling were addressed in the survey analysis.

## **CHAPTER 2: SOCIOLOGICAL STUDIES ON ORIENTATIONS TO GAMBLE**

The theories of Caillouis, Goffman and Devereux seek to explain the generic functions of gambling in society. While, in one sense, herein lies their stature, there remains a need to place gambling behaviour under the microscope; to examine differentials in gambling behaviour and the ways in which different social groups are attracted to different gambling forms.

Most sociological studies of gambling up to the mid 1970's focussed upon horse racing as the main gambling activity, with males as the chief participants. However, the rapid spread of bingo halls in the 1960's, and the current proliferation of slot machines in amusement arcades and leisure centres, has recently encouraged the examination of other gambling games and their play by a wider range of social groups. The literature is examined chronologically under the headings of "social class"; "gender"; and "life-cycle".

### **SOCIAL CLASS**

Devereux explained stratificational discrepancies among American gamblers by the proximity of each social class to the residual Puritan culture, but a more narrowly focussed view was later provided by Herman (1967). Using data provided by the track administration, interviews and observations, Herman sought to explain the differences in betting behaviour between upper, middle and lower class men and women which he observed in his study of horse racing in Los Angeles. He exposed as a misconception the still popularly held view that

gambling ensnares its participants into a system of reckless expenditure in the naive hope of “making a killing”, or that it provides a means of escape from the rational world. Noting that for the crowd as a whole, betting strategies coincided with the actual probabilities of winning, Herman concludes that:

“... horse playing is more characteristic of self control and caution than recklessness, more a participant sport than a spectator sport and ... more ritualistic than innovative” (Herman, 1967, p.99)

As far as “making a killing” is concerned, Herman argues that the role of money is not central but serves primarily to reify the decision making process:

“Money establishes the fact of a decisive act, and in its being lost or returned, it verifies the involvement of the bettor in the “action” (Herman, 1967, p.101).

Therefore alternative functions of gambling for different groups must be sought.

For middle and lower class men, Herman asserts that gambling is primarily a decision making process which provides opportunities to affirm personal autonomy which are decreasingly available in their occupational lives. Through the intellectual exercise of studying “form” these men, albeit on a minor scale:

“... emulate traditional, entrepreneurial roles - weighing alternatives, making decisions, and signalling these decisions by attaching money to them” (Herman, 1967, p.102).

The gambling behaviour of “lower” and “middle class” women is different from their male counterparts; they are more likely to make low risk “show” bets on the choices of public handicappers than to back their own, independent, selections. In the case of working class women, Herman links this strategy to the deprivation of their daily lives:

“... dull sparkless, unfulfilled lives in routinized settings bereft of social-emotional rewards but heavy with responsibility”  
(Herman, 1967, p. 103)

Against this backcloth of dreariness the frequent small wins associated with “show” bets are claimed to provide temporary light relief. A similar betting strategy observed among middle class women is attributed by Herman to the sheltered and dependent nature of their socialisation.

The wealthy upper classes bet large amounts of money “in a setting of conviviality, sociability and exclusiveness” such as the Turf Club. Both their gambling behaviour and its context are consistent with Veblen’s notion of conspicuous consumption; the esteem of others is held not merely by the possession of wealth, but by its evidence occasioned by lavish wagering (see also Devereux, 1949; Rosten, 1967; Scott, 1968). Interestingly, the betting strategy of the wealthy mirrors that of the lower and middle class women: they also bet on the favourites. But in this instance the strategy is attributed by Herman, not to deprivation or dependency on others, but to the lack of time to study “form” occasioned by the sociable nature of their participation.

Herman’s classification of bettors and their gambling behaviour is heuristically useful, but his interpretation of their betting strategies is



questionable. Similar betting behaviour is described among three disparate groups (lower and middle class women and wealthy members of the Turf Club), with a different explanation in each case. While there may be elements of truth in Herman's interpretation, the absence of hard data suggests caution. (See also, Newman, 1972; Murrell, 1979)

The most enduring element of Herman's study is his analysis of the selection strategies of lower and middle class individuals. Like Devereux and Goffman, he emphasises the positive functions of gambling to the individual personality, but links these to the failure of modern production processes to provide ego enhancement:

“... commercialised gambling offers to many people efficient means of enhanced self esteem and gratification in a culture in which satisfaction are increasingly likely to be found in consumption rather than production” (Herman, 1967, p.104).

The suggestion that gambling may satisfy a need for decision making and self autonomy, at least in a symbolic way, has led to several studies which focus on working class betting.

Of these, Zola's participant observation study of horse race players (1967) remains one of the most illuminating examinations of a particular social context within which gambling occurs. The setting is Hoff's, a bar and illegal betting shop, predominantly frequented by Polish and Italian working males, which clearly fits Devereux's description of a “segregated context”.

Firstly, there is an apparent dissociation from the bar of any other sphere of the player's social life:

**“One day my mother sent me after my father. It was gettin late. When he came home he was mad! He kicked her all the way down Lawrence Street and back and said to her, ‘Dont you never send anyone after me here. No buts, anything can wait till I get here’. And she never did it again.” (Zola, 1967, p.20)**

**Secondly, there is a dissociation between gambling and other spheres of economic activity; winnings are the business of the player and he/she is considered a “damned fool” if he/she mentions them to his/her family.**

**Zola finds that in this social context certain of Devereux's observations have particular relevance: a) emotional involvement is under-played (excitement is restrained and over-excitement and prolonged depression are negatively sanctioned); b) winning money is not the dominant motivational force (players did not “quit while they were ahead”, those who did were disliked by regulars and called “cheap bastards”); c) the importance and relevance of competition to gambling varies with the social context in which it occurs (winners buy losers drinks and competition is shifted from the group to “the system”, personified by the bookie). At Hoff's the de-emphasis on emotionality, monetary gain and competition function not only to assuage the deep-rooted ambivalence intrinsic to gambling described by Devereux, but to affirm group attachment and the rewards which it alone can bestow: prestige and group recognition:**

**“... at Hoff's all available attention and admiration was focused on those men who had chosen winners. Everyone clustered about them, prodded them to reveal the basis of their choice, praised them on their good judgement, and regarded their subsequent opinions highly.” (Zola, 1967, p.25-26)**

Such highly prized social rewards are awarded on the understanding that the system of horse racing is understandable and amenable to rational intellectual effort. Highest prestige is awarded to the "handicappers" who make their selection from the careful analysis of factual data, for this demonstrates mastery of technique or skill. The lowest prestige, bordering on derision is awarded to "hunch" or random choice bettors whose strategy not only implies the concept of an underlying order, but that "the system" is beyond control.

The conclusion is that gambling provides a means of channelling frustrations resulting from the vagaries of the socio-economic system and thus helps to preserve some of its major values:

"At Hoff's they can 'achieve' and can gain recognition for their accomplishments - by exercising skill or knowledge in the selection of horses." (Zola, 1967, p. 31)

Similar findings are reported by Newman (1972), who examined gambling behaviour in England using previous survey data, interviews, and observation data from betting shops. He concluded that while gambling is the norm for society in general, there is a particularly strong degree of association between gambling behaviour and social deprivation.

A major strength of Newman's study lies in his comparative sociology of three betting shops in the East End of London. He effectively demonstrates that while each ostensibly performs the same operative function, it also fulfils a variety of personal functions and a range of quite different social functions. On a personal level, each shop provides facilities for the exercise of decision making; developing and sharing

socially valued knowledge and expertise; and the choice of a variety of institutionally sanctioned roles (eg. Sage, Jester, Barrackroom Lawyer, Philosopher and Rebel). On a social level, the functions vary with each shop and are largely defined by the actors themselves.

The Bethnal Green shop is patronised by a clientele similar to that of Hoff's, and an ideology of communality (a victory is one of 'Us' over 'Them'); regard for independent decision making; and respect for *character* in Goffman's sense prevails:

“... defeat in the face of overwhelming odds facing 'Us' is anticipated and thus, in itself not shameful. But the lack of character, of moral fibre, are” (Newman, 1972, p.129)

This betting shop provides a “self contained universe of order and stability” which insulates the group against the external values of competition and achievement.

The Cable Street shop is habituated by unemployed and often homeless men whose social existence is circumscribed within the narrow circle of the “Caff”, the “Boozer”, the betting shop and the “Exchange”. Their ideology is one of nihilism, self-deprecation and failure. Betting strategies are chaotic with an antipathy towards the favourite and emotions are given full vent. For this “bottom crust of the urban proletariat” the betting shop provides a “safety valve” function through which the frustration occasioned by poverty and social impotence, and dominant societal ethics can be expressed. It is:

“A self-created retreat in which the disinherited, the social misfit can vent revenge upon his oppressors by denial of validity

of external value systems, by desecration of the principal 'deity' - money ." (Newman, 1972, p.158).

The Mile End shop is a fantasy microcosm of free market capitalism where would be entrepreneurs can demonstrate authoritative attributes inappropriate in daily life:

"Internal competition for recognition as a fearless speculator, as a ruthless major operator, as resourceful pseudo entrepreneur provide the major substance. Blatant self confidence to rise to the top in merciless confrontation, to beat the market by manipulative skills, to weather unflinchingly temporary reverses, neither to grant nor expect quarter, to transact at all times on the most propitious terms, to outflank and outwit one's competitive rivals, form the major currency of exchange." (Newman, 1972, p.145).

Thus Newman shows how each of these discrete social contexts of gambling can help to channel the potentially problematic frustrations of various working class groups and thus support the dominant socio-economic system.

Scott (1968) makes the theoretical assumption that

"the proper study of social organization is the study of the organization of information" (Scott, 1968, p.3).

He then uses a game model to examine the social organisation of horse racing. The subsequent "information game" is a game of "strategy" where the "players" aim to obtain reliable information which will enable them to "beat the race". A continual pattern of "beating the race" gives rise to the much sought after state of "beating the system". Thus Scott supports the view of previous writers that the lure of the racetrack

lies in the provision of a culturally sanctioned outlet for tension management (Devereux, 1949; Caillois, 1962) and the opportunity for decision making (Herman, 1967; Zola, 1967).

The originality of Scott's contribution lies in his typology of "players" by the frequency of their participation, and, in particular, in what remains to this day one of the few sociological explanations of the process of "addiction" to gambling.

Four-fifths of "players" are "occasionals", for whom horse racing is a form of recreation. As on other social occasions a variety of rituals and customs govern behaviour (for example a certain etiquette operates during the running of a race). And, as on other social occasions a horse track meeting generates many temporary and widespread relationships (for example, strangers may exchange views on the chances of an outsider). A sense of trust and camaraderie abounds:

"... among racegoers, the kinship felt is similar to that experienced in collegial relations to be found when, for instance, two unacquainted professionals meet at a convention."  
(Scott, 1968, p.115).

The "occasionals" define success as "breaking even" and any losses incurred are considered to be payment for recreation. A win is an added bonus.

In contrast to the "occasionals", the "regulars" not only hope to win but expect to; their self conception is not merely that of recreant, but a rational speculator. Among these regulars is found the "addict" who is defined as

“ ... a ‘regular player’ whose standard orientation to the game involves a profound engrossment in the mechanical manipulation of figures.” (Scott, 1968, p.87)

Such a player is deviant from a sociological viewpoint because his total immersion in handicapping has led to an abdication of “normal” occupational and family role responsibilities. Using Goffman’s concept of a “moral career”, Scott charts three stages which for one group of “regular” players involve a shift of conception of self and others resulting in “addiction” to gambling on horses.

The first stage involves an appreciation of the intricacies of handicapping and a mastery of factual data in “The Racing Form”, evidenced in financial gain. The second stage is a crucial point at which the player perceives him/herself to be

“one who can rationally cope with the complexities of picking a winner” (Scott, 1968, p. 90).

(This necessitates a belief system with two separate but related components: a) the perception of the horse race as an ordered event which can be determined by analysis (this illusion is simply maintained by the ability rationally to account for why the selection won or lost); and b) the verbal rationalisation of playing horses as “business” as opposed to gambling, and therefore legitimate and justifying daily attendance.) The third and final stage is enmeshment in a quasi-group (its members come and go) of race track “addicts” and conformity to the norms of “addict” culture.

“Addicts” emphasise the business-like nature of their activity by the liberal use of technical race track jargon and a universal contempt for the ignorance of their competition (the betting public) as “a pack of boobs”. The maintenance of a front of restraint and self-discipline (facilitated by confidence in their long term success) is obligatory since such affective neutrality is similarly appropriate to business conduct. Addicts never pry into activities of fellow addicts which are unrelated to horse racing, and they have a strictly reciprocal relationship with regard to the sharing of information. One norm that is so strictly upheld as to be taboo is the enquiry into how much money has been bet on a race.

Support for Scott’s findings is apparent in Saunder’s discussion of gambling as leisure defined as:

“... pleasurable activity that is voluntarily engaged in, during spare time away from the place of work.” (Saunders and Turner, 1987, p.282).

Saunders and Turner present a typology of horse race gamblers deduced from their observations of customers in five South Wales gambling environments (including betting offices and bars). The typology, like Scott’s, is based on frequency of participation. The main distinction is between those people who “simply dabble with racing” and those who “take it seriously”, who are labelled “uncommitted” and “committed” respectively (Saunders and Turner, 1987, p.293). Within these two groups further sub groups are identified.

Among the “uncommitted” appear the “occasionals” who bet a small fraction of their incomes at irregular intervals, and the “novice” who



aspires to learn more about horse racing. Through seeking advice, the “novice” establishes relationships with other customers and may eventually make the transition from “uncommitted” to “committed” gambler.

Within the “committed” group three sub groups are identified. These are the “regular” majority who bet heavily but retain control; the “compulsives” who completely lose control of their betting; and the “professionals” for whom horse racing is a source of work and income. (The latter two groups are rare). Like Zola, Saunders and Turner find that, despite their mutual preoccupation with horse racing, the “compulsives” and “professionals” are opposite poles in terms of social esteem. The “compulsives” who chase their losses and are driven by a desire to lose are denigrated. They are:

“... viewed with contempt, amusement, or even sympathy by staff and customers alike.” (Saunders and Turner, 1987, p. 293).

The “professionals” on the other hand, are elevated to the status of folk heroes:

“... often talked about but rarely seen, and always associated with phenomenal intellectual judgement and social skill: abilities to fathom the form books and to retain composure and self control when under pressure” (Saunders and Turner, 1987, pp. 293-294).

Once again observations in a concrete setting support Goffman’s thesis that for those who can stand the *action* considerable rewards of social esteem are forthcoming.

In terms of leisure, Saunders and Turner suggest that “occasional” betting is clearly recreational and is motivated by the thrill of the race and the anticipation of disclosure. But “committed” customers confuse any confident description of betting as leisure, since aspects of their approach to it are more akin to work. These are aspects which clearly spoil the game in Caillois’ sense of the term, by the preoccupation with *ludus* (acquisition of handicapping skills) and the development of relations between players and their competitors (the staff) which aim to outwit and deceive.

## **GENDER**

Previous research suggests that men are more likely than women to gamble on lotteries, horse racing, poker and casino gambling, because these activities are more consistent with the male gender role learned through the process of socialisation. (Goffman, 1969; Downes, 1976; Kallick et al 1977; Smith and Abt, 1984). By similar reasoning women are more likely than men to gamble in such games as bingo, raffles and slot machines. (Campbell, 1976; Kallick-Kauffmann, 1979; Dixey, 1987a)).

It becomes immediately apparent that while males dominate the “sport of kings” gambling games which women play are those which are particularly denegated by the image makers. Furthermore, the danger of “addiction” for women bingo players (like that of children playing slot machines) has proved newsworthy in a way in which male dominated gambling games have not. For example:

“As cinemas and dance halls close, bingo palaces take over. More and more women are being drawn into the world of gambling. It is a world of deceit and ruin... where the prayed

for “big win” is worshipped with all the anticipation of the second coming. And where nothing is sacred if it can be sold for betting money.” (“Glasgow Evening Times”, 25.3.1980, reproduced in Dixey 1987a))

The topic of female gambling has received rather more attention from journalists than from academic researchers. Campbell’s (1976) contribution lies within an attempt to explain the mystique of lower middle class and working class gambling. Campbell combines the ideas of Goffman with those of Herman. The search for *action* is the prime motivation to gamble; a search engendered by the “preservative impulse” or “adventure within us”. This impulse becomes manifest as the individual “strives to sustain energy and courage” in the face of a monotonous daily routine, devoid of the necessity to make decisions and lacking in self determination.

“It involves the wooing of the unknown, chance danger and all that is new, thus it is the action that the gambler loves, not the money in most cases, except that it allows him into more action” (Campbell, 1976, p. 220)

This interpretation is illustrated with reference to the gambling behaviour of a variety of social groups, including one which Campbell terms “Elderly life seekers”. These are the elderly players of slender means who regularly visit one or other of the down town casinos in Nevada. Many of these players are elderly women gambling on slot machines:

“... some wearing house dresses, others wearing bright slacks and clogs, all clutching cups of coins as they watch the bell, fruit and bar twirl again and again. They are totally absorbed as are most real gamblers.” (Campbell, 1976, p. 221)

It is this absorption which, for Campbell, provides the clue to their attraction to gambling; it indicates that “they are once more engaged in life”. The comments of a sixty eight year old pensioner illustrate the point:

“I raised my kids. I kept my house. Now I want something different. Here I can wear what I want and play the machines. I never lose much and I like to play. Whenever the money drops, I feel real good. I won something, and I aint won a lot of things in my life.” (Campbell, 1976, p.221)

Campbell claims that through playing slot machines this “elderly life seeker” has gained a new found sense of independence and choice for life, enriched by the frequent victories bestowed by the jackpot. Furthermore these victories are in no way diminished by “reinvesting the winnings”:

“ ... the day is counted not in how much was taken home, but in how many jackpots were won and the amount of play that one was able to sustain on the amount of money invested.” (Campbell, 1976, pp. 221-222)

Campbell notes that bingo is also popular among elderly working class women and that this has an associated camaraderie not so evident among fruit machine players.

This notion of camaraderie among female bingo players is powerfully supported by the findings of Dixey’s study of women and bingo (Dixey, 1987a). Dixey suggests that bingo remains one of the few leisure activities which successfully overcomes the constraints of female working class life. Bingo is relatively cheap, handy (often situated in converted local cinemas), does not require any form of regular

commitment, and husbands do not object to wives going. But above all bingo halls provide a much needed locus for female social interaction, created by the demise of the washhouse and cinema, and the reduction in semi-public space which accompanied the rehousing and rebuilding programmes of the 1950's and 1960's.

As somewhere to go, the bingo club offers the opportunity for social contact in an environment of mutual interest:

"I usually go on my own, but there's that many people, I know there's always someone I can talk to." (Dixey, 1987a, p. 205)

But while each game is in play it demands the total involvement described by Campbell, so that it is possible to be among people and yet not involved with people, as the mood dictates:

"there are certain times that I do just totally ignore everybody; well, say hello and that, but don't encourage them to chat. And other times its handy to have someone to talk to. But some people do like to go and not be bothered and its easy enough to get the message over without offending anybody." (Dixey, 1987a, p.205; see also Herman, 1976, p.37)

Thus the bingo club provides a "moral community", which fulfils many of the structural requirements appropriate to a female working class leisure activity:

".. for women of all ages, the club provides something which no other facility offers - a largely female environment, non-intimate social contact, involvement in a game which requires no training or equipment, relaxation, the chance of winning, and in a building which is physically and culturally part of the community." (Dixey, 1987a, p.213)

Dixey found that, like Scott's "occasional" horse players, most bingo players do not have an instrumental attitude to the game. The average amount spent of £3 to £4 per session is perceived not as a stake which is gambled, but as payment for entertainment. Furthermore, although the thrill of winning encourages people to return, they are realistic about their chances and regard a win as a bonus. Winnings tend to be small, infrequent and shared, and this sharing further sustains and enhances the sociability of the occasion. The "real gamblers" are seen as being those who play the slot machines or "parti-bingo" (a very fast machine version of bingo played for prizes). Dixey claims that these minorities are the fundamental to the profitability of the bingo club.

The repetitive and routine nature of bingo is frequently the basis of patronising comment, as the following extract from "The Times" illustrates:

"Those who hopefully scan the social scene for growing evidence of the 'creative use of leisure', one of the promised fruits of universal education, are bound to be depressed by the success of this cretinous pastime." (The Times, 14.9.1961, reproduced in Dixey, 1987a)

Yet Dixey's respondents clearly relish the regularity, and even enhance it's effect by territorial behaviour with regard to seating arrangements:

"...it's routine. You know exactly what's going to happen. What time this is going to finish. You can sort of plan your night out, you know, because you know there won't be any change." (Dixey, 1987a, p. 210)

Apart from purely practical considerations, Dixey suggests that the apparent attraction of this monotony is understandable when bingo is

considered as an archetypical product of the "culture industry" (Horkheimer and Adorno, 1972). As such it is organised to mirror many basic elements of female working class occupations:

"... it mimics the repetitive restricted work situation experienced by many of its players in its repetitiveness, the need for silence punctuated by short breaks, the need for concentration, its punctual starting and finishing times and its control by others." (Dixey, 1987b, p.308)

Bingo thus provides respite from the daily round without making the return to it too unbearable. Such a leisure pursuit is thus functional to the dominant economic system in the way hypothesised by Devereux.

On another level, both Dixey and Campbell support a core element of Caillois' theory by suggesting that gambling games which are based on pure chance, such as bingo, lotteries and slot machines, parody not only the work situation of the players, but their situation vis-a-vis the socio-economic system itself: one of financial impotence and a reliance on luck or patronage (Dixey, 1987b, p. 311). The odds may be stacked against a win, but at least they are evenly stacked against all:

"Skill is not reflected to any appreciable extent and the rich dowager and the cleaning woman have the same chance of marking their cards correctly, thus one who may never have had a chance in life, here, for the moment, has a chance equal to that of anyone else" (Campbell, 1976, p. 222).

In contrast to the accounts of Campbell and Dixey, Lesieur's (1989) study of female pathological gamblers and crime describes the orientations of female gamblers for whom gambling is clearly dysfunctional. Action Seekers and Escape Artists (terms adopted in the

present study) are ideal types which represent two orientations to gambling, often found in combination. Like all gamblers, Action Seekers seek action, defined as "excitement, thrill and tension" although the implication is that the need is supernormal. One of Lesieur's pathological bingo players described the affective state thus:

"I'd need one number, the adrenalin would pick up, I'd go all numb, hoping and praying that the number would be called." (Lesieur, 1989, p. 11)

Lesieur also found that more than half of the women interviewed initially gambled as an escape from overwhelming problems in their lives. As one slot machine player put it:

"In all honesty, I went out gambling when my husband was drunk so we wouldn't fight. By that time, my older kids were old enough to take care of the little ones if they were awake. I started on the nickel slot machines and progressed to the dollar machines. ... Like I said, I started out allowing myself only so much money. And the money I had, gave me the time -- time away, time of not thinking, the time of not worrying" (Lesieur, 1989, p.11).

This finding clearly supports Devereux's hypothesis on the relationship between the need to escape from problems and pathological gambling.

## **LIFECYCLE**

Previous research shows that for males the propensity to gamble decreases with age. For females, however, there seems to be less variance, although the elderly, again, play less frequently (Downes, 1976).



Campbell's study of working class "elderly life seekers" remains the sole attempt specifically to account for gambling among individuals of retirement age. According to Campbell, female "elderly life seekers" who regularly play slot machines and bingo in down town casinos are demonstrating their new found independence and choice for life. The male "elderly life seekers" also play in down town casinos, where they favour craps and roulette. Here they eat, socialise with their cronies, and, by playing cautiously with their meagre funds, seek the ego enhancement which Goffman terms *character*:

"Momentarily they feel alive and involved; possibilities exist; victories are possible and tomorrow the game exists to be played again." (Campbell, 1976, p. 223)

Thus with both male and female "elderly life seekers" it is clearly the *action* which counts. Furthermore, Campbell notes that in view of the premature retirement and undervalued status of elderly people in a youth orientated society, the positive function of gambling is considerable.

## **PRE-ADULT GAMBLING**

Until the mid 1980's, gambling among adolescents and young people proved similarly unattractive to sociological researchers. This is in spite of the fact that the majority of adolescents gamble, and many of these on a regular basis (Rosenstein and Reutter, 1980; Amati, 1981; Lesieur and Klein, 1987; Ladouceur and Mireault, 1988; Jacobs, 1989; Fisher, 1991).

### **Age at which gambling for money commences**

In the case of the U.S.A, 85% to 90% of young people gamble illegally according to the minimum statutory age threshold of 18 years, set by their respective states of residence (Jacobs, 1989). More than a third of U.S. respondents examined by Jacobs reported gambling before they were eleven years of age, and 70%-88% said they gambled before they were fifteen years old. The average onset of gambling for money among children in the U.K. is likely to be earlier with fruit machine gambling commonly starting at eight or nine years of age (Fisher, 1991).

The lack of public outcry in the U.S. against the open practice of a patently illegal activity by the majority of its children reveals the degree of societal acceptance of underage gambling. This acceptance has been attributed to several possible bases of rationalisation or misconception by adults. The first is the belief that legal sanctions discourage "really serious gambling" so that parents need not worry. The second is that adult society is hesitant to face up to its own crucial role in the socialisation of children into gambling behaviour. The third is that underage gambling is dismissable as merely "fun and games". Finally it is suggested there is simply a lack of awareness by adults of this particular component of adolescent leisure (Jacobs, 1989, p.250).

### **The Initiation of children into gambling**

Initiation into gambling arises from a number of influences. Firstly parental gambling is held by some writers to be an important predictor of adolescent participation (Downes, 1976; Amati, 1981; Arcuri, 1985; Jacobs, 1989). Indeed much adolescent gambling takes place in the company of parents (Lesieur and Klein, 1987). Secondly, the media

(particularly television) reinforces societal acceptance of gambling by the glamourising of high risk gamblers and ubiquitous high prize game shows (Smith and Abt, 1984). Thirdly, gambling on commercially provided gambling games is locale specific, so that participation depends upon supply (for example slot machines in arcades are supernormally available to U.K. children who reside in seaside resorts and U.S. children who reside near casinos (Jacobs, 1989; Fisher, 1991)). Fourthly, some commentators suggest (after Caillois) that gambling is essentially a form of play and thus inescapably interwoven into the autonomous culture of children's games (Herman, 1976; Abt and Smith, 1984).

### **Children at play**

Like Caillois, Smith and Abt (1984) highlight the inherent contradiction in games. By definition children's games are 'pointless' and yet they are significant for the part they play in the socialisation process. They offer respite from the demands of daily life, while expressing and transmitting the myths and values of the wider culture. They may also give a clue as to the male gender bias among child and adult gamblers.

