



Report on the Study of Hong Kong People's Participation in Gambling Activities in 2016

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Commissioned by The Ping Wo Fund

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Polytechnic University**

Executive Summary

The Secretary for Home Affairs Incorporated, as the trustee of the Ping Wo Fund, has commissioned the Department of Applied Social Sciences, The Hong Kong Polytechnic University to conduct “A Study of Hong Kong People’s Participation in Gambling Activities in 2016”. The main objectives of this Study are to gauge the latest prevalence rate of gambling participation and Gambling Disorder (GD) among the general public and the youth; perception towards gambling; gambling behavior and pattern; demographic characteristics of gamblers and GD gamblers; risk factors associated with GD; reasons and the circumstances of football betting and online gambling operated by gaming operators other than the Hong Kong Jockey Club (HKJC); extent and channels of credit betting; characteristics and needs of GD gamblers and significant others; knowledge and perception towards the effectiveness of counselling and treatment (C&T) services for GD gamblers; prevalence trend of GD in overseas and their experience in preventive measures; and recommend the Government and relevant parties on strategies and programmes to alleviate or prevent problems associated with gambling.

The report is divided into six parts (1) Introduction, (2) Literature review on overseas gambling situation and preventive measures, (3) Telephone Poll on general public, (4) Youth Survey, (5) Focus group and individual interviews, and (6) Conclusions and recommendations.

Major Findings

1. Telephone Poll on General Public (aged 15-64)

It was conducted to collect the general public’s views on gambling in Hong Kong. A total of 2 045 telephone interviews sampled randomly were completed. Major findings are as follows:

Prevalence rate of gambling

- 1.1 61.5% respondents gambled in the past year. The tendency of gambling participation among Hong Kong population is decreasing gradually from 77.8% in 2001, 80.4% in 2005, 71.3% in 2008 and 62.3% in 2012, and 61.5% in 2016.

Demographic characteristics and gambling pattern/ behaviors of gamblers

- 1.2 56.4% ($n=823$) of all respondents ($N=1\ 460$) first gambled at age 18 or above.
- 1.3 Mark Six lottery (54.9%), social gambling (e.g. playing mahjong, poker) (31.6%) and horserace betting (12.5%) were the three most popular gambling activities participated by the whole sample ($N=2\ 045$).
- 1.4 Among those who gambled in the past year ($N=1\ 258$), significantly, respondents who were job seekers (94.3%) and those aged 30-49 (93.0%) had a proportionally higher participation rate in Mark Six lottery. Females (55.2%), respondents aged 15-17 (88.9%), those with educational level at or below Matriculation (55.5%), employers (64.9%), and students (64.5%) had a proportionally higher rate in social gambling. Males (31.2%), those aged 50-64 (26.5%), those with educational level at or below F.3 (29.7%), and employers (35.1%) had a proportionally higher rate in horserace betting. Employers (24.3%) had a proportionally higher participation rate in Macau casinos wagering. Males (18.8%), those aged 15-17 (22.2%), and self-employed persons (15.8%) had a proportionally higher participation rate in football betting.
- 1.5 There was an increase in the average monthly amount spent on all types of gambling activities except gambling in mahjong house as compared with the results in 2012. Mark Six lottery amounted to HK\$159.9 (1.2 times of previous figures), social gambling amounted to HK\$423.8 per month (1.4 times), horserace betting amounted to HK\$5,610.6 (5.9 times), football betting amount to HK\$1,598.7 (2.6 times). Gambling in Macau casinos amounted to HK\$7,938.8 (5.6 times) and casino ships amounted to HK\$45,259.6 (20 times).

Illegal gambling and credit betting

- 1.6 Among the 1 258 respondents who gambled in the past year, 0.5% ($n=6$) and 0.8% ($n=10$) of them had participated in illegal gambling and credit betting respectively.
- 1.7 Main sources of credit betting were using credit card or getting bank loan (80.0%, $n=8$) and borrowing from family/ friend/ relative/ colleague (40.0%, $n=4$). 30.0% ($n=3$) of them borrowed from finance companies.

