

REPORT
on
A Study of Hong Kong People's
Participation in Gambling Activities

Centre for Social Policy Studies of
The Department of Applied Social Sciences
&
The General Education Centre of
The Hong Kong Polytechnic University

Commissioned By Home Affairs Bureau
March 2002*

*This is a revised version of the Gambling Report released in September 2001.

Table of Contents

Executive Summary	3
Chapter I : Introduction	11
Chapter II : Methodology	14
Chapter III : Findings of General Population Survey	20
Chapter IV : Findings of School Survey	44
Chapter V : Findings of Qualitative Study	71
Chapter VI : Discussion and Conclusion	98
Bibliography	116
List of Research Team Member	119
Appendix I : Questionnaire for General Public Survey (in Chinese)	
Appendix II : Invitation Letters to Secondary School Principals	
Appendix III: Questionnaire for School Survey (in Chinese)	
Appendix IV: Interview Guide for Pathological Gamblers (in Chinese)	
Appendix V : Interview Guide for Family Members of Pathological Gamblers (in Chinese)	
Appendix VI: Interview Guide for Social Gamblers (in Chinese)	

Executive Summary

1. Background and Objectives

1.1 In February 2001 the Centre for Social Policy Studies of the Department of Applied Social Sciences and the General Education Centre of The Hong Kong Polytechnic University were commissioned by the Home Affairs Bureau (HAB) of the Hong Kong Special Administrative Region (HKSAR) Government to conduct *A Study of Hong Kong People's Participation in Gambling Activities*.

1.2 The main objectives of this study include:

- i. to gauge the perception of gambling among the general (aged 15-64) and the underage (under 18) population and their gambling behaviour;
- ii. to understand the impact of different forms of gambling (including authorized, social and illegal gambling, within and outside Hong Kong) on gamblers;
- iii. to examine the definition of 'pathological' gambling with reference to the local context;
- iv. to gauge the prevalence of pathological gambling among the general population and among the underage in Hong Kong and compare the situation with other jurisdictions;
- v. to investigate the characteristics of pathological gamblers, the onset and the course of pathological gambling, and the impact of pathological gambling on the gamblers and their families; and
- vi. to identify ways to tackle and prevent pathological gambling in Hong Kong and measures to help pathological gamblers, in light of overseas experience and taking into account local circumstances.

2. Research Design and Sampling Method

2.1 As stipulated in the study brief issued by the HAB, the research design of this study consists of four parts:

Part I was a telephone interview with a random sample of 2,004 Hong Kong inhabitants aged 15 to 64, and the margin of error (sampling error) was about $\leq \pm 2.2\%$.

Part II was a school survey in which 2,000 students who were born in or after the year of 1983 were invited to fill in a structured and self-administered questionnaire.

Part III was a qualitative study in which twenty pathological gamblers and six of pathological gamblers' family members, together with ten social (non-pathological) gamblers, were recruited to participate in an in-depth interview.

Part IV was mainly a comparison of the major findings derived from the previous three parts with other jurisdictions.

3. Major Findings

- 3.1 *Results of the general population survey* indicated that gambling activities were very common in Hong Kong. Almost four out of five respondents (78.0%) had participated in at least one of the thirteen gambling activities listed in the survey. The three most popular form of gambling were Mark Six (64.2%), social gambling (e.g. playing Mahjong and cards with friends and relatives) (45.9%) and horse racing (30.4%).
- 3.2 While all the 13 gambling activities had money at stake, they were perceived as being of very different natures. Most of the respondents saw Mark Six lottery (62.5%) and betting on horse racing (78.8%) as 'gambling' activities. However, they had different opinions with regard to the nature of other gambling forms. A very large majority of respondents viewed betting on casino games (86.9%) and soccer matches (83.1%) primarily from the perspective of the 'excitement' they provided. Playing Mahjong or cards with friends and relatives, or what we called social gambling, was largely seen as a way to socialize with other people (75.9%).
- 3.3 Although we have a considerable size of respondents participating in gambling activities, it does not necessarily imply that the local population spends a lot of money on gambling. The median monthly betting money spent varied according to the form of gambling concerned (\$50 on Mark Six; \$100 on casinos in Macau and on social gambling respectively; \$150 on casino ships; \$200 on horse racing; \$300 on soccer betting with local bookmakers; \$750 on soccer betting with offshore bookmakers).

- 3.4 Regarding whether government should provide authorized outlets for soccer betting, the proportion supporting the proposal was larger than the proportion against it (51.2% as against 36.2%). Nearly one-fourth (23.1%) of respondents indicated they would probably/certainly participate in soccer betting if legalized outlets existed.
- 3.5 Concerning the prevalence of pathological gambling in Hong Kong, survey results indicated that 1.85% of the 2,004 respondents could be classified as “probable pathological gamblers” (DSM-IV scoring 5 or above). When asked about the forms of gambling where they experienced the problems, 48.6% of the 37 probable pathological gamblers named horse racing. Social gambling (27.0%) and Macao casinos (18.9%) ranked the second and the third.
- 3.6 Among the gambling population, the “probable problem gamblers” (DSM-IV scoring 3 or 4) or “probable pathological gamblers” (DSM-IV scoring 5 or above) were more likely to be male, the less educated (Form 3 or below), having a personal monthly income (\$10,000 or above). Insofar as the form of gambling is concerned, the probable problem and pathological gamblers were more likely to be involved in horse racing gambling, soccer matches betting or casino gambling.
- 3.7 The school survey found that the underage population also participated in gambling quite actively. About half (49.2%) had participated in social gambling in the past year. One-fifth (19.4%) of the respondents were involved in buying Mark Six in the past year. Among those who admitted gambling and disclosed how they were involved in buying Mark Six ticket, 76.3% did so with the assistance of family members.
- 3.8 Survey result also revealed that the underage was more actively involved in sport gambling (soccer betting 5.7% and betting on other ball games 3.9%) and Internet betting (online casino 4.6%), as compared with the general population.
- 3.9 Regarding the youngsters’ perception of gambling, the underage tended to characterize all gambling activities as primarily gambling except social gambling and buying Mark Six tickets.

- 3.10 Two-fifths (40.1%) of our underage respondents accepted the idea of providing authorized outlets for betting on soccer matches, which has become more and more popular in the territory. However, there were also a significant proportion of youngsters (28.5%) who objected to the idea to provide authorized outlets for betting on soccer matches.
- 3.11 The estimated prevalence rate of probable pathological gambling among the underage was 2.6%, which was higher than that of the adult (aged 18-64) population (1.85%). This phenomenon also occurs in other jurisdictions. Respondents being classified as probable pathological gamblers were found to have very different perception about gambling, as compared to those who had not gambled in the past twelve months. The former tended to understate the nature of gambling and put more emphasis upon other attributes of the activities such as entertainment and excitement. Besides, the underage probable pathological gamblers were found to more likely come from a gambling environment (i.e. where family members or friends were involved in some forms of gambling).
- 3.12 *The qualitative study* found that a high proportion of the pathological gamblers picked up gambling skills (e.g. playing mahjong and card, etc) from their parents, relatives or neighbors at the very young age. They regarded gambling as socially and culturally acceptable behavior that facilitated social interactions and induced pleasure during leisure time. All the pathological gamblers were involved in social gambling for a period of time before they lost control over gambling.
- 3.13 A higher proportion of the pathological gamblers had unsatisfactory financial and stress management than the social gamblers. They also had problems in exercising self-control over gambling. They would borrow money from both legal and illegal lending sources in order to chase after losses.
- 3.14 Pathological gamblers were in general over-confident of their skills and luck in winning, and tended to recall winning experiences and forget losing experiences. There was an urge to gamble more frequently and/or place increasingly larger bets to achieve the desired level of excitement.

- 3.15 The adverse effects of pathological gambling were alarming, including huge debts (ranged from \$20,000 to \$3,000,000) and bankruptcy, serious relationship problems (e.g., separation, divorce, poor parent-child relationship and social isolation of the pathological gamblers, etc), disruption in work (e.g., dismissal, reduced prospect for promotion due to low motivation in work, and unsatisfactory work performance), depression and mental health problems (e.g., insomnia, suicide, mood disorders) faced by the pathological gamblers, their spouses and family members.
- 3.16 A high percentage of the pathological gamblers had been involved in social gambling for a considerable period of time before gambling progressed towards a pathological state. A significant stressor or greater exposure to gambling often precipitated the sudden onset. This critical stage was often characterized by impressive winning experiences that caused an increase in the frequency and the amounts of bets. Then the pathological gamblers were preoccupied with gambling and getting money with which to gamble, to chase after losses and to settle debts.
- 3.17 Pathological gamblers reported that the relapse rate was high when all or a significant portion of debts was cleared, and at a six month abstinence period.
- 3.18 All the pathological gamblers we had interviewed recognized that they needed help but were not aware of any government or non-government treatment and services. A high percentage of the pathological gamblers were encouraged and referred to seek help by their spouse, family members or close relatives.
- 3.19 As compared with other jurisdictions, the scenarios the participation of gambling activities of Hong Kong people were in line with experiences overseas. The prevalence of legal and authorized gambling (that is, Mark Six and local horse racing) among the general population aged 15-64, was 67.6% in Hong Kong. This was higher than USA (63%) and comparable to Germany (67%), slightly lower than UK (72.0%), but definitely lower than Sweden (89.0%), Australia (80.0%) and New Zealand (85-90.0%). Even if social gambling is included, the prevalence rate of gambling is 77.3% in Hong Kong. The percentage was still below that of Sweden, Australia and New Zealand.

- 3.20 The prevalence rate of potential pathological gamblers among the interviewees within the age range 15-64 was 1.85%. It was lower than Australia (2.3%), but higher than the United States of America (1.1%).
- 3.21 The present qualitative survey as well as similar investigations in US and Germany established the importance of family support to the pathological gamblers, on the one hand, and also the need for counseling the families, precisely because the latter are menaced by the gamblers and easily become disoriented. In fact, both US and Germany started the programs of rehabilitation and support for pathological gamblers in the 1970s. As we have no tailor-made support for pathological gamblers in Hong Kong, there is an urgent need for such services.
- 3.22 Our qualitative study showed that 100.0% of the pathological gamblers interviewed had borrowed money from banks and credit institutions, as well as owing large sums of money to credit card institutions. Three-quarters had borrowed money from loan sharks. The debts accumulated by them were normally at the level of several million dollars. This certainly presents an alarming picture of the drastic harm of pathological gambling, which is also substantiated by case studies of pathological gamblers in US, UK, Germany and Australia.

4. Recommendations to the HKSAR Government

On the basis of the findings of this comprehensive study, the research team makes the following recommendations to the HKSAR Government:

- 4.1 We recommend that legal gambling channels should be adequate but limited only to people above 18 years of age, taking into consideration that legalization aims to provide punters with the necessary safety and fairness, and to keep organized crime away.
- 4.2 We recommend that liberalization of gambling policy should be measured and deployed as a defensive strategy against crime and for the benefit of the punters and society as a whole. The legalization of soccer betting is a delicate issue, although a high proportion of the general public is open-minded enough to accept

its legalization. However, legalization may lead to at least an immediate rise of gambling participation, and its influence on adolescent gambling must also be taken into account. Even if legalization of soccer betting is deemed a defensive strategy, close monitoring of its development and impact should be undertaken and the possible consequences have to be fully assessed.

- 4.3 We recommend that the Government should forbid promotion activities and advertisements for legal and illegal gambling that may mislead the public, or induce the underage to participate in gambling. For the higher vulnerability of the underage was reflected by a higher prevalence in pathological gambling.
- 4.4 We recommend that funding should be provided to conduct regular researches to understand the gambling habits of Hong Kong people, as well as the gambling and life patterns of problem and pathological gamblers, including both social and economic impacts.
- 4.5 We recommend that the Government should closely monitor through research funding the gambling behaviour of the underage so as to keep in touch with the further evolvement of adolescents' involvement in gambling.
- 4.6 We recommend that the Government should provide a good percentage (or GDP per capita) of its revenue from gambling or set up a public trust fund to launch and maintain help-lines, emergency services and treatment programmes for problem and pathological gamblers. Furthermore, services should be extended to the immediate members of the families of the problem and pathological gamblers.
- 4.7 We recommend that the Government should make it mandatory for all legal gambling institutions and their off-course betting establishments to put up signs of warning against excessive gambling and information about help-lines in prominent locations.
- 4.8 We recommend that the Government should launch TV and other media campaigns warning the public against excessive gambling and adolescents against illegal gambling and indulgence in gambling.

- 4.9 We recommend that the Government should make it mandatory for all printed media providing legal gambling information to the public to reserve a position to place warnings against excessive gambling and information about help-lines.
- 4.10 We recommend that the Government should initiate the making and use of teaching kits to educate students about the nature and impact of gambling as well as the nature and harm of pathological gambling in their social studies or ethics classes.
- 4.11 We recommend that the Government should undertake measures to put a stop to offshore on-line casinos and other related gambling forms. Local websites should be forbidden to maintain links with offshore on-line casinos and other related gambling forms.
- 4.12 We recommend that banks, credit institutes and credit card institutes should be forbidden to provide service for offshore on-line casinos and other gambling forms. Another effective measure is that the Government can refrain from the legal enforcement of debt payment to these financial institutes whenever overseas debts are incurred due to offshore on-line gambling.
- 4.13 We recommend that the Government should examine the possibility that banks, credit institutes and credit card institutes should be allowed to exchange information about the loan credibility of pathological gamblers. They should also consider setting up loan exclusion system for pathological gamblers upon information from pathological gamblers themselves or their immediate family members.
- 4.14 We recommend that the Government should set up a Committee for Gambling Affairs to propose social policy for gambling, support researches and education related to gambling, treatment or counseling to pathological gamblers and their families, and finally guarantee fairness and address the issue of free competition in legal gambling service.

Chapter I: Introduction

Background

- 1.1 Gambling has a long history in Hong Kong. It is also one type of social behavior deeply rooted in Hong Kong Chinese culture. Betting on horse racing, buying Mark Six tickets and playing mahjong with friends are popular ways Hong Kong people spend their spare time and money. By and large, gambling has been a part of life for many people in Hong Kong.
- 1.2 Few will dispute that gambling provides fun and excitement for many Hong Kong people and contributes significantly to the government revenue each year through the collection of betting duty. The gambling money collected funds many good causes for the local community. However, the fact that some people gamble in ways that may do harm to themselves, their families and even the community should not be overlooked. Many social problems and individual difficulties are found to be closely, or even directly, related to gambling. Appeals to set strict limits to gambling and to devote more efforts to combat gambling have constantly been voiced.
- 1.3 While the public continues their debates about the pros and cons of gambling, illicit activities such as gambling on soccer matches, internet gambling, or betting on horses and the Mark Six through illegal bookmarkers and extraterritorial betting have recently become more and more popular. It is undeniable that, to a certain degree, appropriate legalization would help reduce criminality and hit the activities of the underworld on the one hand, and save policing costs substantially on the other. Yet, the social implications of providing more legal betting avenues create and draw increasing public attentions upon the risks of excessive gambling and potential problems that go hand-in-hand with gambling, especially the so-called ‘problem’ or ‘pathological’ gambling.

- 1.4 Finally, it has been widely argued that the consequences of early exposure to gambling have a negative effect on young people's future development. Ironically, with an increasing institutionalization of gambling in the society, modeling on the gambling behavior of the adults is also recognized as a reason for the increasing spread of adolescent gambling. The involvement of the underage population in gambling activities and their perception of gambling have attracted widespread public concerns.

Objectives of the study

- 1.5 With all the above-mentioned problems and concerns in mind, the General Education Centre and the Centre for Social Policy Studies of the Department of Applied Social Sciences at The Hong Kong Polytechnic University were commissioned by the Home Affairs Bureau of the HKSAR Government to conduct a study on **Hong Kong People's Participation in Gambling Activities** in February 2001. The objectives of this study are as follows:

- i. to gauge the gambling behavior of the general population and the underage – such as the number of people who gamble, the kind of gambling activities they participate in, the frequency they gamble, and the amount of money they spend in gambling, etc.;
- ii. to gauge the perception of gambling among the general population and the underage;
- iii. to understand the impact of different forms of gambling (including authorized, social as well as illegal gambling, both within and outside Hong Kong) on gamblers and compare the case with other jurisdictions;
- iv. to examine the definition(s) of 'pathological' gambling with reference to the local context;
- v. to gauge the prevalence of pathological gambling among the general population and the underage in Hong Kong and compare the case with other jurisdictions;

- vi. to understand the characteristics of pathological gamblers, the onset and the cause of pathological gambling, as well as the impact of pathological gambling on the gamblers, their families and the community; and
- vii. to identify ways to tackle and prevent pathological gambling in Hong Kong and suggest measures to help pathological gamblers, in the light of overseas experience and taking into account local circumstances.

Chapter II: Methodology

Research design

- 2.1 As stipulated in the study brief issued by the HAB, the research design of this study consists of three parts. In part one, researchers need to conduct a telephone interview with an effective sample of 2,000 Hong Kong inhabitants aged from 15 to 64. A structured questionnaire comprising 55 opinion questions on top of a standard set of demographic questions is employed to collect public's views on the prevalence of gambling activities in Hong Kong (Appendix I).
- 2.2 In addition to the general population, the involvement of the underage in gambling also arouses huge public concerns. Therefore, the target group for part two of this study is the underage population, especially students in secondary forms. A self-administered structured questionnaire comprising 74 opinion questions on top of a standard set of demographic questions is employed to find out the attitudes of students towards gambling activities (Appendix III), and an effective sample size of at least 2,000 respondents is preferred for this quantitative study.
- 2.3 Apart from two quantitative surveys, researchers are also requested to carry out a qualitative study of pathological gamblers so as to elucidate the onset and the course of pathological gambling and explore the needs for treatment or services related to gambling related problems. As many pathological gamblers may not only get themselves into serious troubles but also cause harm to their families, part three of this research will conduct some in-depth interviews with the close relatives of pathological gamblers and investigate the impact of pathological gambling on individuals and families.

Data collection and sampling method for general public survey

2.4 The sampling method for general public survey is as follows: first, researchers adopted the modified random digit dialing (MRDD) for generating the list of telephone numbers. The whole process of sampling and data collection can be divided into four different phrases.

Phrase1: to draw randomly an adequate large sample size, say Sample Alpha, from the recently released residential telephone directory published by the PCCW.

Phrase2: to truncate the last two digits of each telephone number in the Sample Alpha and to concatenate them by two independent random digits so as to make the number a normal telephone number used in Hong Kong, i.e., eight-digit format. The transformed telephone numbers comprised a sample called Sample Beta.

Phrase3: to allocate randomly the numbers in Sample Beta into the telephone interviewing computer program. The interviewers were asked to dial the numbers assigned by the computer program. When the dialed telephone numbers had been verified as the target, thoroughly trained telephone interviewers would use the pre-defined 'Kish-Grid' to select one eligible respondent in each household dialed.

The Dialing Results: The total number of telephone lines dialed = 15,316. The margin of error (sampling error) is about $\leq \pm 2.2\%$. The composition of this figure was as follows:

Completed eligible interviews = 2,004

Refused eligible units (including partial interviews) = 1,487

Refused at the very beginning (not-yet verified the eligibility) = 853

Lines in problem (non-existing lines or odd tones) = 2,228

Non-target telephone lines (business, fax or datel lines etc.) = 2,190

No answer (dialed two to six attempts in different sessions) = 6,554

$$\text{The Cooperation Rate}^1 = \frac{2004}{2004 + 1487} = 57.4\%.$$

¹ Groves, R. (1989). *Survey Errors and Survey Costs*. John Wiley & Sons. p.141.

Data collection and sampling method for school survey

- 2.5 For school survey, researchers downloaded a list of secondary schools compiled and issued by the Education Department². An invitation letter in both Chinese and English (Appendix II) was sent to all the principals of secondary schools in Hong Kong on June 4, 2001. From then onward, a continuing process was set up to receive the replies from the school principals. A reminder was issued to them at the beginning of July 2001 to ensure all school principals had acknowledged the survey, and thereby raising the response rate.
- 2.6 Whenever a school principal accepted the invitation to take part in the survey, researchers would contact him/her for information about the distribution of classes in their schools. According to the data collected, we proceeded to conduct cluster random sampling in the lower forms (S1 to S3) and the higher forms (S4 & S6 only as S5 & S7 had already left for public examinations). The sampling unit was therefore naturally the classes, for example, F.1A, F.1B and so forth.
- 2.7 One and only one class was randomly drawn for the survey from each school. Self-administered questionnaire was conducted in each sampled class. All the students were asked to fill in the questionnaire at the same site and period of time in order to lower the possibility of measurement errors.
- 2.8 Sixty-eight out of the total 564-targeted secondary school principals accepted the invitation and allowed researchers to go to their schools to conduct the survey, and students involved amounted to 2,174. It had been taken into consideration that some students in their secondary forms were already over 18 years old, and therefore should not belong to the underage population. Among all 2,174 respondents, 174 respondents indicated that they were born before 1983, meaning that they were 19 years old or above at the time of the survey.
- 2.9 As this study's main concern is about the underage involvement in gambling activities, these 174 'overage' students were excluded from the following analysis. In other words, there were 2000 valid cases for the school survey.

² Available at http://www.ed.gov.hk/ednewhp/school_all14.htm.

2.10 One caveat of this method of data collection is the ‘self-selection bias’ – the willingness of the school principals in allowing his/her students to take part in the survey might affect the quality of data. It is therefore necessary to carry out data assessment by comparing the distributions of the data collected with the data issued by the Census and Statistics Department and the Education Department. Below is the comparison together with some notes on the results.

2.11 As regards the status of sex, among the total 1,998 students who indicated their sex, male had a slightly higher percentage (52.2%) than female (47.8%). This sex status ratio was in fact very close to the numbers estimated by the Census and Statistics Department at the end of year 2000 which recorded a male and female distribution of 51.5% against 48.5%.

Sex	School Survey	C&S Dept (estimated as at the end of 2000)³
Male	1,043 (52.2%)	277.0 x 1,000 (51.5%)
Female	955 (47.8%)	261.2 x 1,000 (48.5%)

http://www.info.gov.hk/censtatd/chinese/hkstat/fas/pop/by_age_sex.htm

2.12 As regards the lower and higher forms in school, the distribution of the sample was also quite similar to the data released by the Education Department, although S1-S3 students were a bit over represented.

Class / Form	School Survey	Education Department (2000/2001)
S1-S3	1,173 (58.6%)	242,915 (53.3%)
S4&S6	827 (41.4%)	213,177 (46.7%)

http://www.ed.gov.hk/ednewhp/resource/key_statistics/English/secondary_education.htm

2.13 In terms of age distribution, again, the sample collected was quite similar to the figures provided by the Census and Statistics Department at the end of year 2000, despite the fact that the age group 13-14 had been under-represented in both samples.

Age	School Survey	C&S Dept (estimated as at the end of 2000)
13-14	795 (39.8%)	173.0 x 1,000 (32.1%)
15-18	1,205 (60.2%)	365.3 x 1,000 (67.9%)

http://www.info.gov.hk/censtatd/chinese/hkstat/fas/pop/by_age_sex.htm

³ The figures are derived from the data released by the Census and Statistics Department at the end of 2000 and the age group they covered is from 13 to 18.

Method of qualitative study on social & pathological gamblers

- 2.14 The researchers have conducted altogether thirty-six in-depth interviews in this study from late April to late July 2001: twenty interviews with pathological gamblers (1 female, 19 males), ten with social gamblers (4 females, 6 males) and six with family members of pathological gamblers (4 wives, 1 husband, 1 daughter).
- 2.15 Seventeen pathological gamblers were referred by a self-help Taxi-drivers' Christian Fellowship called 「職業司機團契」; one by a family counseling agency, another by a pathological gambler, and one come from a list of probable pathological gamblers identified by a parallel telephone survey on the general population undertaken in May 2001. All these twenty interviewees had engaged in probable pathological gambling in the past year.
- 2.16 An interview guide (Appendix IV) was tailor-made to collect data on the process of onset, development, maintenance or quitting of pathological or social gambling. Data collection also focused on gambling attitudes, perceptions of winning, cognition or values on money and materialistic satisfaction, skills in financial management, personal life goals and aspirations, sources of life satisfaction and strategies of stress management, etc. The gamblers' views on the impact of gambling on themselves, their families, and work performance were investigated, and their comments and suggestions for treatment and related services were collected.
- 2.17 Interviews with six family members of five pathological gamblers were conducted by using another interview guide (Appendix V) to collect data on the effects of pathological gambling on family relationship, family finance and the mental health state of individual family members.
- 2.18 The average time spent on either a family interview or an interview with a gambler was about 2 hours. All the interviewees were asked to fill in a brief self-administered questionnaire on essential socioeconomic data (e.g. sex, age, formal education and monthly income) upon completion of the interview.