While young females tend to play out caring roles and consensual contexts in their play, boys are inclined to adopt aggressive and heroic roles in games based upon competition (see also Opie and Opie, 1969). However, not all players are equally endowed with the appropriate attributes of strength and skill, so that games which combine a measure of talent with the random favours of chance, are assured cultural success. Gambling-like games such cards, marbles, picture card flipping, and (since the 1970's) video games, teach children the adult,

societal values of commercialism and competition in the context of what Goffman terms a “fateful encounter”.

Thus as in adult gambling games, the primary reward of success in children's gambling and gambling-type games is not material, but a highly prized gain in “character” in Goffman's sense of the term. By taking risks in games, reputations are built and the winners earn important social rewards (Smith and Abt, 1984; Opie and Opie, 1969).

Each game is immersed in its own subculture and is consequently rich in ritual and meaning. Thus a game of marbles may be a “rite of passage” for a child in a school playground, while a poker game simultaneously provides adolescents with relief from the tedium of daily life and an

“opportunity to reflect the psychological traits which they feel should govern the rest of their lives” (Smith and Abt, 1984, p.132).

An understanding of the subculture surrounding each gambling or gambling-type game would thus seem to be essential to a proper sociological understanding of it.

### **Types of gambling games played by young people**

Jacobs (1990) reports that the four favourite games played for money by U.S.A youth are: cards with family or friends; lotteries (where available); games of skill such as golf, pool and bowls; and sports betting on football and baseball pools and offtrack betting (for the most part illegally pursued with a bookie).

However, in the case of adolescents who reside in locales accessible to casinos the pattern is notably different:

“these glitter palaces seem to have an irresistible lure for underage high school students that tends to preempt their gambling time and dollars.” (Jacobs, 1989, p.253).

Most of the casino betting is reported to be on slot machines, (around 66%), with blackjack (around 25%) as the second favourite activity (Arcuri, Lester and Smith, 1985; Franke, 1988) and roulette (6%) as the third favourite activity.

In the U.K. young people gamble with each other on cards, games involving skill, and a traditional children's game called “coins up the wall” (Moran, 1987; Ide-Smith and Lea, 1988). But overwhelmingly the most common form of commercial gambling is on slot machines (Fisher, 1989). In the U.K., unlike the U.S., gambling on slot machines is lawful for young people under the age of 18 years and is easily accessible to them in purpose built arcades or in non-specialist retail outlets such as cafes and fish and chip shops. Thus wherever they are available slot machines emerge as the gambling form most favoured by young people, on both sides of the Atlantic. Downes, (1976) and Herman, (1976) both report that while fruit machines are played by all age groups, their attraction is predominately for young people and declines with advancing age.

## **DISCUSSION**

The most striking finding of this review of the sociological studies on gambling is the astonishing lack of attention given to what is preeminently a sociological concern. Despite evidence that gambling is a

pervasive, persistent, institutionalised, and often deviant form of behaviour, the study of gambling has only a limited tradition in sociology (Frey, 1984). Enormous potential exists for contributions to the sociology of gambling, both theoretical and empirical.

Most previous sociological studies have dwelt on working class gambling and, like the major theories of Caillois, Goffman and Devereux, they entail functional analyses for their main insights. The segregated social contexts and the total concentration on play provide sanctuary from the strain of daily life. And the equality of opportunity for financial gain (or loss) may help to channel frustrations resulting from the vagaries of the socio-economic system, thus helping to preserve some of its major values. However, for a minority of participants, gambling for leisure progresses into a deviant form and 'addiction' to gambling results.

The different gambling forms are seen as rational choices for a variety of social groups and the well spring of specific subcultures, each with its own set of norms and social relations. These subcultures frequently vary in character between different social contexts of the same gambling form. For all ages and social classes gambling is predominately a male activity and orientations to gambling appear to vary with gender.

Existing studies tend to endorse Goffman's theory, that the pursuit of *character* through gambling is a uniquely male phenomenon. Existing studies also suggest that the pursuit of *character* is not confined to a particular phase of the lifecycle. For small boys flipping picture cards in the school playground, race track punters, and elderly craps players alike, the opportunity for ego enhancement in a status game with peers

appears to be the major motivation. Thus the literature suggests that for males at least the maturative process is a prolonged affair or the striving for a *character* gain is not outgrown.

Given the sparsity of research into female gambling, the prime orientation of female gamblers is not clear, but it is possible that it varies with the chosen gambling form. Thus bingo players are attracted by the companionable nature of play, while slot machine players relish the opportunity to “please themselves” and experience a form of *action* occasioned by a fast-moving gambling game.

However it is likely that male and female orientations to gamble have more in common than discrete studies suggest. Many of the features of lower class female gambling which emerge from the observations of Campbell and Dixey are also common to lower class male gambling. The racing track stand and betting shop similarly offer a largely one-sex environment; non-intimate social contact; a pursuit requiring short periods of total concentration; and the opportunity to make decisions. All of these attractions are available at a venue close to home, and at times which fit in with the various obligations of male working class life. Neither gender is primarily motivated by the opportunity to win money. Furthermore, recent research has shown that while gender is related to gambling behaviour and attitudes, the relations are more modest than the literature has implied, and appear likely to decrease in the future (Lindgren et al. 1987).

Societal attitudes to male and female gambling games are clearly different. Horse racing is the “sport of kings” not of “queens”. Images of sophistication, valour and talent frequently associated with male

casino and racetrack games find their counterparts in the societal expression of distaste for bingo and slot machine play. It is suggested here that the social denegration of the gambling games which women play, occurs not simply because they are “mindless” (lack the requirement of skill). It occurs because they are played predominantly by a powerless, and often denegrated, social group: lower class, middle-aged women, in a patriarchal society.

Indeed many of the purely aleatory gambling games are most popular with such groups. For example keno (a kind of lottery played in down town casinos in America) is most popular with impoverished blacks (Drake and Clayton, 1945; Herman, 1976); slot machines are most popular among women and adolescents (Downes, 1976; Fisher, 1991); blackjack and craps are favoured by young and elderly lower class men respectively (Herman, 1976; Campbell, 1976). Furthermore, low status, unemployed men tend to play the horses, (where the application of knowledge and skill can decrease the odds against the player), in a particularly chaotic and random way (Newman, 1972).

Previous studies of gambling open a number of avenues for future research. The importance of decision making; the relationships between players; the perception of “addicts” by other players; gender differences and contextual considerations helped to inform both the survey and the ethnographic element of this study.



## CHAPTER 3: JUVENILE FRUIT MACHINE GAMBLING IN THE U.K

### INTRODUCTION

The recent interest in fruit machine gambling among young people in the U.K. has arisen from a growing concern that some children who play fruit machines become 'addicted' gamblers and behave deviantly as a consequence of their play. Press allegations have included attempted murder, suicide and child prostitution, as well as a widespread incidence of theft, truancy and vandalism. Headlines such as "Children become bandits for fruit machines" ("The Independent", 8 February 1988); "Young being brainwashed by machines says doctor" ("The Times, 1 September 1987); and "Youth stole 94 times to finance gambling" (The Times, 2 December 1987) are typical and ubiquitous.

The role of the press in fuelling public concern about stereotypes which are ultimately shown to provide false or inaccurate pictures of reality has been well documented elsewhere (see Cohen, 1973). Furthermore, deviant behaviour by children engenders an emotive response from which researchers are not necessarily immune, despite their best efforts. These potential red herrings should be borne in mind when searching for the facts of childhood slot machine use.

Widespread fruit machine gambling in the U.K. is a relatively modern phenomenon resulting from some unseen consequences of the 1968 Gaming Act, which effectively legalised gaming for profit. The same Act also made fruit machine gambling the only form of commercial gambling legally available to children under the age of 18 years. The business is very profitable and the supply of machines has increased

steadily over the past decade, (Moran, 1987; Centre for Leisure Research, 1990). This corresponds with an increase in the number of 'addicted' users seeking help:

"Opportunities for 'action' gambling abound for children and young people and in recent years there has been a small flood of this group into Gambler's Anonymous - they now account for about one in four of all new members." (Moody, 1990, p.109, emphasis supplied)

The Home Office responded to increasing public concern by undertaking a

"... preliminary investigation into the prevalence and character of amusement machine playing by young people under sixteen with a view to establishing the existence or otherwise of a significant social problem requiring legislation." (Graham, 1988, p.1).

The research enquired into the use of video (games) machines as well as fruit (gambling) machines. When the report was published in 1988 it contradicted the findings of all previous research (with the exception of the first published study in this area by Waterman and Atkins (1985)) by concluding that

"the scale of the problem does not appear to warrant legislation. Very few young people are at risk of becoming dependent upon amusement machines and no evidence is found of any association between the playing of machines and delinquency." (Graham, 1988, p.iii)

A comprehensive summary of existing studies on the use of amusement machines by young people is provided in Table 3.1.

Much of the research which preceded the Home Office study (Graham, 1988) was motivated by a perceived problem in the location or group surveyed (Ashdown, 1987; Barham and Cormell, 1987; Huff and Collinson, 1987; Spectrum Children's Trust, 1988). That which has been undertaken since has provided insight into the psychological principles involved in pathological amusement machine use by young people (Griffiths, 1990a, 1990b, 1990c; Brown, 1989; Brown and Robertson, 1990) or sought to shed further light on the participation and consequences of amusement machine use by young people in various regions of the U.K. (National Housing and Town Planning Council, 1988; Children's Society, 1990; Rands and Hooper, 1990; Leeds

Table 3.1

## Summary of U.K. Research Studies on Juvenile Amusement Machine Playing

Researcher	Year	Location	Methodology	Anonymity of Respondents	Age	Sample Size			% Played	Publication Service	Main Conclusions/ Recommendations
						Total	Male	Female			
Waterman & Atkin	1985	Inland	Survey of School Children	...	14-18	451	Not Specified		77%	NRJ	Problem only for small minority—no legislation required
Ashdown	1987	Seaside	Survey of School	Yes	11-16	67	40	31	70% (fm) <sup>a</sup> 76% (vg) <sup>b</sup>	UP	Minimum age limit for all arcades and controls over machines elsewhere
Barham & Cornell	1987	Seaside	Survey of School	Yes	11-16	329	163	166	51%	SP	Extend BACTA ban on under 16s to seaside towns
Huff & Collinson	1987	Youth Custody Centre	Survey of Trainees	Yes	15-21	100	100		60% (fm) 35% (vg)	RJ	Videos and Fruit machines can be addictive for young people and lead to crime
Ide-Smith & Lea	1988	Inland/ Seaside	Survey of School Children	Yes	13-14	50			81% (fm)	RJ	
Spectrum Children's Trust	1988	Inland/ Seaside	Survey of School Children	Yes	11-16	2434	1223	1221	65%	SP	
National Housing & Town Planning	1988	National (7% Sea Side)	Survey of School Children	Yes	13-16	9752	5184	4434	64% (fm) 52% (vg)	SP	Outlaw fruit machines to under 18s
Graham (Home Office)	1988	National (10% Seaside)	Survey (part of large Omnibus Market Research/ Interviews	No	10-16	1946	960	986	13% (fm) 11% (vg) 14% (both)	SP	Very few young people risk dependency; no evidence for link with machines and delinquency
Leeds Polytechnic Social, Science Unit	1989	Inland	Survey of School Children/ Interviews	Yes	11-16	576	Not specified		39% (fm) 44% (vg)	SP	
Bentall, Fisher Kelly, Bromley & Hawksworth	1989	Inland	Interviews with fruit machine players	Yes	15-51*	213	160	50	100% (fm)	RJ	Younger subjects more likely to be machine dependent

**Table 3.1**  
**Summary of U.K. Research Studies on Juvenile Amusement**  
**Machine Playing (Cont.)**

Researcher	Year	Location	Methodology	Anonymity of Respondents	Age	Sample Size			% Played	Publication Service	Main Conclusions/ Recommendations
						Total	Male	Female			
Brown & Robertson	1990	Inland	Questionnaire to School Children	Yes	12-18	350	Not specified			UP	
Griffiths	1990 (a; b)	Inland	Interviews with 'Addicted' Players	Yes	19	8	8		100% (fm) 50% (vg)	RJ	
Griffiths	1990 (b; c)	Inland	Questionnaire/ interviews with fm players	Yes	14-21	50	39	11	100% (fm) 68% (vg)	RJ	
Rands & Hooper	1990	Inland/ Seaside	Survey of School Children	Yes	11-16	2817	Not specified		20.5% (fm) 23% (vg)	UP	26% had problems with video games, fruit machines or both
Childrens Society	1990	Inland	Survey of School Children and Interviews	Yes	11-12 14-15	1332	678	654	8.3% (fm) 21.5% (vg) 32.1% (both)	UP	Heavy usage of video and fruit machines reliably associated with socially undesirable behaviour
Blackpool/ Fylde Youth & Community Service	1990	Seaside/ Inland	Survey of School Children and interviews	Yes	13-16	2704	1325	1379	83% (seaside)	UP	Include fruit machines in Gaming Act. Thus including use by under 18s
The Centre for Leisure Research	1990	Inland/ Seaside	Household survey/ interviews	No	all ages	3297	Not specified		54% (fm) 36% (vg)	SP	Legal restrictions on arcades must take account relevant available leisure opportunities for young people

Publication Service— Key: NRJ— Non Referred Journal; RJ— Referred Journal; SP— Self Publication; UP— Unpublished. \*fm— fruit machine (gambling); vg— video game machine.

Polytechnic Social Science Unit, 1990; Centre for Leisure Research, 1990)

As in the case of the Home Office research some of the studies shown in Table 3.1 have considered the use of both video and fruit machines. This greatly increases the complexity of the research task but has been deemed necessary for two reasons. Firstly, in the U.K., video machines and fruit machines are sited together in amusement arcades. Secondly, although video machines are designed for amusement only and not gaming, they are often the first slot machines which children play and are held by some researchers to act as possible precursors of gambling machines (Moran, 1987; Spectrum Children's Trust, 1988; Rands and Hooper 1990; Brown and Robertson, 1990; Griffiths, 1990a).

The difficulties and limitations of evaluating research employing a variety of methods, sampling procedures, and population sizes are well understood and acknowledged by the author. However, it is suggested here that in a field characterised by a paucity of factual information, that which does exist warrants careful consideration. The analysis which follows provides a critical assessment of the Home Office study and its findings, both on its own merit and in the light of research undertaken before and since, because it is this study which appears to inform the U.K. governmental response. It also aims to synthesise existing sociological knowledge of the juvenile use of amusement machines in the U.K. in order to generate possible routes for future sociological research. The supernormal exposure of children who live in seaside resorts to the alleged ill affects of amusement machines is a central theme of this chapter.

## **SOME DEMOGRAPHIC CONSIDERATIONS**

All existing studies report that the playing of fruit machines is the most common form of gambling among school children in the U.K. Indeed, as Table 3.1 shows, by the time children are established in secondary education they are in the minority if they have not gambled on fruit machines. Such findings are, of course, of little interest if on the whole they represent an occasional play for fun which is inconsequential for the life chances of the child. However, the variation in reported numbers involved may pinpoint a possible direction for future research.

While the variation partly reflects differing sampling procedures, it may also reflect the different types of location surveyed. Moran's (1987) survey of all the head teachers in the London boroughs found that the number of schools reporting fruit machine playing and the number of children in each school who played, increased with the availability of sites. In particular fish and chip shops and cafes providing fruit machines were more commonly found near schools reporting gambling than arcades. One headmaster at a secondary school in Devon reported a decline in school meal takings of up to £50 a week when fruit machines were installed in a cafe near his school, a decline which subsequently halted when the machines were removed (cited in Griffiths, 1988). This would suggest that if gambling by schoolchildren on fruit machines is to be viewed in a negative light, it is the fruit machine which should be the focus of attention rather than the venue (Moran, 1987). If this proves to be the case there would be an argument for some further rethinking on the provision of licences for cafes, fish and chip shops and other non arcade sites.

An even more pressing case exists for examining the anomalous situation of young people who live in seaside towns where fruit machines are a) traditionally freely available for tourist entertainment and b) like cafes, are not subject to British Amusement Catering Trades Association (BACTA) rule, prohibiting young people under the age of sixteen. Since August 1990 arcades which are affiliated to BACTA have been asked to display a notice prohibiting persons under the age of sixteen during term time, unless they can demonstrate that they are on holiday. Nevertheless, assuming this directive is effectively enforced, children residing in seaside resorts are still uniquely free to gamble on fruit machines during their everyday leisure time.

### **Seaside Arcades: a special case**

Amusement arcades are as endemic to the British seaside holiday as picture postcards and lettered rock. Yet there is particular concern that these "amusement palaces", which together with cinemas have traditionally provided entertainment for holidaymakers, provide a year-round facility for the resident population which may be harmful to some members (Ashdown, 1987; Barham and Cornell, 1987; Spectrum Children's Trust (1988).

In response to a request on the 6th May 1987 by Douglas Hogg (then Parliamentary Under Secretary of State at the Home Office) the Gaming Inspectorate (1988) looked for evidence of fruit machine gambling by children under sixteen in 151 inland, and 25 seaside arcades. Inspectors were required to visit each of six selected arcades in the chosen location on three separate occasions during the survey period:

visit 1	12 noon - 2 pm	weekday
visit 2	4 pm - 6 pm	weekday



Drawing a dividing line between age groups by observation alone is bound to be fraught with difficulty. Physical manifestations of maturity, sophistication of children's attire and the subjective perceptions of the observer are all prone to variation. Nevertheless, the greater proportion of children under sixteen seen in seaside arcades compared with inland arcades is too large to be dismissed on methodological grounds alone: 31% of those present in seaside arcades were reported to be under sixteen compared with 11% of those present in inland arcades, and of these "less than half" were accompanied by a responsible adult. (Gaming Board for Great Britain, 1987, p.9)

Seaside arcades were inspected both inside and outside of school holidays. During term time nearly 500 under 16 year olds were observed, 2/3 of whom were unaccompanied by an adult. Unfortunately there is no mention of how this number of children compares with that found outside of school holidays in inland arcades. Nor is it possible to assess the impact on this number of 'holiday' use by children who live outside of the area. Nevertheless, 500 children observed gambling during term time, in such a limited time for observation, provide, at the very least, a potential avenue for future research. Similarly, a "far higher proportion" of under 16 year olds playing videos machines was observed in the seaside arcades. (Gaming Board for Great Britain, 1987, p.10)

Ashdown (1987), Barham and Cormell (1987), Spectrum Children's Trust (1988), and the Centre for Leisure Studies (1990) all draw

attention to frequent play by young people who live in seaside resorts. Ashdown notes that

“Dawlish, the seaside town with its arcades, it is for the holidaymakers an opportunity for idle leisure and pleasure, but for the young people growing up in the town the arcades are the norm.” (Ashdown, 1987, p.5)

The Home Office survey included 10% of children from seaside resorts, a stratification produced by the Registrar General's Standard Regions. The overall conclusions may have been different if the regions had been awarded “proportional representation” and stratified according to the availability of sites (available from the licence records of H.M.Customs and Excise). Not surprisingly Graham reports that

“ .. playing of fruit machines was slightly more prevalent in seaside resorts and slightly less prevalent in rural areas, which probably reflects the extent of opportunities for playing fruit machines in these two kinds of location.” (Graham, 1988, p.15)

The hypothesis that additional use accompanies the increased availability of fruit machines generates no further comment. This is a serious omission of the Home Office research and surprising in view of the findings of studies which preceded it, and that of a previous major work on gambling in the U.K. in which the authors expressed their

“belief in the importance of supply generated by historical causes as a determinant of demand.” (Downes et al, 1976, p.47).

## **THE GENDER OF CHILDREN WHO PLAY AMUSEMENT MACHINES**

All studies found a strong gender bias among child fruit machine gamblers. A greater percentage of boys play than girls in both arcades and other venues. They play more regularly, spend more money and are more likely to play alone (NHTPC, 1988; Ide-Smith and Lea, 1988; Barham, 1987; Spectrum Children's Trust, 1988). One national study found that 70% of boys play machines in amusement arcades compared with 40% of girls, that they spent more than the girls during a typical visit and were twice as likely to play on their own (NHTPC, 1988).

The Home Office data reproduce this gender bias and also provide some interesting information on which types of machine boys and girls prefer. Girls of all ages preferred fruit machines and the proportion in each age group who said they only played fruit machines was larger than the group who said they played both types of machine. In contrast more boys said they only played videos than said they only played fruit machines. Since video games overwhelmingly reflect the violent "pretend" games that boys traditionally play, this is perhaps not surprising. If it emerges that the playing of video games precedes fruit machine gambling for many children, particularly boys, then some understanding of the nature of childhood play and how it has been taken up and transformed by software engineers could be crucial to the understanding of the career path of a child fruit machine gambler.

## **THE AGE OF CHILDREN WHO PLAY AMUSEMENT MACHINES**

There now appears to have been a significant under-estimate of the age at which many children first gamble on fruit machines. This is to some

extent inevitable given that most research has been carried out in secondary schools, thus precluding children under the age of 11 years. However some studies have asked children how old they were when they started fruit machine gambling and these point to the majority having started while still at primary school. One study reported a mean age at which fruit machine play commenced of 8 years 3 months for boys and 8 years 9 months for girls (Ide-Smith and Lea, 1988). Another reported that 44% of the children surveyed started gambling on fruit machines under the age of 10 and 84% under the age of 11 (Ashdown, 1987). Yet another reported that 21% of children started gambling before they were 9 years old (NHTPC, 1988).

Age of commencement to play fruit machines could prove to be a significant factor in the future career of an adolescent gambler. All of Griffiths "addicted adolescents" said they started fruit machine gambling before the age of eleven years and the NHTPC national survey found that those respondents who started gambling before they were 9 years old were more likely to gamble 'very frequently' (4 times a week). This notion is also supported by Huff and Collinson's survey of 100 males in a Youth Custody Centre which distinguished between those youths who had stolen to finance declared habitual gambling and video machine playing and those who had not. The mean age of commencement of play for respondents who had stolen to finance their habit was less than 12 years compared with just under 14 years for those who had not.

While girls in each age group seem to prefer fruit machines, boys in different age groups play different types of machine according to peer group norms. The younger boys predominately play video games, but this preoccupation peaks at about 12 or 13 years and then declines. It is

considered to be socially inappropriate to play videos after a certain age and to do so 'risks censure and even exclusion by ones peers' (Graham, 1988). Spending on fruit machines, however, increases with age although most players "think they'll grow out of it". Adult play of fruit machines in arcades is looked down upon by young players and

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

This is an interesting sociological phenomenon and one which is begging an explanation.

#### **THE CLASS OF CHILDREN WHO PLAY AMUSEMENT MACHINES**

None of the existing studies reports a clear class bias. Graham (1988) found that their respondents who played amusement machines were quite evenly spread in terms of class background although classes C2 and DE were "slightly over-represented". They did find that a slightly higher proportion of children from DE families played fruit machines than those from other class categories, but that such differences were not apparent with respect to video games.

#### **INDICATIONS OF "DEPENDENCY"**

Little theoretical work has been undertaken by the authors of existing sociological surveys on the explanation of such concepts as "dependency", and "addiction" with respect to juvenile gambling. Rather, they have been taken as given and used without further attempt to give insight into their meaning (as, for example, in Barham's unexplained and unsupported use of the concept "addicted" in the following sentence: "some are addicted and spend beyond their means"

(Barham, 1987, pp.25-26, cf Graham, 1988, p.7)). This lack of conceptual analysis is a major shortcoming of all previous attempts to assess the extent of 'addiction' to fruit machine gambling in children. A full discussion is provided in chapter 4.

The Home Office research attempted

“some assessment of the extent to which young people are at risk of becoming dependent upon the playing of fruit and video machines” (Graham, 1988 p.17)

by asking respondents to state:

- how often they spent their own money on playing machines
- how long they played during a typical session
- how much, as proportion of their weekly income, they spent on machines,
- how frequently players spent more than £5 during a session, and
- at what stage during a session they decided to stop playing (fruit machine players only). Group interviews also provided data on spending behaviour and patterns of play.

Several methodological/analytical flaws are evident in their approach:

- a) The nature of the questions being asked suggests that confidentiality is essential for frankness of response. However the respondents were first required to give their own and their mother's name, their full postal address and their telephone number!
- b) The answers to the questions asked provide not an indicator of dependency, but of how much time and money children spend on

amusement machines. Even in cases where this is considerable, it could be argued that such behaviour does not necessarily indicate “dependency” and that children are entitled to spend their time and money as they choose within the confines of the law.

c) By asking children how often they spent their own money on machines, the times when they spent money from other sources eg. school dinner money, were excluded.

d) No systematic attempt has been made to cross tabulate the statistics provided from the answers. For example, it would be interesting to know how many of those children who gambled “two or three times a week” or “nearly every day” also spent “more than £5” a session and/or a large proportion of their weekly income.

e) The method of reporting focussed on those who did not participate frequently, spend much money or behave deviantly in the course of their play. Attention was thus systematically attracted away from the minority of children whose play has given sufficient cause for concern to warrant a Home Office enquiry in the first place. For example:

“only a small minority of young people are at risk of becoming dependent upon either fruit or video machines” (Graham, 1988, p.18).

Take away the word “only” and the statement which in its original form is almost dismissive of this group now focusses upon them (see also, Moody 1989). The findings of existing research on variables which have been used to indicate dependency are examined in more detail below.

## FREQUENCY OF AMUSEMENT MACHINE USE BY YOUNG PEOPLE

One measure of an individual's commitment to a leisure activity is the proportion of resources input to support it. The two basic requirements for slot machine gambling are time and money. Analysis of data on frequency of amusement machine use by children is hampered by the varying and often inadequate operationalisation of concepts such as "regular" and "occasional". For example, the Home Office study defines "regular" users as "those who play more than once a week" while others describe a similar group as those who "play often" (Barham, 1987; Ide-Smith and Lea, 1988). Yet another leaves interpretation of the classification of "regular" open to the subjective assessment of the respondents (Spectrum Children's Trust, 1988).

It could be argued that the Home Office research employs a particularly non standard definition of "regular" compared with common usage. For example, a grown man who goes to the "dogs" every Friday evening may be described as "A regular punter" or as "attending regularly." However in terms used by the Home Office report a young person who visits an arcade once a week to play amusement machines is described as playing "not very often." Yet, later in the report the author refers to an arcade visit as constituting "the central focus of a social event" and we are told that "the most popular time for playing the machines appears to be Friday evening and Saturday." One interviewee is reported as saying

"The main day I go down there is Friday night. It's quite a good night - all my friends are down there." (Graham, 1988, p.23).

Thus for some young people at least, a Friday evening or Saturday visit to an arcade is a regular weekly occurrence of some importance which



may well be undervalued in quantitative and qualitative terms if the child is said to play amusement machines “not very often.”