Football betting

- 1.8 6.6% ($n=135$) respondents of the whole sample had participated in football

betting. Among them, 2 participated in illegal football betting. The participation rate of football betting among the general public has decreased and remained stable since 2012, as the rate in the 2005 Study was 16.3%. The average money spent per month on football betting was HK\$1,598.7.

GD

- 1.9 Measured by the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-V), 1.4% ($n=29$) respondents were diagnosed as having GD, showing a decreasing trend as compared with previous studies. The GD-equivalent rate in the 2012 Study ($N=2\ 024$) was found to be 2.0% ($n=41$).
- 1.10 Proportionally, more GD gamblers were males; older (aged 50 or above); working as employees, and in the industries of accommodation and catering service, transportation and construction industry; working as plant and machine operators and assemblers, or working in elementary occupations; coming from the families with income between HK\$10,000 and HK\$24,999; and were job-seekers.
- 1.11 Mark Six lottery (86.2%), horserace betting (69.0%) and football betting (31.0%) were their three most favorite gambling activities.

Predictors of GD by logistic regression

- 1.12 Respondents who had taken part in horserace betting and football betting were more likely to be GD gamblers. Their chances of being GD gamblers were respectively 6.1 times and 2.7 times higher than other gamblers who did not participate in.

Perceptions on current gambling opportunities, regulation and preventive measures in Hong Kong

- 1.13 In general, respondents believed that the gambling opportunities in Hong Kong were enough in terms of the present number of Mark Six lottery draw per week (83.9% agreed, 15.5% had no comment), 2 horse racing day per week (82.4% agreed, 17.1% had no comment) and present number of football betting matches per week (71.1% agreed, 28.2% had no comment). Besides, 34.7% respondents preferred to hold horse racing day on Saturday than Sunday (22.7%).

- 1.14 62.2% of the respondents were of the view that the age of 18 was the appropriate legal gambling age.
- 1.15 81.9% of respondents were aware of the counselling hotline (#1834 633), and 69.4% of them would seek help from C&T services when they or their family members had gambling problems.

2. Youth Survey (aged 15-22)

Data were collected from two sources: (Sample A, or S-A) 20 secondary schools, and (Sample B, or S-B) 20 non-government organizations (NGOs) / tertiary institutions. Cluster, stratified and proportionate random sampling was employed in S-A. Two classes from F.4 and F.5 in each school were chosen randomly. A total of 2 120 valid questionnaires were collected. Purposive sampling, instead of random sampling, was adopted in S-B. Students and the working youth aged 15-22 were recruited and a total of 1 198 valid questionnaires were collected. As a result, the total number of the whole youth sample was 3 318. Major findings of the Youth Survey are as follows:

Prevalence rate of gambling

- 2.1 The prevalence rate of gambling among S-A was 21.8%, showing a decreasing trend as compared with the rate of 33.5% as identified in the 2012 Study and 54.0% in the 2001 Study on the same target group (secondary school students). When S-B was considered, it was 45.6%.

Demographic characteristics and gambling pattern/ behavior of gamblers

- 2.2 When only S-A was considered, there was no significant difference between those gambled or not in the past year based on gender, age group or educational level. When only S-B was considered, young adults (aged 19-22), and those with higher educational level (i.e. Tertiary or above) had significantly higher percentage of participation in gambling.
- 2.3 Social gambling, Mark Six lottery and football betting were the popular gambling activities among all respondents in the whole youth sample who gambled in the past year. When only S-A was considered, the pattern was similar in that the most popular one was social gambling (19.6%), followed by Mark Six lottery

(5.4%) and football betting (1.2%). All the rates were lower than the results in the 2012 Study.