2.19 Interviews with ten social gamblers were also conducted. Six adult social gamblers were recruited from the general public survey, two adolescent gamblers were recruited from the school survey, and another two adult gamblers were recruited from the referrals by members of the research team. An interview guide (Appendix VI) was designed to collect social gamblers' patterns of involvement in gambling and their perception of the nature of different forms of gambling.

2.20 Members of the research team were responsible for conducting all in-depth interviews. The process of interview was taped after the interviewees had given their consent, and confidentiality was reassured. Tapes were then transcribed and analyzed.

Chapter III: Findings of General Population Survey (Age Range of 15 to 64)

Introduction

Gambling activities are very popular in Hong Kong. Playing Mahjong or cards with friends and family members – what we call social gambling – are common activities found everywhere. In addition to the two authorized channels – namely horse racing run by the Hong Kong Jockey Club and Mark Six Lottery run by the Hong Kong Lotteries Board, unauthorized activities such as gambling on soccer matches, Internet gambling, and extraterritorial betting have recently become widespread. Moreover, many Hong Kong people visit Macau casinos and casino ships to bet. Meanwhile, betting on horse racing and Mark Six through illegal bookmarkers is not uncommon in the local community.

In this chapter the main task is to find out the gambling behavior of the general public and examine how people look at gambling. We will also look into what kind of gambling activities are most attractive to local gamblers and how much money they spend on gambling so as to gauge the impact of different forms of gambling, including authorized, social and illegal gambling, both within and outside Hong Kong.

Profile of respondents

- 3.1 About half of the respondents to the survey were male and half were female. Table 3.1 shows that there was an almost equal distribution of sex in our sample.
- 3.2 About one-third (35.3%) of respondents belonged to the age group that ranged from 18 to 34, and a slightly higher percent (39.2%) fell into the age range within 35-49. Sixteen percent were from 50 to 64, and less than one-tenth (9.5%) were from 15 to 17 (Table 3.2).
- 3.3 Almost sixty percent (58.2%) were married, and the remaining 41.9%, including the single, the separated/divorced and the widowed, can be classified as the non-married (Table 3.3).

3.4 Table 3.4 shows the residential housing types of respondents. Nearly forty per cent (38.5%) lived in self-owned private housing and one-third (33.8%) lived in public housing.

Table 3.1: Distribution of Respondents by Sex

Sex	%	Frequency
Male	49.9	1000
Female	50.1	1004
Total	100.0	2004

Table 3.2: Distribution of Respondents by Age

Age Group	%	Frequency
15-17	9.5	187
18-34	35.3	696
35-49	39.2	771
50-64	16.0	315
Total	100.0	1969

Table 3.3: Distribution of Respondents by Marital Status

Marital Status	%	Frequency
Never Married	39.7	792
Married	58.2	1163
Separated/ Divorced	1.7	33
Widowed	0.5	9
Total	100.1	1997

Table 3.4: Distribution of Respondents by Housing Types

Housing Types	%	Frequency
Public Housing	33.8	678
Home Ownership Scheme	16.7	334
Private Housing (Owned)	38.5	771
Private Housing (Rented)	5.3	107
Quarters	1.6	32
Village / Squatters	3.6	73
Others	0.4	9
Total	100.0	2004

3.5 Table 3.5-7 showed the education level, employment status and occupation of respondents. The majority were employees (53.7%) and had received secondary school education (57.8%).

Table 3.5: Distribution of Respondents by Education

Education Level	%	Frequency
Non-educated / Informal Education	1.2	23
Primary / Kindergarten	12.2	244
Junior Secondary School (F.1-F.3)	20.6	411
Senior Secondary School (F.4-F.5)	37.2	744
Matriculation (F.6-F.7 / Technical Institutes)	6.9	137
College (Non Degree)	4.8	96
University or above	17.2	344
Total	100.0	1999

Table 3.6: Distribution of Respondents by Employment Status

Status	%	Frequency
Employer	2.5	50
Employee	53.7	1068
Self-employed	5.9	117
Unemployed	5.0	100
Retired	3.1	62
Housekeeping	14.2	284
Students	15.5	308
Total	100.0	1989

Table 3.7: Distribution of Respondents by Occupation

Occupation	%	Frequency
Managers and Administrators	13.5	163
Professionals	13.7	165
Associate Professionals	7.2	87
Clerks	24.5	295
Service Workers and Shop Sales Workers	16.1	194
Agricultural and Fishery Skilled Workers	0.4	5
Craft and Related Workers	7.4	89
Plant and Machine Operators and Assemblers	7.6	92
Elementary Occupations	6.1	74
Others	3.3	40
Total	100.0	1204

3.6 The personal income and family income of respondents varied from a few thousand to over fifty thousand dollars. The median monthly of personal income was \$12,000, while the median monthly family income was \$23,000 (Table 3.8-9).

Table 3.8: Distribution of Respondents by Monthly Personal Income

HK Dollars	%	Frequency
Below 5,000	5.4	57
5,000-9,999	20.0	213
10,000-14,999	27.5	293
15,000-19,999	14.1	150
20,000-24,999	13.3	141
25,000-29,999	3.4	36
30,000-34,999	5.6	60
35,000-39,999	2.0	21
40,000-44,999	2.8	30
45,000-49,999	1.0	11
50,000 or above	4.9	52
Total	100.0	1064

Table 3.9: Distribution of Respondents by Monthly Family Income

HK Dollars	%	Frequency
Below 5,000	3.2	48
5,000-9,999	7.7	116
10,000-14,999	16.5	247
15,000-19,999	12.1	181
20,000-24,999	16.9	253
25,000-29,999	6.3	94
30,000-34,999	10.8	162
35,000-39,999	3.6	54
40,000-44,999	5.3	79
45,000-49,999	2.9	44
50,000 or above	14.9	223
Total	100.0	1501

Overall participation in gambling activities

- 3.7 Results indicated that, on the whole, gambling was popular in Hong Kong. Out of 2,004 respondents, 1,563 reported participation in gambling in the past year. This constituted 78.0% of the sample. Only 21.8%, that is, 436 respondents, had not been involved in any form of gambling listed in the survey in the past twelve months.
- 3.8 Results also indicated that Mark Six was the most popular form of gambling in Hong Kong, followed by social gambling and horse racing. As shown in Table 3.10, a majority (64.2%) of the respondents had bought Mark Six in the past year and the percentage was considerably higher than those of the other two forms, which were 45.9% and 30.4% respectively.

Table 3.10: Distribution of Respondents by Participation Rate in Gambling Activities (%)

Gambling Activities	Ever	Never	Forgotten	Total (N)
Mark Six	64.2	35.3	0.4	100.0 (2004)
Illegal Mark Six	0.4	99.6	0.0	100.0 (2002)
Horse Racing	30.4	69.6	0.0	100.0 (2004)
Illegal Horse Racing	0.5	99.5	0.0	100.0 (2004)
Horse Racing (Macau)	0.9	99.1	0.0	100.0 (2004)
Soccer Betting with Local Bookmakers	1.6	98.2	0.1	100.0 (2003)
Soccer Betting with Offshore Bookmakers	1.3	98.5	0.1	100.0 (2004)
Mahjong House	1.2	98.6	0.2	100.0 (2000)
Casino Ship	4.3	95.6	0.0	100.0 (2003)
Casino (Macau)	12.1	87.8	0.1	100.0 (2004)
Online Casino	0.6	99.4	0.0	100.0 (2004)
Casino (Local Illegal)	0.3	99.6	0.1	100.0 (2004)
Social Gambling	45.9	53.9	0.2	100.0 (2004)

Gambling at authorized, unauthorized, and illegal outlets

- 3.9 Regarding Hong Kong people's preferred forms of gambling, it is important to see whether they preferred the two authorized gambling outlets – horse racing run by the Hong Kong Jockey Club and the Mark Six Lottery run by the Hong Kong Lotteries Board – to the others. 1,354 respondents (67.6% of the total 2,004) reported that they had participated in either one or both forms. But some of them had gambled at both authorized as well as unauthorized outlets. Further analysis showed that 1,021 respondents had chosen only the authorized forms but not the

others – meaning that half of respondents (50.9%) gambled only at the local authorized outlets for Mark Six and horse racing. They had not participated in illegal Mark Six, illegal horse racing, soccer betting with local or offshore bookmakers, Mahjong houses, casino ships, Macau casinos, online casinos, and illegal local casinos. In other words, among these ‘gamblers’ (respondents who participated at least in one form of gambling in the past twelve months), the majority (65.3%, or 1,021 out of the total 1,563 gamblers) gambled through legal channels.

- 3.10 Survey results also revealed that 321 respondents had gambling experiences related to casino ships, online casinos, Macau casinos, Macau horse racing, or soccer betting with offshore bookmakers. This group constituted one-fifth (20.5%) of the gambling population.
- 3.11 Illegal gambling seemed to have little appeal to Hong Kong people. Only 69 out of 2,004 respondents (3.4%) had been involved in one or more of the following: illegal Mark Six, illegal horse racing, illegal soccer betting with local bookmakers, and illegal casinos.

Participation in Mark Six Lottery

- 3.12 People did not tend to spend much on Mark Six though it was the most popular form of gambling in Hong Kong. More than half (55.8%) spent \$50 or below betting money on it monthly. Only a tiny proportion (7.0%) spent more than \$200 monthly (Table 3.11). The median monthly betting money the participants spent on the whole was \$50 (from \$10 to \$5,000).

Table 3.11: Distribution of Respondents by Betting Money Spent on Mark Six Monthly

HK Dollars	%	Frequency
50 or below	55.8	597
51 - 100	25.1	269
101 - 200	12.0	128
201 - 500	5.1	55
501 - 1,000	1.6	17
Above 1,000	0.3	3
Total	100.0	1069

Median= \$50

3.13 Compared with authorized Mark Six Lottery, illegal lotteries obviously attracted very few Hong Kong people. As shown in Table 3.10, only eight out of 2,002 respondents (0.4%) had been involved in it. The total amount of money involved in this form of illegal gambling was negligible.

3.14 Mark Six was popular among people from different walks of life. However, Mark Six was found to be more common amongst the male and the married people. Slightly over seventy per cent (70.2%) of male respondents had bought Mark Six in the past year, whereas less than sixty per cent (58.9%) of female respondents had done so (Table 3.12). Regarding the marital status of the respondents, 73.0% of the married had bought Mark Six, whereas only about half (52.7%) of the non-married had done so (Table 3.13).

Table 3.12: Distribution of Respondents' Participation in Mark Six by Sex (%)

Sex	Participating in Mark Six		Total (N)
	Ever	Never	
Male	70.2	29.8	100.0 (995)
Female	58.9	41.1	100.0 (1000)

N=1995, Pearson Chi-Square= 27.575, P<0.05

Table 3.13: Distribution of Respondents' Participation in Mark Six by Marital Status (%)

Marital Status	Participating in Mark Six		Total (N)
	Ever	Never	
Married	73.0	27.0	100.0 (1162)
Non-married	52.7	47.3	100.0 (834)

N= 1996, Pearson Chi-Square= 86.761, P<0.05

3.15 As regards the nature of Mark Six, a majority (62.5%) regarded it as a form of gambling. Slightly over a quarter (25.6%) perceived it as kind of “entertainment” (Table 3.14).

Table 3.14: Distribution of Respondents' Perception of the Nature of Mark Six

Nature	%	Frequency	N
Gambling	62.5	1251	2003
Excitement	0.6	12	2003
Kill-time	1.4	29	2003
Entertainment	25.6	512	2003
Social Activities	0.2	5	2003
Others	15.9	318	2003
Not Sure	7.4	148	2003

Participation in horse racing gambling

3.16 As shown in Table 3.10, horse racing ranked the third most popular form of gambling in Hong Kong. Thirty per cent (30.4%) of respondents betted on horse racing last year. The amount of betting money spent on horse racing monthly was much greater than that on Mark Six. One-fifth (21.1%) of horse racing gamblers spent \$201 to \$500 monthly, and 26.1% even spent over \$500 per month (Table 3.15). The median monthly amount of betting money the participants spent on the whole was \$200 (from \$10 to \$50,000), an amount much higher than that of Mark Six (\$50).

Table 3.15: Distribution of Respondents' Amount of Betting Money Spent on Local Horse Racing Monthly

HK Dollars	%	Frequency
50 or below	27.1	140
51 - 100	13.7	71
101 - 200	12.0	62
201 - 500	21.1	109
501 - 1,000	10.4	54
Above 1,000	15.7	81
Total	100.0	517

Median= \$200

3.17 While illegal off-course bookmaking on horse racing had long existed in Hong Kong, only a small proportion of respondents had participated in this illegal form of gambling. Ten out of 2,002 respondents admitted they had betted on illegal horse racing in the past year. Betting on horse racing in Macau, as shown in Table 3.10, was also insignificant, with more or less the same participation rate as that in illegal horse racing.

3.18 Similar to the findings on Mark Six, betting on horse racing was more popular among men than women (44.1% as against 16.7 %), and among the married than the non-married (34.4% as against 24.8%). As far as age was concerned, it appeared that the older the age, the higher the participation. Almost forty per cent (39.2%) of the group aged 50 or over had betted on horse racing, whereas the rates for the groups aged 35-49 and 18-34 were 34.6% and 28.7% respectively (Table 3.16-18).

Table 3.16: Distribution of Respondents' Participation in Local Horse Racing by Sex (%)

Sex	Participating in Horse Racing		
	Ever	Never	Total (N)
Male	44.1	55.9	100.0 (999)
Female	16.7	83.3	100.0 (1004)

N=2003, Pearson Chi-Square= 177.808, P<0.05

Table 3.17: Distribution of Respondents' Participation in Local Horse Racing by Marital Status (%)

Marital Status	Participating in Horse-racing		
	Ever	Never	Total (N)
Married	34.4	65.6	100.0 (1162)
Non-married	24.8	75.2	100.0 (834)

N= 1996, Pearson Chi-Square= 21.158, P<0.05

Table 3.18: Distribution of Respondents' Participation in Local Horse Racing by Age (%)

Age	Participating in Horse-racing		
	Ever	Never	Total (N)
Under 18	5.9	94.0	100.0 (187)
18 – 34	28.7	71.3	100.0 (696)
35 – 49	34.6	65.4	100.0 (771)
50 or over	39.2	60.8	100.0 (314)

N= 1968, Pearson Chi-Square= 71.777, P<0.05

3.19 In response to the question “What do you think is the nature of betting on horse racing?”, the majority (78.8%) of respondents considered it a kind of gambling. The percentage was 16.4% higher than the case of Mark Six. “Entertainment” as the next popular answer constituted far less significance. Only one-fifth (20.6%) of respondents regarded it a kind of entertainment (Table 3.19).

Table 3.19: Distribution of Respondents' Perception of the Nature of Local Horse Racing

Nature	%	Frequency	N
Gambling	78.8	1579	2003
Excitement	0.7	15	2003
Kill-time	1.5	30	2003
Entertainment	20.6	412	2003
Social Activities	0.2	4	2003
Others	8.0	160	2003
Not Sure	4.9	99	2003

Participation in soccer betting

3.20 Local soccer betting, as compared with Mark Six and horse racing, seemed to have attracted few people. As shown in Table 3.10, only thirty-two out of 2,003 respondents (1.6%) admitted that they had betted on soccer with local bookmakers in the past year. Despite the low participation rate, betting on local soccer matches were still much popular than other unauthorized forms of gambling, like illegal Mark Six and illegal horse racing in Hong Kong as well as horse-racing in Macau.

3.21 Despite the fact that the number of respondents participating in soccer betting with local bookmakers in the past year was small, the amount of betting money they spent monthly had great variations (range \$100 to \$5,000). Thirteen out of thirty-one participants (41.9%) spent \$200 or below per month, while five participants (16.2%) had spent more than \$1,000 per month. The median monthly betting money the participants spent on the whole was \$300 (Table 3.20).

Table 3.20: Distribution of Respondents by Money Spent on Soccer Betting with Local Bookmakers Monthly

HK Dollars	%	Frequency
200 or below	41.9	13
201 - 1,000	41.9	13
Above 1,000	16.2	5
Total	100.0	31

Median= \$300

Table 21: Distribution of Respondents by the Amount of Money Spent on Soccer Betting with Offshore Bookmakers Monthly

HK Dollars	%	Frequency
200 or below	27.3	6
201 - 1,000	45.4	10
Above 1,000	27.3	6
Total	100.0	22

Median= \$750

3.22 Similarly, betting on soccer matches with offshore bookmakers was not very common, as the participation rate of which was only 1.3% (Table 3.10). However, the median amount betting money spent on soccer betting with offshore bookmakers monthly was \$750 (from \$10 to \$30,000), which was the highest among all the different forms of gambling. Six out of twenty-two participants (27.3%) spent more than \$1,000 per month (Table 21).

3.23 About the characteristics of this small group of soccer matches gamblers, it was interesting to find that unlike the profile of participants in Mark Six and horse racing, this form of gambling attracted predominantly young and single people. Table 3.22-23 showed that among those who had betted on soccer matches with local and offshore bookmakers, three quarters were aged 15 to 34 and 70.8% were never married.

Table 3.22: Distribution of Respondents' Participation in Soccer Betting with Local/Offshore Bookmakers by Age

Age Group	%	Frequency
15-17	16.7	8
18-34	58.3	28
35-49	20.8	10
50-64	4.2	2
Total	100.0	48

Table 3.23: Distribution of Respondents' Participation in Soccer Betting with Local / Offshore Bookmakers by Marital Status

Marital Status	%	Frequency
Never Married	70.8	34
Married	29.2	14
Separated / Divorced	0.0	0
Widowed	0.0	0
Total	100.0	48

Table 3.24: Distribution of Respondents' Perception of the Nature of Soccer Betting

Nature	%	Frequency	N
Gambling	1.7	31	1804
Excitement	83.1	1500	1804
Kill-time	2.9	53	1804
Entertainment	1.1	20	1804
Social Activities	17.7	320	1804
Others	0.8	14	1804
Not Sure	7.5	135	1804

3.24 As regards the perception of the nature of soccer betting, an overwhelming majority of respondents (83.1%) saw it in terms of the excitement it offered. Another 17.7% considered it a form of "social activities". Unlike Mark Six and horse racing, soccer betting was rarely seen as gambling. Only 1.7% of respondents chose the category "gambling" (Table 3.24).

Policy on providing authorized outlets for soccer betting

3.25 Whether the government should provide authorized outlets for soccer betting had recently caused heated debates in Hong Kong. Public opinion on the issue was clearly divided. In this survey, slightly more than half of the respondents (51.2%) were in favor of the government's provision of authorized outlets for soccer betting. Among the remaining half, more than one-third (36.2%) held opposite opinion and at least one-tenth (12.6%) could not give a definite answer (Table 3.25).

Table 3.25: Distribution of Respondents' Views on the Provision of Authorized Outlets for Soccer Betting

Opinion	%	Frequency
Agree	51.2	1020
Don't know	12.6	252
Disagree	36.2	721
Total	100.0	1993

Table 3.26: Distribution of Respondents' Views on the Involvement in Soccer Betting when Legalized Outlets were Available

Opinion	%	Frequency
Certainly would	10.5	189
Probably would	12.6	227
Certainly not	76.9	1384
Total	100.0	1800

3.26 One central issue in the debate on the provision of authorized outlets for soccer betting had been whether the availability of such outlets would induce people to become more heavily involved in gambling. In this survey, a majority (76.9%) of respondents indicated that they would not participate in soccer betting even though legalized outlets were provided. About one-tenth (10.5%) gave an affirmative answer and about one-tenth (12.6%) was still undecided (Table 3.26).

3.27 Further analysis indicated that among the 416 potential participants of authorized soccer betting, only 8.7% had not participated in any form of gambling in the past year. Over ninety per cent (91.3%) had already been participants of other gambling activities (Table 3.27).

Table 3.27: Distribution of Potential Participants in Authorized Soccer Betting by Gambling Status

	Gambling Status of Respondents		
	Gamblers %	Non-Gamblers %	Total (N)
Certainly would	94.2 (178)	5.8 (11)	100.0 (189)
Probably would	89.0 (202)	11.0 (25)	100.0 (227)
Total	91.3 (380)	8.7 (36)	100.0 (416)

3.28 It is also of great interest to know whether such a policy would encourage soccer matches gamblers to increase the amount of their betting money. The survey result showed that less than one-fifth (19.6%) would increase their bets for certain, and another 6.5% indicated that they ‘probably would’. The majority (73.9%) of soccer matches gamblers were indifferent towards the change of policy (Table 3.28).

Table 3.28: Distribution of the Tendency to Increase the Amount of Betting Money When Authorized Outlets were Available

Opinion	%	Frequency
Certainly would	19.6	9
Probably would	6.5	3
Certainly not	73.9	34
Total	100.0	46

Participation in casino gambling

3.29 Regarding betting on board casino ships, Table 3.10 showed that only 4.3% of respondents had betted on board casino ships in the past year. Table 3.29 showed that about half of participants spent \$100 or below betting money on it per month, and median monthly betting money participants spent on the whole was \$150 (from \$10 to \$50,000).

Table 3.29: Distribution of Respondents’ Amount of Betting Money Spent in Casino Ships Monthly

HK Dollars	%	Frequency
50 or below	25.4	16
51 - 100	23.8	15
101 - 200	7.9	5
201 - 500	20.6	13
501 - 1,000	7.9	5
Above 1,000	14.3	9
Total	99.9	63

Median= \$150

3.30 Visiting casinos in Macau was not uncommon among Hong Kong people, especially during the Chinese New Year and on other special occasions. The survey found that more than one-tenth (12.1%) of respondents had made bets at the casinos of Macau in the past year (Table 3.10). Similar to the findings about casino ships, the range of betting money participants spent monthly varied greatly from \$10 to \$50,000, though the median monthly amount of betting money was only \$100 (Table 3.30).

Table 3.30: Distribution of Respondents' Amount of Betting Money Spent at Macau casinos Monthly

HK Dollars	%	Frequency
50 or below	27.2	50
51 - 100	23.9	44
101 - 200	8.7	16
201 - 500	15.8	29
501 - 1,000	12.5	23
1,001 - 3,000	7.1	13
Above 3,000	4.9	9
Total	100.1	184

Median= \$100

3.31 Gambling at illegal local casinos was insignificant. Only 0.3% had done so in the past year. It was the least popular gambling activity among all the thirteen activities listed in the survey (Table 3.10). As shown in the same table, online casinos were also unattractive with a participation rate of only 0.6%.

3.32 Over eighty per cent (81.0%) of respondents regarded betting on board casino ships as an activity that offered excitement. Table 3.31 showed that about one-fourth (26.0%) considered it a form of social activity, and very few (1.6%) saw it as gambling. Similarly, betting in Macau's casinos was not regarded as gambling. Only 1.6 per cent chose the answer "gambling", whereas an overwhelming majority (86.9%) emphasized the excitement it offered (Table 3.32).

Table 3.31: Distribution of Respondents' Perception of the Nature of Gambling on board Casino Ships

Nature	%	Frequency	N
Gambling	1.6	29	1862
Excitement	81.0	1510	1862
Kill-time	1.0	19	1862
Entertainment	2.8	53	1862
Social Activities	26.0	484	1862
Others	0.4	8	1862
Not Sure	3.2	59	1862

Table 3.32: Distribution of Respondents' Perception of the Nature of Gambling at Macau casinos

Nature	%	Frequency	N
Gambling	1.6	31	1921
Excitement	86.9	1670	1921
Kill-time	1.1	21	1921
Entertainment	2.2	43	1921
Social Activities	19.3	371	1921
Others	0.3	5	1921
Not Sure	2.6	50	1921

3.33 In contrast to the varied responses to the legalization of soccer betting, the legalization of online casinos gained much less social approval. Only 26.2% agreed that the government should provide authorized outlets for online casino, whereas 73.8% raised objection to such a policy (Table 3.33).