There are other ways in which the Home Office’s method of data gathering and analysis understates the frequency with which young people gamble on fruit machines. The key question is framed as follows:

QD8 How often do you spend	less than once a month
your own money playing	about once a month
fruit machines nowadays?	about 2-3 times a month
	about once a week
	about 2-3 times a week
	nearly every day

Those children who responded positively to the first four options to this question were subsequently classified as those who played “not very often.” The remainder, who said they played 2 or 3 times a week or nearly every day, were then defined as “regular” players (6% of fruit machine players and 10% of video players). One wonders what the Home Office criteria for those children who gamble “often” might be.

It is possible, however, to deduce the number of children who play amusement machines once a week or more from the data provided. These results can then be compared with those of other studies which specifically reported on a frequency classification of “once a week or more,” or whose data can be similarly reworked to provide such a classification. These results are shown in Table 3.2 together with the percentages of children who play four times a week or more.

Table 3.2

## Summary of U.K. Studies Reporting Frequency of Play

<i>Researcher(s)</i>	<i>Year</i>	<i>% 'Regular' players as defined by author</i>	<i>% 'Regular' players redefined as those who play once a week or more</i>	<i>% Players who play 4 times a week or more</i>
Waterman & Atkins	1985	9% (fm) <sup>b</sup>		
Ashdown	1987	23%	23%	4%
Barham & Cormell	1987	37%	37%	3%
Huff & Collinson	1987	24% (fm) 27% (vg) <sup>c</sup>		
Spectrum Children's Trust	1988	26% (fm) 25% (vg)		4% (3/wk or more)
National Housing Town Planning Council	1988	14% (fm)	24% (fm)	5% (fm)
Home Office	1988	6% (fm) 10% (fg)	23% (fm) 28% (vg)	2% (fm) 3% (vg)
Leeds Polytechnic Social Science Unit	1989	39% (fm) 44% (vg)		6%
Griffiths	1990 (a; b)	34% (fm)		6% (fm)
Rands & Hooper	1990		43% (fm - arcades) 51% (vg - arcades)	11% (fm - arcades) 11% (vg - arcades)
Childrens Society	1990	40% (fm - arcades) 54% (other venues)	40% (fm - arcades) 54% (fm - other venues)	16% (fm)
Blackpool & Fylde Youth & Community Service	1990		34% (seaside sample)	5% (seaside sample)
Centre for Leisure Research	1990		14% (fm) <sup>d</sup> 5% (vg) <sup>d</sup> 24% (both) <sup>d</sup>	

<sup>a</sup>these percentages are proportions of the final group chosen for study i.e. those of the total sample who said they played amusement machines (as opposed to those who said they did not). Or, as in the case of the Home Office and Barham's studies, those who said they had played amusement machines in the last month/two months, respectively; <sup>b</sup>fm - fruit machines (gambling); <sup>c</sup>vg - video game machines; <sup>d</sup>spent money during last week

It can be seen that using the criterion of "once a week or more" to define regular play, a considerable degree of consensus is revealed among studies undertaken during the years 1987 and 1988 with an average of about 25% of children who participate playing once a week or more.

An exception to this is Barham and Cornell's (1987) report of 37% of respondents playing once a week or more in a seaside town where "the number of gaming machines available to young people is the largest in the whole county of West Sussex." Such large numbers participating again highlights the need for further research into the relatively free access to amusement machines for children who reside in seaside towns.

Findings of the study by Waterman and Atkins (1985) also differ with only 9% of their respondents falling into this category. But this is probably explained by the age group of children surveyed (14-18 year olds) and their own finding that "younger people are more likely to play on fruit machines, that is 14-15 year olds." In addition, the study is now 5 years old and the number of fruit machines available to children has increased considerably since then (Moran, 1987; Centre for Leisure Studies, 1990). It seems likely that supply factors similarly explain the increased regular participation reported by more recent surveys, but longitudinal statistical research is required to indicate whether or not this is so. A corollary to this would seem to be the corresponding rise in numbers of young people who play amusement machines four times a week or more.

Of course, regular or even very frequent gambling does not automatically imply negative consequences. It may be that for many young people it is the social context of the machines which is the focus of interest and not gambling, and that expenditure on gambling is controlled expenditure, purchasing admission to the chosen social milieu. All previous studies report aspects of the social context of play, such as "atmosphere" and "a good place to meet friends," as an important component of machine use in arcades. Further qualitative research is required to establish the importance of social components of juvenile amusement machine use, relative to the game/gamble itself.

#### EXPENDITURE ON AMUSEMENT MACHINES

The ratio of time to money required to gamble on fruit machines depends upon the payout rate of the machine and (to a limited extent in the short term) the skill of the player in using the various play features to prolong play. The present writer spent £30.60p in one hour (with the aid of sponsorship from a local machine operator who supplied both tokens and machine). Griffiths (1990d) has reported that players spend approximately £3 every ten minutes, including their winnings from the original stake. Certainly, all previous research points to fruit machine gambling being an expensive pastime for many children and one which has a positive income elasticity among participating adolescents (Waterman and Atkin, 1985).

In addition, the National Housing and Town Planning Council (NHTPC) study found a strong correlation between the amount spent during a typical visit and the frequency with which children gambled. Of the 22% of fruit machine players who said they played once a week or more, 15% spent more than £3 during one visit to an arcade and 10%

spent more than £5. Over 33% of children who played at least 4 times a week spent more than £3 on each occasion, and nearly 20% spent more than £10 a session ie. at least £40 a week on gambling. Other studies which tested this hypothesis found a similar correlation between frequency of play and amount spent during a typical visit (Waterman and Atkin, 1985; Spectrum Children's Trust, 1988; Children's Society, 1990).

The Home Office asked their respondents how much money they usually spent on amusement machines in a week. 71% of fruit machine players said they spent less than £1 a week, 17% between £1 and £2 a week and the remaining 12% spent more than £2 a week. (It is not mentioned how many of these spent between £2 and £5, or more than £5 although this information was gathered). Thus attention was focussed on those spending relatively small sums of money and drawn away from those spending more.

Information is, however, supplied on the proportion of income spent on fruit machines and videos by a subsample of Home Office respondents (432 fruit machine players and 402 video players). It reveals that 40% of fruit machine players and 41% of video players spent "a half" or "most of their income" on playing machines. The players who said they spent "only a very small proportion of their income" on fruit machines or videos amounted to 35% of respondents in each case and are described as "those least likely to be at risk of becoming dependent." This is typical of the reporting of results of this survey, with attention focussed on the least involved and (in this instance) no comment at all on the more heavily involved and (using the criteria employed by Graham) those most likely to be at risk of becoming "dependent."

## DELINQUENT BEHAVIOUR BY YOUNG PEOPLE WHO PLAY AMUSEMENT MACHINES

All present studies agree that a minority of children steal or truant to play amusement machines but disagreement exists as to the size and nature of the problem. To measure delinquency by young people who play amusement machines (other than theft of money), the Home Office researchers administered a self-report questionnaire to all participants in the group interviews. As Graham himself points out, the results need to be treated with caution because the sample of 36 children is too small to be considered nationally representative.

A further drawback is that the delinquency questionnaire was borrowed from Riley and Shaw's (1985) study of parental supervision and delinquency and as such is insufficiently focussed on the study in hand to be of much relevance (items include for example: "written or sprayed paint on buildings," "broken windows in an empty house" and "dialled 999 for a joke"). Not surprisingly the author found little evidence of behaviour which could have been motivated by a need to fund the playing of machines. Nevertheless Graham concludes that

"The lack of evidence to suggest playing amusement machines can lead to delinquency also needs further investigation."  
(Graham, 1988, p.32-33).

This recommendation is endorsed by the findings of a study by the Devon and Cornwall Constabulary (Yeomans, 1989). Monitoring the cases of young offenders in Plymouth, Devon (population 258,000) during the course of one year, Yeomans found 72 offences related to amusement machine use, 27 by first time offenders. He concluded:

**“No facts or figures can hope to do justice to the family trauma, the child's stress in being involved, or the aggravation and frustration to the aggrieved be they person or corporate units.”  
(Yeomans, 1989 p.2)**

**Barham and Cormell (1987) and the Centre for Leisure Studies (1990) report stealing from machines. Some respondents evidently thought it “fair game” to fiddle the machines and had developed a range of techniques to do so:**

**“they used strimming wire shaped to coins or to retrieve them, ‘taped’ 10p pieces to a 50p shape, created static to short the micro-circuits and even used brake fluid to gain credits”.  
(Barham and Cormell, 1987, p.21).**

**Most of the other studies concentrate on the unsocial or illegal behaviours of borrowing, using school dinner money, truanting and stealing (to support amusement machine play) to measure related delinquency. The results are shown in table 3.3.**

Table 3.3

### Summary of U.K. Studies Reporting Unsocial/Illegal Behaviour Associated with Amusement Machine Use

<i>Researcher(s)</i>	<i>Year</i>	<i>Borrowing</i>	<i>Using Fare/Lunch money</i>	<i>Truanting from school/ work</i>	<i>Stealing</i>
Ashdown	1987			a	a
Barham & Cormell	1987	16%		2%	5%
Huff & Collinson	1987			18%	23% (fm) <sup>b</sup> 22% (vg) <sup>c</sup>
Spectrum Childrens Trust	1988	16%		4%	4%
National Housing & Town Planning Council	1988	35% (fm)	17% (fm)	7% (fm)	6% (fm)
Home Office	1988	d		d	d
Leeds Polytechnic	1989	20%		7%	10%
Griffiths	1990	24% (38%) <sup>f</sup>	18%	12% (18%) <sup>f</sup>	18% (32%) <sup>f</sup>
Rand & Hooper	1990	7%	4%	2% <sup>g</sup> 1% <sup>h</sup>	2%
Childrens Society	1990	30% (fm)	24% (fm)	14% (fm)	12% (fm) <sup>i</sup> 5% (fm) <sup>j</sup>
Blackpool & Fylde Youth & Community Service	1990	22% (fm) 26% (vg)	12%	5%	7% (fm) <sup>i</sup> 7% (vg) <sup>i</sup> 6% (fm) <sup>k</sup> 5% (vg) <sup>k</sup>
Centre for Leisure Research	1990			h	h

<sup>a</sup>anecdotal evidence. <sup>b</sup>fm – fruit (gambling) machines. <sup>c</sup>vg – video game machines. <sup>d</sup>scant anecdotal evidence. <sup>e</sup>may have only happened once. <sup>f</sup>from family <sup>g</sup>from outside family. <sup>h</sup>anecdotal evidence from caring agencies.



## **Borrowing**

Borrowing and lending money is intrinsic to the economic life of all ages and where recipricocity is involved, may well enrich social relationships. But borrowing money to finance gambling may be symptomatic of excessive play as it implies expenditure beyond the means of the participant. Research has shown that the more frequently young people play amusement machines the more likely they are to borrow money to do so (eg. NHTPC, 1988; Graham, 1988, Children's Society, 1990). The NHTPC reported 32% of children who said they played once a month or less compared with 76% who said they played three times a week, borrowed money to play.

## **Obtaining money from strangers**

Obtaining money from strangers in arcades is another way by which some young people raise further money to gamble when their own runs out. Regular players learn through practise whether they should "hold" one reel and "nudge" another, and having "learnt" the machine sell the knowledge to others:

"When you get skint you watch other people. If you watch them and you know the machines and you can help them sometimes they give you money." (Graham, 1988, p.30)

It is important to find out the extent of this practice in the light of the finding by the Children's Society (1990) that a substantial minority of their repondents experienced undesirable contact with strangers in arcades.

## **School Dinner Money**

Huff and Collinson (1987) found that more "criminal" video players (those who had stolen specifically to fund their play) had used school dinner money to fund play than "non-criminal" players. Other studies report that the spending of school dinner money on amusement machines is more common among frequent players (eg. NHTPC, 1988; Moran, 1987; Children's Society, 1990). The NHTPC reported that 12% of children who play the machines once a month or less used their dinner money to do so, compared with 27% who played weekly and 53% who play 4 times a week or more. (The NHTPC report that dinner money was used more often for non-arcade machines than for arcade machines, in all categories of frequency, which supports the proposal by the Home Office that further research into machine playing by children in non arcade sites is needed.)

Regular players interviewed for the Home Office also said they spent money given to them for meals, clothing and fares on amusement machines:

"I get my dinner money and money to spend at school and I just go and spend it all in there; I'd rather play on the machines"

"(My mother) gives me money every day, and what I do is, I don't have me dinner, I save it and go to the arcade." (Graham, 1988, p.19).

Barham and Cornell similarly report:

"... we know of children who spend their 'dinner money' on the machines and eat if they 'win'." (Barham and Cornell, 1987, p.30).

## **Tuancy**

Tuancing to play amusement machines is reported by all previous studies which included tuancy as a research item. As with the use of school dinner money, tuancy appears to increase with frequency of play. The NHTPC reported (1988) that 3% of children who gambled once a week or less missed school to do so, compared with 35% of children who said they played 4 times a week or more. The NHTPC similarly reported tuancy increasing with the amount spent during a typical session, with the worst offenders again playing in non-arcade sites. For example, 27% of children who spent between £3 and £5 a session tuanted from school to do so, together with a 67% of children who spent £10 or more.

## **Stealing**

For analytical purposes a dividing line may be drawn between those forms of theft which come to be defined as illegal and those which remain merely dishonest. Previous research suggests that some of the money which young people spend on amusement machines is dishonestly expropriated from the home.

The Devon and Cornwall police survey claims that such behaviour exists but is frequently covert as

“parents are able to financially cope with their child or have such a strong parental response that it does not come to (police) notice.” (Yeomans, 1989, p.5).

Ashdown's case study of a schoolgirl gambler illustrates the dilemma faced by one mother:

"Sally took £80 from her mothers bag to follow her obsession. Sally already has the supervision of a Social Worker following a shoplifting spree to raise funds for a night on the machines. Her mother dare not tell the Social Worker about the theft of £80 in fear of Sally being taken back before the courts and the possible consequences."(Ashdown, 1987 p.1)

Even within the family such behaviour may be covert:

"He has stolen from his mother and now his stepfather. His mother has paid back his stepfather without him knowing" (Spectrum's Children's Trust, 1987, p.11).

Again it is the extent of the problem which is most open to debate. The Home Office suggests that it is minimal: "with only a couple of exceptions" they found that their respondents acquired money to play amusement machines from regular sources such as pocket money, ad hoc gifts of money from parents for sweets etc., and part-time employment. However, it must be remembered that no confidentiality was given to their respondents, and the group interviews do suggest that child gamblers used other less regular sources. Nevertheless, we are told that "rarely did their dishonesty amount to more than a petty act of defiance or bravado". For example, "They might at the outside force a parking meter or take money from their parents" (Graham, 1988, p.30). The way in which certain behaviours related to amusement machine use are acknowledged dismissively by some researchers and reported with concern by others remains a further avenue for sociological enquiry. Meanwhile, comments by Yeomans reflect the ultimate governmental stance:

"Do not let us be deluded that as a result of these so-called petty acts a criminal act is committed and the child is then processed as a criminal." (Yeomans, 1989, p.6)

Other surveys did not distinguish between theft inside or outside of the home. Huff and Collinson (1987) found that 60% of their respondents in a Youth Custody Centre gambled on fruit machines, and of these 23% had stolen specifically to fund their play. A similar proportion played videos and of these 22% had stolen to fund their play. Barham and Cormell (1987) reported that 3% of their sample admitted stealing money to play on fruit machines, and 8% of Spectrum Children's Trust's respondents said they had taken money to play slot machines (twice as many boys as girls).

The NHTPC (1988) and the Children's Society (1990) found a significant relationship between the amount children spent on gambling, the frequency with which they played, and the propensity to steal. 4% of children who played once a month or less said they had stolen to play compared with 38% of those who gambled 4 times a week or more. Similarly 4% of children who spent up to one pound during a visit to an arcade had stolen to do so, compared with 25% of those who typically spent between £5 and £10, and 67% of those who spent over £10.

### **'Dependency' and video machines**

Much less attention has been paid in most of the previous research to the use of video machines than fruit machines. An exception to this is the Home Office study which suggests that the initial motivation to play may be quite different:

“the playing of video machines is about personal skill and challenge, rapid reflexes and effective hand/eye coordination, rather than winning money” (Graham, 1988, p.26).

The challenging nature of the games also engenders a keen competitive spirit between players:

“players persistently compare their scores with their own previous performances and those of others. The manufacturers of video games have not been slow to cotton on to this and most video machines now display lists of the best performers’ names.” (Graham, 1988, p.26).

Most existing research tends to report any negative consequences of video machines as being indirect and due to their juxtaposition with fruit machines (eg. Barham, 1987) or their tendency to act as precursors for fruit machines (eg. Moran, 1987). The Home Office found that

“there is little if any likelihood of becoming dependent upon video machines - - the interviewees tended to scoff at the very idea.” (Graham, 1989, p. 27).

However, the Centre for Leisure Studies (1990) reported 50% of their respondents agreeing to the statement “Playing video games is harmful because people get hooked on them.” Furthermore 41% of the video players in the Home Office sample said they spent a half or more of their weekly incomes on video games. And Huff and Collinson (1987) reported a number of their “criminal” video players as “having problems associated with their playing in the past, in the present and also foresaw more in the future.” They also had more relationship problems, took more time off work and neglected food to a greater extent than “non-criminal” players. Thus the need for further research on the largely unexplored phenomenon of juvenile video machine playing in the U.K. is clearly indicated. (For a review of the U.S. and U.K. video game literature, see Griffiths, 1990e.)

## WHO YOUNG PEOPLE PLAY AMUSEMENT MACHINES WITH

Present evidence suggests that for most children a visit to an arcade is a social event enjoyed with siblings or friends. All previous research supports Graham's claim that amusement machine playing is

"an essentially peer group centred activity (which) contrasts somewhat with the concept of the 'lone addict', the solitary player entrapped by the machine's irresistible pull." (Graham, 1988, p.21).

Indeed the Home Office enquiry found that the peer group became a powerful regulating mechanism by which "dependency" was avoided by the majority:

"If the playing of fruit machines goes beyond the boundaries of a social event and begins to impose upon the individual's or the group's life outside the arcade, then the peer group are likely to intervene." (Graham, 1988, p.25).

However, for 24% of the boys and 17% of the girls in the Home Office sample, and 24% of the boys and 10% of the girls in the NHTPC sample, playing is not a social event but a solitary pastime, and as such is, one presumes, outside the sphere of intervention of the group. While solitary playing of games expressly designed for one player can hardly be described as *prima facie* evidence of pathological play by "lone addicts," the NHTPC survey found that the more frequently children played and the more money they spent on a typical visit, the more likely they were to play on their own. Since this finding was not supported by the Children's Society, further research is needed to clarify the issue.

## **THE SOCIAL CONTEXT OF THE ARCADE**

In an account of how young players perceive and experience the role of amusement machines in their lives, Graham highlights the social function of the arcade. For the majority, gambling is just one of the thrills on offer during an occasion when young people meet away from the watchful eyes of adults and immerse themselves in the complexity of norms and roles of their own peer group. For example

“during breaks, individual players might watch their friends or other players at play, smoke a cigarette, or leave the arcade in search of refreshments and throughout the event there is a constant undercurrent of playful flirtation between the boys and girls in the group.” (Graham, 1988, p.23).

In this respect the amusement arcade offers a private sector environment for adolescent socialising akin to the coffee bars of the 1960's.

“It presents young people with a social event not only in terms of providing a convenient place to meet, but also by supplying an environment in which they can explore the boundaries of adulthood within the relatively safe confines of their peer group” (Graham, 1988, p.27).

The social aspects of juvenile amusement machine use are fully discussed in chapter 8.

Conversely, one of the arguments commonly cited by those concerned with the adverse consequences of fruit machine gambling is that arcades provide an environment which is unsuitable and even hazardous for young people. Graham reports that young people 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 beat you up.’ and ‘Its fun; you always think it won’t happen to me being attacked down there.’” (Graham, 1987, p. 28)**

**The positive aspects of perceived potential danger on the adolescent psyche are highlighted thus:**

**“This perception of a constant threat of danger encourages camaraderie and the playing of gambling machines induces a sense of rebelliousness and defiance. It can even offer the opportunity to test one's survival skills -- sometimes players end up spending their last penny and having to improvise a way of getting home.” (Graham, 1987, p. 28).**

**Regrettably, the vital question of whether the perceived threat of danger is real or imagined is not properly pursued, but findings of a survey (Children's Society, 1990) do suggest the need for this. Of 520 child visitors to amusement arcades in Birmingham:**

- 9% had been approached by someone offering to lend money**
- 6% had been approached by someone asking them to steal**
- 17% had been approached by someone offering or selling items (watches, hi-fi, clothes etc.)**
- 19% had been approached by a stranger who had made them feel ill at ease/embarassed,uncomfortable.**
- 10% had been approached by someone offering drugs.**
- 22% had been involved in a fight.**

**Furthermore the Centre for Leisure Research (1990) reported that 80% of their respondents disagreed with the statement: “Amusement arcades provide young people with a safe place to go”.**

Barham (1987) suggests that the safety or otherwise of the arcade depends very much on the management whose attitude of "friendliness" ranges from:

"active interest, protection from bullying and undesirables, even support offered to the youth, to passive disinterest, leaving the young people to their own devices with the provision that such devices be legal (which is not always the case!)" (Barham, 1987, p.23).

In view of the undoubted attraction of arcades as meeting places for young people, the safety of the environment warrants further research.

## **CONCLUSIONS/RECOMMENDATIONS FOR FURTHER RESEARCH**

Analysis of the Home Office research, both on its own merit and in the light of research undertaken before and since, suggests that the key finding, of no evidence of an association between the playing of amusement machines, dependency and delinquency, understates the known facts. The conclusions which may be reliably drawn from the Home Office and other studies, together with recommendations for future research, are:

a) Existing research clearly shows that the playing of amusement machines has become a major leisure pursuit for young people. Graham (1988) and the Centre for Leisure Studies (1990) in particular, have shown that the meanings attached to slot machine play by the majority of young people are vastly different from the "mindless, addiction" model popularly assumed by (non-playing) researchers and journalists to date (for example, Moran, 1987; Midgley, 1988).

Some of the 'motivations' to gamble discussed in chapters 1 and 2 have been observed in previous U.K. studies on juvenile fruit machine gambling, particularly the search for 'action' (Goffman, 1969) and the importance of context (Devereux, 1949; Zola, 1967; Dixey, 1987a). But, as yet there has been no systematic exploration of the complex and diverse range of orientations involved in juvenile fruit machine use. Ethnographic exploration of the subcultures of both video and fruit machine use would be helpful in revealing the social processes involved.

b) The present evidence suggests that a small minority of young players become "addicted" to gambling on fruit machines. The statistical significance of this small minority remains obscure due to methodological difficulties associated with a) definition, and b) mass measurement (such as lack of confidentiality and inadequately framed questions). Further efforts are required on the part of psychologists and sociologists to give a clearer indication of the number of young people involved.

c) It has been claimed that young people who become "addicted" to fruit machines suffer the same character changes that mark all "compulsive" gamblers (Moody, 1990). The reported association between "compulsive" fruit machine gambling and delinquency similarly requires further empirical investigation.

d) Existing research reports that young people who demonstrate "symptoms of dependency" on fruit machines (such as the spending of supernormal amounts of time and money, borrowing, truancy and theft), are predominately male teenagers who are likely to have commenced play as young boys under the age of ten years and who may

play alone. What is now required is some sociological accounting for the characteristics of this subgroup.

e) Compared with fruit machines, research on the incidence and consequentiality of video machine play by young people in the U.K. is meagre, although similar preoccupations clearly pertain. The present view seems to be that young people in the U.K. do not become “addicted” to video machines. However, the lack of systematic investigation, the reliance on (conflicting) anecdotal evidence and the clear indication of “addicted” video game players in the U.S. literature (Griffiths 1990e) suggests caution in accepting this finding as definitive. Further research is needed.

f) The relationship, if any, between video and fruit machine play among young people also warrants further investigation. In particular it would be helpful to know whether or not the playing of fruit machines is contingent in some way upon the playing of video games. Is there, for example, a “career path” for some young players which commences with video machine play and graduates to fruit machine gambling which may or may not become problematic for the child and society?

g) Finally, analysis of existing U.K. research highlights the existence of a group of children who are uniquely vulnerable to the potential problems associated with amusement machine playing. These are the children who reside in seaside towns who have uncontrolled access to amusement machines in tourist arcades (in addition to those in non-arcade sites) throughout the year. Enquiry into the additional impact of amusement machines on the lives of these children is of paramount importance.

## **CHAPTER 4: METHODS AND METHODOLOGY FOR STUDY 'A'**

### **INTRODUCTION**

This chapter begins by discussing some of the philosophic and practical issues which informed the use of both quantitative and qualitative methods in this research. The remainder of the chapter is given to a discussion of the methods and methodology used in Study 'A'. First, there is an analysis of the concept of addiction to gambling and what contribution sociologists can make to it's study. Secondly there is an account of the practical development of the measure to define addiction to gambling in children. Finally, there is an account of how this measure was used in a questionnaire survey to estimate the extent of addiction to gambling among children residing in a seaside town where fruit machines were freely available. The methods and methodology employed in the ethnographic study are discussed in chapter 7.

### **MULTIPLE METHODOLOGIES**

This research includes methods which may be said to represent the extremes of a continuum which has positivism at one end and "anti-positivism" at the other. The positivist extreme is represented by a statistical survey which centres around an index used to define and measure the extent of "addiction" to gambling in children. The "anti-positivist" extreme is represented by an ethnographic study of young fruit machine gamblers in a seaside arcade which seeks to explain the meanings attached to their play. Structured group interviews and unstructured interviews with individuals were also carried out. The debate between positivism and "anti-positivism" as competing paradigms is often a sterile debate. (Benson and Hughes, in Button, 1992)

However, methods of sociological enquiry are not atheoretical tools, and in using them the researcher implicitly adopts certain ontological and epistemological positions (Ackroyd and Hughes, 1981, p.17).

An eclectic methodological approach is not without support in the literature. Denzin, for example, suggests that the use of dissimilar methods to examine the same sociological phenomenon reconciles some of the difficulties attributed to each perspective. He argues that because the weaknesses of one approach are so often the strengths of the other; a diverse approach potentially combines the best of each:

“By combining multiple observers, theories, methods and data sources, sociologists can hope to overcome the intrinsic bias that comes from single method, single observer, single theory studies.” (Denzin, 1970)

Glaser and Strauss also emphasise the practical advantages of methodological triangulation (Glaser and Strauss,)

This proposition, while appealing as a practical justification for multiple method research, is philosophically untenable. At the most abstract levels of ontology and epistemology, different paradigms cannot be reconciled by recourse to evidence or empirical demonstration because they themselves define what is to count as evidence and what can be accepted as phenomena (Hughes, 1976, p.278). Thus if a survey should provide one pattern of results and observation another, the validity of one claim over the other would remain a matter of ontological premise (Philipps, 1973). According to this view sociology can never be a coherent body of knowledge “ ... but only an arena of competing and irreconcilable paradigms” (Hughes, 1976, p.279).