- 2.3a Among the whole sample of the youth aged 15-22, males had significantly higher participation rate than females in football betting, horserace betting, and online gambling.
- 2.3b Considering age, young adults (aged 19-22) significantly had higher participation rate in regulated forms of gambling activities like Mark Six lottery, football betting and horserace betting than the underage (aged 15-18), while the underage significantly had a higher participation rate in social gambling activities. No significant difference was found in online gambling.
- 2.3c Considering educational level among the whole youth sample aged 15-22, respondents who had the lowest educational level (F.1-F.3) significantly had a higher participation rate in football betting and horserace betting than the other groups of different educational levels. Those who had the highest educational level (Degree or above) significantly had a higher participation rate in Mark Six lottery and Macau casino wagering. Those with Matriculation educational level significantly had a higher participation rate in online gambling than others, and those who had senior secondary school level (F.4-F.5) significantly had a higher participation rate in social gambling than the others.
- 2.4 Among those who gambled in the past year, the majority had their gambling onset age at the legal gambling age of 18 (26.9%), followed by age 15 (10.8%), age 12 (10.2%) and age 16 (9.5%). It seemed that the ages of 12, 16, and 18 had special meanings (age 12 is the common age for adolescents transiting status from primary to secondary school students, ages 15 and 16 are the common ages for adolescents entering the job market after nine-year free education, and age 18 is the legal age of gambling and adulthood) which might prompt adolescents to have their first gambling participation. 1.7% of them had the gambling onset age at 5 or below. The respondents were not asked the types of gambling activities that they had participated when they first gambled. It should be noted that social gambling was the most popular type of gambling activity among the adolescents.
- 2.5 Among those who gambled in the past year, respondents aged 15-16 mainly placed bets by family member (22.4%) and relative (7.3%), while respondents aged 17 or above tended to place bets by their own self in HKJC off-course

betting branch (aged 17-18: 28.9%; aged 19-20: 66.7%; aged 21-22: 69.5%) and through HKJC mobile apps (aged 17-18: 9.8%; aged 19-20: 18.1%; aged 21-22: 20.9%). It should be noted that 1.8% of the age group 15-16 and 28.9% of the age group 17-18 placed bets by their own self in HKJC off-course betting branch. Those aged 18 or below had a relatively higher rate (7.3%) in placing bets through non-HKJC betting apps as compared with the older ones (5.5%).

- 2.6 Regarding the venue of gambling, respondents from S-A mainly gambled at relatives' home (56.3%), followed by their own home (39.8%), while respondents from S-B mainly gambled at HKJC off-course betting branch (45.1%), followed by friend's home (42.3%). It should be noted that 7.6% of respondents in S-A gambled at schools, and 8.2% of respondents in S-B gambled at campus. The survey did not ask the kinds of gambling activities they participated in when they gambled at homes or public places. Yet, it should be noted that social gambling was identified as the most popular gambling activities among all respondents in the whole youth sample who gambled in the past year ($N=1\ 008$).

Credit betting

- 2.7 6 (1.3%) and 5 (0.9%) respondents from S-A and S-B respectively had experienced credit betting. They mainly borrowed from family or friend (S-A: 1.3%, S-B: 0.7%), then from bank/finance company (S-A, 1.0%, S-B, 0.8%). 0.2% of respondents in S-A borrowed from illegal money lender.

Football betting

- 2.8 As compared with previous studies, the prevalence rate of football betting among secondary school students (S-A) significantly dropped from 6.8% in 2005 to 4.7% in 2012 and 1.2% ($n=25$) in 2016. Among them, 20 were aged 18 or below. For S-B, the prevalence rate was 9.8% ($n=117$), and 24 of them were aged 18 or below. The average monthly expense on football betting was HK\$717.4.
- 2.9 8.8% ($n=11$) among the whole youth sample who took part in football betting had participated in illegal football betting. The underage (aged 15-18) had a slightly higher participation rate (54.6%, $n=6$) than young adults (aged 19-22) (45.5%, $n=5$).

- 2.10 “Supporting my favorite soccer team/ player” (46.5%), “Football is my favorite sport” (39.4%), “Boosting the excitement when watching the matches” (37.3%) and “Influenced by peers” (35.2%) were the main reasons for taking part in football betting.
- 2.11 Majority of respondents in S-A ($N=25$) placed bets through friend (48.0%, $n=12$), followed by their own self through HKJC off-course betting branch and family member (both 44.0%, $n=11$). Regarding venue, most of them placed bets at home (60.6%, $n=15$), followed by friend’s home (36.0%, $n=9$), then HKJC off-course betting branch (28.0%, $n=7$), bar/pub (24.0%, $n=6$), cyber café (16.0%, $n=4$) and school/campus (12.0%, $n=3$).
- 2.12 Respondents of S-B ($N=117$) mainly placed bets by their own self at HKJC off-course branch (70.9%, $n=83$) and HKJC apps (59.0%, $n=69$). Regarding venue, most of them placed bets at home (60.7%, $n=71$), then HKJC off-course branch (55.6%, $n=65$), friend’s home (30.8%, $n=36$), bar/ pub (12.8%, $n=15$) and school/campus (12.8%, $n=15$).