Table 3.33: Distribution of Respondents' Views to the Provision of Authorized Outlet for Online Casinos

Opinion	%	Frequency
Agree	26.2	452
Disagree	73.8	1274
Total	100.0	1726

Participation in social gambling

3.34 The popularity of social gambling in Hong Kong can clearly be seen from the survey. Nearly half (45.9%) of respondents had played Mahjong or cards with friends or family members in the past year (Table 3.10). Social gambling ranked the second most popular form of gambling among all the 2,004 respondents.

3.35 In terms of the amount of betting money spent on social gambling monthly, half of participants spent \$100 or below, and those who spent over \$1000 accounted for only 4.7% (Table 3.34). The median monthly betting money participants spent on the whole was \$100 (from \$10 to \$25,000).

Table 3.34: Distribution of Respondents' Amount of Betting Money Spent on Social Gambling Monthly

HK Dollars	%	Frequency
50 or below	29.8	195
51 - 100	20.9	137
101 - 200	14.2	93
201 - 500	24.3	159
501 - 1,000	6.1	40
Above 1,000	4.7	31
Total	100.0	655

Median = \$100

3.36 Involvement in social gambling varied significantly with people's sex, age and monthly family income. Table 3.35 showed that more men than women participated in social gambling (51.0% as against 41.1%). Table 3.36 showed that the younger group ranged from 18 to 34 had the highest participation rate (53.3%). Social gambling was most common among those who had a monthly family income of \$25,000-\$39,999 (Table 3.37).

Table 3.35: Distribution of Respondents' Participation in Social Gambling by Sex (%)

Sex	Participation in Social Gambling		
	Ever	Never	Total (N)
Male	51.0	49.0	100.0 (999)
Female	41.1	58.9	100.0 (1001)

N=2000, Pearson Chi-Square= 19.696, P<0.05

Table 3.36: Distribution of Respondents' Participation in Social Gambling by Age (%)

Age	Social Gambling		
	Ever	Never	Total (N)
Under 18	42.2	57.8	100.0 (187)
18 – 34	53.3	46.7	100.0 (696)
35 – 49	43.6	56.4	100.0 (770)
50 or over	40.1	59.9	100.0 (312)

N=1965, Pearson Chi-Square= 11.282, P<0.05

Table 3.37: Distribution of Respondents' Participation in Social Gambling by Monthly Family Income (%)

Monthly Family Income	Social Gambling		
	Ever	Never	Total (N)
Below \$10,000	26.2	73.8	100.0 (164)
\$10,001 - \$24,999	47.9	52.1	100.0 (678)
\$25,000 - \$39,999	55.2	44.8	100.0 (310)
\$40,000 or above	48.8	51.2	100.0 (346)

N= 1498, Pearson Chi-Square= 37.365, P<0.05

3.37 A very high proportion (75.9%) of respondents considered playing Mahjong or cards with friends and relatives a form of social activity. About one-fifth (22.2%) stressed the entertainment it offered. Very few (0.5%) considered these activities a form of gambling (Table 3.38).

Table 3.38: Distribution of Respondents' Perception of the Nature of Social Gambling

Nature	%	Frequency	N
Gambling	0.5	9	1956
Entertainment	22.2	434	1956
Excitement	0.7	13	1956
Kill-time	8.9	176	1956
Social Activities	75.9	1485	1956
Others	14.1	275	1956
Not Sure	2.6	50	1956

Prevalence of problem and pathological gambling

3.38 Table 3.39 showed that 368 respondents in total admitted that they had at least one manifestation of the DSM-IV diagnostic criteria of pathological gambling⁴, and this accounted for 23.5% of the gambling population. If we focused upon those who could be classified as *probable pathological gamblers* (DSM-IV score 5 or above), we could find that buying Mark Six tickets (81.1%) and betting on local horse racing (81.1%) were the two most popular forms of gambling amongst this group of gamblers. Involvement in social gambling and gambling in Macao casinos ranked third and fourth at 70.3% and 43.2% respectively (Table 3.40).

⁴ This study has adopted the widely used conceptualization of pathological gambling published in *The Diagnostic and Statistical Manual of Mental Disorder* (DSM-IV, the American Psychiatric Association, 1994). The definition includes 10 diagnostic criteria that represent three dimensions, namely, damage or disruption, loss of control and dependence. The wording and choice of items and the diagnostic cut-off of five or more criteria are derived from clinical data.

As it would be extremely difficult to draw an universally acceptable dividing line, the Committee on the Social and Economic Impact of Pathological Gambling – the one Committee that had carried out the most recent national wide study on the issues in the United States – adopts a continuum of gambling behaviors and classifies gambling behavior within a topography from Level 0 to Level 3.

Accordingly, Level 0 refers to no gambling problem at all; Level 1 Gambling (score 1 or 2) denotes social/recreational gambling with no obvious harmful consequences; Level 2 Gambling (score 3 or 4) is synonymous with problem gambling, while Level 3 Gambling is as ‘pathological gambling’ defined by the DSM-IV, which manifested five or more of its diagnostic criteria.

This classification developed in DSM-IV set the foundation for measures that are reliable and replicable. So far the DSM-IV criteria have been tested to be very useful among clinicians, and have been used as a basis for constructing instrument or questionnaires to assess prevalence of problem and pathological gambling in the general population.

With reference to scale construction in previous western public surveys in this study, a Chinese version was constructed for the general public survey and the school survey with modifications. For example, for the sake of clarity, some diagnostic criteria might need to be broken down into two items, but the counting method for the number of occurrence was maintained (i.e. if a respondent is reported to manifest one or more of the broken down items from the same original criterion, the score would be counted as only one).

Reliability analysis using the Cronbach’s Alpha showed that the Chinese scale was reliable (Cronbach’s Alpha = 0.75), and items had item-total correlations exceeding 0.3. In order to test the construct validity of scale, factor analysis was performed on the item responses of all the 2,004 respondents. Three conceptually clear factors (loss of control, damage and dependence) accounting for 50.6% of the total variance were extracted via the factorial analytical procedures used in the Principal Component Analysis. All the items in these factors had factor loadings exceeding 0.45. The three factors extracted replicated those three dimensions originally conceptualized in the DSM-IV.

Table 3.39: Exhibition of DSM-IV Diagnostic Criteria on Pathological Gambling (general population)

No. of Criteria Exhibited	Frequency	Cumulative Frequency
10	0	0
9	2	2
8	4	6
7	3	9
6	10	19
5	18	37
4	33	70
3	48	118
2	80	198
1	170	368
Total	368	368

Table 3.40: Distribution of the Probable Pathological Gamblers by the Form of Gambling Involved %

Gambling Activities	Ever	Never	Total (N)
Mark Six	81.1	18.9	100.0 (37)
Illegal Mark Six	2.7	97.3	100.0 (37)
Horse Racing	81.1	18.9	100.0 (37)
Illegal Horse Racing	2.7	97.3	100.0 (37)
Horse Racing (Macau)	10.8	89.2	100.0 (37)
Soccer Betting with Local Bookmakers	13.5	86.5	100.0 (37)
Soccer Betting with Offshore Bookmakers	8.1	91.7	100.0 (37)
Mahjong House	10.8	89.2	100.0 (37)
Casino Ship	24.3	75.7	100.0 (37)
Casino (Macau)	43.2	56.8	100.0 (37)
Casino (Local Illegal)	0.0	100.0	100.0 (37)
Online Casino	0.0	100.0	100.0 (37)
Social Gambling	70.3	29.7	100.0 (37)

3.39 When asked to list the forms of gambling through which problems caused by gambling were experienced, about half of probable pathological gamblers (48.6%) referred to “betting on local horse racing”, and 27.0% referred to “involvement in social gambling” (Table 3.41). Comparatively speaking, despite its highest participation rate, betting on Mark Six was less likely to be associated with the above problems. Only two out of the thirty-seven probable pathological gamblers (5.4%) chose “buying Mark Six ticket” as their answer.

Table 3.41: Distribution of the Probable Pathological Gamblers by Forms of Gambling

Gambling Activities	%	Frequency	N*
Mark Six	5.4	2	37
Illegal Mark Six	0.0	0	37
Horse Racing	48.6	18	37
Illegal Horse Racing	0.0	0	37
Macau Horse Racing	2.7	1	37
Soccer Betting with Local Bookmakers	0.0	0	37
Soccer Betting with Offshore Bookmakers	2.7	1	37
Mahjong House	10.8	4	37
Casino Ship	5.4	2	37
Macau Casino	18.9	7	37
Illegal Casino	0.0	0	37
Online Casino	0.0	0	37
Social Gambling	27.0	10	37
Others	2.7	1	37

3.40 If the cutting score of three on a scale of four in DSM-IV was adopted, 81 respondents out of the total 2,004 would fall into this category of ‘problem gamblers’ (involving in Level 2 Gambling). Adding this number to the number of ‘probable pathological gamblers’ (37 respondents), we had 118 out of the total 2004 respondents who might belong to the category of ‘probable problem or pathological gamblers’.

3.41 Further analysis by logistic regression using the backward stepwise (likelihood-ratio) algorithm showed that some of the demographical factors such as sex, education, family and personal monthly income were effective in assessing the likelihood of a person’s becoming *a probable problem or a pathological gambler* in terms of the different degrees with adequate confidence (Table 3.42).

Table 3.42: Summary of Logistic Regression Equation with Problem/Pathological Gambling as the Criterion Variable and the Socioeconomic Variables and Forms of Gambling as the Predictor Variables

Criteria Variable	Predictor Variable	B	OR (95% CI)	P	Nagelkerke \bar{R}^2
Problem & Pathological Gambling	Sex (1)	0.817	2.264 (1.122 ~ 4.568)	0.023	0.805
	Age	-0.025	0.976 (0.950 ~ 1.002)	0.071	
	Education (1)	1.616	5.034 (1.781 ~ 14.229)	0.002	
	Education (2)	0.731	2.078 (0.840 ~ 5.137)	0.113	
	Personal Monthly Incomes (1)	-2.154	0.116 (0.031 ~ 0.435)	0.001	
	Personal Monthly Incomes (2)	-1.715	0.180 (0.064 ~ 0.507)	0.001	
	Family Monthly Income (1)	0.896	2.451 (0.417 ~ 14.000)	0.321	
	Family Monthly Income (2)	1.042	2.834 (1.010 ~ 7.951)	0.048	
	Family Monthly Income (3)	0.081	1.084 (0.384 ~ 3.062)	0.878	
	Horse Racing (1)	-1.306	0.271 (0.133 ~ 0.550)	0.001	
	Soccer Betting (1)	-1.113	0.329 (0.136 ~ 0.795)	0.014	
	Casino Gambling (1)	-0.853	0.426 (0.238 ~ 0.764)	0.004	

Categorical Coding Variables

- Sex (1): Male;
- Sex (0) Female;
- Education (1): Form III or below;
- Education (2): Form IV to VII (including IVE);
- Education (0): Post-secondary of above;
- Personal Monthly Income (1): Below HK\$10,000;
- Personal monthly Income (2): HK\$10,000 to HK\$29,999;
- Personal Monthly Income (0): HK\$30,000 or above
- Family Monthly Income (1): Below HK\$10,000;
- Family Monthly Income (2): HK\$10,000 to HK\$24,999;
- Family Monthly Income (3): HK\$25,000 to HK\$39,999;
- Family Monthly Income (0): HK\$40,000 or above
- Horse Racing (1): Never Participated;
- Horse Racing (0): Had Participated
- Soccer Matches Betting (1): Never participated;
- Soccer Matches Betting (0) Had Participated
- Casino Gambling (1): Never Participated;
- Casino Gambling (0): Had Participated

3.42 With 80.5% accountable variations on the *probability* of becoming a problem or a pathological gambler by the predictors, given other things are being equal, the model indicated that a male gambler was about 2.3 times (a 95% confidence interval between 1.1 to 4.6 times) than a female gambler to become *a probable problem or a pathological gambler*. For a gambler whose education level was at Form 3 or below, his or her *probability* in becoming a problem or a pathological gambler was 5 times (a 95% confidence interval between 1.8 to 14.2 times) higher than that of the gamblers whose education level was above Form 3.

- 3.43 Concerning the monthly family income, a gambler whose family monthly income was about \$10,000 to \$24,999 had the highest *probability* (about 2.8 times with a 95% confidence interval between 1.0 to 8.0 times) in becoming a problem or a pathological gambler. On the other hand, a gambler with a monthly salary of \$10,000 or above would be 8.6 times (a 95% confidence interval between 2.3 to 32.3 times) more *probable* in becoming a problem or a pathological gambler compared to a gambler who earned less than \$10,000 per month.
- 3.44 People participating in different forms of gambling were likely to become *a probable problem or a pathological gambler*. For example, a gambler who had participated in horse racing gambling had *probabilities* at 3.7 times (a 95% confidence interval is between 1.8 to 7.5 times) higher in becoming a problem or a pathological gambler than the gamblers who did not participate in the ‘horse-racing gambling’.
- 3.45 For participants in soccer betting, the *probability* of becoming a problem or a pathological gambler was 3 times (a 95% confidence interval is between 1.3 to 7.4 times) higher than that of the non-participants in soccer betting. The likelihood of casino gamblers to become *a probable problem or a pathological gambler* was 2.3 times (a 95% confidence interval between 1.3 to 4.2 times) higher than gamblers who did not participate in casino gambling.
- 3.46 Other things being equal, those who possess the following characteristics might have the highest *probability* of becoming a problem or a pathological gambler: male, less-educated, with personal monthly income \$10,000 or above and family monthly income between \$10,000 to \$24,999, and involving themselves in horse racing gambling, soccer matches betting and Casino gambling.

Summary of major findings

- 3.47 Involvement in gambling activities had been very popular in Hong Kong. Almost four out of five respondents (78.0%) had participated in at least one of the thirteen gambling activities listed in the survey. The most popular form of gambling was Mark Six, with a participation rate of 64.2%. Playing cards or Mahjong with friends and relatives – what we call social gambling – was also common (45.9%). Horse racing ranked the third most popular gambling activity in Hong Kong, with a participation rate of 30.4%.

- 3.48 Authorized gambling outlets, namely horse racing run by the Hong Kong Jockey Club and the Mark Six Lottery by the Hong Kong Lotteries Board, had much greater appeal to Hong Kong people when compared with other unauthorized and illegal outlets. Few respondents admitted that they did participate in gambling activities through illegal channels like illegal Mark Six, horse racing and local casinos.
- 3.49 While all the thirteen activities involved money as bets, respondents perceived them as of very different nature. Most of respondents saw Mark Six lottery and horse racing as gambling per se. They, however, had different opinion with regards to the nature of other gambling forms. A majority of respondents considered casino games in terms of the excitement they offered. Similarly, a large proportion emphasized the exciting experience that soccer betting offered rather than the gambling aspect of the activity. Social gambling, understood as playing Mahjong or cards with friends and relatives, was largely seen as a way to socialize with other people. Very few people referred to such activities as gambling.
- 3.50 Although we had a considerable size of respondents participating in gambling activities, it did not necessarily imply that the local population spent a lot of money on gambling. The amount of betting money spent varied according to the form of gambling concerned. Gambling soccer matches with offshore bookmakers had the highest median as far as the amount of betting money participants spent on the whole (\$750) was concerned, whereas Mark Six had the lowest median (\$50).
- 3.51 Regarding whether the government should provide authorized outlets for soccer betting, the proportion supporting the proposal was larger than the proportion against it (51.2% as against 36.2%). Nearly one-fourth (23.1%) of respondents indicated they might participate in soccer betting when legalized outlets were available.
- 3.52 Concerning the prevalence of pathological gambling, survey result indicted 1.85% of the total 2004 respondents could be classified as probable pathological gamblers. An additional 4% can be classified as probable problem gamblers.

3.53 Further analysis showed that the less educated (Form III or below) males with a monthly personal income \$10,000 or above and family monthly income from \$10,000 to \$24,999 were more prone to experience problem or pathological gambling. Gamblers who had involvement in betting horse racing, soccer betting, and casino gambling also had a higher risk in problem/ pathological gambling than those who were not involved.

Chapter IV: Findings of School Survey

(The underage population)

Introduction

The involvement of the underage population in gambling activities is a major focus of the present study. It is reasonable to assume that youngsters might have different behavioral patterns in gambling as they are usually banned socially and legally from gambling. Most of them are also financially dependent on family, meaning that the opportunity cost in gambling would be high. Because of the financial dependency and psychological immaturity, the threshold of the underage to bear the consequences and costs of gambling might be different from those of the general population.

On the other hand, the perceptions of the youngsters on gambling were often used as predictors for future gambling involvement. Therefore, a significant issue raised in the debate on gambling policy is the impact of gambling on youngsters. How they perceived the recent proposals and to what extent as well as in what manner existing gambling policy influenced them are of vital importance in the consideration of policy change.

Under the present gambling policy, legal outlets for gambling are restricted and controlled. Other than social gambling and recreational gambling activities that are beyond the reach of public control, those who are below the age of 18 are not allowed to take part in gambling. The present survey intends to explore the degree of involvement of the school age youngsters in gambling and the values they hold toward different types of gambling activities.

It would not be surprising to expect that some of the underage are actually involved in gambling activities. How many of these youngsters had taken part in gambling in the recent past? What had been the reasons for their involvement? In what ways were they involved? To what extent were they involved? All these are important questions to address so that due actions could be taken and the relevance of the recent gambling policy could be reconsidered.

Profile of respondents

- 4.1 Table 4.1-2 showed the school forms and age distribution of respondents. Apparently students who were born in 1987 and 1985 were expected to be studying in Form II or Form IV respectively, and these two age groups turned out to share the biggest proportion of the entire sample.
- 4.2 According to the current practices in Hong Kong secondary school, students had to select a specific stream of study when they advanced to upper forms (Form IV and above). Amongst those respondents in their upper forms, as shown in Table 4.3, sciences was the most popular stream.

Table 4.1: Distribution of Underage Respondents by Education

Forms	%	Frequency
Form I	18.1	361
Form II	30.2	603
Form III	10.5	209
Form IV	36.0	719
Form VI	5.4	108
Total	100.0	2000

Table 4.2: Distribution of Underage Respondents by Year of Birth

Year	%	Frequency
1983	7.5	150
1984	9.9	197
1985	27.9	557
1986	15.1	301
1987	26.2	524
1988	13.6	271
Total	100.0	2000

Table 4.3: Streams taken by Underage Respondents (Form IV & VI only)

Subject(s)	%	Frequency
Art	35.7	295
Science	50.8	420
Business	10.4	86
Others	3.1	26
Total	100.0	827

- 4.3 The distribution of respondents' sex status was shown in Table 4.4, while Table 4.5 showed that male students participated more actively in gambling activities than their female counterparts.

Table 4.4: Distribution of Underage Respondents by Sex

Sex	%	Frequency
Male	52.2	1043
Female	47.8	955
Total	100.0	1998

Table 4.5: Distribution of Underage Gamblers & Non-Gamblers by Sex (%)

Sex	Gamblers	Non-Gamblers	Unknown	Total (N)
Male	59.4	40.0	0.6	100.0 (1043)
Female	48.2	51.2	0.6	100.0 (955)
Total (N)	54.1 (1080)	45.3 (906)	0.6 (12)	100.0 (1998)

- 4.4 Table 4.6-7 showed that the participation rate of the underage population in gambling also increased at higher forms and older ages.

Table 4.6: Distribution of Underage Gamblers & Non Gamblers by Age (%)

	Gamblers	Non-Gamblers	Unknown	Total (N)
1983	69.3	30.7	0.0	100.0 (150)
1984	63.5	36.0	0.5	100.0 (197)
1985	61.2	37.9	0.9	100.0 (557)
1986	54.5	44.2	1.3	100.0 (301)
1987	47.3	52.3	0.4	100.0 (524)
1988	36.2	63.8	0.0	100.0 (271)
Total (N)	54.0 (1080)	45.4 (908)	0.6 (12)	100.0 (2000)

Table 4.7: Distribution of Underage Gamblers & Non-Gamblers by Education (%)

	Gamblers	Non-Gamblers	Unknown	Total (N)
Form I	37.1	62.9	0.0	100.0 (361)
Form II	49.4	50.6	0.7	100.0 (603)
Form III	57.4	42.6	1.0	100.0 (209)
Form IV	63.7	36.3	0.8	100.0 (719)
Form VI	72.2	27.8	0.0	100.0 (108)
Total (N)	54.0 (1080)	45.4 (908)	0.6 (12)	100.0 (2000)

4.5 Table 4.8 showed the residential housing types of respondents. Most were living in public housing (rental). It accounted for 41.7% of the total respondents.

Table 4.8: Distribution of Underage Respondents by Housing Type

Different Types	%	Frequency
Public Housing	41.7	825
Home Ownership Scheme	17.3	343
Private Housing (Owned)	29.7	588
Private Housing (Rented)	5.4	106
Quarters	1.5	29
Village / Squatters	3.9	77
Others	0.5	10
Total	100.0	1978

4.6 As regards the socio-economic status of respondents' parents, Table 4.9-14 showed that the majority of respondents' fathers had received secondary school education (53.9%) and were currently being employed (90.4%) as the working class (51.2%)⁵. As regards the mother of the respondents, the majority had received secondary school educated (59.6%). Many of them, however, were 'housewives' (48.6%). For those who were employed, "clerks", "service workers and shop sales workers" and "elementary occupations" made up the biggest proportion.

Table 4.9: Distribution of the Father of Underage Respondents by Education

Level of Education	%	Frequency
Non-educated / Informal Education	2.7	43
Primary / Kindergarten	20.1	324
Junior Secondary School (F.1-F.3)	33.6	543
Senior Secondary School (F.4-F.5)	26.9	434
Matriculation (F.6-7/Technical Institutes)	5.9	96
College (Non Degree)	3.3	53
University or above	7.5	121
Total	100.0	1614

⁵ Here the term 'working class' refers to the people working as "craft & related workers", "plant & machine operators and assemblers" and those engaging in 'elementary occupations'.

Table 4.10: Distribution of the Father of Underage Respondents by Employment Status

Status	%	Frequency
Employed	90.4	1686
Unemployed	2.7	50
Retired	4.4	82
Housekeeping	0.8	15
Others	1.7	32
Total	100.0	1865

Table 4.11: Distribution of the Father of Underage Respondents by Occupation

Occupation	%	Frequency
Managers and Administrators	14.3	239
Professionals	6.9	116
Associate Professionals	3.4	57
Clerks	6.3	105
Service Workers and Shop Sales Workers	13.2	221
Agricultural and Fishery Skilled Labor	1.6	26
Craft and Related Workers	23.7	397
Plant & Machine Operators and Assemblers	15.5	260
Elementary Occupations	12.0	201
Housekeepers	0.7	12
Others	2.4	40
Total	100.0	1674

Table 4.12: Distribution of the Mother of Underage Respondents by Education

Education Level	%	Frequency
Non-educated / Informal Education	4.3	71
Primary / Kindergarten	24.4	404
Junior Secondary School (F.1-F.3)	31.7	525
Senior Secondary School (F.4-F.5)	27.9	462
Matriculate Education (F.6-F.7 / Technical Institutes)	5.4	89
College (Non Degree)	2.4	39
University or above	3.9	65
Total	100.0	1655

Table 4.13: Distribution of the Mother of Underage Respondents by Employment Status

Status	%	Frequency
Employed	49.0	943
Unemployed	0.4	8
Retired	1.5	28
Housekeeping	48.6	936
Others	0.6	11
Total	100.0	1926

Table 4.14: Distribution of the Mother of Underage Respondents by Occupation

Occupation	%	Frequency
Managers and Administrators	3.7	64
Professionals	2.3	40
Associate Professionals	4.2	72
Clerks	13.3	229
Service Workers and Shop Sales Workers	12.2	210
Agricultural and Fishery Skilled Labor	0.6	10
Craft and Related Workers	5.7	98
Plant & Machine Operators and Assemblers	1.1	19
Elementary Occupations	12.8	220
Housekeepers	42.5	730
Others	1.5	26
Total	100.0	1718

- 4.7 The majority (95.8%) of respondents still depended on their family to get their pocket money for daily expenses. Some got money from their grandparents and other relatives (8.4%). About one out of sixteen (6.1%) engaged in part-time jobs (Table 4.15). For those ‘part-timers’, working in fast food shops (28.9%) or as private tutors (21.4%) were the two most popular part time employment for the students, and their average weekly working hours was 10. The median monthly income for these ‘part-timers’ was \$1000 (Table 4.16-18).