Thus the researcher is faced with a dilemma: Observational studies are incapable of generating accurate quantitative data, and surveys are totally inappropriate for the attribution of meaning. And yet, as Phillips points out

“all descriptions of behaviour are inevitably both quantitative and qualitative” (Phillips, 1971 p.137)

It could be argued that the process of quantitative analysis is best considered the domain of other disciplines. But fruitful sociological research involves an appreciation of the research topic as a whole, as well as a rich and detailed account of the social processes pertaining to any one aspect. This, in turn, implies the inescapable need for quantitative data gathering.

The dilemma has to some extent been resolved by Giddens's (1976) attempt to construct a theory of social life which acknowledges the simultaneous embodiment of social structure and social action; a “duality of structure”:

“Every act which contributes to the reproduction of a structure is also an act of production, a novel enterprise, and as such may initiate change by altering that structure at the same time as it reproduces it.” (Giddens, 1976, p.138)

However while Giddens has demonstrated a theoretical basis for bridging the positivist - “anti-positivist” divide, the methodological procedures which stem from it are not specified.

Adopting a theoretical position close to that advocated by Giddens, Willis (1977) suggests that the triangulation of methods is not philosophically indefensible as long as the data they produce are used with caution. For example, he argues that final employment categories for young people can be predicted quite well from structural factors such as class background and geographical location. Yet none of these structural factors provides any explanation of the phenomena; they merely give outline to a situation begging an explanation defined as:

“ ... How and why young people take restricted and often meaningless available jobs in the ways which seem sensible to them in their familiar world as it is actually lived.” (Willis, 1977, p.145).

Similarly it is argued here that positivist methods of definition and measurement are currently the most appropriate for estimating the extent of “pathological” gambling among children in a large-scale study. However, the data gathered by the questionnaire survey is used for the sole purpose of providing a broad structural picture of juvenile fruit machine gambling in a seaside town at a given period in time. No attempt is made to use these data to attribute meaning, or to claim sociological understanding. A sociological explanation of the subculture of arcade fruit machine gambling among young people is provided by the ethnographic study.

### **DEFINING AND MEASURING “ADDICTION” TO GAMBLING IN CHILDREN**

Defining and assessing the extent of “addiction” to gambling in children, or other social groups, is archetypically a positivistic enterprise. “Addiction” to gambling is a theoretical construct; it has a conceptual reality but requires empirical evidence of its existence. “Anti-positivists”



would rightly claim that empirical evidence lies in grasping the meanings of childrens' experience of the phenomenon. However, given a situation where information on the extent of gambling addiction among children in a sizeable community is required, the interpretivist approach is simply not practical.

Chapter 3 shows how researchers examining fruit machine gambling among children have employed various "symptoms of dependency" to define and count the "addicted" minority. These include behaviours such as high frequency of fruit machine use, high expenditure on fruit machines, truanting, stealing, borrowing, and spending school dinner money to support play. However, while it may be said that such behaviours characterise some children who are "addicted" to gambling, to specify that children who play fruit machines and indulge in such behaviours are therefore addicted gamblers, places the proverbial cart before the horse. Furthermore, there is a lack of statistical information on which of these behaviours, alone, specifies dependency; or precisely what combination of more than one behaviour indicates dependency.

An individual consideration of some of the "symptoms of dependency" highlights the nature of the difficulties involved. Firstly, the span of play of a fruit machine is a matter of seconds so that a child who plays every day may be doing so in an inconsequential manner. Therefore addiction to gambling may not be defined using frequency of play alone. Secondly, most children play fruit machines in amusement arcades. These venues with their jazzy interiors, flashing lights and "pop" music are intrinsically attractive to children. Thus, long periods of time spent in arcades may reflect the qualities of the venue rather than an overwhelming commitment to the gambling services offered (Fisher,

1991). Thirdly, it could be argued that in a market economy children need socialising in the principle of consumer sovereignty and that if this means spending all of their weekly income on fruit machine gambling then so be it.

In addition, while stealing or truanting to fund fruit machine play may indicate "addiction," it may also describe the anti-social/illegal behaviour of a child who happens to like gambling on fruit machines. Using a similar line of argument, some children who do have a gambling problem which is not supported by dishonest means may remain unaccounted for by a measuring device which depends largely on such behaviour. Finally, arbitrary judgements on what constitutes "very frequent" gambling or "high expenditure" on gambling has resulted in a lack of standardisation which has impeded comparability of information. Given these difficulties, it is not surprising that one research team concluded

"... it may be difficult to determine criteria for machine addiction apart from self report; on this account any dividing line between problem and non-problem users must be an arbitrary one." (Bentall et al, 1989, p.561)

The failure of previous research to provide an accepted, standard measure of gambling addiction has two bases. The first is a lack of conceptual analysis of the term "addiction" as applied to gambling in children. The second is a failure to address what contribution, if any, sociology can validly make to the study of such an addiction.

## **Addiction to gambling and the role of sociology**

Addiction to gambling has variously been described as “compulsive” (Bergler, 1957); “pathological” (Moran, 1970); ; “habitual” (Dickerson, 1984); “excessive” (Orford, 1985) and “problematic” (Dickerson, 1989). “Compulsive” gambling is the layperson’s term, and that used by Gamblers Anonymous. However, this has been considered something of a misnomer in professional circles, because most compulsive gamblers love to gamble. (Lesieur and Rosenthal, 1991).

Moran (1970), proposes the term “pathological” gambling to be more appropriate, since it is not based on assumptions concerning the motivation to gamble. The term “pathological” gambling has since become accepted by research and practitioner communities, where it is in common usage. In professional use it specifically refers to a “chronic and progressive disorder” which comprises

“ ... a cluster of cognitive, behavioral, and perhaps physiological symptoms that indicate that the person has impaired control over his or her gambling and continues to gamble despite disruption or damage to personal, family, or vocational pursuits.” (Lesieur, 1990).

Within the sociological tradition a critique of a pathological model of gambling addiction is implied rather than articulated. As a conventional disease model, pathological gambling is open to the same charge of logical inconsistency as the medical model of mental illnesses such as schizophrenia: It is a medical term defined by non-medical criteria (see Szasz, 1967). Furthermore, in many cases pathological gambling is subject to a double inconsistency in that it is treated by medical means. (Seventy percent of Lesieur’s pathological gamblers had seen a mental

health specialist prior to attending Gamblers Anonymous (Lesieur, 1989)). "Pathological gambling" may thus be construed as a preconceived category devised to construct rather than define social reality.

On a practical level, Herman (1976) argues that once an individual is labelled a pathological gambler, the label becomes their 'master status'; the single characteristic which distinguishes them from others. As a result the problems which may have led to excessive gambling in the first place are intensified by neglect, in a circular fashion:

"Whatever marital difficulties, occupational problems, financial embarrassments, emotional strains are in the picture, they come to be regarded as auxiliary traits to the master trait of gambling." (Herman, 1976, p.110).

In this way the organising features of the label operate so efficiently that 'recovery' may be impeded. The ethnographic study in the present research confirms the importance of overwhelming problems, unrelated to gambling, in the gambling addiction of some children.

Given such theoretical and practical concerns, it is not surprising that previous researchers attempting to define and measure the extent of addiction to gambling in children have 'ducked' the issue. But the real dilemma of the sociologist seeking to measure the extent of gambling, or any other addiction, is that addiction is a psychological or biochemical phenomenon. Since sociology is concerned with social phenomena, it follows that the sociologist cannot validly define or construct a sociological theory of addiction to gambling (or anything else for that matter). As Robinson puts it

**“Anyone who does claim to construct a sociological theory of dependence is either not constructing a sociological theory or is not explaining dependence.” (Robinson, 1972, p.90).**

**This is not to say that the sociologist has no contribution to make to the study of gambling. Gambling is 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 forms of gambling; the dynamics of gambling as a social event; gender differences in gambling behaviour and so on. They may also seek to explain how some people and not others come to be labelled “addicts” and the social consequences of such definition. What they cannot do from within their own discipline is to define addiction to gambling.**

**There is also a case for saying that the implied conceptual criticism of pathological gambling by sociologists contributes more to the sociology of science than the sociology of gambling. As Phillips (1973) argues, the evaluation of concepts specific to a particular discipline/s is more appropriately undertaken by the community of scholars and practitioners within that discipline:**

**“Every disciplines’ practitioners must agree on the criteria which, for that group, and that time, determine what is to be regarded as factual and constituting knowledge”. (Phillips, 1973 p.117).**

**The sociologist may of course validly examine psychological theories of addiction, but as Robinson argues, this is a different enterprise from constructing a sociological theory of addiction:**

“It would be, rather, an attempt to construct a theory of ‘the use of the concept of dependence’ as a particular study in the sociology of science.” (Robinson, 1972, p.91).

If then the sociologist is to operationalise the concept of addiction to gambling to measure the extent of pathological gambling in the field, he/she must borrow the methodological tool of the appropriate discipline. The measure adopted and developed in this study was based on the international measure of the American Psychiatric Association which defines pathological gambling in adults. The term “pathological” gambling has also been used throughout the study to define and measure addiction to gambling in children. This is done in the interest of conformity in the literature on gambling, to which this study is a contribution.

### **THE DEVELOPMENT OF DSM-IV TO DEFINE PATHOLOGICAL GAMBLING IN ADULTS**

The diagnostic criteria used to define pathological gambling in adults have been the subject of ongoing revision in recent years. In 1987 the standard international measure, DSM-III was replaced by DSM-III-R (R = revised). DSM-III-R criteria are modelled on those for psychoactive substance dependence. They reflect the findings of scholarly research over the past 4 or 5 years, that pathological gambling is similar to other addictions (Lesieur and Rosenthal, 1991). However Rosenthal (1989) found some dissatisfaction with DSM-III-R among treatment professionals who expressed a preference for a compromise between the old DSM-III and the newer DSM-III-R criteria.

A questionnaire was designed which included DSM-III, DSM-III-R and other suggested criteria. This was used in a survey of 222 self-designated pathological gamblers and 104 substance dependent controls to find out which criteria were the most effective discriminators for pathological gambling. A new set of nine criteria, DSM-IV, emerged. With the exception of item 7 (illegal acts), each item on DSM-IV was selected by at least 83% of pathological gamblers, and no more than 10% of substance dependent controls. (For a full account of this study see Lesieur and Rosenthal, 1991). DSM-IV is presently in the pre-adoption, consultative stage. Nevertheless it clearly represents a major advance in the definition of pathological gambling among adults.

### **PROPOSED DSM-IV-J**

The proposed DSM-IV criteria have been adapted for use in the present study by children aged between 11 and 16 years of age. The resulting DSM-IV-J (J = juvenile) is modelled closely on the adult version. The proposed DSM-IV and DSM-IV-J criteria are shown below with the changes which comprise DSM-IV-J underlined.

#### PROPOSED DSM-IV

#### PROPOSED DSM-IV-J

Maladaptive behavior as indicated by at least four of the following:

Maladaptive behavior as indicated by at least four of the following:

1) as gambling progressed, became more and more preoccupied with reliving past gambling experiences, studying a system, planning the next venture, or thinking of ways to get money

1) as gambling progressed, became more and more preoccupied with reliving past gambling experiences, studying a system, planning the next venture, or thinking of ways to get money

2) needed to gamble with more and more money in order to achieve the desired excitement

2) needed to gamble with more and more money in order to achieve the desired excitement

3) became restless or irritable when attempting to cut down or stop gambling

3) became restless or irritable when attempting to cut down or stop gambling

4) gambled as a way of escaping from problems or intolerable feeling states

4) gambled as a way of escaping from problems or intolerable feeling states

5) after losing money gambling, would often return another day in order to get even ("chasing" one's losses)

5) after losing money gambling, would often return another day in order to get even ("chasing" one's losses )



6) lied to family, employer, or 6) lied to family, or friends to therapist to protect and conceal the protect and conceal the extent of extent of involvement with involvement with gambling gambling

7) committed illegal acts, such as 7) committed illegal/unsocial acts, forgery, fraud, theft, or such as misuse of school embezzlement, in order to finance dinner/fare money, and theft from gambling the home or elsewhere in order to finance gambling

8) jeopardized or lost a significant 8) Fell out with family or close relationship, marriage, education, friends and jeopardized, job or career because of gambling education, because of gambling

9) needed another individual to 9) needed another individual to provide money to relieve a provide money to relieve a desperate financial situation desperate financial situation produced by gambling (a produced by gambling (a "bailout"). (Lesieur and Rosenthal, "bailout")

Paper presented to the Eighth International conference on Risk and Gambling, August, 1990).

Criteria numbers 7 and 8 of DSM-IV-J are those which differ most from the adult version. Criterion number 7 of DSM-IV embraces illegal means of funding gambling. The DSM-IV-J criterion is widened to include the sort of anti-social (but not necessarily illegal) opportunities

for acquiring cash for gambling which are particularly accessible to children under the age of 16 years ie) the use of school dinner/fare money and theft from inside as well as outside the home.

DSM-IV criterion number 8 describes the risk to, or loss of, a significant relationship or marriage, because of gambling. In the case of children aged 11 to 16 years of age the most significant relationships are likely to be with parents, other family members, and close friends. Given the durable, non-contractual status of parental and other familial relationships, the most likely outcome of gambling dependency in children is disruption rather than disintegration of the family unit. Thus criterion 8 of DSM-IVJ addresses dissent within, rather than the breakdown of, family relationships.

## **TESTING PROPOSED DSM-IV-J**

### **Methodology**

To test the adult model DSM-III-R, a survey was conducted on four groups of individuals: Gamblers Anonymous members, college students, hospital employees, and outpatients in treatment for pathological gambling. The revised criteria were found to discriminate effectively between pathological gamblers and others (Lesieur, 1988). Testing DSM-IV-J in this way proved to be impossible because pathological gambling in children is a relatively new phenomenon, coinciding with the influx of fruit machines in the U.K. and their anomolous legal availability to children (Fisher, 1991). As a consequence there are no established institutions for children with gambling problems, from which a group of children, identified as being pathological gamblers, could be drawn.

It was decided therefore to incorporate the DSM-IV-J test questions in a self administered questionnaire survey on leisure and gambling behaviour, which also included items to discern those behaviours commonly associated with addiction. The incidence of such behaviours among the children defined by the index as gambling pathologically could then be compared with that of other players to test the validity of DSM-IV-J.

## **THE QUESTIONNAIRE**

The questionnaire comprised 7 parts. Part 1 was designed to provide a socio-structural picture of juvenile fruit machine gambling in the study location. It was also designed to test some of the existing hypotheses relating gambling to age, gender, religion and social class which were reviewed in chapters 1-3. Part two was designed to assess the importance of fruit machine use vis-a-vis other leisure pursuits available to children in the study location. Parts 3 and 4 examined the nature of fruit machine use and included the test questions for DSM-IV-J. Part 5 asked questions relating to the arcade venue. Part 6 examined parental attitudes to their children's gambling and the effect of their own participation. Part 7 provided the children with an opportunity to report what they like/disliked about fruit machines and amusement arcades.

### **Test questions for proposed DSM-IV-J**

The proposed DSM-IVJ was tested using 12 questions. These questions together with the corresponding DSM-IVJ criteria are shown below.

## Test Questions for DSM-IV-J

### DSM-IVJ

### TEST QUESTIONS

Maladaptive behavior as indicated  
by at least four of the following:

1) as gambling progressed, 1) Do you often find yourself  
became more and more thinking about fruit machines at  
preoccupied with reliving past odd times of the day and/or  
gambling experiences, studying and planning the next time you will  
system, planning the next venture, play? Yes/No  
or thinking of ways to get money

2) needed to gamble with more 2) Do you find you need to spend  
and more money in order to more and more money on playing  
achieve the desired excitement fruit machines? Yes/No

3) became restless or irritable 3) Do you become restless, tense,  
when attempting to cut down or fed up, or bad tempered when  
stop gambling trying to cut down or stop playing  
fruit machines? Yes/No

4) gambled as a way of escaping 4) Do you play fruit machines as a  
from problems or intolerable way of escaping from problems?  
feeling states Yes/No

5) after losing money gambling, 5) After spending money on fruit  
would often return another day in machines do you play again  
order to get even ("chasing" one's another day to try and win your  
losses) money back? (More than half the  
time)

6) lied to family, or friends to 6) Do you lie to your family or  
protect and conceal the extent of friends to hide how much you play  
involvement with gambling fruit machines? Yes/No

7) committed illegal/unsocial acts, 7) In the past year have you spent  
such as misuse of school money, your school dinner money, or  
and theft from the home or money for bus or train fares, on  
elsewhere in order to finance fruit machines?  
gambling and/or Yes/No

7a) In the past year have you taken  
money from someone you live  
with, without their knowing, to  
play fruit machines?

and/or Yes/No

7b) In the past year have you  
stolen money from outside the  
family, or shoplifted, to play on  
fruit machines? Yes/No

8) Fell out with family or close friends and jeopardized education, because of gambling

8) Have you fallen out with members of your family, or close friends, because of playing fruit machines? Yes/No

and/or

8a) In the past year have you missed school to play fruit machines? (5 times or more)

9) needed another individual to provide money to relieve a desperate financial situation produced by gambling (a "bailout")

9) In the past year have you gone to someone for help with a serious money worry caused by playing fruit machines? Yes/No

The children who played fruit machines and scored 4 or more items were defined "probable pathological" gamblers and those who played fruit machines and scored less than 4 items were defined "social" gamblers.

## THE PILOT STUDIES

A draft questionnaire was piloted on a class of first year and a class of fifth year pupils at neighbouring Community College. (The pilot site was chosen for its marked structural similarities to the research location). In each case completion of the questionnaire was followed by a 35 minute group discussion on a) the respondents' views on slot machine use and amusement arcades; and, b) the respondents' views on

the questionnaire. This exercise was repeated with a revised questionnaire.

In addition to format revisions, 4 important recommendations regarding the administration of the questionnaire emerged:

1. The children should be persuasively assured of the anonymity and confidentiality of their responses.
2. The survey should be administered by persons other than teachers.
3. The childrens' responses should be unseen by their classmates.
4. Extra personnel should be available to help children with reading or other learning difficulties.

## **THE SURVEY**

### **Fruit machines in the study location**

The study location was a small seaside town in the South West of England (population 6000) where the main industries were fishing and tourism. The commercial leisure facilities of the town were dominated by three arcades, containing (at the time of the survey) some 140 fruit machines together with about 70 video machines. One arcade disallowed local children from entering the arcade during school hours. The others imposed no age restrictions at all. The arcades remain open throughout the winter months as well as the holiday season so that local children have virtually unrestricted access to fruit machine gambling in arcades throughout the year.

In addition to the arcades, some 60 fruit machines sited in cafes, fish and chip shops and pubs are also used by local children throughout the year and a further 120 fruit machines sited in holiday camps are used during the holiday season.

### **The sample**

A survey was carried out in a school which is the sole provider of state secondary education for the seaside town and hinterland. Thus, with the exception of a small number of children who attended out-of-town independent schools, the field trial was conducted on a universal sample of secondary school children residing in the study location. The age range of secondary school children in compulsory education in the U.K. is between 11 and 16 years.

The sample consisted of 467 out of 493 children, who attended the secondary school on the morning of the survey. Seven questionnaires were incomplete or incoherent, leaving a final sample of 460. Fifty-two percent of fruit machine players were female and 48% were male. The modal age was 14 years. The ratio of fruit machines to secondary school children in the study location was approximately 2:5, rising to 3:5 during the holiday season of May to October.

### **Administering the Survey**

In view of the sensitive nature of some of the questions asked and the findings of the pilot studies, much emphasis was placed on ensuring the confidentiality of respondents. The (anonymous) survey was organised with the cooperation of the headteacher, deputy head and social guidance tutor. No other members of the school were informed of the survey until just prior to the event. No teachers were present at the



administration of the questionnaires. Instead 32 adults, unknown to the children, were employed. Prior training was given to administrators in communication techniques which stressed the anonymity and confidentiality of information given. The classrooms had been arranged the previous evening as for an examination so that children could not confer or communicate their answers.

### **Counselling**

The pilot studies had shown that filling in the questionnaire highlighted an awareness of gambling-related problems in some children. To meet this need a confidential counselling service was made available. The contact telephone number for this was written on the questionnaire and the survey administrators ensured that all the children copied it into their homework diaries. In addition, the school followed up the questionnaire with a discussion of gambling in society during social guidance lessons.

### **Analysis**

The data provided by the questionnaire survey was analysed using SPSS-PC on a Macintosh microcomputer. The questionnaire is enclosed in Appendix 1.

## CHAPTER 5: THE DSM-IV-J INDEX FOR DEFINING PATHOLOGICAL GAMBLING IN CHILDREN: FIELD TRIAL RESULTS

This chapter begins by describing the demographic characteristics of the sample of children used to test the DSM-IV-J index and the gambling games they played. This is followed by the outcome of the survey in terms of the proportion of children defined as “probable pathological” gamblers and the proportion of children defined as “social” gamblers”. The remainder of the chapter reports on the effectiveness of the DSM-IV-J index in discriminating pathological gambling in children. Gambling-related behaviours which have hitherto been related to addiction to gambling in children were used as validating indicators, as discussed in the previous chapter.

### THE SAMPLE

#### Age and gender

Of the 467 questionnaires collected, 7 were incomplete or incoherent, leaving a final sample of 460. Distribution of age and gender are shown in Table 5.1.

Table 5.1: Age and gender of sample

Age in years	11	12	13	14	15	16	17	Totals
	%	%	%	%	%	%	%	%
Male	46	62	40	55	40	36	100	48
Female	54	38	60	45	60	64	-	52
Totals	18 n=81	18 n=84	19 n=88	21 n=96	19 n=85	5 n=25	- n=1	100 n=460

Just over half of the sample were female and the remainder were male. Total numbers of males and females were evenly distributed within the age range 11-15 years, the modal age being 14 years. Above the age of fourteen years total numbers declined and females outnumbered males. Females made up three fifths of fifteen year olds and two thirds of 16 year olds.

### **Social class**

The social class of the respondents was based on the occupation of the father. In instances where there this was unavailable the mother's occupational status was used. Three in ten came from class background AB, one in two came from class background C and one in five came from class background DE.

### **Religion**

With the exception of a handful of Catholics and one Jehovah's Witness, nearly two thirds of the children were Protestant and the remaining third were atheist or agnostic.

### **Residence**

Three fifths of the sample lived in the seaside town itself; the remaining two fifths lived in outlying villages and hamlets.

## GAMBLING GAMES PLAYED BY CHILDREN IN THE RESEARCH LOCATION

Informal discussions were held with small groups of children in the local youth club, outside the school and elsewhere, to establish the gambling games played by children in the study location. The children surveyed were then asked how often they had played these games in the past year. The results are shown in Table 5.2. (Some children also said they gambled for money on board games such as Monopoly, but the numbers were too small to warrant inclusion.)

**Table 5.2: Gambling games played in the past year: Frequency of participation**

	P.ground games	Cards	Games of skill	horse/dog betting	football pools	fruit machines
	%	%	%	%	%	%
Never	91	76	70	93	92	39
Less than once a month	5	16	15	6	5	28
1-3 times a month	1	4	8	1	1	15
1-2 times a week	2	2	5	-	2	12
3-6 times a week	1	1	-	-	-	4
Every day	-	1	2	-	-	2
Totals	100 (n=455)	100 (n=440)	100 (n=456)	100 (n=455)	100 (n=454)	100 (n=454)

As expected, fruit machines were overwhelming the favourite gamble for the secondary school children: more than three fifths of the children played fruit machines and of these one in three gambled once a week or more. The second and third most popular gambles were games of skill

(especially pool), and card games, which around one in three and one in four of respondents, respectively, reported playing. One in ten of the children reported gambling on playground games such as marbles, and one in ten reported gambling on football pools. Only one in twelve children bet on horses or dogs and comments such as: "I only bet on the Grand National" suggest that this was largely confined to special events. Fruit machine gambling was the only gambling game played by the majority of respondents with sizeable numbers playing regularly.

### **DSM-IV-J: FIELD TRIAL RESULTS**

Sixty-two percent of the children (n=284) reported gambling on fruit machines. Of these, 9% (n=26) scored 4 or more items on the index and were defined "probable pathological" gamblers. The remaining 90% (n=258) were defined "social" gamblers and became the control group. The gambling-related behaviour of the "probable pathological" gamblers was compared with that of the "social gamblers" to test the validity of DSM-IV-J as a measuring device for defining pathological gambling in children aged between 11 and 16 years. The results are shown below.

### **RESOURCES SPENT ON FRUIT MACHINES BY JUVENILE 'PROBABLE PATHOLOGICAL' GAMBLERS**

One way of measuring comparative commitment to a particular leisure pursuit is by assessment of the resources given to it. The resources required for fruit machine gambling are time and money.

**a) Time: frequency of play**

The children were asked how often they played fruit machines in the past year. The results are shown in Table 5.3.

**Table 5.3: Frequency of play: "Social" gamblers compared with "probable pathological" gamblers**

	Social gamblers	Probable pathological Gamblers	All
	%	%	%
Less than once a month	50	8	46
1-3 times a month	25	12	24
1-2 times a week	17	36	19
3-6 times a week	6	24	7
Every day	2	20	4
	100	100	100
(n=	253	26	278)

Chi-Square=46.12 df=4 p<.0000

Table 5.3 indicates that there was a statistically significant difference between "social" gamblers and "probable pathological" in their frequency of play. At the lower end of the frequency range one in two of the "social" gamblers, reported playing fruit machines less than once a month, compared with only one in twelve of the "probable pathological" gamblers. In the cases of the two "probable pathological" gamblers who fell into this category, comments by one suggested that the respondent had recently stopped fruit machine gambling and comments and further responses from the other (thirteen year old) suggested a struggle with gambling. This respondent, for example,

reported gambling on fruit machines less than once a month, but spending £10 -20 in one session. He commented on his questionnaire:

“I get depressed if I spend money on them”.

Only one in four of the “social” gamblers played once a week or more, compared with four out of five “probable pathological” gamblers. At the higher end of the frequency range, only one in fourteen of the “social” gamblers reported playing three times a week or more, compared with approaching one in two of the “probable pathological” gamblers.

**b) Time: amount of time spent on a typical visit to an arcade**

The children were also asked how long they usually spent in an arcade. The range of time spent varied from less than 15 minutes to “all day” . The results are shown in Table 5.4.