Online gambling

- 2.13 The prevalence rate of online gambling of the whole youth sample was 1.4% ($n=45$). When only S-A was considered, the prevalence rate decreased from 4.6% in 2001 to 1.2% in 2012 and 1.0% ($n=21$) in 2016.
- 2.14 Average monthly amount of money spent on online gambling was HK\$1,055 ($n=24$) and average time spending on it per week was 6 hours ($n=29$).
- 2.15 “Online game involving money” (69.2%) and “Online casinos” (26.9%) were the popular forms of online gambling ($n=26$).
- 2.16 “Simple gambling rules” (44.4%) and “Playing without time constraint” (33.3%) were the main reasons for participation.

GD

- 2.17 The prevalence rate of GD was 0.7% for S-A and 3.0% for S-B. As purposive sampling, instead of random sampling, was adopted in choosing respondents in S-B, the result findings of S-B could not be generalized, and hence it provided only a reference but not an indicator to represent the general situation among

young people (aged 15-22).

- 2.18 As DSM-V was used in this Study while DSM-IV was used in previous prevalence studies, probable problem and pathological gambling rates will not be compared. Despite of this, it should be noted that the prevalence rate of GD of S-A was lower than that in previous prevalence studies (probable pathological gambling rate in the 2012 Study was 1.8%).
- 2.19 There were proportionally more male GD gamblers (9.0%) than females (2.5%); and more GD gamblers at junior level of education (F.1-F.3) (17.9%) than those with higher educational levels [(Degree of above: 1.5%; non-degree: 6.3%; matriculation: 10.3%; senior secondary (F.4-F.5): 5.7%)].

Gambling motivation and gambling belief

- 2.20 Using the Chinese version of the Gambling Motivation Scale (C-GMS), it was found that both no-risk gamblers and GD gamblers gambled mainly because of “stimulation”, “broaden gambling knowledge” and “no real purpose for gambling”, but GD gamblers gambled by one more motivation - monetary reward. Further, GD gamblers had a higher level of motivation to gamble than no-risk gamblers in all types of motivation.
- 2.21 Using Gambling Belief Questionnaire-Chinese version (GBQ-C), it was found that GD gamblers tended to have greater gambling distortion in terms of luck/perseverance and illusion of control than no-risk gamblers.

Internet Addiction

- 2.22 Using Young’s Internet Addiction Test (IAT) – 8 items in Chinese version, it was found that 19.0% of respondents in the whole youth sample were probable Internet addiction users. Among 45 online gamblers, 36.4% of them were probable Internet addiction users.

Mental Health

- 2.23 Using the Depression, Anxiety and Stress Scales–21 items (DASS21) measurement in Chinese version, GD gamblers tended to have poorer mental health than no-risk gamblers, as significantly more of them were at a higher level of Depression (15.7% at moderate or above level) and Anxiety (26.8% at moderate or above level) than no-risk gamblers (Depression: 2.9% at moderate or

above level; Anxiety: 9.3% at moderate or above level).

Predictor of GD by logistic regression

2.24 Results generated by logistic regression from respondents of S-A, S-B, and those aged 19 or above from S-A and S-B all showed that respondents who had gambled in horserace betting and were Internet addiction users were more likely to become GD gamblers. Respondents in S-A who tended to be motivated by external pressure/influence were more likely to become GD gamblers, while respondents in S-B and in the group with ages at or above 19 who tended to gamble for money were more likely to become GD gamblers. For S-A, gambling in casinos and online gambling were also found to be predictors of GD.

Perceptions on current gambling opportunities and regulation in Hong Kong

2.25 Over half of respondents (56.1%) in the whole youth sample agreed that the current legal age of gambling (at 18) was appropriate.

2.26 As for the frequencies of gambling opportunities, more than half of the respondents showed no comment. 33.4% agreed to the current number of Mark Six lottery draw per week, 19.4% agreed to the current number of football matches for betting, and 20.0% agreed to the current number of horse racing day per week.