Table 4.15: Distribution of Underage Respondents by Source(s) of Income

Sources	%	Frequency	N
Parents	95.8	1877	1960
Brothers & Sisters	5.9	115	1960
Friends	2.0	39	1960
Schoolmates	1.5	30	1960
Grandparents & other Relatives	8.4	165	1960
Part-time Jobs	6.1	119	1960
Others	2.3	46	1959

Table 4.16: Distribution of Underage Respondents by the Nature of Part-time Jobs

Nature of Part Time Job	%	Frequency
Fast food shop	28.9	46
Fashion boutique	1.9	3
Convenient store	3.8	6
Messengers	4.4	7
Private tutors	21.4	34
Hawkers	5.0	8
Others	34.6	55
Total	100	159

Table 4.17: Distribution of Underage Respondents' by Weekly Working Hours

Working Hours (weekly)	%	Frequency
1 to 5 hours	36.7	54
6 to 10 hours	19.7	29
11 to 15 hours	8.2	12
16 to 20 hours	12.9	19
21 to 25 hours	6.8	10
26 hours or above	15.6	23
Total	100.0	147

Median = 10 hours

Table 4.18: Distribution of Underage Respondents by Monthly Income from Part-time Jobs

HK Dollars	%	Frequency
Below 300	12.9	18
301 - 700	25.0	35
701 - 999	11.4	16
1,000 - 2,000	29.3	41
Above 2,000	21.4	30
Total	100.0	140

Median = \$1,000

- 4.8 Concerning the monthly dispensable “pocket money”, slightly over one-tenth (10.3%) had \$2,000 or above to spend. The majority, however, were within a hundred dollars to a thousand dollars. The median monthly dispensable pocket money was \$600 (Table 4.19).

Table 4.19: Distribution of Underage Respondents by Monthly Dispensable Pocket Money

HK Dollars	%	Frequency
100 or below	12.9	242
101 - 499	24.3	456
500 - 999	30.5	572
1,000 - 1,499	16.1	302
1,500 - 1,999	5.8	108
2,000 or Above	10.3	193
Total	100.0	1873

Median = \$600

Secondary involvement in gambling

- 4.9 Results indicated that an overwhelming majority of respondents' family members had participated in some kinds of gambling activities, and the most popular type of gambling was buying Mark Six tickets (92.3%). Involvement in social gambling (77.1%) and betting on horsing racing (71.5%) turned out to be the second and third most popular types, as shown in Table 4.20.
- 4.10 Respondents also mentioned that many of their friends and schoolmates had participated in some kinds of gambling. Table 4.21 showed that social gambling (56.0%) was the most popular form of gambling amongst respondents' friends and schoolmates. Mark Six (37.3%) and horse racing (33.1%) came second and third. Peer involvements in other gambling forms were, as shown in the same table, significantly less apparent. All except participation in local soccer betting had percentages lower than 10.0%. This confirmed the results provided by other overseas studies that sport betting had been one of the favorable gambling forms among adolescents and youths.

Table 4.20: Distribution of Underage Respondents' Family Members' Participation in Gambling (%)

Gambling Activities	Ever	Never	Don't know	Total	(N)
Mark Six	92.3	6.1	1.7	100.0	(1991)
Illegal Mark Six	3.7	79.8	16.5	100.0	(1978)
Horse Racing	71.5	22.4	6.0	100.0	(1987)
Illegal Horse Racing	4.3	79.5	16.2	100.0	(1982)
Horse Racing (Macau)	7.4	74.6	18.0	100.0	(1982)
Soccer Betting with Local Bookmakers	4.2	83.3	12.4	100.0	(1985)
Betting on Other Ball Game with Local Bookmakers	2.9	85.4	11.7	100.0	(1984)
Soccer Betting with Offshore Bookmakers	1.9	87.2	10.9	100.0	(1984)
Betting on Other Ball Game with Offshore Bookmakers	1.6	87.6	10.8	100.0	(1983)
Mahjong House	13.2	72.3	14.5	100.0	(1985)
Casino Ship	12.1	75.0	12.8	100.0	(1986)
Casino (Macau)	33.5	54.6	11.9	100.0	(1987)
Online Casino	3.7	87.1	9.2	100.0	(1985)
Casino (Local Illegal)	2.4	87.1	10.5	100.0	(1982)
Social Gambling	77.1	16.7	6.2	100.0	(1982)
Others	1.0	99.0	0.0	100.0	(1981)

Table 4.21: Distribution of Underage Respondents' Friends/Schoolmates' Participation in Gambling (%)

Gambling Activities	Ever	Never	Don't know	Total (N)
Mark Six	37.3	32.7	29.9	100.0 (1991)
Illegal Mark Six	5.3	54.9	39.8	100.0 (1990)
Horse Racing	33.1	37.9	28.9	100.0 (1991)
Illegal Horse Racing	5.5	54.4	40.1	100.0 (1990)
Horse Racing (Macau)	5.3	54.6	40.1	100.0 (1990)
Soccer Betting with Local Bookmakers	10.0	50.8	39.2	100.0 (1989)
Betting on Other Ball Game with Local Bookmakers	7.9	51.8	40.3	100.0 (1990)
Soccer Betting with Offshore Bookmakers	4.5	54.6	40.9	100.0 (1988)
Betting on Other Ball Game with Offshore Bookmakers	4.5	54.5	40.9	100.0 (1988)
Mahjong House	7.2	53.7	39.0	100.0 (1990)
Casino Ship	5.1	56.2	38.7	100.0 (1990)
Casino (Macau)	6.6	55.0	38.3	100.0 (1990)
Online Casino	8.9	48.2	42.9	100.0 (1989)
Casino (Local Illegal)	4.7	54.6	40.7	100.0 (1984)
Social Gambling	56.0	20.4	23.6	100.0 (1977)
Others	0.4	99.6	0.0	100.0 (1992)

Gambling participation rate in the past twelve months

4.11 According to the survey results, 1,080 out of the total 2,000 respondents (54.0%) admitted that they had gambled in the past year. Like their peers, social gambling was again the most popular (49.2%), although the participation rate was seven per cent lower. Mark Six and horse racing came second and third. Meanwhile, in the past year 113 out of 1,998 respondents (5.7%) admitted that they had participated in betting on soccer matches, and involvement in online casinos was 4.6% (Table 4.22).

Table 4.22: Distribution of Underage Respondents' Participating in Gambling in the Past Year

Gambling Activities	Ever	Never	Total (N)
Mark Six	19.4	80.6	100.0 (1989)
Illegal Mark Six	1.3	98.7	100.0 (1988)
Horse Racing	9.2	90.8	100.0 (1990)
Illegal Horse Racing	1.7	98.3	100.0 (1989)
Soccer Betting Activities	5.7	94.3	100.0 (1988)
Betting on Other Ball Games	3.9	96.1	100.0 (1986)
Online Casino	4.6	95.4	100.0 (1987)
Social Gambling	49.2	50.8	100.0 (1977)

4.12 For those respondents (908 out of the total 2,000) who indicated that they had not taken part in any gambling activities in the last twelve months, the most important reason for not participating was “lack of interest” (84.5%). Restrictions imposed upon them were also a major reason for not participating. “Legal restriction” (49.1%) appeared to be slightly more important than “familial restriction” (41.5%), while “school restriction” (32.4%) was a relatively less important consideration. A quarter of respondents (24.4%) did not take part simply because they believed that the risk of losing was always high (Table 4.23).

Table 4.23: Distribution of Underage Respondents’ Reasons for Not Participating in Gambling Activities

Reasons	%	Frequency	N
Legal Restriction	49.1	446	908
Family Restriction	41.5	377	908
School Restriction	32.4	294	908
Always Lose	24.4	222	908
Not Interested	84.5	767	908
Others	8.1	74	908
No Special Reasons	26.2	238	908

Forms of participation in gambling

4.13 Among those who admitted having gambled in the past year, 386 respondents reported they had bought Mark Six tickets. Most of these young gamblers had participated through legal channels with ‘encouragement’ from their family members. Table 4.24 showed that 212 out of 278 respondents indicated that they had been involved in buying Mark Six ticket ‘through family members’. One quarter (23.4%) of them made their bets “through schoolmates/friends who were over 18”. Only 19.8% would risk visiting off-course betting branches.

Table 4.24: Distribution of The Ways through which Underage Respondents Participate in Mark Six

Different Ways	%	Frequency	N
Off-course Branch Betting	19.8	55	278
Through Family Members	76.3	212	278
Through Classmates/Friends over 18	23.4	65	278
Through Family Members’ Telephone Account	8.3	23	278
Through Schoolmates/Friends’ Telephone Account	4.7	13	278
Others	2.5	7	278

4.14 The respondents spent only small amount of money on Mark Six. Table 4.25 showed that a majority (89.2%) spent less than \$50 monthly, and the median monthly amount of betting money participants spent on the whole was \$20 (from \$5 to \$600).

Table 4.25: Distribution of the Amount of Betting Money Spent on Mark Six Monthly

HK Dollars	%	Frequency
10 or below	44.0	106
11 - 50	45.2	109
Above 50	10.8	26
Total	100.0	241

Median= \$20

4.15 Horse racing was another form of legalized gambling available in Hong Kong and was the third most popular form of gambling amongst the underage, as shown in Table 4.22. For those who admitted having participated in horse racing in the past year, only 137 disclosed how they had made their bets. Among these respondents the majority had made a bet 'through family members' (57.5%). The help of 'schoolmates or friends over 18' came second and accounted for 36.5%. One-third of them (33.6%) had made use of 'off-course branch betting' (Table 4.26). The amount of horse racing betting money among the underage gamblers differed greatly (Table 4.27), though the median monthly amount of betting money participants spent on the whole was \$60 (from \$5 to \$2,000).

Table 4.26: Distribution of The Ways through which Underage Respondents Participate in Horse Racing

Different Ways	%	Frequency	N
Off-course Branch Betting	33.6	46	137
In-course Betting	9.5	13	137
Through Family Members	57.7	79	137
Through Schoolmates or Friends over 18	36.5	50	137
Through Family Members' Telephone Account	18.2	25	137
Through Classmates/Friends' Telephone Account	8.0	11	137
Others	3.6	5	137

Table 4.27: Distribution of Underage Respondents' Amount of Betting Money spent on Horse Racing Monthly

HK Dollars	%	Frequency
20 or below	28.8	34
21 - 99	25.4	30
100 - 499	32.2	38
500 or above	12.7	16
Total	100.0	118

Median= \$60

4.16 Regarding the involvement in soccer betting, among those respondents who disclosed how they made a bet, the majority had helps from their close friends (68.3%). These underage soccer matches gamblers found other ways like betting 'in bars' (22.0%), 'in entertainment establishments' (18.3%), and with local bookmakers (17.1%) as well as offshore bookmakers (14.6%) not very attractive, as shown in Table 4.28.

Table 4.28: Distribution of The Ways through which Underage Respondents Participate in Soccer Betting

Different Ways	%	Frequency	N
Bars	22.0	18	82
Entertainment Establishment	18.3	15	82
Through Close Friends	68.3	56	82
Local Bookmakers	17.1	14	82
Offshore Bookmakers (by Telephone)	7.3	6	82
Offshore Bookmakers (by Internet)	14.6	12	82
Others	12.2	10	82

4.17 Table 4.29 showed that underage gamblers tended to make use of similar channel to bet on other ball games (except soccer). The most popular way to make a bet on other ball games was 'through close friends' (68.2%). Making bets at bars (27.3%) or at entertainment establishments (25.0%) came far behind at the second and third places.

Table 4.29: Distribution of The Ways through which Underage Respondents Participate in Betting Other Ball Games

Different Ways	%	Frequency	N
Bars	27.3	12	44
Entertainment Establishment	25.0	11	44
Through Close Friends	68.2	30	44
Local Bookmakers	18.2	8	44
Offshore Bookmakers (by Telephone)	6.8	3	44
Offshore Bookmakers (by Internet)	18.2	8	44
Others	11.4	5	44

4.18 While a slightly higher proportion of underage gamblers spent ‘\$500 or above’ betting money on other balls games (25.7%) than on soccer matches (20.3%) monthly, the median monthly amount of betting money participants spent on the whole on soccer matches was higher than on other ball games (Table 4.30-31). The former was \$100 (from \$5 to \$2,000), whereas the latter was \$75 (from \$5 to \$500).

Table 4.30: Distribution of Underage Respondents’ Amount of Money Spent on Soccer Betting Monthly

HK Dollars	%	Frequency
20 or below	23.4	15
21 - 99	23.4	15
100 - 499	32.8	21
500 or above	20.3	13
Total	99.9	64

Median= \$100

Table 4.31: Distribution of Underage Respondents’ Amount of Money Spent on Other Ball Games Monthly

HK Dollars	%	Frequency
20 or below	25.7	9
21 - 99	28.6	10
100 - 499	31.4	11
500 or above	25.7	5
Total	100.0	35

Median= \$75

4.19 Internet shuffling was always attractive to youngsters; many online casinos were in fact targeted at the underage. The amount of money participants spent in online casinos was, however, relatively small. Nearly sixty percent (59.2%) of the respondents who took part in online casinos spent less than a hundred dollars monthly. Table 4.32 showed that only two out of twenty-seven online casino gamblers spent \$500 or above monthly, and the median monthly amount of betting money participants spent on the whole was \$50 (from \$5 to \$1,000).

Table 4.32: Distribution of Underage Respondents' Amount of Money Spent in Online Casinos Monthly

HK Dollars	%	Frequency
20 or below	40.7	11
21 - 99	18.5	5
100 - 499	33.3	9
500 or above	7.4	2
Total	99.9	27

Median= \$50

Perceptions of the nature of different forms of gambling

4.20 Table 4.33 showed that an overwhelming majority of respondents (88.5%) agreed that social gambling, such as playing mahjong or poker with friends or relatives, was for entertainment. Meanwhile, 69.3% respondents would take part in social gambling in order to kill time. Only 32.5% would perceive social gambling as primarily gambling.

Table 4.33: Distribution of the Underage Respondents' Perception of the Nature of Social Gambling

Nature	%	Frequency	N
Gambling	32.5	644	1983
Entertainment	88.5	1754	1983
Excitement	22.1	439	1983
Kill-time	69.3	1375	1983
Social Activities	42.7	847	1983
Others	3.8	75	1983
Not sure	4.6	91	1983

4.21 Mark Six was another type of gambling activity that was considered more a form of entertainment than gambling. Table 4.34 showed that seven out of ten underage respondents (71.4%) perceived Mark Six as a kind of entertainment, whereas only 55.0% would see it as gambling primarily. Very few respondents (5.6%) thought that Mark Six was a social activity. About one out of four agreed that it was a way to spend time (25.1%), a significant proportion of respondents also thought that it was an excitement seeking behavior (21.3%).

Table 4.34: Distribution of the Underage Respondents' Perception of the Nature of Mark Six

Nature	%	Frequency	N
Gambling	55.0	1094	1988
Entertainment	71.4	1420	1988
Excitement	21.3	423	1988
Kill-time	25.1	499	1988
Social Activities	5.6	112	1988
Others	8.5	169	1988
Not sure	8.9	177	1988

4.22 Compared to social gambling and Mark Six, the majority of the underage regarded betting on horse racing (79.0%), on soccer matches (70.1%), on other ball games (70.5%) and in online casinos (69.3%) 'gambling' rather than 'entertainment' activities (Table 4.35-38). Fewer respondents agreed that all these forms of gambling were forms of entertainment, though still over half of the respondents perceived them as such – horse racing (62.6%), soccer betting (67.2%), betting on other ball games (63.0%) and online casino (58.3%). Excitement was another element that many ascribed to these gambling activities – horse racing (40.5%), soccer betting (45.7%) and betting on other ball games (41.3%). Killing time was another important consideration for horse racing (42.5%), soccer betting (41.3%), betting on other ball games (39.2%) and particularly for online casino gambling (52.9%).

Table 4.35: Distribution of the Underage Respondents' Perception of the Nature of Horse Racing

Nature	%	Frequency	N
Gambling	79.0	1561	1977
Entertainment	62.6	1238	1977
Excitement	40.5	801	1977
Kill-time	42.5	841	1977
Social Activities	13.2	261	1977
Others	6.0	119	1977
Not sure	7.4	147	1977

Table 4.36: Distribution of the Underage Respondents' Perception of the Nature of Soccer Betting

Nature	%	Frequency	N
Gambling	70.1	1384	1974
Entertainment	67.2	1326	1974
Excitement	45.7	903	1974
Kill-time	41.3	815	1974
Social Activities	22.4	442	1974
Others	4.4	86	1974
Not sure	8.7	171	1974

Table 4.37: Distribution of Underage Respondents' Perception of the Nature of Betting on Other Ball Games

Nature	%	Frequency	N
Gambling	70.5	1389	1969
Entertainment	63.0	1241	1969
Excitement	41.3	813	1969
Kill-time	39.2	771	1969
Social Activities	18.4	362	1969
Others	2.9	57	1969
Not sure	12.5	247	1969

Table 4.38: Distribution of the Underage Respondents' Perception of the Nature of Online Casinos

Nature	%	Frequency	N
Gambling	69.3	1304	1882
Entertainment	58.3	1097	1882
Excitement	34.1	642	1882
Kill-time	52.9	995	1882
Social Activities	10.1	190	1882
Others	2.8	53	1882
Not sure	13.2	249	1882

The views of the underage population on gambling policy

4.23 The line drawn for legal participation in gambling was always arbitrary. 42% respondents from this school survey remained indifferent to the restriction that one had to be 18 in order to participate in legal gambling (Table 4.39). More or less the same proportion, i.e. 40.6% agreed to such an arrangement. Only 17.4% disagreed.

4.24 However, it seemed that many school students considered participation in legal gambling acceptable, or at least not repulsive. Nearly half of the (46.0%) respondents expressed that they certainly or probably would try legalized gambling when they are 18 years old. Another 28.9% respondents took a ‘wait and see’ attitude and retained the probability for involvement, expressing the view that they were not sure how they would then act. Slightly over one quarter (25.2%) expressed that they would probably or certainly not gamble at all even when they reach the age of 18 (Table 4.40).

Table 4.39: Distribution of Underage Views on Existing Age Limit for Gambling Participation at 18

Opinion	%	Frequency
Agree	40.6	811
Disagree	17.4	347
No Comments	42.0	838
Total	100.0	1996

Table 4.40: Distribution of the Likelihood to Participate in Legal Gambling After 18 for the Underage

Opinion	%	Frequency
Certainly would	11.2	221
Probably would	34.8	689
Not sure	28.9	572
Probably not	11.9	236
Certainly not	13.3	263
Total	100.0	1981

Opinions on the recent debate on soccer betting

4.25 One aspect of the existing gambling policy that had caused heated debates was whether it was acceptable to provide legal outlets for soccer betting. One major argument against the proposal for legalization of soccer betting was the possible impacts of such a policy on youngsters, when the scope of legalized gambling was extended. Survey result indicated that the underage respondents had diversified opinions on this issue. Table 4.41 showed that 40.1% agreed or strongly agreed to the ‘provision of authorized outlets for soccer betting’. This significantly overturned those 28.5% who disagreed or strongly disagreed. The remaining 31.4% opted ‘no comments’.

Table 4.41: Distribution of the Views on the Provision of Authorized Outlets for Soccer Betting among the Underage

Opinion	%	Frequency
Strongly Agree	14.6	291
Agree	25.5	510
No comments	31.4	628
Disagree	13.5	269
Strongly Disagree	15.0	300
Total	100.0	1998

4.26 If legal outlet for soccer betting were provided, the question would be whether students would participate in gambling. Figures in Table 4.42 showed that only 14.4% respondents expressed they certainly or probably would participate. In contrast, 67.1% of respondents expressed that they would certainly or probably not participate in legal soccer betting even with the provision of an authorized betting channel.

Table 4.42: Distribution of the Underage Respondents' Likelihood to participate in Legal Soccer Betting

Tendency to Participate	%	Frequency
Certainly Would	4.8	95
Probably Would	9.6	192
Not Sure	18.6	372
Probably Would Not	14.3	285
Certainly Would Not	52.8	1054
Total	100.0	1998

4.27 Table 4.22 showed that a small portion (4.6%) of respondents had participated in online casino betting in the last twelve months. It was an alarm to many societies that online gambling had attracted more and more youngsters. In response to the question whether 'they agree or not to the setting up of legalized online casinos', only one-fifth of them (20.1%) were open to this proposal. In contrast, 40.1% of the underage population responded negatively (Table 4.43).

Table 4.43: Distribution of the Underage Respondents' Views on the Provision of Authorized Online Casinos

Tendency to Participate	%	Frequency
Strongly Agree	5.9	117
Agree	14.2	283
No comments	39.9	797
Disagree	21.5	430
Strongly Disagree	18.6	371
Total	100.0	1998

4.28 If legal online casinos were setup, only 10.9% respondents indicated that they would certainly or probably participate in the activity. A majority (69.2%), however, expressed they that would certainly or probably not participate, and only 20% were ‘not sure’ (Table 4.44).

Table 4.44: Distribution of Underage Respondents’ Likelihood to participate in Online Casino Gambling

Tendency to Participate	%	Frequency
Certainly Would	3.2	63
Probably Would	7.7	153
Not Sure	20.0	399
Probably Would Not	14.4	288
Certainly Would Not	54.8	1095
Total	100.0	1998

Probable problem/pathological gambling among adolescents

4.29 The school survey found that a total of 399 respondents – one-fifth of the entire 2000 samples – reported themselves as having exhibited one or more of the diagnostic criteria of pathological gambling. Among them, 52 respondents manifested five DSM-IV criteria or more and therefore could be termed as *probable pathological gamblers*. Respondents who showed three to four criteria (90 respondents) could be termed as *probable problem gamblers* (Table 4.45).

Table 4.45: Exhibition of DSM-IV Diagnostic Criteria on Pathological Gambling among the underage

No. of Criteria Exhibited	Frequency	Cumulative Frequency
10	9	9
9	3	12
8	1	13
7	8	21
6	10	31
5	21	52
4	37	89
3	53	142
2	81	223
1	176	399
Total	399	399

4.30 For those who exhibited 5 DSM-IV criteria of pathological gamblers, the most common form of gambling they engaged in was gambling with friends or relatives (95.9%). Participation in legal gambling like Mark Six or horse racing was also quite common, with participation rates of 61.5% and 51.9% respectively. The participation rate for betting on soccer matches, other ball games and online casinos were 42.3%, 32.7% and 40.4% respectively (Table 4.46).

Table 4.46: Distribution of Underage Probable Pathological Gamblers' involvement in Gambling Activities by Forms of Gambling %

Gambling Activities	Ever	Never	Total	(N)
Mark Six	61.5	38.5	100.0	(52)
Illegal Mark Six	17.3	82.7	100.0	(52)
Horse Racing	51.9	48.1	100.0	(52)
Illegal Horse Racing	17.3	82.7	100.0	(52)
Soccer Betting Activities	42.3	57.7	100.0	(52)
Other Ball Games	32.7	67.3	100.0	(52)
Online Casino	40.4	59.6	100.0	(52)
Social Gambling	95.9	4.1	100.0	(49)

4.31 In response to the question “through which form(s) of gambling s/he experienced the problems caused by gambling?” two-third (65.3%) referred to “involvement in social gambling”. Half of the underage probable pathological gamblers (49.0%) referred to “betting on local horse racing”, and 40.8% referred to “buying Mark Six tickets”. Those who chose sport related gambling like “betting on soccer matches” or “betting on other ball games” came fourth and fifth with 36.7% and 22.4% respectively (Table 4.47).