Table 5.4: Amount of time usually spent in an arcade: “Social” gamblers compared with “probable pathological” gamblers

	Social gamblers	Probable pathological gamblers	All
	%	%	%
1-29 minutes	45	6	43
30-59 minutes	32	17	31
60-119 minutes	10	53	12
120-359 minutes	11	12	11
>360 minutes	2	12	3
	100	100	100
(n=	240 <sup>1</sup>	171	257)
Chi-Square= 36.30 df=4 p<.00000			

1

Reported responses to this question were on the low side because some respondents gave answers in amounts of money rather than time categories eg. "From making money to losing £10-£15.

Table 5.4 indicates that there was a statistically significant difference between “probable pathological” gamblers and “social” gamblers in the amount of time they usually spent in an arcade. The modal duration of time spent was less than half an hour for “social” gamblers compared with between one and two hours for “probable pathological” gamblers. Less than one in four of the “social” gamblers usually spent longer than an hour in an arcade, compared with more than three out of four “probable pathological” gamblers. Only one in fifty of the “social” gamblers usually spent longer than three hours in an arcade, compared with more than one in ten of the “probable pathological” gamblers.

Comments written on questionnaires by “social” gamblers drew attention to their controlled expenditure or emphasised the social (non-gambling) aspect of arcades:

“Until I have spent £1”

“No more than £1”

“It depends on who is in there with me such as friends. The arcade is for us a place to hang out” (15 year old)

In contrast “probable pathological” gamblers suggested that time spent in an arcade was a leisure priority:

“It depends if I have to go home but usually up to 4 hours or more “ (13 year old)

“All day” (13 year old)



"It depends usually about 4-5 hours sometimes maybe more." (15 year old)

### c) Weekly expenditure on fruit machine gambling

The children were asked how much money they spent on fruit machine gambling in a typical week. The results are shown in Table 5.5.

Table 5.5: Weekly expenditure on fruit machines: "Social" gamblers compared with "probable pathological" gamblers

Expenditure	Social gamblers	Probable pathological gamblers	All
	%	%	%
Up to £1	49	8	45
£1.01 - £2	25	8	23
£2.01 - £5	14	16	14
£5.01 - £10	8	52	13
£10.01 - £20	2	12	3
More than £20	2	4	2
	100	100	100
(n=	235	25	260)

Chi-Square=54.11 df=5  $p<.00000$

Table 5.5 shows that there was a statistically significant difference between "social" and "probable pathological" gamblers in their weekly expenditure on fruit machines. The modal weekly expenditure was less than £1 for "social" gamblers compared with between £5 and £10 for "probable pathological" gamblers. Only one in four "social" gamblers spent more than £2 a week compared with more than four out of five "probable pathological" gamblers. At the higher end of the expenditure range only one in twenty-five "social" gamblers reported gambling

more than £10 a week on fruit machines compared with one in six “probable pathological” gamblers.

**d) Maximum expenditure on fruit machine gambling in one day**

The children were also asked to recall the largest amount of money they had ever spent on fruit machines in one day. Responses varied enormously and ranged from 10p to £53. The results are shown in Table 5.6.

Table 5.6: The maximum amount of money spent on fruit machines in one day: “Social” gamblers compared with “probable pathological” gamblers

	Social Gamblers	Probable pathological gamblers	All
	%	%	%
Up to £2	58	15	54
£2.01 - £5	20	23	21
£5.01 - £10	17	27	18
£10.01 - £20	4	27	6
More than £20	1	8	1
	100	100	100
(n=	247	26	273)

Chi-Square=35.03 df=4 p<.00000

Table 4 shows that there was a statistically significant difference between “social” gamblers and “probable pathological” gamblers in the maximum amount of money they had gambled in one day. The modal amount was less than £2 for “social” gamblers compared with a (bimodal) range of between £5 and £20 for “probable pathological” gamblers. Only one in twenty “social” gamblers recalled having spent

more than £10 in one day compared with more than one in three "probable pathological" gamblers.

## **UNSOCIAL/ILLEGAL BEHAVIOURS TO SUPPORT JUVENILE FRUIT MACHINE GAMBLING**

The majority of previous studies have suggested that a range of unsocial/illegal behaviours are symptomatic of juvenile gambling dependency. These also relate to the resourcing of gambling in terms of time (truancy) and money (borrowing, misappropriating school dinner/fare money, stealing from the family, stealing from outside the family, and selling possessions to raise money to gamble on fruit machines). The involvement in unsocial/illegal behaviours to resource fruit machine play by "social" gamblers compared with "probable pathological" gamblers is discussed below.

### **Truancy**

Barham (1987), NHTPC, (1988) and Children's Society, (1990) all reported varying incidences of truancy related to alleged or implied fruit machine dependency. The school under study had a particularly strict regime for controlling truancy, whereby the Deputy Head, checked all class attendance registers, daily, and personally followed up suspected truants. As a result the truancy rate, which had previously been a matter of concern in this particular school, was very low. Nevertheless, none of the "social" gamblers had truanted from school to gamble on fruit machines, whereas one in twelve of the "probable pathological" gamblers had done so ( $p < .00058$ ).

## Borrowing

The borrowing and lending of money is intrinsic to the economic life of all age groups and where reciprocity is involved may enhance social relationships. But borrowing to finance gambling may suggest excessive play as it implies expenditure beyond the means of the participant (Fisher, 1991). Various U.K. surveys report that the more frequently children gamble on fruit machines, the more likely they are to borrow money to do so. (NHTPC,1988; Graham, 1988; Children's Society, 1990). The children in the present study were asked how often they had borrowed money to gamble in the past year. The results are shown in Table 5.7.

Table 5.7: Borrowed to gamble: "Social" gamblers compared with "probable pathological" gamblers.

	Social gamblers	Probable pathological gamblers	All
	%	%	%
Never	67	19	63
Once or twice	28	42	29
More than once or twice	5	39	5
	100	100	100
(n=	250	26	276)

Chi-Square=41.67 df=2 p<.00000

Table 5.7 shows that borrowing money to gamble on fruit machines was a common occurrence among the children studied. Table 5.7 also shows there was a statistically significant difference between "social" and "probable pathological" gamblers in their involvement in this

behaviour. Only one in three “social” gamblers borrowed to play fruit machines compared with four out of five “probable pathological” gamblers. “Social” gamblers were also more likely to borrow less often. Only one in twenty of the “social” gamblers reported borrowing more than just “once or twice” compared with two out of five of the “probable pathological” gamblers.

### **Gambling school dinner/fare money**

Previous studies report that the spending of school dinner money on fruit machines is more common among frequent players (eg. Moran, 1987; NHTPC, 1988; Children’s Society, 1990). The children in the present study were asked how often they had spent their school dinner/fare money on fruit machine gambling in the past year. The results are shown in Table 5.8.

**Table 5.8: Spent school dinner/fare money to gamble: “Social” gamblers compared with “probable pathological” gamblers**

	Social gamblers	Probable pathological gamblers	All
	%	%	%
Never	91	61	88
Once or twice	8	12	8
More than once or twice	1	27	4
	100	100	100
(n=	254	26	280)

Chi-Square=46.62 df=2 p<.00000

Table 5.8 shows that there was a statistically significant difference between “social” gamblers and “probable pathological” gamblers in

their spending of school dinner/fare money to gamble. Only one in ten “social” gamblers had used this money for gambling compared with four out of ten “probable pathological” gamblers. Furthermore only one in one hundred “social” gamblers had gambled dinner/fare money more than just “once or twice” compared with more than one in four “probable pathological” gamblers.

### **Selling possessions**

The Children’s Society (1990) reported that “heavy users” were more likely to sell their possessions to fund machine playing than “low frequency users”. The findings of the present study on this behaviour are shown in Table 5.9.

**Table 5.9: Sold possessions to gamble: “Social” gamblers compared with “probable pathological” gamblers**

	Social gamblers	Probable pathological gamblers	All
	%	%	%
Never	99	69	96
Once or twice	1	23	3
More than once or twice	-	8	
	100	100	100
(n=	224	25	249)

Chi-Square=63.00 df=2 p<.00000

Table 5.9 shows that there was a significant difference between “social” and “probable pathological” gamblers in their selling of possessions to fund gambling. Only one in one hundred of the “social” gamblers had

sold their possessions compared with nearly one in three of the “probable pathological” gamblers. None of the “social” gamblers had sold their possessions more than just “once or twice” compared with one in twelve of the “probable pathological” gamblers.

### **Stealing from within the family**

It has already been suggested that money from the family home may provide an important source of ill-gotten funds for juvenile gambling (Fisher, 1991). The present study supports this suggestion with money stolen from the home emerging as the most common non-legitimate source of funds for gambling. The participation in this activity of “social” gamblers is compared with that of “probable pathological” gamblers in Table 5.10.

Table 5.10: Stole from the family to gamble: “Social” gamblers compared with “probable pathological” gamblers

	Social gamblers	Probable pathological gamblers	All
	%	%	%
Never	93	54	89
Once or twice	6	19	7
More than once or twice	1	27	4
	100	100	100
(n=	253	26	279)

Chi-Square=53.42 df=2 p<.00000

Table 5.10 shows that there was a statistically significant difference between “social” gamblers and “probable pathological” gamblers in their involvement in stealing from the family to gamble. Only one in

fourteen “social” gamblers admitted to this behaviour compared with nearly one in two “probable pathological” gamblers. Furthermore only one in one hundred “social” gamblers reported stealing from their families more than just “once or twice” compared with more than one in four “probable pathological” gamblers.

### Stealing from outside the family

The NHTPC (1988) and the Children’s Society (1990) found a significant relationship between the amount of money children spent on gambling, the frequency with which they played and the propensity to steal (for a detailed discussion of this topic see Fisher, 1991). The children in the present study were asked how often they had stolen from sources outside of the family, or shoplifted, to fund gambling in the past year. The results are shown in Table 5.11.

Table 5.11: Stole from outside the family or shoplifted to gamble: “Social” gamblers compared with “probable pathological” gamblers

	Social gamblers	Probable pathological gamblers	All
	%	%	%
Never	100	88	98
Once or twice	-	4	1
More than once or twice	-	8	1
	100	100	100
(n=	254	26	280)
Chi-Square=23.77 df=2 p<.00001			

Table 5.11 shows that there was a statistically significant difference between “social” and “probable pathological” gamblers in their



involvement in stealing from sources outside of the family. None of the “social” gamblers admitted to this behaviour compared with one in eight of the “probable pathological” gamblers. Furthermore one in twelve of the “probable pathological” gamblers reported stealing from outside of the family more than just “once or twice”.

### **Self perception of a gambling 'problem'**

To test the validity of DSM-IV-J from a subjective viewpoint, the children who played fruit machines were asked “Are you yourself worried that you play fruit machines too much?” The large positive response to this question suggests a general awareness by children of the possible negative consequences of play. However, only one in six of the “social” gamblers reported being worried that they played fruit machines too much, compared with nearly one in two “probable pathological” gamblers ( $p < .00009$ ).

### **DSM-IV-J: AN ITEM ANALYSIS**

Each criteria of DSM-IV-J was analysed independently and found to correlate with “probable pathological” gambling for the children in the sample children. The results are shown in Table 5.12.

**Table 5.12: Analysis of items in DSM-IV-J for “social” and “probable pathological” gamblers (percent “yes” responses)**

Criterion no.	“dimension”	Social gambler	Probable pathological gambler
1	preoccupation	6	56
2	tolerance	11	81
3	withdrawal	6	65
4	escape	4	58
5	chase losses	42	85
6	lies	9	69
7	illegal acts	14	65
8	family/education	6	50
9	bail out	0.4	36

Chi-Square for all items  $p < .001$

Table 5.12 shows that all items were significant predictors of “probable pathological” gambling in the children studied. Criteria 4) (escape), 3) (withdrawal) and 1) (preoccupation), were the best predictors of “probable pathological” gambling for this sample. Criteria 9) (bail out), 8) (education/family), 6) (lies/deception) and 2) (tolerance) were next in their discriminating ability. Criterion 7) (illegal acts) discriminated less effectively and criterion 5) was common among all the gamblers. The implications of this item analysis for future research are discussed below.

## **DISCUSSION**

This study has presented an index for defining pathological gambling in children. The index, DSM-IV-J is closely modelled on DSM-IV, the

criteria currently being refined to diagnose pathological gambling in adults.

Defining and counting the incidence of pathological gambling in children is truly pioneering research. Accordingly, DSM-IV-J in its present form, and associated test questions, are attributed consultative status only. Certain problematic areas have emerged as a result of the present field trial.

Firstly, in spite of considerable pains taken to assure respondents of the confidentiality and anonymity of their replies, it is likely that the incidence of unsocial/illegal behaviours to support fruit machine play were under-reported. A post-survey appraisal of the questionnaire was undertaken in the form of two group interviews. The interviewees comprised a class of eleven year olds and a class of fifteen year olds who had taken part in a pilot survey. In both instances the children insisted that, stealing, in particular, would be under-reported due to "shame" and the "fear of being found out". The under-reporting of unsocial/illegal behaviours should be taken into account in assessing the results of any future, national, U.K. survey based on DSM-IV-J. In such a situation administration procedures as stringent as in the field trial may not be possible.

Secondly, the present study suggests that truancy is an unreliable measure of that part of DSM-IV-J number 8 which determines whether or not a child's education is jeopardized because of gambling. Risk to education as measured by truancy rate is a) inevitably arbitrary in terms of which rate "jeopardizes education"; b) a function of truancy follow up procedures rather than gambling dependency; c) logically flawed,

since attendance at school does not necessarily imply that education is not at risk because of gambling. Adjustment to the test question for DSM-IV-J criterion 8, to include a measure of educational attainment, may enhance its validity.

Thirdly, validating questions used to determine expenditure on fruit machines were presented in closed and unequal category form (eg. £1-£2, £2-£5 etc.). Open ended income and expenditure questions would permit comparative assessment of the proportion of income spent each week on gambling, which would provide a more meaningful measure (Graham, 1988).

Fourthly, Table 5.12 shows that items 2, 5 and 7 were endorsed by an unexpectedly high number of "social gamblers". The wording used in the associated questions may have inadvertently created some false positives. These items clearly require further development and testing in the field.

Nevertheless, the results of the field trial show that DSM-IV-J is an effective discriminator of pathological gambling in children. There were statistically significant differences between those children defined by DSM-IV-J as "probable pathological" gamblers and the control group of "social" gamblers in all behaviours hitherto related to gambling dependency in children. The "probable pathological" gamblers were also significantly more likely to be worried that they were "playing fruit machines too much".

Finally, the results of this study clearly refute the claim by the Home Office that "there is no evidence of any association between amusement

machines, dependency and delinquency” (Graham, 1988, p.iii). The “probable pathological” gamblers were significantly more likely to commit large amounts of time and money; to borrow money and sell their possessions; and to truant and steal to support fruit machine gambling, than were the “social” gamblers. The study thus provides clear evidence of an association between fruit machine gambling, dependency and delinquency for children in the location studied.

Constructive comment by other researchers together with further systematic field trials would be helpful in establishing a definitive version of DSM-IV-J and associated test questions for use with children in the U.K. and elsewhere.

## CHAPTER 6: THE SOCIAL CHARACTERISTICS OF YOUNG GAMBLERS

### INTRODUCTION

Chapter 5 demonstrates the existence of a group of children in the study location, defined as “probable pathological gamblers”, for whom fruit machine gambling was problematical. The literature reviewed in chapters 1 to 3, suggests that a range of social characteristics such as age of commencement to gamble, gender, social class, religion and parental gambling may distinguish between pathological gamblers and others. Previous studies on juvenile fruit machine gambling have not systematically explored the range of possible structural differences. Nevertheless, as chapter 3 shows, previous studies tend to agree that young pathological gamblers tend to be predominantly male teenagers who are likely to have commenced play under the age of 10 years and who may play alone. Certainly, the popular, generic image of the typical young fruit machine “addict” is that of the lone adolescent male. This begged a question for the present research: Were the “probable pathological gamblers” socially different from those defined as “social gamblers”? If so, it might be possible to construct a social profile of those children at risk. A range of possible influences suggested by the gambling literature was examined. The results are shown below and discussed at the end of the chapter.

In addition, this chapter provides an overall picture of juvenile fruit machine gambling, in the research location and the role of parental gambling and attitudes.

## AGE

The numbers of children who gambled on fruit machines increased with age from around two fifths of the 11 year olds to a plateau of approximately seven in ten of the children aged between 13 and 15 years. Thereafter the participation rate fell with just under six in ten 16 year olds participating. These findings support Graham's (1988) and The Children's Society's (1990) claim that the number of 11 year olds involved is less than that of the older age groups. However, the incidence of pathological gambling with respect to age followed a different pattern. The results are shown in Table 6.1.

Table 6.1: Age (in years): "Social gamblers compared with probable pathological gamblers"

	11	12	13	14	15	16	All
	%	%	%	%	%	%	%
Probable path. gamblers	11	10	14	5	3	23	9
Social gamblers	89	90	86	95	97	77	91
(n=	100	100	100	100	100	100	100
	36	39	64	65	60	13	277)

Chi-square= 9.27 df=5 p<.09

Table 6.1 shows that there was not a statistically significant relationship between age and pathological fruit machine gambling. The most striking finding is that nearly one in four of the sixteen year olds were "probable pathological gamblers", nearly three times the average for the other age groups. However, this result also failed to achieve statistical significance (p<.07).

This finding regarding older children may provide the first empirical clue as to whether children 'mature out' of a gambling problem (Lesieur, 1990) or carry it with them into adulthood (Jacobs, 1990). It suggests that while there is a tendency for children to 'mature out' of social fruit machine gambling, a hard core of those playing pathologically persists. However, the lack of statistical significance suggests caution in drawing a definitive conclusion. Clearly, longitudinal research is required to explore the argument in a more systematic manner. Table 6.1 also shows that although fewer eleven year olds participate than older children, a similar proportion of those who did were defined as "probable pathological gamblers".

#### **The age at which children started to gamble on fruit machines**

Respondents were asked how old they were when they first started to play on fruit machines. Starting ages ranged from 4 to 15 years with a mean of 10 years and 10 months. Two thirds of the sample started to gamble on fruit machines between the ages of 9 and 11.

The starting age of the "probable pathological gamblers was compared with that of the "social gamblers". The results are shown in Table 6.2.



**Table 6.2: Starting age for fruit machine players: “Social gamblers compared with probable pathological gamblers”**

	8 years or less	9-12 years	13-16 years	All
	%	%	%	%
Probable path. gamblers	21	8	4	9
Social gamblers	79	92	96	91
%	100	100	100	100
(n=	29	181	55	265

Chi-square= 7.07 df=2 p<.03

Table 6.2 shows that there was a statistically significant difference between the starting ages of children who were defined as “social gamblers” and those who were defined as “probable pathological gamblers”. The children who had started gambling on fruit machines before commencing secondary school were more likely to develop a gambling problem. Most ‘at risk’ were the children who commenced play at the age of 8 years or less. One in five of these played pathologically, compared with one in twenty of those who commenced play over the age of 8 years.

This finding supports those of previous studies which report that children who experience problems with fruit machine gambling are likely to have commenced play at an earlier age than other players (NHTPC, 1988; Children’s Society, 1990).

## GENDER

Three in five of both the boys and the girls gambled on fruit machines. The gender of “probable pathological” gamblers was compared with that of “social” gamblers. The results are shown in Table 6.3.

Table 6.3: Gender: “Social gamblers compared with probable pathological gamblers”

	Male	Female	All
	%	%	%
Probable path. gamblers	8	10	9
Social gamblers	92	90	91
	100	100	100
(n=	132	145	277)

Chi-square=6.4 df=1  $p<.42$

Table 6.3 shows that there was no statistically significant difference in gender between “social gamblers” and “probable pathological gamblers”. This finding contradicts the findings of all previous research, that “symptoms of dependency” in children (variously defined by the authors) are more commonly found in males (Ide-Smith and Lea, 1988; NHTPC, 1988; Children’s Society, 1990). This is an important result and is discussed in more detail in the “discussion” at the end of the chapter.

## SOCIAL CLASS

The incidence of fruit machine gambling among the children of different class backgrounds was examined. The results are shown in Table 6.4

**Table 6.4: Participation in fruit machine gambling by social class**

	AB	CI	C2	DE	All
	%	%	%	%	%
Players	54	60	64	74	61
Non- players	<u>46</u>	<u>40</u>	<u>36</u>	<u>26</u>	<u>39</u>
	100	100	100	100	100
(n=	143	52	176	61	432)

Chi-square=7.82 df=3 p<.05

Table 6.4 shows that there was a statistically significant difference in the incidence of fruit machine gambling between children from different class backgrounds. Participation increased steadily through the classes from just over one in two of the children from class backgrounds A and B, to three out of four of the children from class backgrounds D and E. This is the clearest class bias yet observed in such studies, although Graham (1988) did find that a slightly higher proportion of children from DE families played fruit machines than those from other class categories.

The class backgrounds of the “social gamblers” were then compared with those of the “probable pathological gamblers”. The results are shown in Table 6.5

Table 6.5: Social class: "Social gamblers compared with "probable pathological gamblers"

	AB	C1	C2	DE	All
	%	%	%	%	%
Probable path. gamblers	5	10	12	9	9
Social gamblers	<u>95</u>	<u>90</u>	<u>88</u>	<u>91</u>	<u>91</u>
	100	100	100	100	100
(n=	77	31	111	45	264)

Chi-square= 2.35 df=3 p<.50

Table 6.5 shows that there was not a significant relationship between social class and pathological gambling. Children from class backgrounds A and B were under-represented compared with those from other class categories but this finding just failed to achieve statistical significance ( $p<.06$ ). These results suggest that while fruit machine gambling is particularly characteristic of working class youth culture in the location studied, the relationship does not clearly extend to pathological gambling. The findings of studies of adult gambling, that pathological gambling is more likely to be found in the "lower classes" (Devereux, 1949; Caillois, 1962; Newman, 1972) or "upper classes" (Devereux, 1949) do not inform our understanding of juvenile pathological gambling in the location surveyed. However, the findings of the present study on the supernormal participation of working class children in fruit machine gambling, warrant the further exploration of a link between pathological gambling in children and social class, in a larger-scale study.

## RELIGION

The children were asked what their religion was. Similar proportions of Protestants, Catholics and Atheists and Agnostics played fruit machines. The religion of the "pathological gamblers" was compared with the "social gamblers" The results are shown in Table 6.6

Table 6.6: Religious affiliation: "Social gamblers compared with probable pathological gamblers"

	Protestant	Catholic	Other	None/Don't know	All
	%	%	%	%	%
Probable path. gamblers	7	15	-	12	9
Social gamblers	93	85	100	88	91
(n=	100 188	100 13	100 1	100 75	100 277)

Chi-square= 2.12 df=3 p<.55

Table 6.6 shows that there was not a significant relationship between religious affiliation and and pathological fruit machine gambling. Since church attendance is held to be a more accurate indicator of religiosity than profession of faith (eg. Wilson, 1966), the children were also asked how often they went to church. The church attendance of the "social" gamblers was then compared with that of the "probable pathological" gamblers. The results are shown in Table 6.7.

Table 6.7: Regular church attendance (once a week or more): "Social gamblers compared with "probable pathological gamblers"

	Yes	No	All
	%	%	%
Probable path. gamblers	17	8	9
Social gamblers	<u>83</u>	<u>92</u>	<u>91</u>
	100	100	100
(n=	18	260	278)

Chi-square=1.39 df=1  $p<.24$

Table 6.7 shows that the children who went to church once a week or more were more likely to gamble pathologically than the other players, but that this finding was not statistically significant. In view of Devereux's (1949) thesis, that pathological gambling in the U.S.A was negatively correlated with Protestantism, the Protestant children who went to church once a week or more were compared with non-Protestant non attenders. Again, no statistically significant difference was found in the incidence of pathological gambling ( $p<.83$ ).

## LOCATION OF FRUIT MACHINE PLAY

The children were asked where it was usual for them to play on amusement machines. Since the pilot studies had shown that children commonly played in a variety of venues, more than one answer was invited. (Unfortunately this question did not differentiate between video games and fruit machines, so that caution is required in the interpretation of data). Arcades were by far the most popular type of venue. Seven out of ten players usually played in arcades, one in five in pubs, one in six in holiday camps, one in eight in fish and chip shops and one in fourteen in cafes. Boys and girls used the available venues equally, but the pattern of use varied with age. The popularity of arcades is sustained through the age groups but as players advance in age they play less in fish and chip shops and more in pubs. One in seven of the eleven year olds played in pubs compared with nearly two in five of the sixteen year olds. The usual venues of the "social" gamblers were compared with those of the "probable pathological" gamblers. The results are shown in Table 6.8.

Table 6.8: Usual venues for amusement machine play: "Social gamblers compared with "probable pathological gamblers"

Venue	Pathological gamblers %	Other players %	All %	Chi-square
Arcades	92	87	87	$p < .46$
Fish and chip shops	28	17	18	$p < .19$
Cafes	16	10	10	$p < .33$
Holiday camps	36	21	22	$p < .07$
Pubs	52	27	29	$p < .00$
	n=26	n=338		

Table 6.8 shows that a greater proportion of the “probable pathological gamblers” routinely played in all the venues compared with the other players. As expected, arcades were the most popular venue for both groups. The outstanding result is that the “probable pathological gamblers” were significantly more likely to play in pubs than other players ( $p < .00$ ). One in two of the “probable pathological gamblers”, compared with three in ten “social gamblers” reported playing in pubs. This finding is important for two reasons. Firstly, the playing of fruit machines in pubs is illegal for the under-eighteens. Secondly, public concern has been directed at the juvenile playing of fruit machines in arcades while (illegal) under-age gambling in pubs has been largely ignored. Holiday camps also proved to be particularly popular with the “probable pathological gamblers”, with more than one in three frequenting them, compared with just over one in five of the “social gamblers” ( $p < .07$ ).

### **LOCATION OF RESIDENCE**

In view of the overwhelming popularity of arcades, the children were asked whether or not they lived within walking distance of the town (and its arcades). This data was crosstabulated with that on regular play (once a week or more). The results are shown in Table 6.9.



**Table 6.9: Living within walking distance of an arcade: Regular players compared with less frequent players**

	Yes	No	All
	%	%	%
Less than once a week	61	81	68
More than once a week	39	19	32
	<u>100</u>	<u>100</u>	<u>100</u>
(n=	145	93	238)

Chi-square=10.45 df=1 p<.001

Table 6.9 shows that there was a statistically significant relationship between living within walking distance of an arcade and regular fruit machine gambling in an arcade. Two in five of the players who lived in the town gambled once a week or more, compared with one in five of the players who lived out of town. This finding supports the view of Downes et al (1976) regarding the importance of supply as a determinant of demand for gambling services. No significant difference was found between town dwellers and non-town dwellers in their use of non-arcade venues for fruit machine gambling.

The location of “social gamblers” was then compared with that of “probable pathological gamblers”. The results are shown in Table 6.10.