2.27 Regarding the preference of weekend horse racing day, 71.5% did not comment, 16.2% preferred Sunday, and 12.3% preferred Saturday.

3. Qualitative Study

To understand the perceptions, motivation of gambling and pathways of developing GD, 17 individual interviews and 8 focus group discussions were conducted. 10 gamblers with GD, 6 significant others and 1 professional gambler were invited for individual interviews. As for the 8 focus group discussion, there were 2 discussion sessions with a total of 11 interviewees from general public, 3 sessions with a total of 12 young people, 2 sessions with a total of 12 young people at-risk, and 1 session with 3 professional gamblers. Major findings of interviews are as follows:

Attitudes towards gambling and motivations to gamble

- 3.1 Majority of interviewees had positive perceptions towards gambling such as viewing it as a social activity or recreation, charity, and career with professional skills. Curiosity, killing boredom, earn quick money were the reasons to gamble. A few respondents in the focus groups considered that gambling activities were not fair and could not be trusted.

Risk factors of gambling

- 3.2 Summarizing feedbacks from the interviewees, several factors contributing to gambling behaviors and GD were identified as follows:

3.2a *Personality factors* such as interpretive bias and illusion of control, craving for gambling, low awareness of addiction, lack of self-control and inability to stop gambling, impulsiveness, sensation seeking, affiliation needs, loneliness, low self-esteem, poor stress coping skills, and poor financial management concepts;

3.2b *Behavioral factors* such as early onset, early win, chasing loss, and be secretive about gambling;

3.2c *Familial factors* such as parental influence, lack of parental guidance, stress/lack of support, and poor communication;

3.2d *Work factor* such as stress;

3.2e *Social factors* such as wealth/money oriented value, peer influence, etc.;

3.2f *Cultural factors* such as acceptancy, and treating gambling as a bonding tool;

3.2g *Environmental factors* such as availability and accessibility of gambling activities, popularity of football betting, media and advertising, gambling neighbourhood, incentive offered by gambling operators, and easiness and availability of loans.

Football betting

- 3.3 7 respondents in the Youth Focus Groups ($N=12$), 2 respondents in the At-risk Youth Focus Groups ($N=12$), and 7 GD gamblers including the 2 younger ones (aged 20 and 25 respectively) involved in football betting. Similar with the findings in the Youth Survey, interest/ support for the league, new gambling forms, boosting excitement, winning money, and social gathering/peer influence were the reasons of football betting. The 2 GD gamblers also mentioned they thought that it was easy to win in football betting.

Online gambling/online games

- 3.4 8 respondents in the Youth Focus Groups and 2 respondents in the At-risk Youth Focus Groups involved in online games. 1 young GD gambler participated in online gambling. They took part in online gambling/games because their identities were concealed. Convenience and efficiency, easy-to-win perception, credit betting and great discount were other factors that aroused their interest to participate in online gambling.

Gambling patterns, behaviors and risk factors of gambling among the youth

- 3.5 Some of the respondents in all the Youth and the At-risk Youth Focus Groups ($N=24$) had experience gambling at an early age. In extreme case, 3 of them had the earliest onset at age of 5. 6 of them had an onset at ages 6-9. GD interviewees, based on their experiences, considered that early onset of gambling might bring harms to the young generation.
- 3.6 Parental influence, lack of parental guidance, peer influence, social need, and making easy money; and personality factors such as sensation seeking, enhancing self-esteem, and curiosity were the reasons for gambling among the youth.
- 3.7 Cards, football, mahjong, fish-shrimp-crab, and online games were those activities mostly participated by the youth in the focus groups (both the youth and the at-risk youth). They also went to game centres from time to time. Some of them reported the presence of money lenders at such venues.

- 3.8 Most of the youth in all the focus groups set limit in gambling and would not chase loss, as they did not want to borrow. They only borrowed from family members and friends, and none of them had ever borrowed from bank or loan shark.

Consequences of GD

- 3.9 Poor study/ work performance, great financial loss/ hardship, negative emotion/ poor mental health, criminal activities like stealing, disharmony/ breakdown of family, and suicidal thought/ act were the negative consequences mentioned by the respondents. Significant others would also experience financial hardship, neglect of child caring, a sense of insecurity, scare and grief, intimidation from loan sharks, mood disorder and even suicide.