Table 4.47: Distribution of Underage Probable Pathological Gamblers and the Form of Gambling through which they experienced their Problems

Gambling Activities	%	Frequency	N*
Mark Six	40.8	20	49
Illegal Mark Six	12.2	6	49
Horse Racing	49.0	24	49
Illegal Horse Racing	10.2	5	49
Soccer Betting Activities	36.7	18	49
Other Ball Games (except soccer)	22.4	11	49
Online Casino	16.3	8	49
Social Gambling	65.3	32	49
Others	4.1	2	49

* Three out of 52 probable pathological gamblers refused to answer this question.

4.32 As compared to those who had not gambled in the past year (non gamblers), it was quite obvious that those *probable pathological gamblers* put much more emphasis upon ‘entertainment’ rather than the ‘gambling’ nature of all forms of gambling, that is, 76.9% as against 50.0% on Mark Six; 76.5% as against 66.7% on horse racing; 80.8% as against 63.5% on soccer betting; 71.4% as against 57.1% on betting on other ball games; 64.0% as against 60.0% on online casinos and 88.2% as against 52.9% on social gambling (Table 4.48-53). This attitude might be a reason for the active participation in gambling activities for the probable pathological gamblers. It also could be a result of the need to justify their active involvement. In contrast, the majority of non-gamblers perceived all form of gambling activities as ‘gambling’ except social gambling, which was regarded by many as ‘entertainment’ (83.3%) and ‘time-killing activities’ (63.9%). Only 32.4% non-gamblers perceived social gambling as ‘gambling’.

Table 4.48: Distribution of Differences in Underage Respondents’ Perception of the Nature of Mark Six %

Nature	Non-gamblers Only (N=904)*	Probable Pathological Gamblers Only (N=52)
Gambling	59.1	50.0
Entertainment	67.6	76.9
Excitement	19.6	44.2
Kill-time	25.4	38.5
Social Activities	4.5	15.4
Others	7.1	11.5
Not sure	11.4	7.7

Remark: The total number of respondents (908 non-gamblers against 1080 gamblers) was 1988 instead of 2000 because we could not identify the gambling status of 12 respondents. Among the gamblers, 52 were probable pathological gamblers (i.e. exhibited 5 or above according to the DSM-IV criteria).

* Four out of 908 non-gamblers refused to answer this question.

Table 4.49: Distribution of Differences in Underage Respondents' Perception of the Nature of Horse Racing %

Nature	Non-gamblers (N=901)*	Potential Pathological Gamblers Only (N=51)@
Gambling	80.8	66.7
Entertainment	58.5	76.5
Excitement	35.0	60.8
Kill-time	40.3	58.8
Social Activities	11.3	27.5
Others	5.4	11.8
Not sure	9.2	2.0

Remark: The total number of respondents (908 non-gamblers against 1080 gamblers) was 1988 instead of 2000 because we could not identify the gambling status of 12 respondents. Among the gamblers, 52 were probable pathological gamblers (i.e. exhibited 5 or above according to the DSM-IV criteria).

* Seven out of 908 non-gamblers refused to answer this question.

@ One of out 52 probable pathological gamblers refused to answer this question.

Table 4.50: Distribution of Differences in Underage Respondents' Perception of the Nature of Soccer Betting %

Nature	Non-gamblers (N=903)*	Probable Pathological Gamblers Only (N=52)
Gambling	71.3	63.5
Entertainment	61.8	80.8
Excitement	40.8	69.2
Kill-time	38.22	61.5
Social Activities	17.2	44.2
Others	3.9	9.6
Not sure	10.3	1.9

Remark: The total number of respondents (908 non-gamblers against 1080 gamblers) was 1988 instead of 2000 because we could not identify the gambling status of 12 respondents. Among the gamblers, 52 were probable pathological gamblers (i.e. exhibited 5 or above according to the DSM-IV criteria)

* Five out of 908 non-gamblers refused to answer this question.

Table 4.51: Distribution of Differences in Underage Respondents' Perception of the Nature of Betting Other Ball Games %

Nature	Non-gamblers (N=902)*	Probable Pathological Gamblers Only (N=49)@
Gambling	72.3	57.1
Entertainment	58.6	71.4
Excitement	37.0	46.9
Kill-time	34.4	42.9
Social Activities	15.6	32.7
Others	2.8	4.1
Not sure	14.2	12.2

Remark: The total number of respondents (908 non-gamblers against 1080 gamblers) was 1988 instead of 2000 because we could not identify the gambling status of 12 respondents. Among the gamblers, 52 were probable pathological gamblers (i.e. exhibited 5 or above according to the DSM-IV criteria)

* Six out of 908 non-gamblers refused to answer this question.

@ Three out of 52 probable pathological gamblers refused to answer this question.

Table 4.52: Distribution of Difference in Underage Respondents' Perception of the Nature of Online Casino %

Nature	Non-gamblers (N=871)*	Probable Pathological Gamblers Only (N=50)@
Gambling	72.2	60.0
Entertainment	54.6	64.0
Excitement	30.3	50.0
Kill-time	47.8	58.0
Social Activities	6.7	34.0
Others	3.0	8.0
Not sure	12.9	18.0

Remark: The total number of respondents (908 non-gamblers against 1080 gamblers) was 1988 instead of 2000 because we could not identify the gambling status of 12 respondents. Among the gamblers, 52 were probable pathological gamblers (i.e. exhibited 5 or above according to the DSM-IV criteria)

* Thirty-seven out of 908 non-gamblers refused to answer this question.

@ Two out of probable pathological gamblers refused to answer this question.

Table 4.53: Distribution of Differences in Underage Respondents' Perception of the Nature of Social Gambling %

Nature	Non-gamblers (N=896)*	Probable Pathological Gamblers Only (N=51)
Gambling	32.4	52.9
Entertainment	83.9	88.2
Excitement	16.0	60.8
Kill-time	63.9	74.5
Social Activities	37.0	68.6
Others	2.9	9.8
Not sure	7.0	5.9

Remark: The total number of respondents (908 non-gamblers against 1080 gamblers) was 1988 instead of 2000 because we could not identify the gambling status of 12 respondents. Among the gamblers, 52 were probable pathological gamblers (i.e. exhibited 5 or above according to the DSM-IV criteria)

* Four out of 908 non-gamblers refused to answer this question.

@ One out of probable pathological gamblers refused to answer this question.

4.33 Again, as shown in Table 4.54-55, it was very obvious that those who exhibited symptoms of pathological gambling had family members and peers involved intensively in nearly all gambling activities. Respondents in the non-gamblers group were generally living in a less “gambling-conducive” social environment in which family members and peers were much less involved in all gambling activities. This characteristic of the social circle of different groups denoted that being exposed to a social context with a lot of on-going gambling activities might possibly lead to more active involvement of the underage in gambling, which in turn increased the likelihood of gambling problems.

Table 4.54: Distribution of Differences in Underage Respondents' Family Members who had participated in Gambling Activities in the Past Year by Forms of Gambling %

Gambling Activities	Family Members Participation Rate	
	Non-gamblers (N)	Probable Pathological Gamblers Only (N=52)
Mark Six	89.0 (904)	90.4
Illegal Mark Six	2.2 (901)	17.3
Horse Racing	62.3 (904)	86.5
Illegal Horse Racing	2.2 (905)	15.4
Horse Racing (Macau)	4.2 (901)	23.1
Soccer Betting with Local Bookmakers	1.4 (904)	23.1
Betting on Ball Games with Local Bookmakers	0.6 (903)	25.0
Soccer Betting with Offshore Bookmakers	0.7 (905)	15.4
Betting on Ball Games with Offshore Bookmakers	0.6 (904)	11.8
Mahjong House	8.6 (905)	25.0
Casino Ship	6.4 (905)	36.5
Casino (Macau)	23.9 (905)	48.1
Online Casino	1.5 (905)	19.2
Casino (Local Illegal)	1.2 (903)	17.3
Social Gambling	60.2 (898)	92.2

Remark: The total number of respondents (908 non-gamblers against 1080 gamblers) was 1988 instead of 2000 because we could not identify the gambling status of 12 respondents. Among the gamblers, 52 were probable pathological gamblers (i.e. exhibited 5 or above according to the DSM-IV criteria).

Table 4.55: Distribution of Differences in Underage Respondents' Schoolmates/Friends who had Participated in Gambling Activities in the Past Year by Forms of Gambling %

Gambling Activities	Schoolmates & Friends' Participation Rate	
	Non-gamblers (N)	Probable Pathological Gamblers Only (N=52)
Mark Six	21.2 (907)	78.8
Illegal Mark Six	3.0 (906)	30.8
Horse Racing	19.3 (906)	78.8
Illegal Horse Racing	2.8 (906)	32.7
Horse Racing (Macau)	2.6 (907)	28.8
Soccer Betting with Local Bookmakers	4.3 (907)	44.2
Betting on Ball Games with Local Bookmakers	3.1 (907)	38.5
Soccer Betting with Offshore Bookmakers	2.0 (907)	26.9
Betting on Ball Games with Offshore Bookmakers	2.2 (907)	32.7
Mahjong House	3.2 (907)	34.6
Casino Ship	2.5 (907)	28.8
Casino (Macau)	3.2 (907)	36.5
Online Casino	4.0 (907)	34.6
Casino (Local Illegal)	2.7 (904)	25.0
Social Gambling	30.0 (899)	84.3

Remark: The total number of respondents (908 non-gamblers against 1080 gamblers) was 1988 instead of 2000 because we could not identify the gambling status of 12 respondents. Among the gamblers, 52 were probable pathological gamblers (i.e. exhibited 5 or above according to the DSM-IV criteria).

Summary of findings of the school survey

- 4.34 The survey results clearly revealed that a portion of underage students did engage in some form of gambling in the past year. Social gambling was the most prevalent form as half of them took part in these activities, and most of them did not regard gambling the primary nature of social gambling.
- 4.35 Horse racing and Mark Six attracted some youngsters, even though the underage was prohibited from participating in these two popular forms of gambling. As there were legal outlets for participation in these two gambling forms, most youngsters who took part made their bet through ‘legal’ channels with the help of family members and close friends. Only a very small number gambled via illegal ways. As a significant portion of those who gambled in these activities made their way through family members, it was likely that family members did accept or tolerate underage involvement in legal gambling.
- 4.36 Survey results also revealed that some youngsters had participated in some illicit gambling activities in the past year such as soccer betting, betting on other ball game and gambling with online casinos. On the surface, it seemed that the participation rates were low. However, given the illegal status, the seriousness of the issue was still subject to interpretation.
- 4.37 It was apparent that the existing gambling policy was widely supported by school students. The majority did not object to the age limit of 18 for people to take part in gambling. This age limit appeared to be a clear dividing line in the mind of the youngsters as near half of the respondents would consider taking part in gambling when they reach 18.
- 4.38 Youngsters were often considered as sport enthusiasts and were thought to be more ready to accept new ideas. It was therefore not surprising that a significant, though not a majority, of them accepted the idea of providing legal outlets for soccer betting. To a lesser extent, legal provision of online casinos was also supported by near one fifth of the school age students. Again, one out of seven and one out of ten indicated respectively that they would or would consider taking part in these two activities if they were legalized. Steps to modify the existing gambling policy should not forget to assess the possible impacts and consequences of this propensity.

- 4.39 Further analysis of the survey data revealed that among the underage population, male respondents at higher forms and older ages were more likely to take part in gambling.
- 4.40 Social gambling and Mark Six were the most popular gambling activities for the underage, and participation in horse racing ranked third. Though it was not legal for the underage to take part in gambling of whatever forms, still some of the respondents managed to get access to legal channels through which they could participate in legalized gambling.
- 4.41 Gambling on sports like betting on soccer matches, as compared with general public, was more attractive to the underage population. This was also true to the underage involvement in online casino gambling. All these were closely connected with peer involvements, indicating that the gambling pattern of the respondents was largely similar to those of their peers.

Chapter V: Findings on Qualitative Study

Introduction

Pathological gambling is different from social gambling. People involved in social gambling will gamble for entertainment without risking their financial affordability (Shaffer et al., 1997). Though they would sometimes briefly chase their losses, they are rarely preoccupied with gambling. Pathological gamblers are characterized by a periodic or continuous loss of control over gambling, a preoccupation with gambling and with getting money to chase losses, irrational thoughts, lies and deception, debts and illegal acts, and family and work disruptions (*Diagnostic & Statistical Manual of Mental Disorders*, Fourth Edition, 1994).

As a part of a comprehensive study on gambling behaviors in Hong Kong, this qualitative study aims at increasing our understanding of the course and impact of pathological gambling, and the treatment or services for the pathological gamblers and their families. Major findings derived from in-depth interviews with pathological gamblers and social gamblers were provided separately in two sections. Section I comprises of results on pathological gambling, and section II presents results on social gambling.

Section I: Findings on Pathological Gambling

- 5.1 19 male and one female pathological gamblers were interviewed in this study. The youngest was only 24 years old and the oldest was 57. The majority (70.0%) was within the age range of 30 to 49. Among these twenty pathological gamblers, half of them were married and living with their spouse. The other half included seven interviewees who were 'divorced' and three others who had 'never married' (Table 5.1).
- 5.2 Regarding the interviewees' socio-economic characteristics, the majority (75.0%) possessed secondary school education or below. Only three interviewees (15.0%) were university graduates with a bachelor degree.
- 5.3 With the exception of four pathological gamblers, all the other interviewees were currently employed. They included two taxi-drivers, three civil servants, three workers at restaurants, two managerial professionals, one engineer, one investment adviser, one welfare worker, one clerical worker, and one who worked as a laborer at a school.

Table 5.1: Summary of Major Features of 20 Pathological Gamblers Interviewed

Case No.	Sex /Age of Onset	Years of Social Gambling before Onset	Years of Pathological Gambling	Psychosocial Characteristics	Reasons Reported at Onset Phase	Forms of Gambling	Precipitating Factor	Amount of Debts (HK\$)
1	M / 21	12	25	<ul style="list-style-type: none"> winning brought wealth, reputation, satisfaction, joy and self-worth seek excitement and pleasure selective memories of gambling experience poor finance management accepted borrowing money as an appropriate coping strategy 	<ul style="list-style-type: none"> to seek pleasure and excitement influenced by colleagues 	<ul style="list-style-type: none"> Macau casino gambling illegal horse racing 	<ul style="list-style-type: none"> greater exposure to gambling 	1,500,000
2	M / 23	15	28	<ul style="list-style-type: none"> the only solution to debts and financial problems was gambling gambling provided excitement and pleasure gambling as a strategy to cope with stress borrowing and returning money was normal and acceptable behavior an urge to spent every penny from early adolescence 	<ul style="list-style-type: none"> to socialize with boss, colleagues to reduce work-related stress to seek excitement and pleasure habitual leisure activities 	<ul style="list-style-type: none"> Macau casino gambling 	<ul style="list-style-type: none"> greater exposure to gambling 	2,500,000
3	M / 33	20	20	<ul style="list-style-type: none"> a must win attitude selective memories of winning experiences weak impulse control poor finance management inadequate problem solving skills 	<ul style="list-style-type: none"> to get rich to seek excitement and pleasure to kill time 	<ul style="list-style-type: none"> Macau casino gambling 	<ul style="list-style-type: none"> greater exposure to gambling 	
4	M / 34	16	7	<ul style="list-style-type: none"> low self-esteem wealth represented success & social status no other healthy activities poor stress management techniques 	<ul style="list-style-type: none"> to get big money to kill time to seek excitement and relaxation 	<ul style="list-style-type: none"> Macau casino gambling 	<ul style="list-style-type: none"> greater exposure to gambling 	
5	M / 30	17	15	<ul style="list-style-type: none"> father was a gambler early exposure to gambling activities abused financial support from family members who were ready to pay his debts lacked job satisfaction influenced by friends gambling became a part of life selective memories of winning experiences 	<ul style="list-style-type: none"> modeling effect from friends, business partners highly flexible timetable in work 	<ul style="list-style-type: none"> Mahjong illegal horse racing Macau casino gambling soccer betting 	<ul style="list-style-type: none"> greater exposure to gambling 	Over 2,000,000

Table 5.1: Summary of Major Features of 20 Pathological Gamblers Interviewed (Con't)

Case No.	Sex /Age of Onset	Years of Social Gambling before Onset	Years of Pathological Gambling	Psychosocial Characteristics	Reasons Reported at Onset Phase	Forms of Gambling	Precipitating Factor	Amount of Debts (HK\$)
6	M / 35	16	13	<ul style="list-style-type: none"> • to cope with stress and depression • lack of impulse control due to over-protection of parents • a vain personality and low self-esteem • lack of healthy hobbies 	<ul style="list-style-type: none"> • to seek excitement • to seek money • to cope with depressed mood and stress 	<ul style="list-style-type: none"> • horse racing • Macau casino gambling 	<ul style="list-style-type: none"> • greater exposure to gambling 	350,000
7	F / 50	20	3	<ul style="list-style-type: none"> • to avoid pain arising from marital conflicts and separation • ineffective problem solving 	<ul style="list-style-type: none"> • to escape from pain of marital conflicts 	<ul style="list-style-type: none"> • Macau casino gambling 	<ul style="list-style-type: none"> • separation 	3,000,000
8	M / 23	15	22	<ul style="list-style-type: none"> • a strong lust for money because wealth symbolized success • longed for a luxurious style of living • sought recognition and acceptance by friends and colleagues who gambled • weak impulse control • selective memories of winning experiences • to seek relief from stress and marital conflicts • abuse of parental support in paying debts 	<ul style="list-style-type: none"> • to get quick and big money • influenced by friends • to seek excitement and pleasure 	<ul style="list-style-type: none"> • Korean & Macau casino gambling • local illegal casino gambling 	<ul style="list-style-type: none"> • greater exposure to gambling 	Unknown
9	M / 27	12	30	<ul style="list-style-type: none"> • wealth boosted self worth • no other healthy hobbies/ activities • ineffective stress management • using avoidance strategy to solve problems • an urge to seek excitement 	<ul style="list-style-type: none"> • failure in career • to forget pain and problems • to get big money • to kill time • to seek excitement 	<ul style="list-style-type: none"> • Macau casino gambling 	<ul style="list-style-type: none"> • career failure 	1,000,000
10	M / 26	1.5	3	<ul style="list-style-type: none"> • to seek pleasure, pride, satisfaction and self-confidence in winning • selective memories of winning experiences 	<ul style="list-style-type: none"> • a short cut to huge money • to seek excitement and pleasure with peers • psychological satisfaction and self-esteem in winning • influenced by peers 	<ul style="list-style-type: none"> • horse racing • stocks and shares • Macau casino gambling • soccer betting 	<ul style="list-style-type: none"> • greater exposure to gambling 	400,000

Table 5.1: Summary of Major Features of 20 Pathological Gamblers Interviewed (Con't)

Case No.	Sex /Age of Onset	Years of Social Gambling before Onset	Years of Pathological Gambling	Psychosocial Characteristics	Reasons Reported at Onset Phase	Forms of Gambling	Precipitating Factor	Amount of Debts (HK\$)
11	M / 31	14	7	<ul style="list-style-type: none"> • lack will power • to cope with family troubles • a must win attitude • uncontrollable urge to chase after losses 	<ul style="list-style-type: none"> • escape from family troubles • influenced by colleagues 	<ul style="list-style-type: none"> • casino gambling 	<ul style="list-style-type: none"> • family conflicts 	2,800,000
12	M / 25	10	6	<ul style="list-style-type: none"> • to rebel against an over-demanding father • a habit and an urge to spend every penny from childhood • get used to borrow money • a greed for money and spending money • poor finance management • weak impulse control • lack healthy hobbies • a lust for excitement 	<ul style="list-style-type: none"> • to seek pleasure and excitement • to kill time • to social and relax • to cope with stress • habitual activities 	<ul style="list-style-type: none"> • legalized horse racing • soccer betting 	<ul style="list-style-type: none"> • loss of a lover 	2,300,000
13	M / 33	14	15	<ul style="list-style-type: none"> • no clear life goal • unsatisfactory skills in finance management • a lust for excitement • lack healthy hobbies • gambling offered a short cut to money 	<ul style="list-style-type: none"> • to socialize with colleagues • to test wisdom • gambling was a hobby • to seek satisfaction and pleasure • to win money 	<ul style="list-style-type: none"> • legal horse racing in HK 	<ul style="list-style-type: none"> • greater exposure to gambling 	1,000,000
14	M / 27	2	13	<ul style="list-style-type: none"> • a must win attitude • selective memories of winning experiences • perceived one self as having good lucky in gambling • to escape the pain of losing a lover 	<ul style="list-style-type: none"> • encouraged by winning experiences • to seek pleasure • accompanied first at by friends and a brother • to kill time • a cut short to get money to handle debts • to cope with stress 	<ul style="list-style-type: none"> • Macau casino gambling • horse racing 	<ul style="list-style-type: none"> • loss of a lover 	700,000
15	M / 21	12	2	<ul style="list-style-type: none"> • father was a pathological gambler • lust for money and materialistic gratification • to seek excitement • no clear life goal 	<ul style="list-style-type: none"> • to win money • interested in ball games • to kill time and boredom • to seek satisfaction and self-confidence • peer influence 	<ul style="list-style-type: none"> • soccer betting • horse racing 	<ul style="list-style-type: none"> • greater exposure to gambling 	20,000

Table 5.1: Summary of Major Features of 20 Pathological Gamblers Interviewed (Con't)

Case No.	Sex /Age of Onset	Years of Social Gambling before Onset	Years of Pathological Gambling	Psychosocial Characteristics	Reasons Reported at Onset Phase	Forms of Gambling	Precipitating Factor	Amount of Debts (HK\$)
16	M / 42	35	10	<ul style="list-style-type: none"> • father was a pathological gambler • irrational thoughts about winning • strong dignity and denial of failure in business • an over self-reliant personality 	<ul style="list-style-type: none"> • marital conflicts • conflicts with father and brother • to win money for business in China 	<ul style="list-style-type: none"> • Macau casino gambling 	<ul style="list-style-type: none"> • business crisis 	200,000
17	M / 35	20	6.5	<ul style="list-style-type: none"> • increased exposure to Macau casino gambling • weak impulse control • greedy for money • gambling as a short cut to big money 	<ul style="list-style-type: none"> • influenced by colleagues • encouraged by winning experiences 	<ul style="list-style-type: none"> • Macau casino gambling • horse racing 	<ul style="list-style-type: none"> • greater exposure to gambling 	900,000
18	M / 33	13	16	<ul style="list-style-type: none"> • to cope with stress and problems • selective memories of winning experiences • seek excitement • derived a sense of pride and self-worth in winning experiences • weak impulse control 	<ul style="list-style-type: none"> • to seek excitement, satisfaction and self-worth • to seek relaxation when depressed • to avoid stress 	<ul style="list-style-type: none"> • Macau casino gambling • horse racing 	<ul style="list-style-type: none"> • greater exposure to gambling 	2,500,000
19	M / 30	20	4.5	<ul style="list-style-type: none"> • an urge to chase after losses • a short cut to big money • to seek satisfaction • enjoyed spending money • poor finance management 	<ul style="list-style-type: none"> • to win money • to kill time and seek excitement 	<ul style="list-style-type: none"> • Macau casino gambling • legal horse racing • soccer betting 	<ul style="list-style-type: none"> • greater exposure to gambling 	250,000
20	M / 24	6	18	<ul style="list-style-type: none"> • money was most important in life • to seek a sense of importance at Mahjong centers • to seek quick money • selective memories of winning experiences • to seek pleasure and excitement • to cope with depression 	<ul style="list-style-type: none"> • to get rich • to seek pleasure and excitement • good service at Mahjong centers • to get big money to pay debts 	<ul style="list-style-type: none"> • Mahjong 	<ul style="list-style-type: none"> • greater exposure to gambling 	600,000

Psycho-socio characteristics of pathological gamblers

- 5.4 Table 5.1 showed that a high proportion (80.0%) of the interviewees claimed that money was extremely important to them. Six interviewees saw money as what they pursued in their lives. To them money and wealth represented success (30.0%), self-esteem (20.0%) and power to influence others and gaining respect (10.0%). Gambling offered a short cut to wealth. However, a majority of the interviewees (90.0%) believed that money was both a cause and a solution to their problems when they got into debts and gambling-related difficulties.
- 5.5 Many male interviewees reported that they longed for materialistic satisfaction and sensual enjoyment such as eating delicious meals, drinking good wines, relaxing at saunas and night clubs, and purchasing quality goods, cars and spacious apartments, etc. Some of them did improve their levels of materialistic satisfaction when they won big money by gambling. However, many married male interviewees did not want to draw the attention of their wives to their sudden materialistic possessions acquired through gambling.
- 5.6 Half (50.0%) of the interviewees did not have clear goals in life, and eight (40.0%) did not get any sense of satisfaction in life before the onset stage. As pathological gambling developed into a repetitive habit, a high proportion of the interviewees (80%) reported that gambling and chasing losses had become their goals in life, especially when debts accumulated. They (75.0%) found no other sources of life satisfaction other than the sense of excitement from gambling.
- 5.7 All twenty interviewees depicted gambling as a socially and culturally acceptable behavior. For those who participated in the legal forms of gambling activities, they adopted an even more lenient attitude. They emphasized the benefits and functions of relaxation, recreation and promotion of social interactions in gambling activities.
- 5.8 A majority (80.0%) of the pathological gamblers had perceived that the chance for winning existed as long as gambling persisted (有賭未爲輸). Driven by a greed for money and excitement, they were determined to win as much as they could. They would not stop betting when they were winning money because they perceived that they were in good luck. When they were losing money, they (80.0%) strongly believed that they had to chase after losses even if they had to

borrow money from illegal sources. Twelve (60.0%) interviewees had selective memories of their winning experiences, and tended to forget the pain of losing money. Six (30.0%) interviewees were over-confident of their gambling techniques. They thought gambling skills were more important than luck.