**Table 6.10: Living within walking distance of arcades: "Social gamblers compared with probable pathological gamblers"**

	Yes	No	All
	%	%	%
Probable path. gamblers	11	7	9
Social gamblers	<u>89</u>	<u>93</u>	<u>91</u>
	100	100	100
(n=	171	105	276)

Chi-square=1.18 df=1 p<.28

Table 6.10 shows that there was not a statistically significant relationship between pathological gambling and living within walking distance of the arcades. This demonstrates the inadequacy of frequency of play alone as an indication of gambling dependency. It also, once more, highlights the importance of non-arcade sites, particularly pubs and holiday camps, as venues for children with gambling problems. The findings on location of fruit machine play all support Moran's (1987) assertion that as far as pathological gambling in children is concerned, it is the fruit machine which is the culprit, rather than the venue.

### **WHO CHILDREN PLAY FRUIT MACHINES WITH**

Respondents were asked whether they usually played fruit machines alone; with friends; with parent(s), brother(s) and/or sister(s) or other relatives; or with other players they happened to meet during play. Since pilot work had shown that, for some children there was no single, fixed response to such a question, respondents were invited to select more than one of the categories offered. No significant gender differences emerged in the company boys and girls kept while gambling

on fruit machines, but age proved to be an important factor. In particular, the eleven year olds were more likely to play with their family than all other age groups. The patterns of companionship were remarkably uniform for all other age groups. Table 6.11 shows which categories of persons the 11 year olds gambled with, compared with the older children.

Table 6.11: Who children routinely played fruit machines with: 11 year olds compared with 12-16 year olds

	11 years	12-16 years	All	Chi-square
	%	%	%	
Alone	28	26	27	p<.87
Friends	33	73	68	p<.00
Parents	36	13	16	p<.00
Siblings	14	13	14	p<.96
Other relatives	11	4	5	p<.05
Players met in the arcade	-	6	5	p<.14
	12	88	100	
(n=	33	235	268)	

Table 6.11 shows that for most of the children, fruit machine gambling was a social activity with more than two in three of the children playing with friends and one in three playing with relatives of some kind. A small minority of children (one in twenty) gambled with other players they happened to meet during a session and one in four reported playing alone. Clearly players may gamble alone on some occasions and in company on others.

There was a statistically significant difference between who 11 year olds played with and all other age groups. Eleven year olds were more likely to gamble with their parents than with any other social group. More

than one in three of the 11 year olds reported usually gambling with their parents compared with only one in eight of the older children. Similarly one in ten of the 11 year olds gambled with other members of their family (excluding brothers and sisters) compared with only one in twenty of the older children. Only one third of 11 year olds said they played with their friends compared with nearly three quarters of the older children. A similar proportion played alone.

While the differing choices of gambling companions for 11 year olds and 12 - 16 year olds may reflect those for other leisure pursuits, they have important implications for the initiation of children into commercial gaming. The supernormal number of 11 year olds gambling with their parents supports Lesieur and Klein's (1987) assertion that gambling for money is frequently a family affair.

The gambling companions of "probable pathological gamblers" were compared with those of "social gamblers". The results are shown in Table 6.12.

Table 6.12: Who children routinely played fruit machines with: "Social" gamblers compared with "probable pathological" gamblers

	Social gamblers	Pathological gamblers	All	Chi-square
	%	%	%	
Alone	29	42	30	p<.11
Friends	70	58	68	p<.72
Parents	15	21	16	p<.27
Siblings	15	17	15	p<.72
Other relatives	5	8	6	p<.40
Players met in the arcade	5	8	5	p<.47
	9	91	100	
(n=	24	244	268)	

Table 6.12 shows that there was not a statistically significant difference in companionship patterns between “probable pathological” gamblers and “social gamblers”. Like “social” gamblers, a greater proportion of “probable pathological” gamblers reported usually playing with friends than playing alone. However there was a tendency for “probable pathological gamblers” to be less likely to play with their friends and more likely to play alone. More than four in ten of the “probable pathological gamblers” reported playing alone, compared with three in ten of the “social gamblers”. These findings suggest that the popular image of the “lone addict” is an oversimplified one. Observation from the “change box” of an arcade revealed that while many players appeared to be playing alone, the opportunities for non-intimate contact with other players, by, for example commenting upon a win, provided a subjective sense of playing with others.

One in five of the “probable pathological gamblers” reported playing fruit machines with their parents, which once again suggests a lack of awareness on the part of some parents as to the extent of their childrens’ participation.

## **PARENTAL ATTITUDES AND GAMBLING BEHAVIOUR**

### **Parental attitudes**

The attitudes and gambling behaviour of the parents of children who gamble on fruit machines has been largely ignored by researchers. However, Graham (1988) hypothesised that

“with respect to excessive playing of amusement machines it is possible that parents’ knowledge of their teenagers’ involvement is uncertain” (Graham, 1991 p.36)

Respondents were asked if their parents knew that they played amusement machines. (It should be borne in mind that the question once again included arcade video machines as well as fruit machines.) Seven in ten of the children reported playing amusement machines with their parents knowledge, one in ten said they played without their parents knowledge, and two in ten said they did not know the answer to this question (n=373).

The respondents were also asked how their parents felt about their playing amusement machines. Only one in one hundred of the children reported that their parents approved, and one in three reported that their parents "didn't mind". The majority of the children (nearly two thirds) reported that their parents disapproved of their playing coin-operated amusement machines; and, of these, one third disallowed it (n=398).

### **Parental gambling**

The children were also asked about their parents gambling behaviour. Nearly one in two of the children reported that their parents gambled on the football pools; one in four on games of skill such as snooker, pool or darts; more than one in five on fruit machines; and one in eight on horses. It is immediately apparent that fruit machine gambling was more popular with the children than with their parents. Nearly three times as many children aged 11 to 16 years reported gambling on fruit machines themselves as their parents.

The reported incidence of gambling among the parents of "probable pathological gamblers" was then compared with that of the other children. The results are shown in Table 6.13.

**Table 6.13 Parental gambling: Pathological gamblers compared with other children**

	Pathological gamblers	Other children	All
Parent/s gamble	%	%	%
Yes	55	77	56
No	45	23	44
	100	100	100
(n=	434	26	460

Chi-square=4.95 df=1 p<.02

Table 6.12 shows that there was a statistically significant difference in the incidence of parental gambling between the “probable pathological gamblers” and the other children. More than three quarters of the “probable pathological gamblers” reported that their parent/s participated in some form of gambling, compared with just over a half of the other children. Furthermore almost a half of the “probable pathological gamblers” reported that their parents also gambled on fruit machines, compared with only one fifth of the parents of the other children (p<.02).

These findings agree with the suggestion that parental gambling is likely to be important predictor of adolescent participation (Downes, 1976; Amati, 1981; Arcuri, Lester and Smith, 1985; Jacobs, 1989; Lesieur & Rothschild, 1989). The findings also support Graham’s (1988) suggestion, that parents who gamble have a particular responsibility towards their children.

## DISCUSSION

The popular image of the young fruit machine addict, and one which is largely supported by earlier research, is that of the lone, adolescent male. This study demonstrates that, as a generic description, this may be misleading. At the very least it is an inaccurate description of young pathological gamblers in a seaside town.

Firstly, the modal age of the young pathological gambler is likely to be younger than the description suggests. In the location surveyed pathological gamblers were as likely to be found at the lower end of the age range (11 - 12 years), as at the top (15 - 16 years). The tendency for children to experience gambling problems at such an early age, in part arises from the free availability of fruit machines for children of all ages. It also arises from a lack of parental awareness of the dangers involved and/or a lack of parental control.

The majority of the children reported that their parents disapproved of their playing slot machines. However, more of the eleven year old fruit machine players reported gambling with their parents, than with any other social group (eg. friends or siblings). Moreover, one in five of the "probable pathological" gamblers also reported that it was usual for them to gamble with their parents. It is possible that some parents feel that it is unwise for their children to gamble on fruit machines without parental supervision, but somehow "safe" with it. Some parents were simply unaware of the extent of their children's participation in fruit machine gambling; one in ten of the children reported that they played slot machines without their parents' knowledge.



With or without parental consent, the earlier children commenced gambling on fruit machines the more likely they were to play pathologically in their secondary school years. One in five of the "probable pathological" gamblers commenced play at the age of eight years old or younger. If this finding is extrapolated chronologically one would expect to find a number of adults who commenced gambling in their teenage years, to experience gambling problems in later life. Longitudinal research is required to establish the extent to which this is so.

Secondly, this study disaffirms the claim that the young fruit machine addict is stereotypically male. "Probable pathological" gamblers were as likely to be female as male. It is possible, of course, that mixed gender amusement machine gambling in arcades, and the consequences this has for pathological use, is a particular feature of seaside youth culture. However, the view that pathological gamblers are predominantly male has been given less emphasis in more recent research. Thus, for example, The Children's Society, (1990) reported a less marked gender difference than Ide-Smith and Lea (1988). This lends support to Lindgren's (1987) hypothesis that gender differences in gambling participation are less important than commonly assumed, and likely to decrease with time.

Thirdly, this study found that more "probable pathological" gamblers played alone than "social" gamblers. However, more "probable pathological" gamblers reported that they usually played with friends than alone. This finding suggests that the popular image of the "lone fruit machine addict" is an oversimplified one. Moreover, the negative implications of playing alone may prove to be a red herring as addicted

gamblers, like addicted substance users, may actively seek to pursue their addiction in the company of fellow addicts (Pearson, 1987).

In sum these findings disaffirm any notion of a *typical* young fruit machine addict. "Probable pathological" gamblers were equally male or female, spread across the age range of eleven to sixteen years, and came from a range of social class and religious backgrounds. However, "probable pathological" gamblers were more likely than "social" gamblers to have started playing fruit machines when they were very young (at the age of eight years or younger). They were also more likely to have parents who gambled, particularly on fruit machines. A retrospective, more qualitative, study of young adult pathological gamblers which charts their individual "careers" would be useful in establishing other social factors involved in the process of addiction to gambling in children.

## **CHAPTER 7: METHODS AND METHODOLOGY FOR STUDY 'B'**

### **INTRODUCTION**

This chapter discusses some of the philosophical and ethical issues raised by the methodology of ethnography. This is followed by a discussion of the practical field work effort: how access was gained, relations in the field and the process of analysis. The problems of validity and reliability in ethnography are raised together with an account of how they were addressed in the present study. Finally, there is a postscript on the impact of the media on this research, and its implications for methodology.

### **THE ETHNOGRAPHY**

Ethnography involves the researcher in participant observation of the culture or subculture of the people under study so that he/she may come to interpret the world in the same way that they do. To this end the ethnographer

“... participates overtly or covertly in peoples daily lives for an extended period of time, watching what happens, listening to what is said, asking questions; in fact collecting whatever data are available to throw light on the issues with which he or she is concerned.” (Hammersley and Atkinson, 1989).

Given the centrality of meaning, peoples' behaviour can only be understood in context, so the behaviour which is the research topic must be investigated in it's 'natural setting'.

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 “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. 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.

Sociologists who are philosophically at the anti-positivism extreme of the positivism/anti-positivism continuum, described in chapter 4, impose a clear limit on the sociological knowledge ethnography can produce. The task is specifically one of *cultural description* and anything more is seen as

"... imposing the researcher's own arbitrary and simplistic categories on a complex reality." (Hammersley and Atkinson, 1989).

The rationale for this limitation is based on a reversal of the status which is attributed to common sense knowledge and scientific knowledge by positivism; the actors models are paramount.

Such a view clearly imparts a disdain for theory. Indeed, when Howard Becker was asked by a student how to choose a theoretical framework Becker replied

"What do you want to worry about that for. You just go out and do it." (Quoted by Atkinson in Bell and Newby, 1977, p.32)

And yet, as Hammersley and Atkinson (1987) argue, the development and testing of theory is what distinguishes sociology from journalism and literature. Indeed, ethnography which proceeds in this way can degenerate into a total relativism which disintegrates social life into a series of one-off utilitarian-type acts (Atkinson and Drew, 1979, reported in Payne et al, 1988).

It is paradoxical that the distinction between commonsense and science, between the researcher and the researched, should ultimately impose restrictions on both positivism and naturalism. Two solutions have been proposed to resolve the dilemma for ethnography. Firstly, Hammersley and Atkinson suggest that the problem largely derives from “an obsession” with decontaminating the data from possible effects of the researcher. Yet sociology is fundamentally a reflexive activity; the researcher is existentially part of the social world he/she is investigating. Hammersley and Atkinson go further by asserting that, as *active participant* in the research process, the ethnographer is the research instrument *par excellence*. In the field the researcher may test theories and assess alternatives and generally take data not at face value but as a

“field of inferences in which hypothetical patterns can be identified and their validity tested out” (Hammersley and Atkinson. 1987, p.18).

Capitalisation of the fact of reflexivity in the role of ethnographer thus allows full rein to his/her “sociological imagination” in the way described by C. Wright Mills (1970). It also allows a departure from the “aseptic prose style and avoidance of reflection” which frequently

accompany attempts to exorcise the contamination of participation (Punch, 1986, p.14).

The second solution has been proposed by Atkinson and Drew (1979) who argue that traditional (non-ethnomethodology) ethnography has failed on two counts: a) it's view that sociological accounts are superior to that of lay persons and; b) exclusive concentration on the researchers' preferred version of the actors account of events. They suggest that an adequate theory of social order would be grounded in a

“ ... social world (that) is comprised of unique circumstances which are nevertheless recognisable as instances of generalised types, and is simultaneously flexible and patterned, subjectively experienced and externally objective, uncertain and certain, indescribable and describable. That is, the theory would have to be neither so flexible or rigid that it lacks any sensitivity to the potentially infinite range of contextual variation in the world, nor so flexible or loose that nothing at all is held to be general across different contexts.” (Atkinson and Drew, 1979, p.20 reported in Payne et al, 1983)

Meeting these criteria requires a reorientation on the part of sociology from the asking of unanswerable 'why' questions to asking answerable and neglected 'how' questions.

A practical research technique is specified for the ethnographer asking 'how' questions: People in the culture or subculture under study are to be viewed as 'anthropologically strange'. The past emphasis on empathy with the people studied is replaced by an attitude of naivety of local rules and customs. In this way the researcher is better placed to uncover the situated rationality of the behaviour under study; the actors are seen as rule-using analysts rather than 'cultural dopes'.

Ethnomethodological ethnography undertaken in this way may exceed a series of discrete cultural descriptions and contribute to a continuing stock of knowledge of the social phenomena under study. This stock of knowledge may be transferred from one situation to another, allowing for local modifications in the same fashion as the acquisition of conversation. Furthermore the access of the sociologist to a metalanguage, and the opportunity of compiling analyses of knowledge where it is socially differentiated, may allow a claim for the superior status of such knowledge. (Payne et al, 1981, p.137-138).

A combination of the approaches suggested by Atkinson and Drew (1979) and Hammersley and Atkinson (1987) were used in the present ethnographic study. Ascribing to Hammersley and Atkinson's (1987) view on the cruciality of theory development to sociological practice, the existing sociology of gambling as described in chapters 1 to 3 provided a 'starting block' for the field work effort. Indeed a simple spider diagram positioned by the cash tray in the "change box" served as a memory aid to the 'sensitising concepts' (Blumer, 1954) of Caillois (1962), Goffman (1976), Devereux, (1949) and others. This assisted the ongoing process of the identification of hypothetical patterns of gambling behaviour, the evaluation of hypotheses and theories and the search for alternatives. In practical terms, it provided a base of 'what is known' from which to explore the unknown.

Following Atkinson and Drew (1979), any attempt to explain 'why' children gamble on fruit machines was rejected in favour of 'how' children orient to fruit machine gambling. In addition, a conscious effort was made on the part of the researcher to view the subculture of the arcade as 'anthropologically strange'. This was aided by the fact

that, to the researcher, the subculture was in many ways 'anthropologically strange'. The presence of the spider diagram and an audio tape recorder provided a constant reminder of the need for a conscious interchange between the cultural frames of participant (change box attendant) and researcher.

## **GAINING ACCESS**

The question of access to a desired field of study provides two areas for ethical reflection. Firstly, should the researcher 'come clean' about his/her researcher role; and secondly, should the researcher come clean about the precise nature of his/her research? Opinions vary. At one extreme Douglas argues that since social life is characterised by "deceitfulness, evasiveness, secrecy and frontwork" the ethnographer is justified in using similar tactics to penetrate social processes (J. Douglas in Bulmer, 1982, p.226). Furthermore, since secrecy and deceit particularly characterise the centres of power in society, 'anything goes' as sociologists seek to expose the powerful (a position adopted by Holdaway, 1980, in justifying his own covert role in research on the police).

Others argue that it is unethical and unnecessary for the researcher to misrepresent his/her true identity or research aims (K. Erikson in Bulmer, 1982); and that covert observation is harmful to subjects, researcher and sociology (Bulmer, 1982). While on the whole agreeing with the latter view, Punch suggests that ethical purity in all cases would close off avenues for certain types of research. This begs the question of who is to decide what sociological research projects are undertaken, and which are left undone (Punch, 1989, p.44).



Agreeing that overt research is the ethical choice, wherever possible, I decided to 'come clean' on my researcher status and the nature of my research. I wrote to three arcade managers, requesting permission to undertake observation in their premises, preferably while working free of charge in a "change box". None replied. I followed up each letter with a telephone call: One manager courteously declined, another said that if I was seen anywhere on his premises, I would be "thrown out" and the third agreed to an interview.

I assured the arcade manager that I was not a 'moral entrepreneur' but an objective researcher seeking to explain the social processes which children and young people attach to fruit machine play in an arcade setting. On this basis he agreed to my working as an unpaid cashier in the "change box" at times to suit myself. Reflecting on my good fortune, I concluded that it was partly due to a gender effect. On this occasion, the common cultural stereotyping of females as 'unthreatening', 'socially acceptable but incompetent' (Easterday et al, 1977) had worked to my advantage. I was also grateful to the insights of ethnomethodological ethnography. By asking 'how' as opposed to 'why' juveniles were oriented to gambling, moral issues did not directly inform the practical field work.

## **FIELD WORK AND FIELD RELATIONS**

The staff of the arcade, including assistant manager, 'engineer', and various part-timers, and the regular players were all aware of my researcher status and the nature of my work. In the case of casual users of the arcade (particularly holiday makers in the summer) consent seemed superfluous and in any case was physically unattainable.

The job of cashier helped field relations in two major ways. Firstly, it allowed sufficient time to minimise the reactive response to the researcher role. Regular clients became accustomed to seeing me in a bona fide arcade role (giving out change) and after a while curiosity in the researcher role waned, and a willingness to share their enthusiasm, for fruit machine gambling to an attentive audience prevailed. This was extended on several occasions to invitations to accompany players on their round of play for demonstrations of their fruit machine playing skills.

Secondly, working in the arcade provided an ideal opportunity for unobtrusive observation. A working role facilitated the development of interaction with the arcade clientele which was not based on an unnatural intrusion into the social processes of their play. Again, my gender played a part. As Lofland (1975) suggests, women have a "thereness" about them, like domestic servants they are present but in the background (Lofland, 1975, p.145). A female cashier in an arcade, largely concealed by a "change box", exemplifies this description. Furthermore, while I was not a true 'insider', the job of cashier afforded 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.

### **THE PROCESS OF ANALYSIS**

The examination and interpretation of the data was consciously reflexive and proceeded from a thoroughly learned theoretical base 'to think with' (Hammersley and Atkinson, 1983). As the months of observation passed, it became clear that the social processes that I was observing

were more complex than initial impressions and the gambling literature had suggested. Not one or two, but almost all the literature on gambling orientations proved to be insightful in some way. Towards the end of the field work I perceived that children and young people were differentially oriented to fruit machine gambling and yet certain social rewards were common to all. While I was confident that this was the case, I was at a loss as to how I should convey my findings.

The breakthrough came as a result of an examination of one of the more unusual concepts used by the players themselves. In particular, I noticed that the older male players (aged about 16 to 21) referred to the younger boys (aged about 9 to 12) as their 'slaves'. I understood the term 'slave' to be a social construction; a particular version of their relationship with the younger boys. Clearly the younger boys did not perceive their role in this way; they were primarily there to learn fruit machine gambling skills. This analysis generated the concept of 'apprentice' to describe the playing strategy of the younger boys.

Teasing out the variations in strategy I had observed, I very quickly devised a classification of strategies for fruit machine gambling by children and young people in an arcade (Lofland, 1970). Each strategy, was then given a name which conveyed the essence of the orientation. In this way a typology of young fruit machine players comprising Arcade Kings and their Apprentices, Machine Beaters, Rent-a-Spacers, Action Seekers and Escape Artists was formed. The types described a primary orientation to gamble and yet were not mutually exclusive; elements of each strategy were observed to a varying extent in each player.

## VALIDITY

Views on validating the findings of ethnographic studies vary with the theoretical positions of exponents. The positivist view is that the construct validity of ethnography should be tested by indicators as in quantitative research (Evans, 1983), ( for example, the validity of DSM-IV-J as a tool for defining pathological gambling in children was tested using 'symptoms of dependency' as indicators.) However, as Hammersley and Atkinson (1983) argue, ethnography involves a continual process of interplay between the finding of indicators and the conceptualising of analytic categories, and:

"This derives from the inductive, reflexive character of ethnography where the process of analysis involves the simultaneous development of constructs to produce a 'fit' between the two." (Hammersley and Atkinson, 1983, p.185).

Thus there is a sense in which the validation of ethnographic research is seen as integral to the field work enterprise as opposed to a separate, ex post facto event. Prising indicator and concept apart at the finish with the aim of using the former as evidence that the latter is true defies the logic of objectivity.

The ethnomethodological view is that since a proper mode of enquiry is concerned with explicating and describing members experiences, the evidence for a description lies in the activities described (Benson and Hughes 1991, p.132). Again the implication is that construct validation is assumed within the field work phase, but this is not specified.

Hammersley and Atkinson (1983) suggest that concepts generated by ethnography may be checked by triangulation; the inferences drawn from one set of data may be checked against the inferences drawn from

another set of data. This is not seen as true validation in the scientific sense, so much as 'covering all the angles' so that 'indicators' are seen as another source of data rather than confirming or disconfirming agents. To this end data were also collected from interviews with young players and respondent validation.

### **The interviews**

Ten in-depth interviews were conducted with members of the arcade clientele who seemed to fit one of the typological categories of Arcade King, Rent-a-Spacer, Action Seeker, and Machine Beater. I decided against attempting to interview any of the children who fitted the category of Escape Artist, on ethical grounds. It seemed likely that an in-depth interview with such a respondent would generate the need for counselling which was beyond my task and training. Instead I relied on documented case studies from youth workers and found that they provided confirming examples of what I had observed.

Where possible, the interviews were undertaken during a quiet period in the arcade. The remainder were undertaken at a venue within walking distance of the arcade. They lasted for a minimum of half an hour and a maximum of one and a half hours. Wherever possible the interviews were recorded on an audio tape recorder.

The interviews which took place in the arcade were straightforward in that they were part of a continuing process of naturally occurring social interaction. The interviews which took place outside the arcade were more problematic: The offer of payment, change of social context and the presence of an audio tape recorder all emphasised the researcher role which had been so effectively subsumed under that of "Change

box" cashier. In each case about fifteen minutes of social interaction passed before the relationship which had developed in the arcade was restored sufficiently to proceed in a reasonably relaxed manner.

I did not decide beforehand what questions I wanted to ask, but entered each interview with a mental list of the issues I wanted to be covered. Most of my questioning was non-directive, consisting of open-ended questions designed to open up broad topics eg. 'What sort of skills are used by fruit machine players?' However, on occasions where I wanted to clarify an ambiguity that had arisen, or seek individual versions of phenomena, highly directive questions were used, eg. 'Is it possible to beat the machine?'. The taped interviews were transcribed for data analysis and the non-taped interviews were written up as field notes. The study of young gamblers in the field allowed the cross-checking of interview data with direct observation and vice versa (Browne, 1989).

### **Respondent validation**

Some sociologists argue that the ultimate validity of an ethnographic account depends upon whether or not the actors themselves accept it as true (Bloor, 1978, p.548-549). However, as Schutz (1964) notes, the meaning in action is grasped only retrospectively on the basis of memory, with all the problems that this entails. Furthermore, as Bloor (1978) points out, members interpret data in the light of their own social concerns, and how they perceive the research act. Thus validation by respondents is problematic and the data is better considered as a further source of data and insight rather than an indicator of truth.

Immediately prior to writing up the ethnographic study, one of the regular players and the arcade manager were separately asked whether

or not the typology of young fruit machine players corresponded with reality as they saw it. The initial reaction of both was of someone who had just been told a secret, which on retrospect they knew all the time. The arcade manager gave a broad grin and said

“Well, I’ll be .... Thats it! You’re 99% right - but what about the holiday makers?”

The arcade manager correctly noticed that I had (intentionally) omitted casual play by visiting holidaymakers from my analysis.

The regular player seemed genuinely amused and pleased with the typology and picked out his own category of Machine Beater. This was particularly interesting because this player was perceived by his peers to be an “addict” but had been very reticent about his play. An added bonus of my modest attempt at respondent validation was that, having seen and approved the typology, the regular player talked to me more openly about his fruit machine gambling career, and it’s consequences, than before.

## **RELIABILITY**

More attention has been given to validity in the development of ethnographic methodology than to reliability. Indeed questions about the reliability of another’s observations have been treated as taboo, as though it was an accusation of incompetence, bias or dishonesty (Kirk and Miller, 1986, p.52). Kirk and Miller (1986) argue that reliability in ethnographic research is incumbent upon the detailed documentation of procedure. Furthermore, this should be done in such a way that

“ ... the loci of decisions internal to the research are made apparent (Kirk and Miller, 1986, p.72)

They propose a four phase model of the ethnographic process which

“ .. sharply categorizes activities as falling in the purview of either Invention (research design), Discovery (data collection, Interpretation (analysis), or Explanation (documentation). (Kirk and Miller, 1986, p.72)

The sequencing and adequate description of these four phases as in the model of science is presented as the necessary first step towards matters of reliability in ethnography. This model has informed the present study as a matter of sound research practice, however the claims made for it vis a vis the matter of reliability are challenged. Firstly the diverse combination of qualities ethnographers bring to the research field in terms of gender, age, previous life and research experiences, theoretical orientation and so on, defy the logic of replication. Secondly, as Bell (1977) found out, willingness to ‘expose all’ may have highly avoidable consequences (in his case the threat of legal action) so that it is difficult for researchers to be totally open about their research experience.

Punch (1986) goes further and somewhat cynically suggests that research accounts are inevitably

“ ... bowdlerized post hoc interpretations polished up for academic interpretation.” (Punch, 1986, p.19)

Ultimately we may be persuaded to accept the view that research accounts are, after all just one particular ‘expert’ version of events, however carefully informed.