Motivation to seek help

- 3.10 Family support, reconciliation of family relationship, and unbearable debt, realizing one's need, acceptance of lacking of luck, and a wish to have a new life were the main factors for GD gamblers to make change. Support from family was crucial in motivating them to seek help and during the treatment process. Though respondents said gambling was socially acceptable, paradoxically they viewed gambling loss as a shame. As a result, gamblers would keep secret about their gambling behaviors and losses, which contributed to one of the reasons preventing them from seeking help.

Relapse triggers

- 3.11 Relapse of gambling was found to be contributed by a number of factors, including: triggers (family disharmony, having significant others as gamblers, and emotional turmoil); internal disturbances (over confidence in being smart, a wish to chase loss, lack of belief in healing, lack of confidence to pay debts, and lack of determination to make change); and high-risk external environment (convenience of gambling venues, gambling fever at times like world-cup and rising stock market, unemployment/ financial pressure, too much free time, and availability of money and easy lending).

Perceptions towards effectiveness and limitations of the C&T centres

- 3.12 Respondents considered that the C&T centres were professional and a variety of treatments were effective in helping them rebuild values, increase self-esteem, strengthen family relationships, manage debts, and set future plans to have a new life. At the same time, they were under the impression that the centres were facing resources constraints.
- 3.13 They supported that more work should be done for promotions, clarifying service nature, outreaching, arousing significant others to seek help first, educating people on financial management, cultivating positive value, and providing more developmental and educational activities especially to young people. Respondents suggested that apart from the C&T centres, the Government and other NGOs should also have their roles in the prevention of gambling problems.

Perceptions on current gambling opportunities and regulation in Hong Kong

- 3.14 Majority of interviewees considered that there were sufficient gambling opportunities in Hong Kong.
- 3.15 Majority of interviewees did not express any views on legal gambling age, while a few interviewees (4 respondents) suggested that the legal gambling age should be raised.

4. Conclusion and recommendations

- 4.1 The findings in this Study show that the participation rate of Hong Kong people in gambling activities, as well as the prevalence rate of GD have continued to drop in recent years. While there are increasing concerns about the popularity of football betting especially among the young generation, the results reveals that the participation rate of football betting has dropped, while the prevalence of online gambling remains at a very low level.
- 4.2 The decreasing trend in prevalence rate of gambling and rate of GD may be resulted from the publicity and education efforts, as well as measures in place to alleviate gambling associated problem in recent years. Based on the findings, it is recommended that such measures should continue and be further stepped up on the following three areas: publicity and education; preventive and remedial services; and responsible gambling (RG) initiatives of HKJC as the betting operator.

- 4.3 Regarding publicity and education, efforts should be stepped up to cover parenthood education, financial literacy, cultivation of positive values and elevation of self-esteem, awareness of harms of gambling and signs of GD, and prevention of Internet addiction. The aspect of financial literacy should be included as part of teaching materials or in the curriculum for schools. Apart from the general public and the youth in particular, significant others and teachers may also be the targets as they can help in early identification of at-risk gamblers. As for the means of publicity, it is suggested that digital marketing and public transportation should be used, together with broadcasting during half-time interval airing of horserace and football betting programmes. There should also be cooperation with NGOs.
- 4.4 As for preventive and remedial measures, it is suggested that counselling hotline service should be extended to 24 hours and seven days. Outreaching services and sector specific services should be provided for those industries and occupations at risk of GD as identified in the Study. The publicity of the counselling services should also be enhanced and, in particular, their professional input in rebuilding family relationship and debt management should be highlighted. To sustain the implementation of the above measures, funding support should be increased and provided continuously.
- 4.5 As for HKJC, its efforts in promoting RG should be stepped up, e.g. setting up RG booth; broadcasting warning messages or help-seeking information; enhancing its self-exclusion programme for gamblers; setting up pre-commitment programme for gamblers to set a budget/limit for gambling; and putting more RG messages in advertisement. HKJC should also avoid promoting gambling and portraying its events as social activities for families with children.