- 5.9 All (100.0%) the interviewees reported having difficulty in exercising impulse control, and had illusion of self-control over gambling. Their own reflection depicted periods in which they either periodically or continuously lost control over gambling, they simply could not cut back or stop gambling when they were losing and or winning money.
- 5.10 Eighteen (90.0%) interviewees described themselves as inadequate or very unsatisfactory in managing personal and family finance. No serious efforts to plan, save and budget were made. Five interviewees formed the habit of spending every penny they had from childhood or early adolescence due to inappropriate parental supervision. Ten interviewees accepted borrowing and repaying money as a normal life style when they joined the work force. They observed that friends, colleagues and even their boss or seniors would borrow money from each other. Half of the male married interviewees failed to provide stable maintenance fee to their spouse since their marriage. They relied heavily on their wives to shoulder financial burden and manage family finance before they became pathological gamblers.
- 5.11 A high (70.0%) proportion of the interviewees reported ineffective stress management and problem solving. Four interviewees had no one to confide troubles to, another four had no other more desirable leisure activities or stress coping strategies. Two interviewees indulged in drinking, eating and other forms of sensual enjoyment. Most (70.0%) of the interviewees employed gambling as an escape from marital discord, family conflicts, personal problems and hassles in their jobs. They attempted to relax and to reduce the level of stress experienced by gambling. They remarked that as they fully concentrated upon gambling activities, all their troubles seemed to vanish. Obviously, no problems could be solved by such an irrational strategy, and as the level of stress increased so did the frequency of gambling.

Onset of pathological gambling and its precipitating factors

- 5.12 Nine male interviewees started pathological gambling within the age range of 20 to 29 years. Another nine interviewees began pathological gambling within the age range of 30 to 39. The ages of onset for the remaining two were aged at 42 and 50 respectively.
- 5.13 Twelve interviewees had been involved in social gambling for 10 to 19 years before gambling progressed towards a pathological state. Five out of the twenty pathological gamblers had been social gamblers for 20 years or more. Only three interviewees had less than ten years involvement in social gambling.
- 5.14 Concerning the interviewees' involvement in pathological gambling, only eight out of twenty had experiences less than 10 years. All the others had experienced more than one decade of involvement in pathological gambling. Since 60% of the interviewees had involved in pathological gambling for 10 to 30 years, the chronic nature of this disorder was indicated.
- 5.15 The most popular form of gambling among the interviewees was Macau casino gambling. Fifteen interviewees had been involved in gambling at Macau casinos for years. Eleven interviewees gambled in local horse racing, including both legal and illegal horse racing. Five interviewees participated in soccer betting, two interviewees played mahjong at restaurants, clubs and mahjong centers, and only one interviewee gambled at both Korean casinos and local illegal casinos.
- 5.16 The six most frequently reported reasons for pathological gambling at the onset phase were seeking excitement (60.0%), winning money (60.0%), influence from colleagues and friends (50.0%), gambling became habitual activities (45.0%), seeking pleasure (40.0%) and stress management and relaxation (40.0%). The three reasons with the same level of reported frequency were coping with depression (20.0%), escaping from relationship problems (20.0%) and seeking a sense of satisfaction and self-esteem (20.0%). One interviewee reported that his strong interest in ball games led to subsequent soccer betting.

- 5.17 A stressor or greater exposure to gambling often precipitated the abrupt onset of pathological gambling. A majority (70.0%) of the interviewees had experienced greater exposure to gambling before the onset. Greater exposure to gambling was mainly due to either a need to socialize with colleagues or friends (50.0%) or a need to kill time (50.0%). Six interviewees encountered a stressful event before the onset; these stressors included separation with spouse (16.7%), loss of a lover (33.4%), family quarrels arising from child care of a newborn baby (16.7%) and business or career crisis (33.4%).
- 5.18 The onset phase was often characterized by several episodes, of winnings (70.0%), which led to an increase in the frequency of gambling, the amounts wagered, and the preoccupation with gambling. Five out of the twenty interviewees participated in gambling activities everyday after work, and the other fifteen doubled the frequency of pre-onset gambling, ranging from 2 to 4 times a week. Gambling became habitual activities and a life style pattern. They tolerated several days without sleep, and neglected other physical needs such as eating and drinking, etc.
- 5.19 After the onset all interviewees gradually preferred and developed the habit of gambling alone. They found it a hassle to gamble with colleagues or acquaintances that requested to leave the casinos or the mahjong centers when the pre-scheduled time was up or the pre-determined amounts were lost. Therefore, the pathological gamblers wanted the autonomy to gamble as long as they wished, and to determine the amount to be wagered.
- 5.20 A high proportion (80.0%) of interviewees reported an urge to gamble coincided with a progression in the frequency of gambling during periods of depression, stress and financial hardship. Gambling was employed as a strategy to cope with depression and stress. It was also perceived as a short cut to obtain money.
- 5.21 All the interviewees experienced periods in which they either continuously or periodically could not control their gambling behavior. They simply could not cut down or stop gambling in both winning and losing circumstances.
- 5.22 There was a strong impulse to chase after losses. The hope for winning the lost money was supported by selective memories of previous winning experiences. At least four interviewees had the experience of winning HK\$200,000 to \$300,000 in a single day with a few thousands borrowed. All the interviewees believed that there was hope for winning money as long as gambling persisted.

- 5.23 All the interviewees resorted to borrowing money to gamble, to chase losses and to pay debts. They accepted borrowing and returning money as an acceptable behavior. Both legal (100.0%) and illegal (75.0%) lending sources were sought. Legal lending sources included borrowing from family members, relatives, friends, colleagues, banks, credit and financial institutions, etc. Illegal sources mainly referred to loan sharks at casinos and mahjong centers. One interviewee resorted to stealing from family members and department stores.
- 5.24 As the pathological gamblers got into debts, especially huge debts which beyond their financial credibility, they were tempted to and forced to continue gambling. It was because they found no other short cuts to get huge amounts of money speedily. They also believed that they had to and could win a part or all the lost money from the place where they lost them. Besides having been influenced by such irrational thoughts, there was also a need and an urge to increase their bets.
- 5.25 A high percentage (80.0%) of the interviewees spontaneously invested increasingly large bets in order to induce the desired level of excitement and pleasure. All the interviewees exhibited withdrawal symptoms (e.g., restlessness and feeling irritable) when attempts to cut down or cease gambling were made.

Quitting efforts

- 5.26 All the twenty interviewees reported both voluntary and involuntary attempts to quit pathological gambling. Involuntary efforts to stop pathological gambling occurred when: a) there was simply no money available for gambling due to dismissal (20.0%) and or unemployment (20.0%), harsh financial control exercised by spouse or family members (20.0%), and lending sources were exhausted and used up (90.0%); b) the pathological gamblers were coerced to quit gambling under the threats of separation or divorce (70.0%), suicide (15.0%) and being compelled to leave their family (45.0%); and c) the pathological gamblers were forced to promise quitting gambling as a condition of receiving financial help from spouse or family in settling debts.

- 5.27 Voluntary efforts to quit pathological gambling were also made in the following circumstances: a) the pathological gamblers (100.0%) were overwhelmed by a sense of guilt, shame, worthlessness and self-blame when debts had accumulated to an extent that exceeded and exhausted gamblers' own financial abilities, b) the pathological gamblers were themselves convinced of quitting after having observed and reflected upon the harmful impact of gambling on their spouse, children and other close relatives.
- 5.28 A broad range of self-help strategies was used in attempts to quit pathological gambling. In order to avoid temptations and influence from colleagues who gambled, three interviewees changed to work in a new environment, and one interviewee even quitted his job to work in China. Five interviewees voluntarily solicited financial control from spouse or family who would monitor their everyday expenses. Their wives were authorized to receive payment of their monthly incomes. Two interviewees gave their cards of identity to their wives in order to keep away from Macau casinos. The majority (90.0%) made attempts to change their life style patterns such as picking up more healthy activities (e.g. playing ball-games, swimming, and going to church, etc).
- 5.29 According to the self-reporters of the interviewees, the chance for relapse was high when all or a significant proportion of the debts had been cleared, and at a half year quitting period. The urge to gamble was often irresistible for many quitters (50.0%) when stress or problems in work and or in inter-personal relationship emerged.
- 5.30 Although 18 interviewees reported that had been making attempts to quit gambling when they were interviewed for this research, nine interviewees were anxious about relapse, and five interviewees admitted that they had gambled recently. Only four were confident about abstinence.

Impact on pathological gamblers and their families

- 5.31 All the twenty interviewees recognized the adverse impact of pathological gambling on themselves and their families. Many of them were overwhelmed with guilt (85.0%), shame (25.0%) and low self-esteem (35.0%). They also suffered from mental health problems such as depression (70.0%), suicidal thoughts (35.0%), suicidal attempts (20.0%) and insomnia (15.0%).

- 5.32 Seven interviewees constantly experienced a high level of stress. Three interviewees were mentally distressed. One interviewee reported poor physical health, and another one found physically exhausted after long hour of gambling. Three out the twenty interviewees encountered bankruptcy, one committed criminal offences of stealing, and one was addicted to alcohol. Fifteen interviewees admitted that gambling had adversely affected their motivation or interest in work. Three interviewees recognized deteriorating efficiency or performance. One interviewee was forced to resign, and another one gave up his job voluntarily to work in China in order to quit gambling. Three interviewees were dismissed, two worked under the threats of dismissal. Three experienced failure in business, and one encountered relationship hassles among colleagues as a result of gambling in the office.
- 5.33 The most common adverse financial consequences of pathological gambling were tight family finance and losses of personal and family savings to pay debts. All the spouses of the pathological gamblers described themselves as helpless victims who were compelled to manage extremely desperate family financial circumstances as a result of debts. Three pathological gamblers regretted that their children lost the chance to pursue tertiary education because of financial problems arising from debts. Six pathological gamblers had to re-mortgage or sell their flats to settle debts.
- 5.34 Pathological gambling also produced relational problems, including family quarrels (100.0%), divorce (30.0%), threats of divorce (20.0%) and family disintegration (30.0%) due to suicide of a spouse, disappearance of a pathological gambler and abandonment of family members. A young pathological gambler was expelled from home by his parents. For families that did not disintegrate, nine married pathological gamblers remorse that they had spent too little time with their wives and children. Two young pathological gamblers lost their lovers who gave them up in despair.
- 5.35 The spouses of eight married pathological gamblers suffered from mental health problems, including depression (5 wives), suicidal attempts (1 wife), suicidal thoughts (2 wives) and suicide (1 wife). A spouse died from committing suicide. At least five wives were distressed with threats from loan sharks. A senior pathological gambler reported that his young son, who modeled after him, also suffered from the disorder of pathological gambling.

Treatment and Services

- 5.36 All the interviewees, including the pathological gamblers and six family members, reported that they were not aware of any governmental treatment or services for the pathological gamblers and their families. As a result they were extremely desperate and did try to kill themselves when they got into great troubles either with debts or gambling related problems.
- 5.37 A high proportion of the interviewees were referred to seek help from a Christian fellowship where treatment was rendered by a team of ex-pathological gamblers. Both individual counseling and group therapy were available by adopting a religious and spiritual approach. Almost all the service recipients, especially the pathological gamblers, found the treatment effective. Despite numerous unsuccessful attempts to stop gambling, the pathological gamblers claimed that they successfully gained control of their urge to gamble with a new spiritual influence inside themselves. They seemed to be very confident and determined of quitting gambling with the support of their spouse and family members.
- 5.38 After having attended courses on quitting pathological gambling, the common essential changes experienced and reported by the pathological gamblers included the following: more rational thoughts about money and wealth, realistic perceptions of winning and losses, strengthened impulse control, changing gambling attitudes, and a new life style and life goal.
- 5.39 Most of the pathological gamblers and all their family members admitted that they need treatment and help. The government should make treatment and services available, and treatment had to be expanded to include families. They highly recommended that treatment should be specialized and tailored made for problem and pathological gamblers, it would be most effective if ex-pathological gamblers were involved in providing treatment.
- 5.40 The family interviewees stressed the importance of education and preventive strategies. They remarked that there was a lack of effective public health education and prevention on problem gambling both at school and in the community.

Section II: Findings on Social Gambling

5.41 Ten social gamblers had been interviewed for this study, and four were female and six were male. Among them, the youngest (2 interviewees) were 16 years old and the oldest interviewee was 48 years old. Meanwhile, four of them were married and the other six were not married.

5.42 The majority (70.0%) was secondary school educated, and the remaining three were university graduates. In terms of interviewees' occupation, there included one unemployed, two students, two sales workers, one factory worker, one a watchman, one teacher, one hair stylist, and one hotel laborer.

Table 5.2: Summary of Major Features of 10 Social Gamblers Interviewed

Case No.	Years of Social Gambling	Psychosocial Characteristics	Reasons	Forms of Gambling	Amount Wagered (HK\$ per Week)
1	6	<ul style="list-style-type: none"> • money was desirable only • to seek fun and socialize with peers • materialistic satisfaction was good but not most important • life goal: good academic performance • gambling was acceptable • winning was a matter of luck • could control over gambling • fair finance management • effective stress management 	<ul style="list-style-type: none"> • to socialize with peers and schoolmates • to kill time • to seek fun & pleasure 	<ul style="list-style-type: none"> • soccer betting • playing cards • mark six 	50-150
2	5	<ul style="list-style-type: none"> • money was not most important in life • to socialize with peers and seek pleasure • would not indulge in materialistic satisfaction • life goal: improvement in academic performance • gambling was a desirable entertainment • could accept both winning and losing • proper control over gambling • fair finance management • effective coping with stress 	<ul style="list-style-type: none"> • to socialize with peers and schoolmates • to seek excitement and pleasure • as habitual leisure activities 	<ul style="list-style-type: none"> • soccer betting • mahjong • playing cards 	200
3	33	<ul style="list-style-type: none"> • to seek entertainment • to socialize with friends and colleagues • could accept losing money • stop gambling when the pre-determined amounts were lost • money fostered a sense of security • family was a source of satisfaction • planned to budget and save up • more keep to gamble after winning 	<ul style="list-style-type: none"> • to seek pleasure • to relax • to socialize with relatives and friends 	<ul style="list-style-type: none"> • mahjong • casino ship • playing cards 	1000-2000

Table 5.2: Summary of Major Features of 10 Social Gamblers Interviewed (Con't)

Case No.	Years of Social Gambling	Psychosocial Characteristics	Reasons	Forms of Gambling	Amount Wagered (HK\$ per Week)
4	24	<ul style="list-style-type: none"> desirable to be rich but money was not most important not pursuing materialistic satisfaction life goal secured job and stability in life and happy family life derived satisfaction from family life gambling was an acceptable social activity had never lost control over gambling satisfactory finance management effective stress management the chance for losing money existed 	<ul style="list-style-type: none"> to relax and seek pleasure to socialize with friends and customers 	<ul style="list-style-type: none"> horse-racing mahjong playing cards Macau casino gambling mark six 	300-400
5	12	<ul style="list-style-type: none"> money was basic to meet everyday expense inadequate finance management (no plans to save or budget) gambling as an entertainment satisfied with life so far good control over gambling effective stress management / relaxation 	<ul style="list-style-type: none"> to seek fun and excitement to socialize with peers and colleagues 	<ul style="list-style-type: none"> Mahjong horse racing Macau casino gambling 	300-500
6	10	<ul style="list-style-type: none"> gambling was not the best leisure but acceptable money is essential but not most important no strong lust for materialistic satisfaction longed for getting a suitable job as a current life goal good control over gambling no problem in finance management 	<ul style="list-style-type: none"> to socialize with friends to kill time to seek fun and pleasure to get some money 	<ul style="list-style-type: none"> playing cards mahjong mark six horse racing 	200-500
7	34	<ul style="list-style-type: none"> money was necessary but not most important losses were expected to seek entertainment with friends would not gamble alone refused to borrow money to chase after losses stop gambling when the pre-determined amount was lost had control over gambling health was wealth life goal: fulfilling a mother's role 	<ul style="list-style-type: none"> to seek entertainment to kill time as habitual leisure activities 	<ul style="list-style-type: none"> mahjong horse-racing Macau casino gambling mark six 	300

Table 5.2: Summary of Major Features of 10 Social Gamblers Interviewed (Con't)

Case No.	Years of Social Gambling	Psychosocial Characteristics	Reasons	Forms of Gambling	Amount Wagered (HK\$ per Week)
8	22	<ul style="list-style-type: none"> • money was necessary but not most important • no strong desire for materialistic satisfaction • life goal: fulfill parental responsibilities • satisfaction from family life and career • gambling was acceptable when under control • satisfactory finance management • effective stress management 	<ul style="list-style-type: none"> • to socialize with friends • to seek pleasure • as habitual leisure activities to kill time • to relax 	<ul style="list-style-type: none"> • mahjong • playing cards 	800-2000
9	33	<ul style="list-style-type: none"> • money was important • no lust for materialistic satisfaction • life goal: self-actualization • satisfaction from career and marriage • gambling could add color & fun to life but losses were expected • winging or losing was not important as amounts wagered were not huge • good control over gambling • inadequate finance management • effective stress management 	<ul style="list-style-type: none"> • to seek excitement and fun • to socialize with friends • to test intelligence • to kill time 	<ul style="list-style-type: none"> • mahjong • playing cards 	1000-3000
10	18	<ul style="list-style-type: none"> • money was important for business development • no great desire for materialistic satisfaction • life goal: prosperous business and happy family life • satisfaction from family life • to seek excitement and relaxation • fair control over gambling • effective stress management • fair finance management 	<ul style="list-style-type: none"> • to socialize with peers • to seek pleasure and relaxation • as habitual leisure activities to kill time 	<ul style="list-style-type: none"> • -playing cards • -mark six • -Macau casino gambling 	1000-3000

Psycho-social characteristics of social gamblers

5.43 Table 5.2 showed all interviewees admitted that one could hardly survive without money in modern city life. However, they did not regard money or materialistic satisfaction as the most important things they pursued in lives. Health, peace of mind and harmonious inter-relationships were considered as more important than money or materialistic satisfaction. Gambling was not perceived as a desirable short cut to monetary richness. They would not employ gambling as a strategy to obtain money, instead full-time and part-time work, financial investment and saving scheme were accepted as more effective methods to get money.

- 5.44 Two students expressed their wish for getting a good job upon completing their study as what they currently longed for in life. A female university graduate wanted a good career, and a mother found fulfilling her parental role effectively a meaningful life goal. The other five married interviewees wanted happy family life and stable finance.
- 5.45 A high proportion (60.0%) of the interviewees derived a sense of satisfaction from their work or study, and from mutually satisfying inter-personal relationships, including relationship with family, friends and colleagues.
- 5.46 All the interviewees accepted social gambling as a form of healthy recreation. They preferred legal gambling to illegal gambling. The younger interviewees (30.0%) were more lenient towards soccer betting, and they adopted a less judgmental attitude towards gambling activities among students in family and school environment.
- 5.47 Half of the interviewees believed that chances for losing money not winning existed in all gambling activities. Although 60.0% of interviewees hoped that they would be lucky enough to win some money when they gambled, they did not regard winning or losing as a matter of life and death. Their major concern was not winning or not, they gambled for social purpose but not for money.
- 5.48 All the interviewees reported a sense of control over gambling. They usually gambled within their financial affordability, and would stop betting when they were continuously losing money. They were often rational enough to overcome the urge and abandon the thought of chasing after losses. Eight interviewees did not have any preoccupation with gambling. They soon went on with their normal functions and activities (work or study, etc.) when gambling was over.
- 5.49 Six interviewees found their skills in finance management satisfactory. They developed plans for everyday expenses, saving up and investment, etc. The other four interviewees described their finance management as very adequate. They had sufficient income to meet daily expenses, and were not in debts. Although gambling did help the interviewees to relax themselves, all of them did not recognize gambling as the only single effective strategy to cope with stress or to solve problems. They would flexibly employ a wide range of techniques to manage stress, including watching television or movies, eating, confiding troubles

to family or friends, and taking a break or taking a trip, etc. For the younger interviewees, they preferred playing sports (e.g. ball games, swimming, shopping, sleeping, listening to movies, and going to the 'chat-room', etc.)

Gambling experiences of social gamblers

- 5.50 A high proportion (90.0%) of the social gambler started to gamble for recreational and social purposes since they were just children and young adolescents, from the age of 10 to 16. At least six interviewees learnt to play mahjong or playing cards from their parents and relatives in a family environment. Only four of the interviewees picked up gambling skills from schoolmates, friends or neighbors.
- 5.51 Gambling with family and relatives (20.0%) was engaged in mainly on special occasions such as at Chinese festivals. Gambling with family, friends, neighbors and colleagues was usually on weekends and public holidays (30.0%), and occasionally after work or school (70.0%). Gambling among students took place in secret when parents were still at work.
- 5.52 The most common forms of social gambling were playing mahjong (80.0%), playing cards (70.0%), horse racing (40.0%), Mark Six (40.0%), Macau casino gambling (40.0%), and soccer betting (30.0%). Students' soccer betting (20.0%) was organized secretly among schoolmates in secondary schools. One interviewee was involved in online soccer betting and illegal Macau soccer betting, and another one gambled almost quarterly at casino ships with her spouse.
- 5.53 As most forms of social gambling involved the availability of several partners, the frequency of social gambling varied a lot. It would be as frequent as four times a week (30.0%) in playing mahjong or playing cards, and as infrequent as bimonthly (10.0%) gambling at Macau casinos, and quarterly gambling at casino ships (10.0%). Only one interviewee gambled alone in horse racing without any companion.
- 5.54 All social gamblers gambled with predetermined acceptable losses, ranging from a few hundred dollars among the students (20.0%) per month to a few thousand dollars per week among the working adults (70.0%). They (90.0%) would usually stop when they lost all the predetermined amounts of money, and could rationally

control their urge to chase after losses. They believed that they would continue to lose money as they were out of luck; therefore, it would be better to wait for the return of good luck. Five interviewees preferred to gamble less frequently and would reduce the amount to be wagered when they were in bad luck, i.e. losing money continuously over a period of time.