## **POSTSCRIPT ON PUBLICITY**

Morgan (1972) describes how socially sensitive topics such as drug use and social services may be picked up and distorted by the media in discomfiting ways. Having examined earlier press accounts of fruit machine gambling in children I was aware of the tendency for even 'quality' newspapers to sensationalise the issue. However, I was not prepared for the enormous media impact my studies would have.

Major articles appeared in nine national newspapers under headlines such as "Child Addicts Steal to Fund Gambling" (The Daily Telegraph, Nov. 5, 1991); "One Armed Bandit Boom Spawns Gambling Addicts" (The Observer, Nov. 10, 1991) and "Gambling Tragedy of the Arcade Addicts Aged 11" (Today, Nov. 5, 1991). The press coverage led to comprehensive radio and television coverage. In addition, I was besieged by telephone calls and letters from parents, councillors, probation officers, police officers and youthworkers. The research, it seemed had awakened a 'sleeping giant'.

Apart from stimulating public debate, the publicity had three outcomes which have implications for methodology. Two are ethical considerations and the third is a cautionary tale. Firstly, reporters from certain newspapers scoured the country in search of Arcade Kings, Machine Beaters and the like. Miraculously a press embargo on place names, protected the identity of the town and school. However, one reporter got very close and, in the interest of protecting the privacy of the respondents, was deliberately diverted to another town. This led to a two page expose in Sunday paper entitled "I'm a slave of the slot machines and I'm only twelve" (The People, Nov. 10, 1991, p.12-13).

The sort of exposure I had felt ethically obliged to protect the study respondents from, had occurred elsewhere.

The second ethical consideration concerns the profession of sociology. One of the major themes which runs through ethical debate on research is that researchers should not spoil the field for others. Given that the debate on juvenile fruit machine gambling stimulated by this research is unwelcome to the "Trade" it is unlikely that another researcher will gain access to an arcade as 'overt insider' for a very long time. As Punch puts it:

"We cannot kick people in the teeth or elsewhere and expect them to keep on smiling". (Punch, 1986, p.48).

Thirdly, arcade owners have a vested interest in the continuing legal availability of fruit machine gambling to children. In seaside locations, particularly, their livelihoods are partially dependent upon it. It was not therefore surprising that I should meet with personal hostility, intimidating telephone calls and abusive criticism of my work. I was, however, taken aback to find myself forceably restrained against the wall of a hotel corridor and verbally intimidated prior to making an academic presentation to a conference. A subjective sense of impending danger was a very real part of the publication phase of this work which I was not adequately prepared for.

## CHAPTER 8: THE PULL OF THE FRUIT MACHINE: A SOCIOLOGICAL TYPOLOGY OF YOUNG PLAYERS

### INTRODUCTION

While much has been written about the “dark side” of fruit machine gambling among young people, (Fisher, 1991a) surprisingly little has been written from a sociological perspective about the pleasures and satisfactions that fruit machine gambling affords. 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).

This study seeks to provide a sociological analysis of how children and young people orient to fruit machine gambling. The analysis is based on the findings of an ethnographic study, and presented in the form of a typology. Throughout this chapter the words “addict” and “addiction” will be used for the simple reason that these were the terms used by the players themselves. (There is a conceptual discussion of “addiction” to gambling in chapter 4.)

Chapters 1 to 3 show that theoretical contributions from sociology on how people orient to gambling are sparse, with major works stemming from the 1940's, 1950's, 1960's, and 1970's. Ethnographic studies of gambling are rare but, where they exist, provide rich insights into the subculture surrounding different gambling forms.

The concepts from the literature which have particularly informed the present study are: **play orientations** (Caillois, 1962; Abt and Smith, 1984); **economic orientations** (eg. Devereux, 1949; Zola, 1967; Dixey, 1987; CLR, 1990); **'action-seeking' and ego enhancement orientations** (eg. Devereux, 1949; Goffman, 1969); **escape orientations** (eg. Campbell, 1976; Lesieur, 1989); **problem solving and decision making orientations** (eg. Herman, 1967; Zola, 1967, Scott, 1968); **contextual orientations** (eg. Dixey, 1987; Newman, 1972).

The chapter begins by providing a description of fruit machine gambling in an arcade. This is followed by an account of some fruit machine gambling skills, because playing skills, or the lack of them, are intrinsically interwoven with gambling orientations among young people. Finally, there is a presentation of the typology, followed by a discussion of its use.

### **FRUIT MACHINE GAMBLING IN AN AMUSEMENT ARCADE**

The electronic fruit machine consists of three reels embellished with fruit symbols which revolve when a coin (the stake) is inserted. When the reels come to rest they reveal a sequence of three fruit. The aim is to achieve one of a number of winning sequences of three identical fruit. 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. Ten pence and two pence machines are also available.

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 of *ilinx* (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, eg. "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, thats 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. Thats 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 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, 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 its, like, nine away,....if a melon's on the line its ten to the grape, like, and fings 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 whats 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 (Griffiths, 1990b). 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 artists", the primary orientation to gamble coincided with previously reported motivations of female "pathological" gamblers (Lesieur, 1989). 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 its no good going on it after one of 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 committment 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 let you down, all the rest of them wont 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 the 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 its bigheaded saying that, but I'm pretty chuffed at the way I've learned it like, you know, cos its 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 cigarette 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. 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, 1990).

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 all 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 DSM-IV-J index (Fisher, 1992). Indeed their status is based on the achievement and maintenance of rationality and self-control:

“We dont go mad, like, we usually have a tenner each, like. We might go down and blow the lot plus another tenner each, like. But thats what happens on a Saturday like. But we would'nt 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 (Browne, 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*) its 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 their losses in an attempt to beat the machine. As one of the Kings put it:

“He aint got the patience to stand their 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 Brownes 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 cant win anything. Its still nice to play them, thats why I got them.

Researcher: Whats good about it?

Respondent: It just is. Its just trying to beat it and that. Its like a little challenge - you've got to get different fings 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 (Browne, 1987):

"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.

### **THE 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 teen-age 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 SEEKERS**

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 whats going to happen next - suspense - thats the word I was looking for. Cos you put your money in and you dont know whats 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*), lets 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 with 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 Children's Society, 1990) 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 beat you up.' and 'Its fun; you always think it won't happen to me being attacked down there.'" (Graham, 1988, p.28)

## **THE 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 whom 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 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 provide 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 explanations 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 its 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 (eg. 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.

Chapter 3 has shown that fruit machine gambling addiction is a growing problem in U.K. Society. An understanding of how children and young people orient to fruit machine gambling will contribute not only to the sociology of gambling, but to the practical work of the Caring Services in preparing effective counselling programmes.

## CONCLUSIONS/RECOMMENDATIONS FOR FURTHER RESEARCH

This thesis has examined juvenile fruit machine gambling in a seaside location by means of two major studies. Study "A" developed a standard means of measuring the extent of addiction to fruit machine gambling among children aged 11 to 16 years. The measure was tested by questionnaire survey on a sample of 467 of children residing in a seaside town. Study "B" focussed on patterns of usage and aimed to describe how children and young people orient to fruit machine gambling in a seaside arcade. The data were obtained from ethnographic fieldwork. This conclusion reiterates the main themes of the research and draws together the major findings of both studies. It also makes recommendations for future research.

### **Juvenile fruit machine addiction: moral panic or social fact?**

The current public interest in juvenile fruit machine gambling has been fuelled by sensational media reports on children who became addicted to fruit machine gambling and resorted to delinquent behaviour, ranging from petty crime to attempted murder, to fund their play. The public debate comprises two views. Firstly, the Industry, backed by Home Office Study 101, argues that the problem has been blown up out of all proportion, and that it is the more appropriately the domain of parental supervision than legal reform. Secondly, the Caring Services, drawing on the findings of the majority of academic research, argue that the problem is acute enough to warrant a legal ban on fruit machine gambling among children. This would bring the U.K. gaming law on access to children, into line with the rest of Europe and the U.S.A.

Chapter 3 has shown that the Home Office Study 101, which presently informs Government policy, contains certain methodological and analytical flaws. Not least of these is the lack of confidentiality given to their respondents. (Children were required to supply their mother's address and telephone number!). Chapters 3 and 4 have shown that all previous studies which have sought to address the debate have been hindered by a lack of conceptual analysis of what actually comprises addiction to gambling in children. This has resulted in the use of arbitrary methods of measurement and a range of findings which fit a range of viewpoints. It is not surprising, therefore, that the debate continues to generate more heat than light.

Chapter 4 has presented a standard index, DSM-IV-J, for defining pathological gambling in children. The index is closely modelled on DSM-IV, the criteria currently being refined to diagnose pathological gambling in adults. Defining and counting the incidence of pathological gambling in children is truly pioneering research. Accordingly, DSM-IV-J in its present form, and associated test questions, are attributed consultative status only.

Nevertheless, the results of the field trial, reported in chapter 5, show that DSM-IV-J is an effective discriminator of pathological gambling in children. There were statistically significant differences between those children defined by DSM-IV-J as "probable pathological" gamblers and the control group of "social" gamblers in all behaviours hitherto related to gambling dependency in children. The "probable pathological" gamblers were also significantly more likely to be worried that they were "playing fruit machines too much".

These findings have several important implications. Firstly, the research provides a clear response to the Home Office claim that "there is no evidence of any association between amusement machines, dependency and delinquency" (Graham, 1988, p.iii). The "probable pathological" gamblers were significantly more likely to commit large amounts of time and money; to borrow money and sell their possessions; and to truant and steal to support fruit machine gambling, than were the "social" gamblers. The study thus provides clear evidence of an association between fruit machine gambling, dependency and delinquency for children in the location studied.

Secondly, in a situation where fruit machine gambling is freely available to children, problem gambling is not confined to a few, poorly socialised individuals. In the location where DSM-IV-J was tested, 9% of the children who played gambled pathologically (6% of the total sample). The number involved (26) would have filled an average class in the school surveyed. However, the proportion of children with gambling problems, in the nation as a whole, is likely to be smaller than 9%, due to limitation of supply in rural areas and restricted access to some urban arcades. A national survey, using a measure such as DSM-IV-J, would be helpful in providing a definitive estimate of the number of juvenile fruit machine addicts in the U.K.

The ethnographic study similarly provided evidence of stealing from the family, stealing from outside of the family and truancy to support an addiction to fruit machine gambling. Stealing from the family was ubiquitous and produced particular recrimination on the part of the child and distress to other family members. A study on the impact of a

childhood addiction to gambling on the family would help to illuminate some of the wider consequences of pathological gambling in children.

Thirdly, chapter 3 has shown that children who reside in seaside resorts are particularly vulnerable to problems associated with fruit machine gambling because of their year-round access to tourist amusement arcades. The present research shows that fruit machine gambling in tourist amusement arcades was a major component of adolescent leisure in the location surveyed. A national study using a standard measure such as DSM-IV-J would allow comparison of gambling addiction rates between the regions.

Constructive comment by other researchers together with further systematic field trials would be helpful in establishing a definitive version of DSM-IV-J and associated test questions for use with children in the U.K. and elsewhere.

### **Fruit machine gambling and video machines**

Compared with fruit machines, research on the incidence and consequentiality of video machine play by young people in the U.K. is meagre, although similar preoccupations clearly pertain. The present view seems to be that young people in the U.K. do not become "addicted" to video machines. However, the lack of systematic investigation, the reliance on (conflicting) anecdotal evidence and the clear indication of "addicted" video game players in the U.S. literature suggests caution in accepting this finding as definitive.

The relationship, if any, between video and fruit machine play among young people also warrants further investigation. In particular it would

be helpful to know whether or not the playing of fruit machines is contingent in some way upon the playing of coin-operated video games. Is there, for example, a "career path" for some young players which commences with video machine play and graduates to fruit machine gambling which may or may not become problematic for the child and society? Further research is needed.

### **The fruit machine addict and popular stereotyping**

The popular image of the young fruit machine addict, and one which is largely supported by earlier research, is that of the lone, adolescent male. Chapter 6 has shown that, as a generic description, this may be misleading. At the very least it is an inaccurate description of young pathological gamblers in a seaside town.

Firstly, the modal age of the young pathological gambler is likely to be younger than the description suggests. In the location surveyed pathological gamblers were as likely to be found at the lower end of the age range (11 - 12 years), as at the top (15 - 16 years). Furthermore, the earlier children commenced gambling on fruit machines the more likely they were to play pathologically in their secondary school years. One in five of the "probable pathological" gamblers commenced play at the age of eight years old or younger. If this finding is extrapolated chronologically one would expect to find a number of adults who commenced gambling in their teenage years, to experience gambling problems in later life. Longitudinal research is required to establish the extent to which this is so.

Secondly, the findings reported in chapter 6 have disaffirmed the claim that the young fruit machine addict is stereotypically male. "Probable

pathological" gamblers were as likely to be female as male. It is possible, of course, that mixed gender amusement machine gambling in arcades, and the consequences this has for pathological use, is a particular feature of seaside youth culture. However, the view that pathological gamblers are predominantly male has been given less emphasis in more recent research. This lends support to the hypothesis that gender differences in gambling participation are less important than is commonly assumed, and are likely to decrease with time.

Thirdly, chapter 6 has shown that more "probable pathological" gamblers played alone than "social" gamblers. However, more "probable pathological" gamblers reported that they usually played with friends than alone. This finding suggests that the popular image of the "lone fruit machine addict" is an oversimplified one. Moreover, the negative implications of playing alone may prove to be misleading as addicted gamblers, like addicted substance users, may actively seek to pursue their addiction in the company of fellow addicts.

In sum these findings disaffirm any notion of a *typical* young fruit machine addict. "Probable pathological" gamblers were equally male or female, spread across the age range of eleven to sixteen years, and came from a range of social class and religious backgrounds. A retrospective, more qualitative, study of young adult pathological gamblers which charts their individual "careers" would be useful in establishing other social factors involved in the process of addiction to gambling in children.



## **Juvenile fruit machine gambling and the role of parents**

This research suggests that there is a general lack of awareness on the part of parents of the addictive potential of fruit machine gambling. This can be attributed to several possible bases of rationalisation or misconception. The first is the belief that if fruit machine gambling is legal for children it must be “all right”. The second is that when gambling is undertaken by children it is dismissable as “fun and games”. The third is the mistaken identification of today's electronic fruit machine with its infinitely slower mechanical predecessor. The fourth is that adult society is hesitant to face up to its own crucial role in the socialisation of children into gambling behaviour.

Chapter 6 has reported that the majority of parents disapproved of their children playing slot machines. However, observation from the “change box” revealed that it was commonplace for parents to lift up toddlers to insert coins in fruit machines. And more of the eleven year old fruit machine players reported gambling with their parents, than with any other social group (eg. friends or siblings). Moreover, one in five of the “probable pathological” gamblers also reported that it was usual for them to gamble with their parents. It is possible that some parents feel that it is unwise for their children to gamble on fruit machines without parental supervision, but somehow “safe” with it. Some parents, of course, were simply unaware of the extent of their children's participation in fruit machine gambling.

## **Is “social” fruit machine gambling really anti-social?**

There is a widely held belief that fruit machine gambling is an anti-social leisure pastime because it replaces interaction with people by interaction with a machine. The adjunct to this is that fruit machine

gambling is a mindless moronic pursuit, demanding no more from the player than conditioned responses to electronic stimuli.

This research finds that “social” (as opposed to “pathological” gambling) in children is, above all, the focal point of a social event. Amusement arcades provide an autonomous cultural space for children and young people to ‘hang out’ and meet their friends. Fruit machine gambling provides the lynch pin upon which complex social processes such as gender exploration and status recognition vitally depend. Furthermore, fruit machine gambling is not a game of pure chance which is unamenable to problem solving. Indeed, for certain categories of player, the acquisition and demonstration of phenomenal playing skills lies at the very heart of their orientation to play.

### **How children and young people orient to fruit machine gambling: the typology**

Chapter 8 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.

Chapter 8 shows that the sociological explanations of why people gamble, reviewed in chapters 1 and 2, 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. 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; non-intimate social

contact; a pursuit requiring short periods of total concentration; and the opportunity to make decisions. All of these attractions were available at a venue close to home, and at times which fitted in with the various obligations of adolescent life.

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.

Children and young people now account for about one in four of all new members of Gamblers Anonymous in the U.K. 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" not only for future researchers but for counsellors in the field.

## BIBLIOGRAPHY

- Abt, V. and Smith, J.F. (1984). Gambling as Play. *Annals of the American Academy of Political and Social Science*, 474, 122-132.
- Abt, V., McGurrin, M.C. and Smith, J.F. (1985). Toward a Synoptic Model of Gambling Behavior. *Journal of Gambling Behavior*, 1, 2.
- Ackroyd, S. and Hughes, J. (1981). *Data Collection in Context*. London: Longman.
- Amati (1981). Juvenile delinquency and Habit Patterns. *Indian Journal of Social Work*, 44, 405-408.
- Arcuri, A., Lester, D. and Smith, F. (1985). Shaping Adolescent Behavior. *Adolescence*, 20, 935-938.
- Ashdown, J. (1987). *Young People and Gaming Machines*. Dawlish Youth Office, Devon. Special Report.
- Bacon, S.D. (1973). Social Aspects of the Process of Addiction to Alcohol. In Hawks (ed.) *The Epidemiology of Drug Dependence*. WHO Regional Office for Europe, Euro 5436iv, Copenhagen.
- Barham, B. and Cornell, M. (1987). *Teenage Use of Amusement Arcades in Bognor Regis*. Bognor Regis WSIHE.
- Benson, D. and Hughes, J. (1992). Method and Inference in G. Button (ed.) *Ethnomethodology in the Human Sciences*. London: Longman.
- Bentall, R.P., Fisher, D., Kelly, Bromley, E. and Hawksworth, K. (1989). The Use of Arcade Gambling Machines: Demographic Characteristics of Users and Patterns of Use. *British Journal of Addiction*, 84, 555-562.

- Bergler, E. (1957). *The Psychology of Gambling*. New York: Hill and Wang.
- Blackpool/Fylde youth Community Service (1990). *A Research Study on Young People and Gambling in Blackpool*. Blackpool: author.
- Bloch, H. (1951). The sociology of gambling. *The American Journal of Sociology*, 57, 215-221.
- Bloor, M. (1978). On the Analysis of Observational Data: A Discussion of the Worth and Use of Inductive Techniques and Respondent Validation. *Sociology*, 12, 3, 545-552.
- Blumer, H. (1954). What is Wrong with Social Theory? *American Sociological Review*, 19, 3-10.
- Brenner, G.A. (1986). Why Do People Gamble? Further Canadian Evidence. *Journal of Gambling Behavior*, 2, 2, 121-129.
- Bromm, J.M. (1978). *Sport: A Prison of Measured Time*. London: INK.
- Brown, R.I.F. (1989). Gaming, Gambling, Risk Taking, Addictions and a Developmental Model of a Pathology of Man-Machine Relationships. In J. Klabberg, D. Croowall, H. deJong and W. Scheper (eds.) *Simulation Gaming*. Oxford: Pergammon Press.
- Brown, R.I.F. and Robertson, S. (1990). Home Computer and Video Game Addictions in Relation to Adolescent Gambling: Conceptual and Developmental Aspects. Paper presented at the Eighth International Conference on Risk and Gambling, London, August 15-17.
- Browne, B.R. (1989). Going on the tilt: Frequent Poker Players and Control. *Journal of Gambling Behavior*, 5, 1, 3-21.
- Bulmer, M. (ed.) (1982). *Social Research Ethics*. London: Macmillan.

- Caillois, R. (1962). *Man, Play and Games*. New York, Free Press.
- Campbell, F. (1976). *Gambling a Positive View*. In William R. Eadington (ed.) *Gambling and Society*. Springfield, Illinois, Charles C. Thomas.
- Centre for Leisure Research (1990). *Playing the Machines: A Study of Leisure Behaviour*. Edinburgh: author.
- Children's Society (1990). *A Survey of Fruit Machine Gambling in Adolescents*. London: author.
- Childs, D. (1987). *Amusement Arcades - Young People and Criminal Behaviour*. National Association of Senior Probation Officers. Special Report.
- Clarke, M. (1990) *A Sociological Analysis of Gambling in Northern Ireland*. Undergraduate project, University of Ulster.
- Cohen, S. (1973). *Folk Devils and Moral Panics*. London: Paladin.
- Cornish, D.B. (1978). *Gambling: A Review of the Literature and its Implications for Policy and Research*. London: H.M.S.O.
- Costa, N. (1988). *Automatic Pleasures: The History of the Coin Machine*. London, Kevin Francis Publishing.
- Denzin, N.K. (1970). *The Research Act*. Chicago: Aldine.
- Devereux, E.C. (1949). *Gambling and the Social Structure*. Doctoral dissertation, Harvard.
- Devereux, E.C. (1968). *Gambling*. In D.L. Sills (ed.) *International Encyclopaedia of the Social Sciences*, 6, 53-62.
- Delman, T.E. (1979). *Gambling: A Social Problem?* *Journal of Social Issues*, 35, 3, 36-42.

- Dickerson, M. (1984). *Compulsive Gamblers*. London: Longman.
- Dickerson, M. (1989). Gambling: A Dependence Without a Drug. *International Review of Psychiatry*, 1, 157-172.
- Dixey, R. (1987). Its a Great Feeling When You Win: Women and Bingo. *Journal of Leisure Studies* 6, 2, 199-214.
- Dixey, R. (1987). Bingo, the 1960 Betting and Gaming Act, the Culture Industry and .... Revolution. *Journal of Leisure Studies*, 6 - 301-313.
- Downes, D.M., Davies, B.P., David, M.E. and Stone, P. (1976). *Gambling Work and Leisure: A Study Across Three Areas*. London: Routledge and Kegan Paul.
- Drake, St. Clair and Cayton, H. (1945). Policy: Poor Man's Roulette. In Robert D. Herman (ed.) *Gambling*. New York: Harper Row.
- Dunlop, V. (1988). Something Strong Inside. *Arena*, Feb./March, 24-26.
- Easterday, L., Papademos, D., Schorr, L., Valentine, C. (1977). The Making of a Female Researcher. *Urban Life*, 6, 3, 333-348.
- Erickson, E.H. (1968). *Identity, Youth and Crisis*. New York: Norton.
- Evans, P. (1987). Win or Lose - It Is All The Same If The Players Are Hooked. *The Daily Times*, January, 19.
- Evans, J. (1983). Criteria of Validity in Social Research: Exploring the Relationship between Ethnographic and Quantitative Approaches in M. Hammersley (ed.) *The Ethnography of Schooling: Methodological Issues*. Driffield: Natterton.
- Filby, M.P. and Harvey, L. (1988). Recreational Betting: Everyday Activity and Strategies. *Journal of Leisure Studies*, 7, 2, 159-172.



- Fisher, S. (1990). The Pull of the Fruit Machine. Paper presented at the Eighth International Conference on Risk and Gambling. London, August 15-17.
- Fisher, S. (1991). Governmental Response to Juvenile Fruit Machine Gambling in the U.K.: Where Do We Go From Here? *Journal of Gambling Studies*, 7, 3, 217-247.
- Fisher, S. (1992). Measuring Pathological Gambling in Children: The Case of Fruit Machines in the U.K. *Journal of Gambling Studies*, in press.
- Foote Whyte, W. (1943). The Rackateer in the Social Setting. In Robert D. Herman (ed.) *Gambling*. New York: Harper Row.
- Franke, M.L. (1988). Casino Gambling Among College Students: Three Sequential Years of Data. Paper presented at the Third International Conference on Gambling Behavior, New York City, New York.
- Frazier, F.E. (1957). Playing Seriously. In Robert D. Herman (ed.) *Gambling*. New York: Harper Row.
- Frey, J.M. (1984). Gambling: A Sociological Review. *Annals of the American Academy of Political and Social Sciences*. 274, 107-121.
- Gaming Board for Great Britain (1987). Survey of Under Sixteen Year Olds in Inland and Seaside Arcades. London, author.
- Giddens, A. (1976). *New Rules of Sociological Method: A Positivistic Critique of Interpretative Sociologies*. London: Hutchinson.
- Giddens, A. (1979). *Capitalism and Modern Social Theory: An analysis of the writings of Marx, Durkheim and Weber*. Cambridge: Cambridge University Press.

- Glaser, B. and Strauss, A. (1976). *The Discovery of Grounded Theory*. New York: Aldine.
- Goffman, E. (1969). *Where the Action is: Three Essays*. London: Allen Lane, The Penguin Press.
- Graham, J. (1988). *Amusement Machines, Dependency and Delinquency*. Home Office Research Study 101. London: H.M.S.O.
- Griffiths, M.D. (1988). *Adolescent Gambling: Report of a Workshop*. Society for the Study of Gambling Newsletter, 14, 12-16.
- Griffiths, M.D. (1990a). *Addiction to Fruit Machines: A Preliminary Study Among Young Males*. *Journal of Gambling Behavior*, 6, 113- 125.
- Griffiths, M.D. (1990b). *The Cognitive Psychology of Gambling*. *Journal of Gambling Studies*, 6, 31-42.
- Griffiths, M.D. (1990c). *The Acquisition, Development and Maintenance of Fruit Machine Gambling in Adolescence*. *Journal of Gambling Studies*, 6, 193-204.
- Griffiths, M.D. (1990d). *The Role of Cognitive Bias and Skill in Fruit Machine Playing*. In S.E.G. Lea, P. Webley and B. Young (eds.) *Applied Economic Psychology in the 1990's*. Exeter, Washington Singer Press.
- Griffiths, M.D. (1990e). *Amusement Machine Playing in Childhood and Adolescence: A Comparative Analysis of Video Games and Fruit Machines*. *Journal of Adolescence*, in press.
- Griffiths, M.D. (1991). *An analysis of "Amusement Machines Dependency and Delinquency"* (Home Office Research Study 101). *Journal of Gambling Studies*. 7, 1, 79- 86 .

- Hammersley, M. and Atkinson, P. (1983). *Ethnography Principles in Practice*. London: Tavistock Publications.
- Henriksson, B. (1983). *Not For Sale: Young People in Society*. Aberdeen, The University Press.
- Herman, R.D. (ed.) (1967). *Gambling*. New York, Harper Row.
- Herman, R.D. (1976). *Motivations to Gamble*. In William R. Eadington (ed.) *Gambling and Society*. Springfield, Illinois, Charles C. Thomas.
- Herman, R.D. (1976). *Gamblers and Gambling*. US and Canada: Lexington Books.
- Hermkens, P. and Kok, I. (1990). *Gambling in the Netherlands: Developments, Participation and Compulsive Gambling*. Paper presented at the Eighth International Conference on Risk and Gambling. London, August 15-17.
- Holdaway, S. (1982). *An Inside Job: A Case Study of Covert Research on the Police* in M.Bulmer (ed.) *Social Research Ethics*. London: Macmillan.
- Holmes, G. (1985). *Against the Odds*. *Youth in Society*, 11, 37-43.
- Horkheimer, M. and Adorno, T. (1972). *Dialectic of Enlightenment*. New York: Seabury Press.
- Huff, G. and Collinson, F. (1987). *Young Offenders, Gambling and Video Playing*. *British Journal of Criminology*, 27, 4, 401-410.
- Hughes, J.A. (1978). *Sociological Analysis: Methods of Discovery*. London: Thomas Nelson.
- Huizinga, J. (1950). *Homo Ludens*. New York: Roy Publishers.