- 5.55 A high percentage (90.0%) of the interviewees refused to borrow money despite of persuasion and offers of loans made by friends or even loan sharks at casinos. They (90.0%) did not experience any withdrawal symptoms such as restlessness and irritability when they ceased to gamble. However, they sometimes would like to gamble and thought about the pleasurable gambling activities.
- 5.56 A majority (90.0%) of the interviewees did not gamble for money, only one was eager to get some money by gambling when financial hardship was experienced. All the interviewees gambled for entertainment; they enjoyed the gambling process from which fun and pleasure were derived. Usually for adult social gamblers, they also obtained oral gratification from eating good meals after gambling. They winners would pay the bills for meals. Nine interviewees took the chance to socialize with friends and colleagues in gambling activities. They chatted happily in social gambling. The other common reasons for social gambling were killing time (60.0%), seeking relaxation (40.0%) and seeking excitement (30.0%). Only one interviewee wanted to test his intelligence through gambling activities.
- 5.57 Seven of the adult interviewees did not experience any negative consequences related to social gambling. They sometimes found themselves tired physically after long hours of gambling (40.0%) but they (90.0%) did not encounter relationship problems and disruption in work or study due to gambling. The young students might experience a short period of financial tightness due to losses.

Summary of findings

- 5.58 A high proportion of the pathological gamblers and social gamblers were exposed to recreational gambling at a very young age, often at childhood, mainly in a home or family environment. They picked up gambling skills (e.g. playing mahjong and card, etc) from their parents and relatives or neighbors. They regarded gambling as socially and culturally acceptable behavior that facilitated social interactions and induced pleasure at leisure time. All the pathological gamblers had involved in social or recreational gambling for a period of time before they lost control over gambling.
- 5.59 Both groups of gamblers claimed that there was a lack of effective treatment and services for pathological gamblers and their families. Some of them advocated more intensive school-based prevention and intervention, and more dynamic family-based counseling and group therapy for problem gamblers and pathological gamblers.
- 5.60 Social gamblers gamble mainly for entertainment and social purposes with predetermined amounts of money to be wagered but without harmful consequences. Pathological gamblers gamble chiefly for money and excitement. A considerable proportion of the pathological gamblers regarded gambling as a short cut to wealth, and longed for materialistic satisfaction. They were often desperately forced to gamble for money when they were in debts. It seemed that social gamblers were relatively less money-minded in gambling activities, and winning was not their major concern. They enjoyed the gambling process from which pleasure and fun were derived. Unlike the pathological gamblers, they seldom gambled alone.
- 5.61 A higher proportion of the pathological gamblers were unsatisfactory in finance management and stress management than the social gamblers. They also had problems in exercising control over gambling. They would seek help from both legal and illegal lending sources in order to chase after losses. They were over-confident of their skills and luck in winning, and selected to recall winning experiences and tended to forget losing experiences. There was an urge to gamble more frequently and or invest increasingly larger bets to achieve the desired level of excitement.

- 5.62 Relatively, a higher proportion of social gamblers described their skills in finance management and stress management as satisfactory. They did not lose control in gambling, and believed that luck was more important than gambling techniques. Therefore, they usually would not chase after losses, instead they preferred to gamble less frequently or reduce the amounts of money to be wagered when they were in bad fortune. They did not accept borrowing money to gamble, and were aware of the chances to lose money in gambling activities.
- 5.63 No serious harmful impact of social gambling was reported in this study. However, the adverse effects of pathological gambling were alarming, including huge debts (ranged from HK\$20,000 to \$3,000,000) and bankruptcy, serious relationship problems (e.g., separation, divorce, poor parent-child relationship and social isolation of the pathological gamblers, etc), disruption in work (e.g., dismissal, reduced prospect for promotion due to low motivation in work, and unsatisfactory work performance), depression and mental health problems (e.g., insomnia, suicide, mood disorders) of pathological gamblers, their spouse and family members.
- 5.64 It was reported that participation in Macao casinos were the most popular form of gambling amongst the pathological gamblers we had interviewed. Fifteen out twenty admitted that gambling in Macao casinos was the form of gambling they had involved in. Involvement in horse racing gambling came the second (11 interviewees) and betting on soccer matches ranked third (5 interviewees).
- 5.65 A high percentage of the pathological gamblers had been involved in social gambling for a considerable period of time before gambling progressed towards a pathological state. A significant stressor or greater exposure to gambling precipitated the sudden onset. This critical stage was often characterized by impressive winning experiences that caused an increase in the frequency and amounts of bets. Then the pathological gamblers were preoccupied with gambling and getting money with which to gamble, to chase after losses and to settle debts. Gradually pathological gambling became a life style pattern, and gambling behavior usually increase at times of stress, frustration and depression. The vicious circle of gambling to cope with debts and stress which generally led to heavier debts, deeper sense of guilt and greater depression perpetuated.

5.66 Self-initiated voluntary and involuntary attempts to cut back or stop gambling would never be easy. Pathological gamblers reported that the relapse rate was high when all or a significant portion of debts was cleared, and at a six month abstinence period.

5.67 All the pathological gamblers recognized that they needed help but were not aware of any government or non-government treatment and services. A high percentage of the pathological gamblers were encouraged and referred to seek help by their spouse, family members or close relatives. They read the treatment advertisement of a Christian self-help organization in the newspaper. It seems that the emotional and financial support of family members played a vital role in effective referral, successful abstinence and relapse prevention.

Addendum: education & services

5.68 This study was the first local qualitative research to investigate the process of onset, development, maintenance and quitting of pathological gambling. The findings also expand our understanding of the psychosocial characteristics of both pathological gamblers and social gamblers. The impact of pathological gambling on gamblers and their families was examined, and opinions on treatment and services were collected. In brief, this study promotes our knowledge about pathological gambling and social gambling, their similarities and major differences. Results generated from this study have implications for education, public health and social services.

5.69 In view of the findings that there were great differences between the pathological gamblers and social gamblers in gambling attitudes, perceptions of winning and self control, values on money and materialistic satisfaction, personal life goal and sources of life satisfaction, skills in coping with stress and finance management, preventive and educational programs on gambling attitudes and important life skills can be organized to prevent pathological gambling in both community and school setting.

- 5.70 School-based moral or educational programs may include promoting awareness of the harmful consequences of gambling, fostering socially desirable attitudes towards gambling, money and materialistic satisfaction, strengthening impulse control, guidance in developing personal life goals and seeking satisfaction in life through a wide range of desirable sources, and skills training in stress management and finance. Ideally parents should be involved in these programs since educational effects will be maximized when there is co-operation between school and family.
- 5.71 Through community-based public health education, the public's sensitivity towards problem gambling and pathological gambling can be sharpened, and alertness at the deleterious effects of pathological gambling can be reinforced. A non-discriminating public attitude towards pathological gamblers and their families can be cultivated. Individuals and families having gambling related problems should have access to services and treatment.
- 5.72 Community-based public health education and promotion can employ a cross-disciplinary approach by integrating the joint efforts of different professions, including the profession of mental health, psychology, social work and information technology.
- 5.73 The mass media has a vital role to play in educating the public on gambling related problems and issues, cultivating appropriate help seeking behavior and informing the public of the services available to individuals and families. Also, the use of computer and advanced telecommunication technology (e.g., internet and web-based information systems and help lines) may help to maximize the cost-effectiveness of public health education strategies, especially among the students and the younger population.
- 5.74 Currently, specific professional treatment and services tailored made for pathological gamblers and their families are not available. In fact, there is a lack of well-trained and experienced gambling counselors and therapists in Hong Kong. As a result, without timely professional help, the pathological gamblers and their families would resort to tragic problem solving, such as committing suicide, divorce, sudden disappearance and bankruptcy; etc to cope with debts and gambling related problems.

5.75 The findings of this research indicate that the extent of unmet need for treatment and services was great, a high proportion of all the interviewees were not aware of any government or subsidized treatment and services which might be useful to them. It seems that unavailability of treatment and services was the major cause of such a high rate of unmet need, and probably stigmatization and reluctance to seek help would be another crucial reason. In view of these circumstances, suggestions for treatment or services are made as follows:

- i Similar to addiction problems (e.g., drug addiction and alcoholism), pathological gambling is a mental disorder involving the complicated interaction of personal, familial and societal factors, it is necessary to develop specific services tailored made for treating pathological gambling and even problem gambling to ensure cost-effectiveness. There are at least two short cuts to achieve this goal.
- ii First, existing family counseling can be modified and specialized to serve these special clientele and their families by expanding the counselors' knowledge and skills. Foreign specialized training and certification (e.g., the U.S.A. and the UK) can be considered or local training can be developed in the university. Overseas training must acknowledge and resolve the issues related to cultural differences as the perceptions and gambling behavior of Hong Kong Chinese would not be the same as our western counterparts. A few experienced voluntary gambling counselors from the Taxi-drivers' Christian Fellowship may act as resource persons or key informants in in-service training of local gambling counselors.
- iii Second, as self-help organizations such as Gambler's Anonymous in the United States has been increasing in popularity (Lopez Viets and Miller, 1997), it is worthwhile to consider including a self-help service or intervention model in addition to specialized family counseling. The Taxi-drivers' Christian Fellowship is a self-help religious body in helping pathological gamblers and their families for over a decade. All the gambling counselors are ex-pathological gamblers who possess the advantage of having excellent empathetic understanding of pathological gamblers and their families, minimizing or removing stigmatization, and acting as convincing models of successful abstinence and new behavior. In the past year 250 persons sought help from the Fellowship, about 50% (125) of these

clients were pathological gamblers, and 50% (125) were family members (113 spouses, 8 siblings and 4 parents) of pathological gamblers.

- iv As a self-help organization, the Taxi-drivers' Christian Fellowship adopts a family-based treatment model jointly with group therapy. Spouse or family members are involved as far as possible throughout the family-based treatment process, and mutual support groups among gamblers and family members are organized as well. For example, there is a women's mutual support group mainly composed of wives of pathological gamblers. The government should consider the benefits of funding more self-help organizations as a long-term intervention strategy.
- v A broad range of relevant services can be included: a) hotline or help-line services can be developed to meet urgent inquiry and handle individual or family crises, and these services should be made known to the public such as at the race courses and off course betting branches of the Hong Kong Jockey Club, b) clinical assessment of pathological gambling and gambling related problems, c) family-based counseling as both the pathological gambler and his or her family need help, c) support groups among pathological gamblers and their families, d) systematic follow up to maintain treatment effects and to prevent relapse, and e) mass programs (e.g., exhibition, seminars and workshops, etc) to educate the public on the nature, the underlying causes and treatment of problem and pathological gambling.

Future research

5.76 This study was an exploratory investigation of the onset and the course, effects and treatment of pathological gambling using the in-depth interviewing method. There were some limitations of such a small-scale study, including the small samples of social and pathological gamblers and family members, and the study employed a retrospective approach that relied heavily on the self-reports of the interviewees. However, it was very difficult to recruit pathological gambler as they were full of shame and guilt, and were distressed with debts and gambling related problems.

- 5.77 Ideally, future research should be longitudinal, multi-stage study using a prospective design with larger samples of interviewees, and a greater number of comparison groups (e.g. social, problem, pathological and elderly gamblers, and even non-gamblers). With these improvements in research design, generalization to larger populations can be made, and the short-term and long-term effects of gambling can be examined more thoroughly.
- 5.78 Since there has been no research on therapeutic effectiveness of current intervention strategies and self-help programs, future research may focus on the outcomes of these intervention efforts. Furthermore, investigation on the characteristics of those who seek help and those who reject can aid in designing effective strategies to encourage help seeking behavior, and in developing more cost-effective treatments.

Chapter VI: Discussion and Conclusion

Introduction

The chief purpose of this chapter is to discuss the results of the investigation presented in three parts, namely, the general population survey, the school survey and the qualitative survey. The significance and relevance of these three parts, however, can be more adequately assessed, if we are capable of putting them under the light of the realities and experiences of other countries, in which not only the development of gambling as a socially institutionalized form, the investigations into and reflections upon the problems of gambling activities and pathological gambling, but also the policy are more liberal than that of Hong Kong.

Social Manifestations of Gambling

- 6.1 It is an essentialist illusion to look for the nature of gambling without taking care of the historical and social manifestations of gambling. In fact, Jan McMillen (1996:6) tried to clarify the problem in the following words: *“Despite its apparent universality, the concept of gambling has no intrinsic meaning; rather, its meaning always depends on the socio-historical context in which it occurs.”*
- 6.2 McMillen further elucidated the 8 possible limitations of “conventional gambling studies”, which include treating it as a universal constant, looking at the problem in the liberal individualistic angle, considering it as a problem of social control and administration, adopting an economic stance which is severed from the political and cultural significance, a-historical and static conception of gambling, positivistic in conducting research, ethnocentric in neglecting other political and cultural contexts, and unable to accommodate the dialectical conception of gambling relations --- between competing classes, between capital and the state or between national and global dimension (ibid: 11-12).
- 6.3 Gambling existed as soon as mankind lived together and that leisure as well as social means became available to them. Nowadays, in the European Union, gambling is subsumed under the ordinance for public security and order because

of its potential danger, and each member state can set up its own legislation ranging from regulation to prohibition. Germany allows only state regulated gambling under Criminal Ordinance §284 (§284 StGB) (Meyer/Bachmann 2000: 6-9).

- 6.4 Britain liberalized gambling in 1960 through the endorsement of the “Betting and Gaming Act” (Rosecrance 1988: 142), followed shortly by Australia, which entertains nowadays the most widespread and liberal laws, legalizing many different forms of gambling (McMillan 1996: 86-100; Rosecrance 1988: 150).
- 6.5 In the United States, liberalization took stages to develop and started in the 50s (Rosecrance 1988: 44). However, different states have different policies, again ranging from prohibition in only a few (Utah, Tennessee and Hawaii) to liberalization in quite a number (NGISC Report 1999).
- 6.6 The attitude towards gambling of different countries has undergone gradual transition. In the United States, the attitude is ambivalent: *“On the one hand, gambling has been regarded as a sin, a vice, a crime and an unproductive waste of time, ... today gambling can be seen as harmless, recreational, charitable and even patriotic – particularly when it is in the context of playing state lotteries”* (Smith 1996:102).
- 6.7 Likewise, the attitude in Hong Kong also manifests a kind of ambivalence. However, while few would like to see Hong Kong liberalized in gambling like Macao, the majority may not oppose to a defensive strategy of liberalization.

Legal forms of gambling and social gambling

- 6.8 Hong Kong, until now, has authorized only a limited number of gambling activities, mainly Mark Six and horse racing (mahjong halls constitute the third form which is declining drastically in importance). There has been no major policy change since the early 70s.
- 6.9 Germany, however, has very concrete figures about the gambling activities of its citizens. In 1991, according to the “Stiftung Warentest”, two-third of the population in Germany participates in different forms of gambling regularly.

- 6.10 In U.S. there are 28 states running casinos, with over 700,000 jobs directly or indirectly related to this form of gambling business. The wages summed up to US\$21 billion. There are state lotteries (participation in 1998, 52.0%; in 1975, 10.0%), casinos (29.0% and 10.0%) horse racing (7.0% and 14.0%), bingo (6.0% and 19.0%) and the new frontier of convenience gambling (mainly slot machines) and Internet gambling. (NGISC Report, 1999:1/3)
- 6.11 The recent Gambling Review Report (2001) in UK estimated that there are 33 million adults involved in gambling in the past year, equivalent to 72.0%. About 50% gambled in the past week. This is higher than USA (63.0%), lower than Sweden (90.0%), Australia (80.0%), and New Zealand (85.0-90.0% of people above 15 years of age). UK harbors a great number of gambling activities. The most popular is National Lottery, which attracts 65.0% of the population, followed by scratch cards (22.0%), fruit machines (14.0%), and social betting (13.0%). (Gambling Review Report, 2001: 17, also Sproston et al., 2000:4) More women than men have not gambled. Men gambled more than women except Bingo, and Scratch-cards are equally popular among both women and men (ibid: 18).
- 6.12 In comparison, the prevalence of participation in legal gambling among the population aged 15-64, which is 67.6% in Hong Kong, is higher than USA (far less liberalized than other western countries) and comparable to Germany, slightly lower than UK, but definitely lower than Sweden, Australia and New Zealand. Interestingly, the question of social gambling has been given very little attention in western countries; UK reported a rate of 11.0% of the population above the age of 16, who made private bets in 1999-2000. In Australia, 5.3% of the Australian adults played games privately for money. (Inquiry, 2000:3.16) Even inclusion of social gambling indicated a population prevalence (people participating in one to three forms) of 77.3% in Hong Kong, which is still below that of Sweden, Australia and New Zealand.
- 6.13 As compared with western countries with a liberalized gambling culture and institutionalization, Hong Kong people does seem to attribute a lot of significance to social gambling, and the percentage is very high (45.9% adults, adolescents 50.0%). This may, however, have a lot to do with the form of pastime entertainment available to the people, young and old. Another reason that can account for the high rate of social gambling is the non-existence of a great variety

of gambling forms like in western countries to attract institutionalized gambling, therefore, Hong Kong people have more resort to social gambling.

- 6.14 Regarding the opening up of more channels of legal gambling, Hong Kong people are circumspect and can make keen differentiations. The general public survey showed 51.2% for, 36.2% against, 12.6% no opinion. The school survey showed 40.1% for, 28.5% against, and 31.4% no opinion, when legalization of soccer betting is concerned.
- 6.15 When asked about the legalization of Internet gambling, the general public survey shows 22.6% for, 63.6% against, and 13.4% no opinion. The school survey shows 20.1% for, 40.1% against, and 39.9% neutral, and this comes as no surprise because adolescents may not have formed a very strong opinion yet like adults.
- 6.16 Another important issue is adolescent gambling. The NGISC Report gave the range of prevalence rate of past year gambling as 52 to 89 percent, and the average was 73.0% in the United States. (NGISC Report, 1999: 7-20) This had a lot to do with the popularity of sports wagering. In comparison, the local school survey shows a participation of 54.1% in Hong Kong, which cannot be said to be low, and as one in five is engaged in forms of gambling that should be forbidden to them. Close monitoring is, then, imperative.

Illegal Forms of gambling

- 6.17 As early as 1985, researchers estimated that the Americans lost some US\$11.8 billion to legal gambling and US\$5 billion to illegal forms (Evans/Hance 1998: 400). In Europe, the estimation of illegal gambling in 1996 was at 10 billion Ecu. These joints concentrated around cities, and the turn over was estimated in 1996 at 500-800 million in Munich, 600-800 million in Frankfurt and 200 million in Duesseldorf.
- 6.18 The worst challenge of illegal gambling for Germany comes from the Internet. When there were only 10 sites in 1996, the number shot up to 200 in 1998. The greatest problem is the disclosure of personal data to these sites without awareness of whether these firms are solid, not to mention also the outflow of billions. This has also a problem of major concern in US. The NGISC Report sound out the

alarm about the startling growth of Internet gambling, which rose from US\$445.4 million to US\$919.1 million from 1997 to 1998. Not only underage participation is a great concern the legitimacy of the games and the operator is another grave issue (NGISC Report, 1999: 2-15).

6.19 In US, illegal gambling is pervasive, but the NGISC Report 1999 failed to give any concrete figures, except the very rough estimation of sport wagering, which is illegal except in Nevada and Oregon, ranging from US\$80 billion to a staggering sum of US\$380 billion.

6.20 The Gambling Review Report of UK failed to give concrete figures of illegal gambling. The Gambling Review Body agreed with the limitations for police action against illegal forms of gambling and it was also understood that the figures should not be alarming (Gambling Review Report, 2001: 74-6). David Dixon examined in his article "Illegal Betting in Britain and Australia -- Contrasts in Control Strategies and Cultures" the competition between the legal and illegal operations, and of course the business is lucrative. He also came to conclude that: *" the case of illegal betting exemplifies the need to understand crime and control not as distinct but rather as interactive and interdependent phenomena. Such illegal activities are shaped by the state's attempts to suppress and control them. In turn, strategies of control have been molded in response to the resistance and adaptability of the illegal activities"* (1996: 97).

6.21 Australia furnishes an interesting example to fight against illegal gambling through legalization. Illegal gambling, especially casinos, have dwindle to an insignificant level since the 80s. There are many reasons that can account for this decline, but the increase of legalization reduced the activities of illegal gambling at least to some extent. This is coupled with strict probity rules, whereby organized crime cannot corrupt the authority of law enforcement (Inquiry, 2000:10.9-12).

6.22 It has to be admitted that we are still left much in the dark when estimation of illegal gambling is concerned. A more certain claim we can make may be that illegal gambling in Hong Kong is not very popular when compare to legal forms, and it is practically everywhere the like. Our survey results indicated that only 3.4% scattered in illegal Mark Six, illegal horse racing, soccer betting with local bookmakers and illegal casinos. Most of the unauthorized forms do not enjoy

great popularity among the general public, on-line casinos (0.6%), Macao Horse Racing (0.9%) and soccer betting with off shore bookmakers (1.3%). However, among these forms, we have to admit that betting on soccer is the most popular form, among the general public (1.6% with local bookmakers, 1.3% with offshore bookmakers) and school adolescents (5.7%) alike, and more important still, it is considered more as wagered for the excitement, and not so much gambling.

- 6.23 Legalization of soccer gambling is really a question that is worth careful consideration. Looking at UK, football pool betting constituted only 9.0% of the gambling activities of people above 16. We have at least one reason to justify that this form of legalized betting will enjoy greater popularity than in UK, because there are far less legal betting channels, and football is very popular in Hong Kong. The survey confirmed to a great extent this conjecture, for 10.5% of the general public affirmed their participation if authorized outlets are provided, 12.6% answered that they probably would. Among school adolescents, 5.0% affirmed they would, 9.7% said possibly would, and 18.8% were not sure.
- 6.24 The most serious problem of legalization of soccer gambling is its influence upon the younger generation. We have to share the worry of the NGISC report that betting in sports among youngsters is really a problem, and early betting behavior will more easily lead to habitual or even pathological gambling at a later stage. However, the NGISC still considered legalization of gambling an issue that is rested in the hands of individual states, and nation wide campaigns against adolescent gambling in sports should be launched.
- 6.25 Another problem worth discussing is that of Internet gambling in the form of on-line casino and online sports betting. It is true that they have not yet constituted a great threat, but we have reasons to worry. For one thing, this will continue to expand if there is no reasonable control, and it is more popular among the younger generation (on-line casino 0.9% general public rate of participation, but 4.5% among school adolescents), for another. We have to anticipate the danger that on-line casino betting can easily lead, in particular, adolescents and also the general public to pathological gambling. Finally, we have to share the worry faced by the US Government about underage participation and legitimacy of games and operators.

Social demands for and rejection of gambling

6.26 J. F. Smith (1996:104) delineated 5 interactive aspects of gambling that can be considered as beneficial, and thus inducing social demand for it:

- i *the need to prove one's superiority;*
- ii *the desire to challenge or overcome an obstacle;*
- iii *the hope for and pursuit of the favor of destiny;*
- iv *the desire to test one's strength, skill, endurance, or ingenuity;*
- v *conformity to rules and laws, the duty to respect them, ...*

6.27 McMillan attributed to gambling even more positive perspectives: as recuperative adult play, escapist safety valve, deviant adaptations to anomie or to alienation, as an integral element of working-class culture which seeks to overcome lack of success and security, outlet for gamblers to test chance and skill, as an effective opportunity for self-realization and creativity lacking in the work-place, and even in face of consistent losses there are rewards gained from social interaction and group association (1996: 16-7).