Ide-Smith, S. and Lea, S.E.G. (1988). Gambling in Young Adolescents. *Journal of Gambling Behavior*, 4, 110-119.

Jacobs, D. F. (1989). *Illegal and Undocumented: A Review of Teenage Gambling and the Plight of Children of Problem Gamblers in America*. In Howard J. Shaffer, Sharon Stein, Blase Gambino and Thomas N. Cummings (ed.s). Massachusetts/Toronto: Lexington Books.

Kallick, M., Suits, D., Dielman, T. and Hybels, J. (1977) *A Survey of American Gambling Attitudes and Behavior. Appendix 2 to Gambling in America*. Washington D.C: U.S Govt. Printing Office.

Kallick-Kauffmann, M. (1979). The Micro and Macro dimensions of gambling in the United states. *Journal of Social Issues*, 35, 3, 7-26.

Keill, N. (1956). The Behaviour of Five Adolescent Poker Players. *Journal of Human Relations*, 5, 79-89.

Kirk, J. and Miller, L.M. (1986). *Reliability and Validity in Qualitative Research*. Beverly Hills: Sage Publications.

King, K.M. (1985). Gambling: Three Forms and Three Explanations. *Sociological Focus*, 18, 3, 235-248.

Knight, I. (1987). Gaming Machine Addicts: Curb on Arcades is Sought. *The Daily Times*, December, 2.

Ladouceur, R. and Mireault (1988). Gambling Behaviors Among High School Students in the Quebec Area. *Journal of Gambling Behavior*, 4, 3-12.

Leeds Polytechnic (1989). Cited in J. Long *Playing the machine: Amusement arcade ethics*. *Leisure Management* 9, 8, 65-66.

- Leppard, D. (1987). Scandal of the Child Gamblers. The Sunday Times, May, 3.
- Lesieur, H.R. and Klein, R. (1987). Pathological Gambling Among High School Students. Addictive Behavior, 12, 129-135.
- Lesieur, H.R. (1988). Altering the DSM-III Criteria for Pathological Gambling. Journal of Gambling Behavior, 4, 38-47.
- Lesieur, H.R. (1989). Female Pathological Gamblers and Crime. Paper presented at the Meeting of the American Society of Criminology, Reno, Nevada, Nov. 9.
- Lesieur, H.R. and Rothschild, J. (1989). Children of Gamblers Anonymous Members. Journal of gambling Behavior, 5, 269-282.
- Lesieur, H.R. and Rosenthal, R. (1990). Proposed Descriptive Text for DSM-IV. Paper presented at the Eighth International Conference on Risk and Gambling. London, August 15-17.
- Lesieur, H.R. and Rosenthal, R. (1991). Pathological Gambling: A Review of the Literature (Prepared for the American Psychiatric Association Task Force on DSM-IV Committee on Disorders of Impulse Control Not Elsewhere Classified). Journal of Gambling Studies, 7, 1, 5-41.
- Lindgren, H.E. et al (1987). The Impact of Gender on Gambling Attitudes and Behavior. Journal of Gambling Behavior 3, 3, 155-167.
- Lofland, L.H. (1970). Interactionist Imagery and Analytic Interruptions in T. Shibutani (ed.) Human Nature and Collective Behaviour: Papers in Honour of Herbert Blumer. New Jersey: Prentice-Hall.
- Lofland, L.H. (1975). The 'Thereness' of Women: A Selective Review of Urban Sociology. In M. Millmam amd R.M. Kanter (eds.)

Another Voice: Feminist Perspectives on Social Life and Social Science. New York: Anchor Books.

McDonald, J. (1960). Sport of Kings, Bums and Businessmen. In Robert D. Herman (ed.) Gambling. New York: Harper Row.

Maguire, J.A. (1987). Against the Odds. Arena Review, May, 37-43.

Mann, M (1973). Consciousness and Action among the Western Working Class. London: Macmillan.

Meyer, G. and Fabian, T. (1990). Pathological Gambling and Criminal Behavior. Paper presented at the Eighth International Conference on Risk and Gambling. London, August 15-17.

Midgley, S. (1988). Children Become Bandits for Fruit machines. The Independent, February, 8.

Mills, C.W. (1970). The Sociological Imagination. Harmondsworth: Penguin.

Mok, Waiman, P. and Hraba, J. (1990). Age Differences in Gambling Behavior. Paper presented at the Eighth International Conference on Risk and Gambling. London, August 15-17.

Moody, G. (1989). Amusement Machines, Dependency and Delinquency: A Personal Appreciation. Unpublished manuscript.

Moody, G. (1990). Quit Compulsive Gambling. Northampton, Thorsons.

Morgan, D.H.J. (1972). The British Association Scandal: The Effect of Publicity on a Sociological Investigation. Sociological Review, 20, 2, 185-206.

Moran, E. (1970). Varieties of Pathological Gambling. British Journal of Psychiatry, 116, 593-597.

Moran, E. (1987). Gambling Among Schoolchildren: The Impact of the Fruit Machine. National Council on Gambling. Special Report.

Murrell, M.E. (1979). Why People Gamble: A Sociological Perspective. In D. Lester (ed.) Gambling Today. Illinois: Charles C. Thomas.

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.

The Observer, November 10 (1991). "One-Armed Bandit Boom Spawns Gambling Addicts."

Opie, I. and Opie, P. (1969). Childrens Games in Street and Playground. Oxford: Oxford University Press.

Orford, J. (1985). Varieties of Pathological Gambling. British Journal of Psychiatry, 116, 593-597.

Pearon, G. (1987). New Heroin Users. Oxford: Blackwell.

The People, Nov. 10 (1991). "I'm a Slave of the Slot Machines and I'm Only 11."

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.

Parker, H.J. (1974). View from the Boys. London, David and Charles.

Parry, N. and Parry, J. (1976). The Rise of the Medical Profession. London: Croom Helm.

Payne, G., Dingwell, R., Payne, J. and Carter, M. (1981). Sociology and Social Research. London: Routledge and Kegan Paul.

Perkins, B. E. (1958). *Gambling in English Life*. London, the Epworth Press.

Phillips, D.L. (1971). *Knowledge From What?* Chicago: Rand McNally.

Phillips, D.L. (1973). *Abandoning Method*. San Francisco: Jossey-Bass.

Punch, M. (1989). *The Politics and Ethics of Fieldwork*. Beverly Hills: Sage Publications.

Rands, J. and Hooper, M. (1990). *Survey of Young Peoples' Use of Slot Machines Within the Sedgemoor District in Conjunction with Somerset Youth Association*. Unpublished manuscript.

Rapaport, R.N and R. (1975). *Leisure and the Family Life Cycle*. London: Routledge.

Riley, D. and Shaw, M. (1985). *Parental Supervision and Juvenile Delinquency*. Home Office Research Study no. 83. London: H.M.S.O.

Roberts, K., Cook, F.G., Clark, S.G. and Semeonoff, E. (1977). *The Fragmentary Class Structure*. London Heinemann.

Robinson, D. (1972). *Sociological Theories of Dependence: An Illogical Notion?* In Hawks (ed.) *The Epidemiology of Drug Dependence*. W.H.O. Copenhagen.

Rosenstein R. and Reutter, J. (1980). *Gambling: An Adolescent Activity*. *Journal Of Adolescent Health Care*, 1, 180.



- Rosenthal, R.J. (1989). Pathological Gambling and Problem Gambling: Problems in Definition and Diagnosis. In Shaffer H., Stein S.A., Gambino B., Cummings T. N. (Eds.) *Compulsive Gambling: Theory and Practice*. Lexington, MA: Lexington Books.
- Rosten, L. (1967) The Adoration of the Nag. in Robert D. Herman (ed.) *Gambling*. New York: Harper Row.
- Saunders, D.M. and Turner, D.E. (1987). Gambling and Leisure: The Case of Racing. *Journal of Leisure Studies* 6, 281-299.
- Schutz, A. (1964). The Stranger: An Essay in Social Psychology in A. Schutz (ed.) *Collected Papers*, vol. 2. The Hague: Martinus Nijhoff.
- Scott, M.B. (1968). *The Racing Game*. Chicago, Aldine Publishing Company.
- Smith, J. and Abt, V. (1984). Gambling as Play. *Annals of the American Academy of Political and Social Sciences*, July, 474, 12-32.
- Smith, R. and Preston, F. (1984). Vocabularies of Motives for Gambling Behavior. *Sociological Perspectives* 27, 325-348.
- Spectrum Children's Trust (1988). *Slot Machine Playing in Children*. Taunton: Author.
- Szasz, T. (1967). *The Myth of Mental Illness*. New York: Dell.
- The Telegraph, Nov. 5 (1991). "Child Addicts Steal to Fund Gambling."
- Today Nov. 5 (1991). "Gambling Tragedy of the Arcade Addicts Aged 11".

- Walsh, D. (1972). Functionalism and Systems Theory. In Filmer, P., Phillipson, M., Siverman, D. and Walsh D. New Directions in Sociological Theory. London: Collier-Macmillan.
- Warde, A. (1990). Introduction to the Sociology of Consumption. *Sociology*, 24, 1, 1-4.
- Waterman, J. and Atkin, K. (1985). Young People and Fruit Machines. *Society for the Study of Gambling Newsletter* 7, 23-25.
- Wen Lang Li and Smith, M.H. (1976). The Propensity to Gamble: Some Structural Determinants. I. William R. Eadington (ed.) *Gambling and Society*. Illinois: Charles C. Thomas.
- Willis, P. (1977). *Learning to Labour*. Westmead: Saxon House.
- Wilson, B. (1966). *Religion in a Secular Society*. London: C.A. Watts and Co.
- Yeomans, T. (1989). *Adolescent Gambling Survey, Plymouth*. Devon and Cornwall Constabulary. Plymouth: author.
- Zola, I. (1963). Observations on Gambling in a Lower Class Setting. In Robert D. Herman (ed.) *Gambling*. New York: Harpers Row.

## APPENDIX I

LEISURE AND GAMBLING QUESTIONNAIRE

(Please do not write your name anywhere on this questionnaire)

PLEASE NOTE: ALL BETTING IN THIS SURVEY IS CONSIDERED BETTING FOR  
MONEY NOT FOR "FUN".

THIS QUESTIONNAIRE IS CONFIDENTIAL. NOBODY THAT YOU KNOW, OR WHO KNOWS YOU WILL SEE IT. WE DO NOT WANT YOUR NAME OR ADDRESS.

WHERE BOXES ARE PROVIDED PLEASE TICK THE CORRECT BOX. PLEASE TRY TO ANSWER ALL THE QUESTIONS THAT APPLY TO YOU. IF A QUESTION DOES NOT APPLY TO YOU THEN LEAVE IT BLANK.

PART 1

FIRST PLEASE TELL US A BIT ABOUT YOURSELF

1. Are you male or female?:

Male ☐ Female ☐

2. And how old are you? I am \_\_\_\_\_ years

3. Now, what is the name of your father's usual job? \_\_\_\_\_

4. Please describe the sort of work he does  
\_\_\_\_\_  
\_\_\_\_\_

5. What is the name of your mother's usual job? \_\_\_\_\_

6. And what sort of work does she do?  
\_\_\_\_\_  
\_\_\_\_\_

7. Do you live within walking distance of the town of Looe?

Yes ☐ No ☐

8. What is your religion? Would it be:

Christian (eg, Church of England, Methodist) ☐

Catholic ☐

Jewish ☐

Other (state which one) \_\_\_\_\_

I have no religion ☐

I dont know ☐

**PART 2**

HERE ARE SOME QUESTIONS ABOUT THE THINGS YOU LIKE TO DO IN YOUR SPARE TIME

9. When you have free time, who do you usually spend it with? (tick one)

Parents

☐

Brother(s) and/or sister(s)

☐

A boyfriend or girlfriend

☐

One close friend

☐

A group of friends of both sexes

☐

A group of friends the same sex as me

☐

I spend my free time on my own

☐

10. Do you feel bored because you have nothing to do in your spare time?

I am often bored

☐

I am sometimes bored

☐

I am seldom or never bored

☐

11. How much money do you usually have to spend each week (from pocket money, spare time job etc.)? Would it be:

Up to £1

☐

Over £1 up to £2

☐

Over £2 up to £5

☐

Over £5 up to £10

☐

Over £10 up to £20

☐

More than £20 - (please state how much)

-----

12. Please tell us how often you have done or gone to each of the following things in the last year by ticking one of the boxes for each activity.

	Never	Less than once a month	1 to 3 times a month	1 or 2 times a week	3 to 6 times a week	Every day
Youth club	1	2	3	4	5	6
Church service or religious meeting	1	2	3	4	5	6
Youth organisation like cubs, scouts, guides etc.	1	2	3	4	5	6
Meetings of a special hobby club	1	2	3	4	5	6
Meetings of a sports team or club	1	2	3	4	5	6
Pubs	1	2	3	4	5	6
Dances or discos	1	2	3	4	5	6
Parties	1	2	3	4	5	6
Theatre or cinema	1	2	3	4	5	6
Amusement arcades	1	2	3	4	5	6
Watching T.V.	1	2	3	4	5	6
Smoking cigarettes	1	2	3	4	5	6
Drinking alcoholic drinks	1	2	3	4	5	6
Playing a musical instrument	1	2	3	4	5	6
"Hanging around" seafont or streets	1	2	3	4	5	6
skateboarding/ cycling	1	2	3	4	5	6
other activity (say which)	1	2	3	4	5	6

☐ 17

☐ 18

☐ 19

☐ 20

☐ 21

☐ 22

☐ 23

☐ 24

☐ 25

☐ 26

☐ 27

☐ 28

☐ 29

☐ 30

☐ 31

☐ 32

☐ 33

13. And please tell us which of the following gambling games you have played for money in the last year by ticking one of the boxes for each activity

	Never	Less than once a month	1 to 3 times a month	1 or 2 times a week	3 to 6 times a week	Every day
Card games	1	2	3	4	5	6
Playground games eg. marbles, jacks coins up the wall	1	2	3	4	5	6
Games of skill such as snooker pool, golf, darts	1	2	3	4	5	6
Board games eg. Monopoly, Trivial Pursuits	1	2	3	4	5	6
Betting on horses or dogs	1	2	3	4	5	6
Fruit machines	1	2	3	4	5	6
Football pools	1	2	3	4	5	6
Other gambling game (say which) -----	1	2	3	4	5	6

☐ 34

☐ 35

☐ 36

☐ 37

☐ 38

☐ 39

☐ 40

☐ 41



**PART 3**

WE ARE ESPECIALLY INTERESTED IN AMUSEMENT MACHINES, WHICH HAVE BECOME VERY POPULAR AMONG YOUNG PEOPLE OVER THE PAST FEW YEARS

14. Please tell us if you have ever played on COIN\_OPERATED AMUSEMENT MACHINES ?

The machines we are interested in are VIDEO GAMES (eg. Robo Cop, Shinobi, Out Run etc.) and FRUIT MACHINES (sometimes called "gamblers" or "gambling machines")

	Yes	No
Video machines	1	2
Fruit machines	1	2

IF YOU HAVE NEVER PLAYED ON COIN-OPERATED AMUSEMENT MACHINES IN THE PAST YEAR,  
PLEASE GO TO PART 6, question no. 43.

15. How old were you when you first started to play on coin-operated amusement machines?

I started to play video machines when I was \_\_\_\_\_ years old

I started to play fruit machines when I was \_\_\_\_\_ years old

16. Where do you usually play amusement machines? (you may tick more than one box)

## Arcades

## Fish and chip shop

## Cafe

**Holiday camp**

10

**Pub**[illegible]

Other (please say where) \_\_\_\_\_

17. And how often do you play AMUSEMENT MACHINES IN AN ARCADE nowadays? Would it be:

	Never	Less than once a month	1 to 3 times a month	1 or 2 times a week	3 to 6 times a week	Every day
VIDEO GAMES	1	2	3	4	5	6
FRUIT MACHINES	1	2	3	4	5	6

2	2
3	3

44	45
40	47

- ☐ 48
- ☐ 49
- ☐ 50
- ☐ 51
- ☐ 52
- ☐ 53

18. When you play AMUSEMENT MACHINES IN AN ARCADE how much time do you usually spend in there?

56	57	58

19. How often do you play AMUSEMENT MACHINES IN OTHER PLACES (eg. fish and chip shops, cafes, pubs etc.)? Would it be:

	Never	Less than once a month	1 to 3 times a month	1 or 2 times a week	3 to 6 times a week	Every day
VIDEO GAMES						
FRUIT MACHINES						

59
60

### AMUSEMENT

20. And when you play COIN OPERATED MACHINES IN ANOTHER PLACE (eg. fish and chip shop, cafe, pub etc.) how long do you usually spend in there

61	62	63

21. When you play coin operated amusement machines, do you usually play:  
(You may tick more than one box)

	Alone	With friends	With parents	With brother / sister	With other relatives	With other players you meet
VIDEO MACHINES						
FRUIT MACHINES						

64	65	66	67	68
76	77	78	79	80

22. How much do you usually spend on coin-operated amusement machines IN ONE WEEK Would it be:

	Up to and inc. 50p	Over 50p up to £1	Over £1 up to £2	over £2 up to £5	Over £5 up to £10	Over £10 up to £20	More than £20 - how much?
VIDEO MACHINES							
FRUIT MACHINES							

76
77

1	2	3
---	---	---

2
---

23. What is the largest amount of money you have ever spent on amusement machines in one day? Would it be:

	Up to and inc. 50p	Over 50p up to £1	Over £1 up to £2	over £2 up to £5	Over £5 up to £10	Over £10 up to £20	More than £20 - how much?
VIDEO MACHINES	1	2	3	4	5	6	7
FRUIT MACHINES	1	2	3	4	5	6	7

5
6

#### PART 4

REMEMBER AS YOU ANSWER THESE QUESTIONS THAT YOUR NAME IS NOT ON THE PAPER. NOBODY WILL KNOW WHOSE ANSWERS THESE ARE.

24. Do you often find yourself thinking about playing amusement machines at odd times of the day and/or planning the next time you will play?

	Yes	No
VIDEO MACHINES	1	2
FRUIT MACHINES	1	2

7
8

25. Do you find that you need to spend more and more money on playing amusement machines?

	Yes	No
VIDEO MACHINES	1	2
FRUIT MACHINES	1	2

9
10

26. Do you become restless, tense, fed up, or bad tempered when trying to cut down or stop playing amusement machines?

	Yes	No	I have not tried to cut down/stop playing
VIDEO MACHINES	1	2	3
FRUIT MACHINES	1	2	3

11
12

27. Do you play amusement machines as a way of escaping from problems?

	Yes	No
VIDEO MACHINES	1	2
FRUIT MACHINES	1	2

13
14

28. After spending money on amusement machines do you play again another day to try and win your money back/ get a higher score?

	Every time	Most of the time	Less than half of the time	Never
VIDEO MACHINES	1	2	3	4
FRUIT MACHINES	1	2	3	4

15  
16

29. Do you lie to your family or friends to hide how much you play amusement machines?

	Yes	No
VIDEO MACHINES	1	2
FRUIT MACHINES	1	2

17  
18

30. Have you fallen out with members of your family, or close friends, because of playing amusement machines?

	Yes	No
VIDEO MACHINES	1	2
FRUIT MACHINES	1	2

19  
20

31. In the past year have you borrowed money to play on amusement machines?

	Never	Once or twice	3 to 5 times	5 to 10 times	more than 10 times
VIDEO MACHINES	1	2	3	4	5
FRUIT MACHINES	1	2	3	4	5

21  
22

32. If you borrowed money was it from the following people? (You may tick more than one box)

	Friends	Family	A stranger (eg. someone you met while playing machines)
VIDEO MACHINES	1	2	3
FRUIT MACHINES	1	2	3

23 24 25  
26 27

33. In the past year have you gone to someone for help with a serious money worry caused by playing amusement machines?

	Never	Once or twice	3 to 5 times	5 to 10 times	more than 10 times
VIDEO MACHINES	1	2	3	4	5
FRUIT MACHINES	1	2	3	4	5

28  
29

34. In the past year have you spent school dinner money, or money for bus or train fares, on amusement machines?

	Never	Once or twice	3 to 5 times	5 to 10 times	more than 10 times
VIDEO MACHINES					
FRUIT MACHINES					

30  
31

35. In the past year have you missed school to play amusement machines?

	Never	Once or twice	3 to 5 times	5 to 10 times	more than 10 times
VIDEO MACHINES					
FRUIT MACHINES					

32  
33

36. In the past year have you taken money from someone you live with, without their knowing, to play amusement machines?

	Never	Once or twice	3 to 5 times	5 to 10 times	more than 10 times
VIDEO MACHINES					
FRUIT MACHINES					

34  
35

37. In the past year have you stolen money from outside the family, or shoplifted, to play on amusement machines?

	Never	Once or twice	3 to 5 times	5 to 10 times	more than 10 times
VIDEO MACHINES					
FRUIT MACHINES					

36  
37

38. In the past year have you sold any of your possessions to play on amusement machines?

	Never	Once or twice	3 to 5 times	5 to 10 times	more than 10 times
VIDEO MACHINES					
FRUIT MACHINES					

38  
39

## PART 5

**ONLY FILL IN THIS SECTION IF YOU GO TO AMUSEMENT ARCADES. IF YOU DONT THEN LEAVE THIS SECTION BLANK AND GO ON TO PART 6 ON THE NEXT PAGE.**

39. Here are some of the reasons why some young people say they go to arcades. Please tick which reasons apply to you. (You may tick more than one box)

To play the machines

☐☐ a-c

To meet my friends (or "hang around")

☐☐ d-f

To get to know other people who like playing the machines

☐☐ g-i

To watch other people play

☐☐ j-l

Because I am bored, and have nothing else to do

☐☐ m-o

To smoke cigarettes with my friends

☐☐ p-r

To drink alcohol with my friends

☐☐ s-u

To get away from problems at home, school, with friends

☐☐ v-x

Other reasons (state which here)

---

---

☐ y-z☐

40. Do you go to arcades more often in the summer?

More often

☐

Same

☐

Less often

☐☐

41. When you have been in an arcade, have any of the following happened to you? (You may tick more than one box).

a) Approached by a stranger offering to lend money

☐☐ 1

b) Approached by a stranger asking you to steal

☐☐ 2

c) Approached by someone offering or selling items (eg. watches, clothes, personal HI FI)

☐☐ 3

d) Approached by a stranger who made you feel embarrassed or uncomfortable

☐☐ 4

e) Approached by someone offering drugs?

☐☐ 5

f) Involved in a fight

☐☐ 6

# PART 6

42. Do your parents know you play on amusement machines?

Yes ☐

No ☐

I dont know ☐

☐ 57

43. How do your parents feel about your playing on amusement machines?

They like it

☐

They dont mind

☐

They dont like it, but allow it

☐

They dont allow it

☐

I dont know how they feel about it

☐

☐ 58

44. Do either of your parents gamble? Please tick one box for each activity.

	Never	Less than once a month	1 to 3 times a month	1 or 2 times a week	3 to 6 times a week	Every day	I dont know
Football pools	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Betting on horses or dogs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fruit machines	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Games of skill such as snooker pool or darts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other gambling game (say which) -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

☐ 59

☐ 60

☐ 61

☐ 62

☐ 63

PART 7

45. Are you yourself worried that you play VIDEO MACHINES too much?

Yes ☐

No ☐

☐ 64

46. Are you yourself worried that you play FRUIT MACHINES too much?

Yes ☐

No ☐

☐ 65

47. What do you like/dislike about VIDEO MACHINES?

☐ 66  
☐ 67  
☐ 68  
☐ 69

48. What do you like/dislike about FRUIT MACHINES?

☐ 70  
☐ 71  
☐ 72  
☐ 73

49. What do you like/dislike about ARCADES?

☐ 74  
☐ 75  
☐ 76  
☐ 77

THANKYOU VERY MUCH FOR YOUR HELP

IMPORTANT INFORMATION

If you think you may have a gambling problem please dont feel bad about it, it can happen to anyone. Please call OPEN DOOR on 9-671914 between 9a.m. and 5p.m. where someone is waiting to help you.

OPEN DOOR offers free, and completely confidential help for young people with such difficulties.



# Question time

Television quiz and game shows became popular in the 1950s with shows such as the American show *The \$64,000 Dollar Question* and its British version *Double Your Money*, and have remained near the top of the ratings ever since. Listed below are some quiz shows.

T	R	M	R	O	F	E	H	T	F	O	P	O	T	Y	C
S	R	E	T	S	U	B	K	C	O	L	B	X	A	Z	K
E	M	A	S	F	R	Y	A	L	P	S	D	L	I	H	C
R	I	M	U	Z	I	U	Q	P	O	P	S	B	R	K	W
A	Z	L	A	A	Y	U	F	O	E	S	T	E	N	H	S
U	E	D	T	E	D	N	R	A	A	E	D	A	A	N	T
Q	U	S	N	B	T	W	H	L	T	I	L	T	W	A	C
S	L	P	Y	I	A	R	C	B	R	B	S	T	W	M	I
Y	C	O	P	S	M	T	E	T	Y	M	T	H	O	E	D
T	A	R	O	T	S	R	S	T	Y	E	A	E	R	T	D
I	S	T	E	R	R	R	E	L	S	T	H	T	L	H	A
R	U	B	I	E	A	K	I	T	S	A	S	E	D	A	Y
B	E	F	L	T	N	N	M	N	S	A	M	A	W	T	L
E	V	I	S	A	E	T	E	C	R	A	B	C	I	T	L
L	I	Z	L	B	F	W	E	A	T	O	M	H	S	U	E
E	G	B	G	O	S	Z	Y	S	L	P	T	E	E	N	T
C	R	O	T	C	A	F	N	O	T	P	Y	R	K	E	W

*Beat the Teacher*  
*Blankety Blank*  
*Blockbusters*  
*Celebrity Squares*  
*Child's Play*  
*First Class*  
*Give us a Clue*

*Krypton Factor*  
*Mastermind*  
*Masterteam*  
*Name That Tune*  
*Pop Quiz*  
*Screen Test*  
*Starstrider*

*Telly Addicts*  
*Top of the Form*  
*What's my Line?*  
*What's News?*  
*Worldwise*