6.28 More pessimistic or realistic interpretation of the immense proliferation of gambling in U.S. is based on the social change accompanied by the change of the value system of the masses. As J. F. Smith put it: *"Many observers of modern America note that we live in an age of diminishing real opportunities... With Veblen's conspicuous consumption no longer a leisure-class trait, people in the United States seemingly live for the moment in an unpredictable world, and they are willing to consume wealth for the pleasure it can afford."* (1996: 111)

6.29 John Dombrink aptly presented the nature of "gambling" as a kind of social vice, and how the legalization of it made progress. Unlike the decriminalization of pornography, homosexuality and abortion, for which there have been movements of the public urging for the upholding of rights of free speech, personal sexual orientation and women's choice, gambling growth is seen as "conducted by competing groups of business and political elites". It is comparable to alcohol and cigarette smoking as less harmful social vice (forms of self-mayhem), but at the same time possessing socially valued fiscal abilities, and these three forms are also "special interest vice", for they represent strong interests of the manufacturers or operator, and thus are vulnerable, so that people should be protected from

excessive “advertising, sponsorship and public use”. The legalization of this form of vice has been “framed in the language of privilege, rather than right...” (1996: 57-60)

- 6.30 To what extent is gambling undesirable social behavior? Christian fundamentalists and moral conservatives reject gambling as immoral. It is caused by greed and cannot be compatible with Christian ideals of love and care. Interestingly, Catholicism is not opposed to gambling, provided certain criteria are met: the money is not needed for other important purpose, free participation; revenues must be used for charitable or public purposes, and fair game (Cozic/Winters: 1995: 20-56).
- 6.31 It is interesting to note that gambling still remains a very controversial issue in USA because of the bi-partisan nature of the society and politics (Cozic/Winters, 1995: 17-56). In UK, it is demonstrated that people’s attitude have not undergone great change. This is compared with similar experience in Australia. The majority wants to maintain the status quo in these countries, as ample gambling opportunities are available (Gambling Review Report 2001: 69-72).
- 6.32 Some studies revealed that there might be a misunderstanding of opponents to liberalization of gambling that the introduction of new forms of gambling will necessarily lead to proliferation of gambling. The Gambling Review Report contradicts this view at least in one aspect. Weekly expenditures of UK families on gambling show an internal cycle of up and downs within the trend of continuous liberalization. (Gambling Review Report 2001: 20-1) The economy is the most determining factor of the level of participation.
- 6.33 In comparison, the attitude of the people in Hong Kong as reflected by the survey should be termed as highly realistic. There is no popular advocacy for liberalization of gambling, but the society can be directed easily to the orientation of deeming liberalization as privilege, and the state plays the role of mild paternalism in regulating, and not so much as granting the people their right to gamble, as they deem convenient.

Prevalence of pathological gambling

6.34 Rosenthal traced 6 predisposing factors for pathological gambling:

- i A family history of compulsive gambling --- as many as one third of the compulsive gamblers have a biological relative with the disorder, and then extending through 2 to 3 generations.
- ii Growing up in a family with an extremely critical, or rejecting, or emotionally unavailable parent.
- iii An emphasis in the family on status or an overvaluing of money.
- iv Men, in particular, brought up to be extremely competitive.
- v The existence of an early physical or developmental problem.
- vi Hyperactivity. For many with Attention Deficit Hyperactivity Disorder, gambling initially serves as a rather specific way to medicate oneself. ... it slows them down, calms them and allows them to concentrate (Eadington/Cornelius 1993: 146-7).

6.35 Goodman (1995) estimated that in U.S., the prevalence of problem gamblers ranges from 1.5 to as high as 6.5%. Higher prevalence has a lot to do with the higher availability of gambling facilities, and culture also plays an important role, as there are far less Germans from the east that are pathological gamblers than Germans from the west.

6.36 Whether youths can be easy victim of pathological gambling is an important problem. The NGISC Report 1999 has been unable to pin down the rate of youth pathological gambling, some claim higher, others claim lower when compared with adult pathological gambling. The rough estimation is between 1.2 to 11.2%, which is higher than the rate for adults. It is, however, certain that roughly two-thirds of the 16 and 17-year olds have gambled in some forms (NGISC Report 1999: 4-13).

6.37 The Gambling Review Report (2001: 93) confirmed a prevalence rate of pathological gambling 0.6-0.8%, around 275,000 to 370,000 people, in UK, despite the vast availability of various forms of gambling. It was claimed to be

low in comparison to Australia (2.3%), USA (1.1%), New Zealand (1.2%) and Spain (1.4%), so comparable to Sweden (0.6%). However, the report pointed to the higher vulnerability of juveniles, which is proven to be at 1.7% (age 16-24), contrasting 0.5% (age at or above 25) (ibid, 89). The higher juvenile rate in UK can be attributed to the high availability of fruit machines to juveniles. In US, the estimation of the rate of juvenile pathological gambling is higher, ranging from 0.3% to 9.5%, with a average of 6.1% (NGISC Report 1999: 7-20)

6.38 We have observed a rate of 1.85% of potential pathological gamblers among the interviewees within the age range 15-64. In comparison, we can say that the prevalence rate of pathological gamblers in Hong Kong presents a very complex picture. On the one hand, it is higher than USA (1.1%) but lower than Australia (2.3%), which enjoys great liberalization in gambling. One reason for this particular rate of pathological gambling in Hong Kong despite the limited forms of legalized gambling can be attributed to the lack of education, precautionary signs and warnings, and therapy. The rate of 2.6% of school adolescent pathological gambling in Hong Kong is not as high as that of US, but it is still higher than UK, in which the gambling culture is even more liberal. It is a cause for worry.

Nature of pathological gambling

6.39 A lot of researches establish that slot machines and casino gambling are the most significant forms that create pathological gamblers. Meyer and Bachmann (2000:56) listed that among pathological gamblers, the main enticing forms are (multi-variant):

91.3%	<i>slot-machine (Geldspielautomaten) in casino</i>
31.1%	<i>cards and dice game</i>
30.1%	<i>fruit machines (Gluecksspielautomaten) in game-halls/ bars</i>
16.1%	<i>roulette</i>
11.4%	<i>24 or other combination roulette</i>
11.0%	<i>Black Jack/Baccara</i>
6.7%	<i>rub-off lottery (Scratchcards)</i>
6.4%	<i>lottery</i>
6.0%	<i>horse racing</i>
1.7%	<i>stocks speculation</i>

- 6.40 The Gambling Review Report of UK (2001:92) confirmed this by pointing out that *"The British Prevalence Survey associates the highest percentage of survey with table games in a casino, betting and fruit machines. GamCare (an organization for the research and treatment of pathological gambling) has noted that in excess of 50% of calls to its help-line concern problem gambling on fruit machines."*
- 6.41 The report also cited similar results from Australia and New Zealand surveys, respondent preferences for gaming machines, track betting and casino gambling (which also includes machines) are constantly associated with problem gambling. Furthermore, The Gambling Review Report of UK (2001: 93) also points to the fact that *"the rate of problem gambling tends to vary with the type of gambling opportunities available and their proliferation, rather than with the percentage of the population who participate in gambling."* Thus, Sweden has a population participation rate of 89.0% in gambling, but the prevalence rate is only 0.6%, as there are no dog racetracks, no off-track betting, and no casinos during the time of survey. There is sports pool betting. On the contrary, in USA, the population participation rate is only 63.0%, and the prevalence rate is higher, and likewise, New Zealand (90.0%) and Australia (82.0%).
- 6.42 Pathological gambling is often coupled with other forms of addiction, most common of all, alcoholism. Pathological gambling easily leads to criminality. Meyer and Bachmann established that pathological gamblers are very seldom felonious, but more involved in theft, fraud, embezzlement, issuing bad cheques and document forgery (Meyer/Bachmann, 2000: 113-9; Goodman 1995: 48; Barker/Britz 2000: 157-160).
- 6.43 It is stated in the NGISC Report that the National Opinion Research Center (NORC) study found out that one-third of pathological and problem gamblers had been arrested before, for low-risk gamblers only 10.0%, and non-gamblers 4.0%. Nearly one quarter (23.0%) of pathological gamblers had been imprisoned, and 13.0% of problem gamblers. Bankruptcy is another problem closely linked up with pathological gambling. The NGISC Report also quoted the NORC study that 19.2% of pathological gamblers filed bankruptcy, 5.5% for low-risk gamblers, and 4.2% for non-gamblers.

6.44 Qualitative researches done in Hong Kong revealed that pathological gambling is more related to casino betting, and horse racing. There are no convenient gambling facilities like slot machines in Hong Kong, and casino is the dominant trend leading to pathological gambling, which is available in Macao, from the casinos organizations we can win over little support and cooperation to combat against pathological gambling. The government can do more for the pathological gamblers addicted to horse racing in Hong Kong.

Social support to tackle pathological gambling

6.45 Two most important and recent researchers established the importance of social support not only to pathological gamblers, but also immediate members of their family, for the latter easily fall victim to their gambling member without much coping skill, not even the slightest understanding of the nature of the gamblers' pathology. The breaking up of relationship may be detrimental to the gamblers themselves, on the one hand, and knowledgeable support may bring far easier recovery (Castellani, 2000: 177-190; Meyer/Bachmann, 2000: 270ff).

6.46 The above experiences are substantiated by the present qualitative survey, which established the importance of family support to the pathological gamblers, on the one hand, and also the need of counseling for the family, precisely because it is menaced by the gambler and easily becomes dis-oriented. In fact, both US and Germany started the programmes of rehabilitation and support for pathological gamblers in the 70s. We have to reflect upon the fact that we have no such support for pathological gamblers in Hong Kong, and there is indeed urgent need for such services.

Preventive measures against pathological gambling

6.47 An important issue that is related to the reinforcement and proliferation of harm of pathological gambling is that of financing from private or institutional sources. The NGISC Report attacked the policy of easy loans to gamblers through credit cards, which consequential induced disastrous financial difficulties to the gamblers (NGISC Report, 1999: 7-14).

- 6.48 Our qualitative survey revealed that 100.0% of the pathological gamblers interviewed had borrowed money from banks and credit institutions, as well as owing large sums of money to credit card institutions. 75.0% had borrowed money from loan sharks. The debts accumulated by them were normally at the level of several hundred thousand dollars. This can adequately present an alarming picture of the drastic harm of pathological gambling.
- 6.49 Experts like Meyer, Bachmann and Castellani, who have been involved in research and therapy for a long time rejected the “medical model”, which consider pathological gambling as a form of disease alone. There are not only a lot of reasons, personal, familial, social and even biological causes that can lead to pathological gambling. Therapy, therefore, has to be launching in different ways so as to suit clients that are pathological gamblers due to different causes (Meyer/Bachmann, 2000: 56-7 & 138-255; Castellani 143-175). In this aspect, we have also nothing whatsoever. More researches need to be done in Hong Kong.

Gambling – social function and dysfunction

- 6.50 There is little doubt that state controlled gambling is a sure source of income. NGISC report, 1999 stated that from 1976-1997, legal wagering grew nearly 16 times and occupied 0.3% of personal income to 0.74% in 1997. The gross revenue rose from US\$10.4 billion to US\$50 billion in 1997. In Australia, NSW already boasted of a turnover of A\$3,200 million in 1991. In 1997-8, the turnover reached A\$11 billion, and in 1998-9, A\$12.4 billion. In New Zealand, the turnover was NZ\$7 billion in 1998. Opponents often dismiss gambling as a totally unproductive form of activity. This is discussed in the Australian Report, which stated that there are more benefits from the liberalization of gambling. “This overall benefit has three components: a benefit of A\$2.7 billion to A\$4.5 billion for recreational gamblers; a transfer of A\$4.3 billion principally to government in the form of tax revenue, license fees and community contributions; and a loss for problem gamblers of around A\$2.7 billion” (Inquiry, 2000: 5.1).
- 6.51 In Germany, the turnover from the gambling industries in 1997 was DM100 billion, and the revenue to the state reached DM6.824 billion (in 1970 it was DM1.286 billion). This has not included the revenue from slot machines, which

accounted for DM1.35 billion in 1997. In UK, the annual turnover recently is estimated at 42 billion pounds. The yield is 7.3 billion.

6.52 Hong Kong also enjoys a great contribution from the Jockey Club, which had a turnover of HK\$80 billion in year 2000. The Government procured 13.0-14.0%. Not only is this a substantial source of revenue, more important still, maintaining these two forms of legal gambling can dampen the proliferation of organized crime and safeguard public order to a good extent. We have to admit like most western countries that this form of taxation is really an important source of income, which a lot of governments cannot afford to give up. Especially when prohibition will drain this source to the underworld.

6.53 There are different calculations of the social costs induced by pathological gambling based on different criteria and serving different purposes. Goodman estimated that the social cost incurred by each pathological gambler ranges from US\$9,500 to US\$30,000. The social cost is not given in money terms, but the social consequences like divorce, lost of savings and suicide are admitted to be severe. The Gambling Review Report 2001 also acknowledged the significance of the social costs incurred by pathological gambling, despite the fact that it has not arrive at any estimations. Nevertheless, the Thompson et al 1996 report did provide the cost for therapy at US\$320 per person, which is accepted as the minimum. The NGISC Report 1999 accepted the NORC study result that problem and pathological gamblers account for 15 percent of the dollars lost in gambling. The annual cost of each is US\$1,050, and the lifetime cost reaches US\$7,250. The Australian Inquiry estimated an average annual cost of A\$6,000 for each problem gambler, and A\$19,000 for each pathological gambler. The total social cost estimation ranges from the conservative A\$1.8 billion to the highest of A\$5.6 billion. (Inquiry, 2000: 9.1)

6.54 There is one interesting point in the UK Gambling Review Report. It deplores the lack of deployment of public funding in UK for the support of pathological gamblers, who are not considered to be patients or subjects of public health care. Recommendations are made in this report to set up a publicly financed mechanism. Examples of public funding for the treatment of problem gambling are:

US (US\$100,000-\$1,500,000 for 17 states; prevalence rate =1.1%)
Canada (C\$150,000-\$10 million; prevalence rate=1.6%)
Australia (A\$17 million; prevalence rate=2.3%)

- 6.55 More researches and substantial calculations need to be done to find out the social cost incurred locally and to estimate the right sum of funding for treatment in Hong Kong.
- 6.56 The Gambling Review Report of UK (2001: 74-97) posed three important reasons for regulation: 1) *Keeping Crime out of Gambling* --- large sum of money in illegal gambling leads to syndicates, money laundry, cheating, rigged games, and reduce competition; 2) *Fairness to the Punter* --- ensure honesty (in sports) fair return and free information, even choice and competition; 3) *Protecting the Vulnerable* --- satisfy the need to gamble within a fair and safe environment while protecting against pathological gambling and under-age gambling.
- 6.57 Under the light of the above criteria, we can say that the present mode of legalized gambling in Hong Kong does have achieved the purposes of providing the punters a safe and fair environment for gambling, keeping organized crime out of these gambling forms successfully and keeping the underage away from these forms of gambling, but it cannot be perceived that it has accomplished the purpose of enhancing free competition of gambling service and guaranteeing cost efficiency. The future tasks will be the making and implementation of policy, support researches on gambling, education for the general public and services to the pathological gamblers.

Education to maturity regarding gambling

- 6.58 In face of such lucrative revenues, it is understandable that no country can revert back to the earlier stage of prohibition. In fact, even staunch attackers of state operation of gambling business like Robert Goodman has to admit that his idea is not to ask the state to turn the clock back, but rather to be well aware of the damages of reckless expansion (Goodman, 1995: 179).
- 6.59 Likewise, shrewd authors like Castellani (2000: 193-204) and Meyer and Bachmann (2000: 300-311) also realized the need for preservation of fair forms of gambling. The main concern is to reduce pathological gambling to the minimum through concerted effort, do more research on the subject matter, and educate the masses to gambling rationally.

6.60 In the case of Hong Kong, education programs to explain to youngsters the nature of gambling and its natural consequences are unavailable and need to be developed. We have to admit we have to start from scratch and it is no easy task, only the Government can provide resources and align concerted effort to launch programs of education and therapy.

Recommendations to the HKSAR Government

6.61 On the basis of the findings of this comprehensive study, the research team makes the following recommendations to the HKSAR Government:

- i We recommend that legal gambling channels should be adequate but limited only to people above 18 years of age, taking into consideration that legalization aims to provide punters with the necessary safety and fairness, and to keep organized crime away.
- ii We recommend that liberalization of gambling policy should be measured and deployed as a defensive strategy against crime and for the benefit of the punters and society as a whole. The legalization of soccer betting is a delicate issue, although a high proportion of the general public is open-minded enough to accept its legalization. However, legalization may lead to at least an immediate rise of gambling participation, and its influence on adolescent gambling must also be taken into account. Even if legalization of soccer betting is deemed a defensive strategy, close monitoring of its development and impact should be undertaken and the possible consequences have to be fully assessed.
- iii We recommend that the Government should forbid promotion activities and advertisements for legal and illegal gambling that may mislead the public, or induce the underage to participate in gambling - for the higher vulnerability of the underage was reflected by a higher prevalence in pathological gambling.

- iv We recommend that funding should be provided to conduct regular researches to understand the gambling habits of Hong Kong people, as well as the gambling and life patterns of problem and pathological gamblers, including both social and economic impacts.
- v We recommend that the Government should closely monitor through research funding the gambling behavior of the underage so as to keep in touch with the further evolvement of adolescents' involvement in gambling.
- vi We recommend that the Government should provide a good percentage (or per capita GDP) of its revenue from gambling or set up a public trust fund to launch and maintain help-lines, emergency services and treatment programmes for problem and pathological gamblers. Furthermore, services should be extended to the immediate members of the families of the problem and pathological gamblers.
- vii We recommend that the Government should make it mandatory for all legal gambling institutions and their off-course betting establishments to put up signs of warning against excessive gambling and information about help-lines in prominent locations.
- viii We recommend that the Government should launch TV and other media campaigns warning the public against excessive gambling and adolescents against illegal gambling and indulgence in gambling.
- ix We recommend that the Government should make it mandatory for all printed media providing legal gambling information to the public to reserve a position to place warnings against excessive gambling and information about help-lines.
- x We recommend that the Government should initiate the making and use of teaching kits to educate students about the nature and impact of gambling as well as the nature and harm of pathological gambling in their social studies or ethics classes.

- xii We recommend that banks, credit institutes and credit card institutes should be forbidden to provide service for offshore on-line casinos and other gambling forms. Another effective measure is that the Government can refrain from the legal enforcement of debt payment to these financial institutes whenever overseas debts are incurred due to offshore on-line gambling.
- xiii We recommend that the Government should examine the possibility that banks, credit institutes and credit card institutes should be allowed to exchange information about the loan credibility of pathological gamblers. They should also consider setting up loan exclusion system for pathological gamblers upon information from pathological gamblers themselves or their immediate family members.
- xiv We recommend that the Government should set up a Committee for Gambling Affairs to propose social policy for gambling, support researches and education related to gambling, treatment or counseling to pathological gamblers and their families, and finally guarantee fairness and address the issue of free competition in legal gambling service.
- xi We recommend that the Government should undertake measures to put a stop to offshore on-line casinos and other related gambling forms. Local websites should be forbidden to maintain links with offshore on-line casinos and other related gambling forms.

Bibliography:

English References:

Barker, T. & Britz, M. (2000). *Jokers Wild: Legalized gambling in the 21st century*. Westport, Conn.: Praeger.

Brenner, G. A., Lipeb, M. & Servet, J.-M. "Gambling in Cameroon and Senegal: A response to crisis. In McMillan, J. (Ed.) (1996). *Gambling Cultures*. London: Routledge. P.167-178.

Castellani, B. (2000). *Pathological Gambling*. Albany, N.Y.: SUNY.

Cozic, C. P. & Winters, P. A. (Eds.) (1995). *Gambling: Current Controversies*. San Diego, Calif.: Greenhaven.

Dixon, D. "Illegal betting in Great Britain and Australia: Contrast in control strategies and cultures". In McMillan, J. (Ed.) (1996). *Gambling Cultures*. London: Routledge. P.86-100.

Dombrink, J. "Gambling and the legalization of vice". In McMillan, J. (Ed.) (1996). *Gambling Cultures*. London: Routledge. P.43-64.

Eadington, W. R. & Cornelius, J. A. (Eds.) (1993). *Gambling Behavior and Problem Gambling*. Reno, Nevada: Institute for the Study of Gambling and Commercial Gaming, College of Business Administration, U. of Nevada.

Evans, R. L. & Hance, M. (Eds.) (1998). *Legalized gambling: For or against*. Chicago & La Salle: Open Court.

Galski, T. (Ed.) (1987). *The Handbook of Pathological Gambling*. Springfield, Ill.: Charles C. Thomas.

Goodman, R. (1995). *The Luck Business: The Devastating Consequences and Broken Promise of America's Gambling Explosion*. N.Y. & London: Free Press.

- Griffiths, Mark (1995). *Adolescent Gambling*. London: Routledge
- Haddock, P. (1996). *Teens and Gambling: Who Wins?* Springfield, N.J.: Enslow.
- Hong Kong Government (1965). *The Report of the Advisory Commission on Gambling Policy*. Hong Kong: The Government Printer.
- Kaplan, H. R. (1984) "The social economic impact of state lotteries", *The Annals of the American Academy of Political and Social Sciences* 474:91-106.
- Lopez Viets, V.C., and W.R. Miller. (1997). *Treatment approaches for pathological gamblers*. *Clinical Psychology Review*. 17: 689-7022.
- McMillan, J. (Ed.) (1996). *Gambling Cultures*. London: Routledge. P.6-42.
- McMillan, J. "Understanding Gambling: History, Concepts and Theories". In McMillan, J. (Ed.) (1996). *Gambling Cultures*. London: Routledge. P.6-42.
- Meyer, G & Bachmann, M. (2000). *Spielsucht*. Berlin, Heidelberg & N.Y.: Springer
- Minichiello, V., Aroni, B., Timewell, E., and Alexander, L. (1995). *In-Depth Interviewing: Principles, Techniques, Analysis*. Melbourne: Longman.
- Reith, Gerda (1999). *The Age of Chance: Gambling in Western Culture*. London: Routledge.
- Rosecrance, John (1988). *Gambling Without Guilt*. Belmont, Calif.: Wadsworth
- Shaffer, H.J., and M.N. Hall., and J.V. Bilt. (1997). *Estimating the Prevalence of Disordered Gambling behavior in the United States and Canada: A Meta-Analysis*. Cambridge: Harvard Medical School Division of Addictions.
- Smith, J. F. "When it's bad it's better: Conflicting images of gambling in American culture. In McMillan, J. (Ed.) (1996). *Gambling Cultures*. London: Routledge. P.101-115

Thompson, William N. (1997). *Legalized Gambling: A Reference Handbook* (2nd edition). CA.: ABC-CLIO, Inc.

Van Den Bergh, Nan (Ed.) (1991). *Feminist Perspectives on Addictions*. N.Y.: Springer.

Volberg, R. A. and Steadman, H. J., (1988). "Refining Prevalence Estimates of Pathological Gambling" in *American Journal of Psychiatry* 145 (4), 502-5.

Walker, M. (1992). *The Psychology of Gambling*. London: Butterworth-Heinemann.

Williams, Mary E. (ed.) (1999). *Legalized Gambling*. CA.: Greenhaven Press.

Chinese References:

戈春源著，(1995)。《賭博史》。中國：上海文藝出版社。

魯言著，(1978)。《香港賭博史》。香港：廣角鏡出版社

明光社，(2000)。《賭博對青少年的影響研究報告》。

香港青年協會，(1999)。《青少年與賭博》。

香港基督教服務處，(2001)。《賭癮對個人及家庭的影響》。

List of Research Team Members

Mr. CHUNG, Kim-wah	Assistant Professor, Department of Applied Social Sciences, The Hong Kong Polytechnic University
Miss FISHER, Shirley	Project Associate, Centre for Social Policy Studies, Department of Applied Social Sciences, The Hong Kong Polytechnic University
Dr. LAU, Stephen	Head, General Education Centre, The Hong Kong Polytechnic University
Mr. SO, Ernest	Project Associate, Centre for Social Policy Studies, Department of Applied Social Sciences, The Hong Kong Polytechnic University
Dr. SZE, Stephen	Principal Lecturer, General Education Centre, The Hong Kong Polytechnic University
Dr. WONG, Day	Lecturer, General Education Centre, The Hong Kong Polytechnic University
Dr. WONG, Irene	Instructor, Department of Applied Social Sciences, The Hong Kong Polytechnic University
Dr. WONG, Jimmy	Project Fellow, Centre for Social Policy Studies Department of Applied Social Sciences, The Hong Kong Polytechnic University